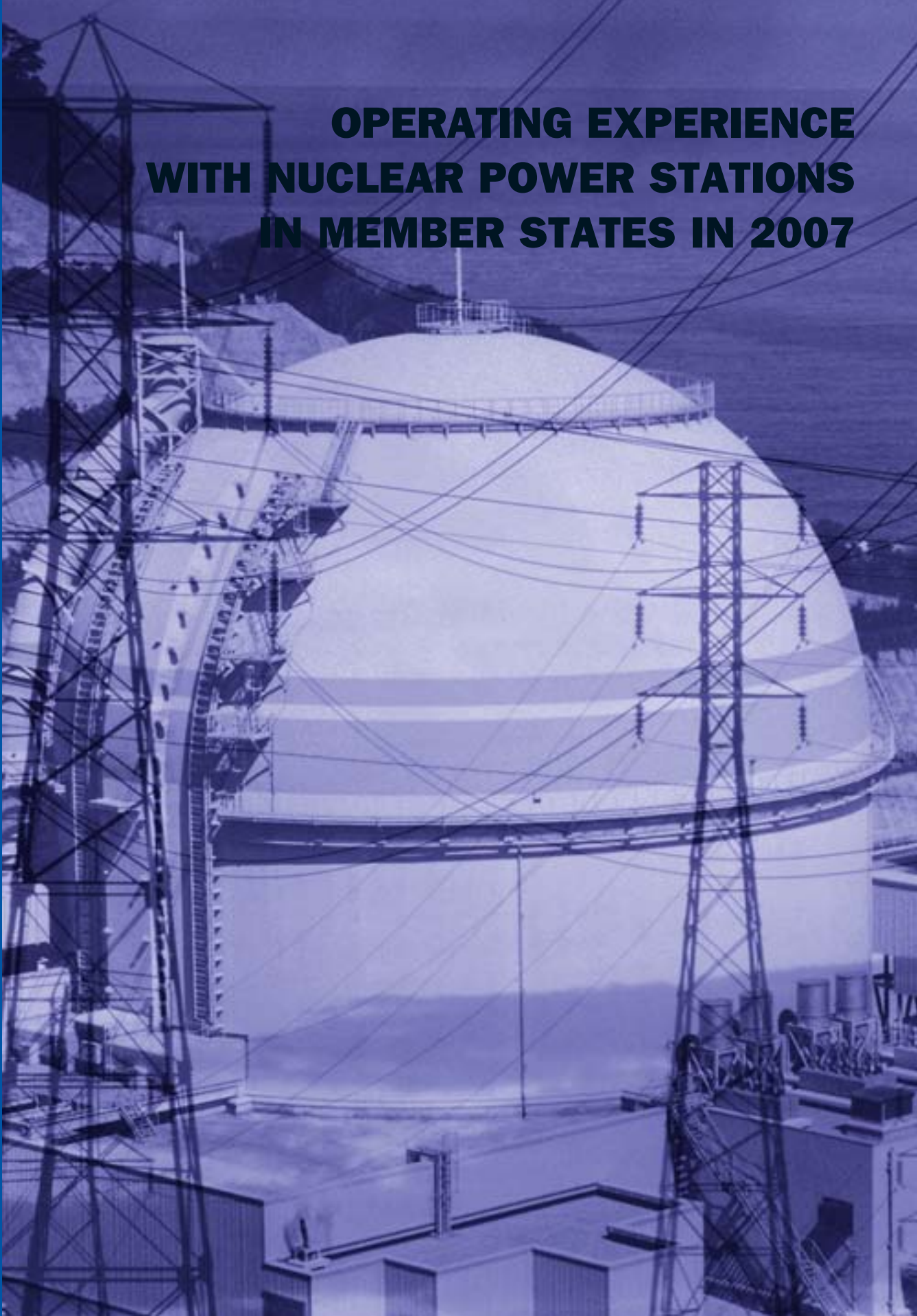




IAEA

International Atomic Energy Agency

**OPERATING EXPERIENCE
WITH NUCLEAR POWER STATIONS
IN MEMBER STATES IN 2007**



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GHANA	NIGER	
GREECE	NIGERIA	
	NORWAY	
	PAKISTAN	

The Agency's Statute was approved on 23 October 1956 by the Conference on the Statute of the IAEA held at United Nations Headquarters, New York; it entered into force on 29 July 1957. The Headquarters of the Agency are situated in Vienna. Its principal objective is "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world".

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FOREWORD

This report is the thirty-ninth in the Agency's series of annual reports on operating experience with nuclear power stations in Member States.

As in previous years, in addition to annual performance data and outage information, the report contains a historical summary of performance and outages during the lifetime of individual plants and six figures illustrating worldwide performance and statistical data. Since 2006 the report is in an electronic version on CD-ROM which provides enhanced features for data searching and analysing.

It is hoped that this report and related Agency publications will be useful to everyone concerned with nuclear power reactors. Suggestions and corrections from readers would be most welcome.

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1. INTRODUCTION

This report is the thirty-ninth in the Agency's series of annual reports on operating experience with nuclear power stations in Member States. For the third time it is issued purely in an electronic version.

The report is a direct output from the Agency's Power Reactor Information System (PRIS), whose databank contains all operating experience data published in the Agency's operating experience annual reports since 1970 and basic information on power reactors, including design data. It presents operating experience data for all worldwide nuclear power plants after starting commercial operation. The PRIS databank is available free of charge to IAEA Member States through its two services: PRIS-Statistics, PRIS-PC, and PRIS CD-ROM. The PRIS-Statistics and PRIS-PC allow direct access to the database through the Internet. Those front-end-tool interfaces allow searching and querying through pre-designed statistics. PRIS outputs are also available on the PRIS web-site: www.iaea.org/dbpage. It contains publicly available information about reactor units and nuclear industry results.

Load, operation and availability factors are used as the basic performance indicators. Energy unavailability factors, separately for planned and unplanned unavailability (due either to causes under plant management control or external causes out of plant management control), are used as a measure of energy lost through a unit not being available. However, some ambiguity remains in the operators' reports of the unavailability data, resulting in inconsistencies in these factors. It is recognized that there is an inherent difficulty in reporting unavailability in energy due to external causes with relation to energy losses due to load following operation and grid limitation. It should be noted that, for load, operation and unavailability factors, there might be differences between the data of this report and those published elsewhere. To avoid confusion, reference should be made to the definitions given in Section 2. In Section 3 this report presents figures illustrating worldwide performance indicators up to 2007.

According to the information available to the Agency at the end of 2007, there were 439 nuclear power reactors operating in the world, with a total net capacity of 372.2 GW_(e).

Three new reactor units were connected to the grid in 2007: Kaiga 3 (202 MW_(e)) in India, Tianwan 2 (1000 MW_(e)) in China and Cernavoda 2 (655 MW_(e)) in Romania. In addition, the long-term shutdown unit Browns Ferry 1 was reconnected in the USA.

There were no reactor retirements in 2007 in contrast to the eight nuclear power reactors retirements in 2006.

At the end of 2007 there were 33 nuclear power plants under construction in the world with a total net capacity 27.2 GW_(e). In 2007 there were seven construction starts: Qinshan II-4 (610 MW_(e)) and Hongyanhe 1 (1000 MW_(e)) in China, Flamanville 3 in France (1600 MW_(e)), Shin Kori 2 (960 MW_(e)) and Shin-Wolsong 1 (960 MW_(e)) in the Republic of Korea and twin floating reactors Severodvinsk – Akademik Lomonosov 1

and 2 (30 MW_(e) each) in the Russian Federation. In addition, active construction resumed at Watts Bar 2 in the USA.

The scope of publication has been enhanced by information related to non-electrical application of nuclear power reactors. Section 6 consists of production data related to district heating, industrial process heat delivery and to water desalination. In 2007 the nuclear energy was utilized for non-electrical application in 11 Member States involving energy from 74 nuclear reactors.

This publication includes information received by the Agency up to 1 June 2008. Up to this date data from all operating units had been reported. Any data modification received after that date, although not included in this publication, is available in the PRIS database.

The information contained in the report was made available to the Agency through designated national correspondents. The Agency appreciates the valuable assistance of the national authorities, official correspondents and various electrical utilities in gathering the information for this report.

The report was compiled by staff of the Agency's Division of Nuclear Power. It is hoped that it will be useful to nuclear power plant operators, nuclear system designers, nuclear power planners, interested professional engineers and scientists and others concerned with the operating experience of nuclear power reactors. Suggestions and corrections from readers would be most welcome.

2. DEFINITIONS

1. Reference Unit Power, RUP [$MW_{(e)}$]

The reference unit power is the maximum (electrical) power that could be maintained continuously throughout a prolonged period of operation under reference ambient conditions.

It is specified that this value must remain constant for a given unit unless, following permanent modification, or a new permanent authorization, the management decides to amend the original value.

The reference unit power may be gross of net:

– The gross RUP (P_g , $MW_{(e)}$) is deemed to be measured at the output terminals of all generator sets in the station; it includes therefore the power taken by the station auxiliaries and losses in transformers that are considered integral parts of the station.

– The net RUP (P_n , $MW_{(e)}$), indicating the maximum power that can be supplied, is measured at the station outlet terminals, i.e. after deducting the power taken by station auxiliaries and the losses in the transformers that are considered integral parts of the station.

2. Design net capacity [$MW_{(e)}$]

The net reference unit power as specified in an original unit design.

3. Reference period, T [hours]

For units in power ascension at the end of the period, the clock hours from the beginning of the period or the first electrical production, whichever comes last, to the end of the period.

For units in commercial operation at the end of the period, the clock hours from the beginning of the period or of commercial operation, whichever comes last, to the end of the period or permanent shutdown, whichever comes first.

4. On-line hours, t [hours]

The total clock hours in the reference period during which the unit operated with breakers closed to the station bus.

5. Reference Energy Generation, REG [$MW_{(e)}h$]

Net electrical energy which would have been supplied to the grid if the unit were operated continuously at the reference unit power during the whole reference period.

6. Energy Generated (net), EG [$GW_{(e)}h$]

Net electrical energy produced during the reference period as measured at the unit outlet terminals, i.e. after deducting the electrical energy taken by unit auxiliaries and the losses in transformers that are considered integral parts of the unit. If this quantity is less than zero, zero is reported.

7. Load Factor, LF [%]

$$LF = \frac{EG}{REG} \times 100$$

EG = energy generated (net), [MW_(e)h]
REG = reference energy generation [MW_(e)h]

Load factor, for a given period, is the ratio of the energy, which the power unit has produced over that period, to the energy it would have produced at its reference power capacity over that period.

8. Operation factor, OF [%]

$$OF = \frac{t}{T} \times 100$$

t = number of hours on-line [h]
T = number of hours in the reference period [h]

Operation factor is the ratio of the number of hours the unit was on-line, to the total number of hours in the reference period, expressed as a percentage. It is a measure of the unit time availability on the grid and does not depend on the operating power level.

9. Available capacity, P [MW_(e)]

The available capacity at a given moment is the maximum net capacity at which the unit or station is able or is authorized to be operated at a continuous rating under the prevailing conditions assuming unlimited transmission facilities.

10. Energy loss, EL [MW_(e)h]

Energy loss is the energy which could have been produced during the reference period by the unavailable capacity; it is categorized into three types:

- PEL - planned energy loss
- UEL - unplanned energy loss
- XEL - energy loss due to causes external to the plant

UEL comprise shutdowns, unplanned load reductions or outage extensions.

11. Unavailability

The unit unavailability is defined as a status when the plant is not able to operate at its maximum capacity (reference power). This condition, which may be under or beyond plant management control, should only reflect lack of availability of the plant itself, regardless of energy demand, transmission grid condition or political situation in the country.

Unavailability is classified as planned if it is foreseen at least 4 months in advance, generally at the time when the annual overhaul programme is established, and if the beginning of the unavailability period can be largely controlled and deferred by management. Unavailability is classified as unplanned if not scheduled at least four weeks in advance. Power plant operation at lower than maximum capacity because of lower demand from the grid but available to operate at the maximum capacity, does not constitute unavailability, either planned or unplanned.

12. Energy Availability Factor, EAF [%]

$$EAF = \frac{REG - PEL - UEL - XEL}{REG} \times 100$$

The energy availability factor over a specified period, is the ratio of the energy that the available capacity could have produced during this period, to the energy that the reference unit power could have produced during the same period.

13. Energy Unavailability Factor, EUF [%]

$$EUF = \frac{EL}{REG} \times 100$$

The unavailability factor over a specified period is the ratio of the energy losses EL that have not been produced during this period due to the unavailable capacity, to the energy that the reference unit power could have produced during the same period.

The energy unavailability factor EUF over a specified period can be divided into:

PUF = planned unavailability factor

UUF = unplanned unavailability factor due to causes in the plant

XUF = unplanned unavailability factor due to causes external to the plant.

The unavailability factor can be expressed as: $EUF = 100 - EAF$

14. Unit capability factor, UCF [%]

$$UCF = \frac{REG - PEL - UEL}{REG} \times 100$$

Unit capability factor is defined as the ratio of the energy that the unit was capable to generate over a given time period considering only limitation under the plant management control, to the reference energy generation over the same time period, expressed as a percentage. Both of these energy generation terms are determined relative to reference ambient conditions.

15. Construction start

Date when first major placing of concrete, usually for the base mat of the reactor building, is done.

16. First criticality

Date when the reactor is made critical for the first time.

17. Grid connection

Date when the plant is first connected to the electrical grid for supply of power.

18. Commercial operation

Date when the plant is handed over by the contractors to the owner and declared officially to be in commercial operation.

19. Permanent Shutdown

Date when the plant is officially declared shut down by the owner and taken out of operation permanently.

20. Long-term Shutdown

A unit is considered in the long-term shutdown status, if it has been shut down for an extended period (usually several years) without any firm recovery schedule at the beginning but there is the intention to re-start the unit eventually.

21. Outages

For the purpose of PRIS coding, the outage is defined as any status of a reactor unit, when its actual output power is lower than the reference unit power for a period of time. By this definition, the outage includes both power reduction and unit shutdown. The outage is considered significant, if the loss in the energy production corresponds to

at least ten hours of continuous operation at the reference unit power or if it has been caused by an unplanned reactor scram (even if the unit had been shut down for less than 10 hours).

22. Outage duration [h]

The total clock hours of the outage measured from the beginning of the reference period or the outage, whichever comes last, to the end of the reference period or the outage, whichever comes first.

23. Factors refer to the plants which were in commercial operation during the whole of the reference period.

24. Cumulative factors are given for the plants which were in commercial operation during full calendar years.

25. A blank and three periods (...), if used in tables, denote information that is not applicable or not available, respectively.

26. Types of outages

The outage type is a three-character code. The third character is for unplanned outages only:

Code_1 description:

- (P) Planned outage due to causes under the plant management control
- (U) Unplanned outage due to causes under the plant management control
- (X) Outage due to causes beyond the plant management control ("external")

Code_2 description:

- (F) Full outage
- (P) Partial outage

Code_3 description:

- (1) Controlled shutdown or load reduction that could be deferred but had to be performed earlier than four weeks after the cause occurred or before the next refueling outage, whatever comes first
- (2) Controlled shutdown or load reduction that had to be performed in the next 24 hours after the cause occurred
- (3) Extension of planned outage
- (4) Reactor scram, automatic
- (5) Reactor scram, manual.

27. Main causes of outages

- (A) Plant equipment failure
- (B) Refuelling without a maintenance
- (C) Inspection, maintenance or repair combined with refuelling
- (D) Inspection, maintenance or repair without refuelling
- (E) Testing of plant systems or components
- (F) Major back-fitting, refurbishment or upgrading activities with refuelling
- (G) Major back-fitting, refurbishment or upgrading activities without refuelling
- (H) Nuclear regulatory requirements
- (J) Grid failure or grid unavailability
- (K) Load-following (frequency control, reserve shutdown due to reduced energy demand)
- (L) Human factor related
- (M) Governmental requirements or Court decisions

- (N) Environmental conditions (flood, storm, lightning, lack of cooling water due to dry weather, cooling water temperature limits etc.)
- (P) Fire
- (R) External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant, spare part delivery problems etc.)
- (S) Fuel management limitation (including high flux tilt, stretch out or coast-down operation)
- (T) Offsite heat distribution system unavailability
- (U) Security and access control and other preventive shutdown due to external threats
- (Z) Others

28. Plant systems affected

Nuclear Systems

- 11.00 Reactor and Accessories
 - 11.01 Reactor vessel and main shielding (including penetrations and nozzles)
 - 11.02 Reactor core (including fuel assemblies)
 - 11.03 Reactor internals (including steam separators/dryers - BWR, graphite, pressure tubes)
 - 11.04 Auxiliary shielding and heat insulation
 - 11.05 Moderator and auxiliaries (PHWR)
 - 11.06 Annulus gas system (PHWR/RBMK)
 - 11.99 None of the above systems

- 12.00 Reactor I&C Systems
 - 12.01 Control and safety rods (including drives and special power supply)
 - 12.02 Neutron monitoring (in-core and ex-core)
 - 12.03 Reactor instrumentation (except neutron)
 - 12.04 Reactor control system
 - 12.05 Reactor protection system
 - 12.06 Process computer
 - 12.07 Reactor recirculation control (BWR)
 - 12.99 None of the above systems

- 13.00 Reactor Auxiliary Systems
 - 13.01 Primary coolant treatment and clean-up system
 - 13.02 Chemical and volume control system
 - 13.03 Residual heat removal system (including heat exchangers)
 - 13.04 Component cooling system
 - 13.05 Gaseous, liquid and solid radwaste treatment systems
 - 13.06 Nuclear building ventilation and containment inerting system
 - 13.07 Nuclear equipment venting and drainage system (including room floor drainage)
 - 13.08 Borated or refuelling water storage system
 - 13.09 CO₂ injection and storage system (GCR)
 - 13.10 Sodium heating system (FBR)
 - 13.11 Primary pump oil system (including RCP or make-up pump oil)
 - 13.12 D₂O leakage collection and dryer system (PHWR)
 - 13.13 Essential auxiliary systems (GCR)
 - 13.99 None of the above systems

- 14.00 Safety Systems
- 14.01 Emergency core cooling systems (including accumulators and core spray system)
- 14.02 High pressure safety injection and emergency poisoning system
- 14.03 Auxiliary and emergency feedwater system
- 14.04 Containment spray system (active)
- 14.05 Containment pressure suppression system (passive)
- 14.06 Containment isolation system (isolation valves, doors, locks and penetrations)
- 14.07 Containment structures
- 14.08 Fire protection system
- 14.99 None of the above systems

- 15.00 Reactor Cooling Systems
- 15.01 Reactor coolant pumps/blowers and drives
- 15.02 Reactor coolant piping (including associated valves)
- 15.03 Reactor coolant safety and relief valves (including relief tank)
- 15.04 Reactor coolant pressure control system
- 15.05 Main steam piping and isolation valves (BWR)
- 15.99 None of the above systems

- 16.00 Steam generation systems
- 16.01 Steam generator (PWR), boiler (PHWR, AGR), steam drum vessel (RBMK, BWR)
- 16.02 Steam generator blowdown system
- 16.03 Steam drum level control system (RBMK, BWR)
- 16.99 None of the above systems

- 17.00 Safety I&C Systems (excluding reactor I&C)
- 17.01 Engineered safeguard feature actuation system
- 17.02 Fire detection system
- 17.03 Containment isolation function
- 17.04 Main steam/feedwater isolation function
- 17.05 Main steam pressure emergency control system (turbine bypass and steam dump valve control)
- 17.06 Failed fuel detection system (DN monitoring system for PHWR)
- 17.07 RCS integrity monitoring system (RBMK)
- 17.99 None of the above systems

Fuel and Refuelling Systems

- 21.00 Fuel Handling and Storage Facilities
- 21.01 On-power refuelling machine
- 21.02 Fuel transfer system
- 21.03 Storage facilities, including treatment plant and final loading and cask handling facilities
- 21.99 None of the above systems

Secondary plant systems

- 31.00 Turbine and auxiliaries
- 31.01 Turbine
- 31.02 Moisture separator and reheater
- 31.03 Turbine control valves and stop valves
- 31.04 Main condenser (including vacuum system)
- 31.05 Turbine by-pass valves
- 31.06 Turbine auxiliaries (lubricating oil, gland steam, steam extraction)
- 31.07 Turbine control and protection system
- 31.99 None of the above systems

- 32.00 Feedwater and Main Steam System
- 32.01 Main steam piping and valves
- 32.02 Main steam safety and relief valves
- 32.03 Feedwater system (including feedwater tank, piping, pumps and heaters)
- 32.04 Condensate system (including condensate pumps, piping and heaters)
- 32.05 Condensate treatment system
- 32.99 None of the above systems

- 33.00 Circulating Water System
- 33.01 Circulating water system (pumps and piping/ducts excluding heat sink system)
- 33.02 Cooling towers / heat sink system
- 33.03 Emergency ultimate heat sink system
- 33.99 None of the above systems

- 34.00 Miscellaneous Systems
- 34.01 Compressed air (essential and non-essential / high-pressure and low-pressure)
- 34.02 Gas storage, supply and cleanup systems (nitrogen, hydrogen, carbon dioxide etc.)
- 34.03 Service water / process water supply system (including water treatment)
- 34.04 Demineralized water supply system (including water treatment)
- 34.05 Auxiliary steam supply system (including boilers and pressure control equipment)
- 34.06 Non-nuclear area ventilation (including main control room)
- 34.07 Chilled water supply system
- 34.08 Chemical additive injection and makeup systems
- 34.09 Non-nuclear equipment venting and drainage system
- 34.10 Communication system
- 34.99 None of the above systems

- 35.00 All other I&C Systems
- 35.01 Plant process monitoring systems (excluding process computer)
- 35.02 Leak monitoring systems
- 35.03 Alarm annunciation system
- 35.04 Plant radiation monitoring system
- 35.05 Plant process control systems
- 35.99 None of the above systems

Electrical Systems

- 41.00 Main Generator Systems
- 41.01 Generator and exciter (including generator output breaker)
- 41.02 Sealing oil system
- 41.03 Rotor cooling gas system
- 41.04 Stator cooling water system
- 41.05 Main generator control and protection system
- 41.99 None of the above systems

- 42.00 Electrical Power Supply Systems
- 42.01 Main transformers
- 42.02 Unit self-consumption transformers (station, auxiliary, house reserve etc.)
- 42.03 Vital AC and DC plant power supply systems (medium and low voltage)
- 42.04 Non-vital AC plant power supply system (medium and low voltage)
- 42.05 Emergency power generation system (e.g. emergency diesel generator and auxiliaries)
- 42.06 Power supply system logics (including load shed logic, emergency bus transfer logic, load sequencer logic, breaker trip logic etc.)
- 42.07 Plant switchyard equipment
- 42.99 None of the above systems

3. ABBREVIATIONS

COUNTRY CODES

AM	ARMENIA
AR	ARGENTINA
BE	BELGIUM
BG	BULGARIA
BR	BRAZIL
CA	CANADA
CH	SWITZERLAND
CN	CHINA
CZ	CZECH REPUBLIC
DE	GERMANY
ES	SPAIN
FI	FINLAND
FR	FRANCE
GB	UNITED KINGDOM
HU	HUNGARY
IN	INDIA
JP	JAPAN
KR	KOREA, REPUBLIC OF
KZ	KAZAKHSTAN
LT	LITHUANIA, REPUBLIC OF
MX	MEXICO
NL	NETHERLANDS
PK	PAKISTAN
RO	ROMANIA
RU	RUSSIAN FEDERATION
SE	SWEDEN
SI	SLOVENIA
SK	SLOVAK REPUBLIC
TW	TAIWAN, CHINA
UA	UKRAINE
US	UNITED STATES OF AMERICA
ZA	SOUTH AFRICA

REACTOR TYPES

BWR	Boiling Light-Water-Cooled and Moderated Reactor
FBR	Fast Breeder Reactor
GCR	Gas-Cooled, Graphite-Moderated Reactor
LWGR	Light-Water-Cooled, Graphite-Moderated Reactor
PHWR	Pressurized Heavy-Water-Moderated and Cooled Reactor
PWR	Pressurized Light-Water-Moderated and Cooled Reactor

OPERATORS

ALP	ALABAMA POWER CO.
AMERGEN	AMERGEN ENERGY CO.
AMERGENE	AMERGEN ENERGY GENERATING CO.
ANAV	ASOCIACION NUCLEAR ASCO-VANDELLOS A.I.E. (ENDESA/ID)
ANPPJSC	JOINT STOCK COMPANY ARMENIAN NPP
AZPSCO	ARIZONA PUBLIC SERVICE CO.
BE	BRITISH ENERGY
BEG	BRITISH ENERGY GROUP PLC
BKW	BKW ENERGIE AG
BRUCEPOW	BRUCE POWER
CCNPP	CALVERT CLIFFS NUCLEAR POWER PLANT INC.
CEA/EDF	COMMISSARIAT A L'ENERGIE ATOMIQUE / ELECTRICITE DE FRANCE
CEZ	CZECH POWER COMPANY , CEZ A.S.
CFE	COMISION FEDERAL DE ELECTRICIDAD
CHUBU	CHUBU ELECTRIC POWER CO.,INC.
CHUGOKU	THE CHUGOKU ELECTRIC POWER CO,INC.
CNAT	CENTRALES NUCLEARES ALMARAZ-TRILLO(ID/UFG/ENDESA/HC/NUCLENOR)
CONSENEC	CONSUMERS ENERGY CO.
DETED	DETROIT EDISON CO.
DOMENGY	DOMINION ENERGY KEWAUNEE
DOMIN	DOMINION VIRGINIA POWER
DUKE	DUKE POWER CO.

E.ON	E.ON KERNKRAFT GMBH
EDF	ELECTRICITE DE FRANCE
ELECTRAB	ELECTRABEL M. V. NUCLEAIRE PRODUKTIE
ELETRONU	ELETROBRAS TERMONUCLEAR SA - ELETRONUCLEAR
ENERGYNW	ENERGY NORTHWEST
EnKK	ENBW KERNKRAFT GMBH (SITZ IN OBRIGHEIM)
ENERGY	ENERGY NUCLEAR
ENTGS	ENERGY GULF STATES INC.
ENTGYARK	ENERGY ARKANSAS, INC.
EPZ	N.V. ELEKTRICITEITS-PRODUKTIEMAATSCHAPPIJ ZUID-NEDERLAND
ESKOM	ESKOM
EXELON	EXELON GENERATION
FENOC	FIRST ENERGY NUCLEAR OPERATING CO.
FKA	FORSMARK KRAFTGRUPP AB
FORTUMPH	FORTUM POWER AND HEAT OY (FORMER IVO)
FPL	FLORIDA POWER & LIGHT CO.
FPLDUANE	FPL ENERGY DUANE ARNOLD
GNPJVC	GUANDONG NUCLEAR POWER JOINT VENTURE COMPANY LIMITED(GNPJVC)
HEPCO	HOKKAIDO ELECTRIC POWER CO.,INC.
HOKURIKU	HOKURIKU ELECTRIC POWER CO.
HQ	HYDRO QUEBEC
ID	IBERDROLA, S.A.
IMPCO	INDIANA MICHIGAN POWER CO.
INPP	IGNALINA NUCLEAR POWER PLANT
JAPCO	JAPAN ATOMIC POWER CO.
JAVYS	JADROVA VYRADOVACIA SPOLOCNOST /NUCLEAR DECOMMISSIONING COMPANY, PLC./
JNPC	JIANGSU NUCLEAR POWER CORPORATION
KEPCO	KANSAI ELECTRIC POWER CO.
KGECO	KANSAS GAS ANE ELECTRIC CO.
KGK	KERNKRAFTWERK GUNDREMMINGEN GMBH
KHNP	KOREA HYDRO AND NUCLEAR POWER CO.
KKB	KERNKRAFTWERK BRUNSBÜTTEL GMBH
KKG	KERNKRAFTWERK GOESGEN-DAENIKEN AG
KKK	KERNKRAFTWERK KRÜMMEL GMBH & CO. OHG
KKL	KERNKRAFTWERK LEIBSTADT
KLE	KERNKRAFTWERKE LIPPE-EMS GMBH
KOZNPP	KOZLODUJ NPP-PLC
KWG	GEMEINSCHAFTSKERNKRAFTWERK GROHNDE GMBH & CO. OHG
KYUSHU	KYUSHU ELECTRIC POWER CO.,INC.
LANPC	LINGAO NUCLEAR POWER COMPANY LTD.
MEL	Magnox Electric Limited
NASA	NUCLEOELECTRICA ARGENTINA S.A.
NBEPIC	NEW BRUNSWICK ELECTRIC POWER COMMISSION
NEK	NUKLEARNA ELEKTRARNA KRSKO
NMPNSLLC	NINE MILE POINT NUCLEAR STATION, LLC
NNEGC	NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>
NOK	NORDOSTSCHWEIZERISCHE KRAFTWERKE
NORTHERN	NORTHERN STATES POWER CO.
NPCIL	NUCLEAR POWER CORPORATION OF INDIA LTD.
NPPD	NEBRASKA PUBLIC POWER DISTRICT
NPQJVC	NUCLEAR POWER PLANT QINSHAN JOINT VENTURE COMPANY LTD.
NUCLENOR	NUCLENOR, S.A.
NUCMAN	NUCLEAR MANAGEMENT CO.
OKG	OKG AKTIEBOLAG
OPG	ONTARIO POWER GENERATION
OPPD	OMAHA PUBLIC POWER DISTRICT
PAEC	PAKISTAN ATOMIC ENERGY COMMISSION
PAKS Zrt.	PAKS NUCLEAR POWER PLANT LTD
PGE	PACIFIC GAS & ELECTRIC CO.
PP&L	PENNSYLVANIA POWER & LIGHT CO.
PROGENGC	PROGRESS ENERGY CAROLINAS, INC.
PROGRESS	PROGRESS ENERGY CORPORATION
PSEG	PUBLIC SERVICE ELECTRIC & GAS CO.
PSEGPOWR	PSEG POWER, INC.
QNPC	QINSHAN NUCLEAR POWER COMPANY
RAB	RINGHALS AB
REA	ROSENERGOATOM, CONSORTIUM
RWE	RWE POWER AG
SCE	SOUTHERN CALIFORNIA EDISON
SCEG	SOUTH CAROLINA ELECTRIC & GAS CO.
SE,plc	SLOVENSKÉ ELEKTRARNE, A.S.
SHIKOKU	SHIKOKU ELECTRIC POWER CO.,INC
SNN	SOCIETATEA NATIONALA NUCLEARELECTRICA S.A.
SOUTH	SOUTHERN NUCLEAR OPERATING CO.
STP	STP NUCLEAR OPERATING CO.

TEPCO	TOKYO ELECTRIC POWER CO.,INC.
TOHOKU	TOHOKU ELECTRIC POWER CO.,INC
TPC	TAI POWER CO.
TQNPC	THE THIRD QINSHAN JOINTED VENTURE COMPANY LTDA.
TVA	TENNESSEE VALLEY AUTHORITY
TVO	TEOLLISUUDEN VOIMA OY
TXU	TXU ELECTRIC CO.
VEPCO	VIRGINIA ELECTRIC POWER CO.
WEP	WISCONSIN ELECTRIC POWER CO.

CONTRACTORS

ABBATOM	ABBATOM (FORMERLY ASEA-ATOM)
ACECOWEN	ACECOWEN (ACEC-COCKERILL-WESTINGHOUSE)
ACLIF	(ACECOWEN - CREUSOT LOIRE - FRAMATOME)
AECL	ATOMIC ENERGY OF CANADA LTD.
AECL/DAE	ATOMIC ENERGY OF CANADA LTDA AND DEPARTMENT OF ATOMIC ENERGY(INDIA)
AECL/DHI	ATOMIC ENERGY OF CANADA LTD./DOOSAN HEAVY INDUSTRY & CONSTRUCTION
AEE	ATOMENERGOEXPORT
APC	ATOMIC POWER CONSTRUCTION LTD.
ASEASTAL	ASEA-ATOM / STAL-LAVAL
B&W	BABCOCK & WILCOX CO.
BBC	BROWN BOVERI ET CIE
CE	COMBUSTION ENGINEERING CO.
CGE	CANADIAN GENERAL ELECTRIC
CNCLNEY	CNIM-CONSTRUCTIONS NAVALES ET INDUSTRIELLES DE MEDITERRANEE CL - CREUSOT LOIRE , NEY - NEYRPIE
CNNC	CHINA NATIONAL NUCLEAR CORPORATION
DHICKAEC	DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA ATOMICENERGY RESEARCH INSTITUTE/COMBUSTIONENGINEERING
DHICKOPC	DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA POWER ENGINEERING COMPANY/COMBUSTIONENGINEERING
EE/B&W/T	THE ENGLISH ELECTRIC CO. LTD / BABCOCK & WILCOX CO. / TAYLOR WOODROW CONSTRUCTION LTD.
FAEA	FEDERAL ATOMIC ENERGY AGENCY
FRAM	FRAMATOME
FRAMACEC	FRAMACECO (FRAMATOME-ACEC-COCKERILL)
GE	GENERAL ELECTRIC CO.
GE/GETSC	GENERAL ELECTRIC CO. / GENERAL ELECTRIC TECHNICAL SERVICES CO.
GE/T	GENERAL ELECTRIC CO. / TOSHIBA CORPORATION
GEC	GENERAL ELECTRIC COMPANY (UK)
GETSCO	GENERAL ELECTRIC TECHNICAL SERVICES CO.
HITACHI	HITACHI LTD.
IZ	IZHORSKIYE ZAVODY
KWU	SIEMENS KRAFTWERK UNION AG
MAEP	MINATOMENERGOPROM, MINISTRY OF NUCLEAR POWER AND INDUSTRY
MHI	mitsubishi HEAVY INDUSTRIES LTD.
NEI.P	NEI PARSONS
NNC	NATIONAL NUCLEAR CORPORATION
NPC	NUCLEAR POWER CO. LTD.
NPCIL	NUCLEAR POWER CORPORATION OF INDIA LTD. VIKRAM SARABHAI BHAVAN, ANUSHAKTI NAGAR, MUMBAI - 400 094.
OH/AECL	ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.
PAA	PRODUCTION AMALGAMATION 'ATOMMASH', VOLGODONSK
PAIP	PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA
PPC	PWR POWER PROJECTS
S/KWU	SIEMENS/KRAFTWERK UNION AG
SIEM,KWU	SIEMENS AG, KRAFTWERK UNION AG
SIEMENS	SIEMENS AG, POWER GENERATION, 91058 ERLANGEN, GERMANY, WWW.POWERGENERATION.SIEMENS.COM
SKODA	SKODA CONCERN NUCLEAR POWER PLANT WORKS
TNPG	THE NUCLEAR POWER GROUP LTD.
TOSHIBA	TOSHIBA CORPORATION
WH	WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS
WH/MHI	WESTINGHOUSE ELECTRIC CORPORATION / MITSUBISHI HEAVY INDUSTRIES LTD.

4. FIGURES

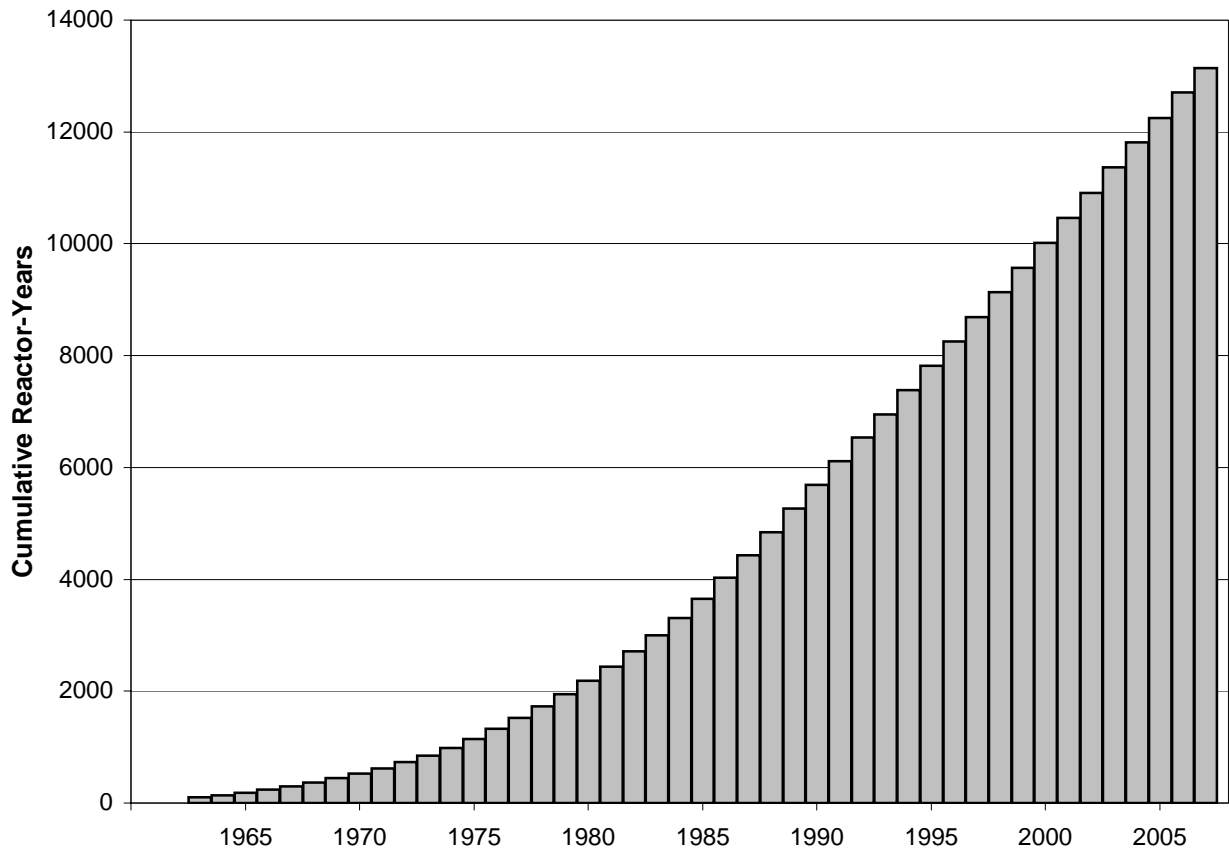


Figure 1 — Nuclear Power Reactors Operating Experience

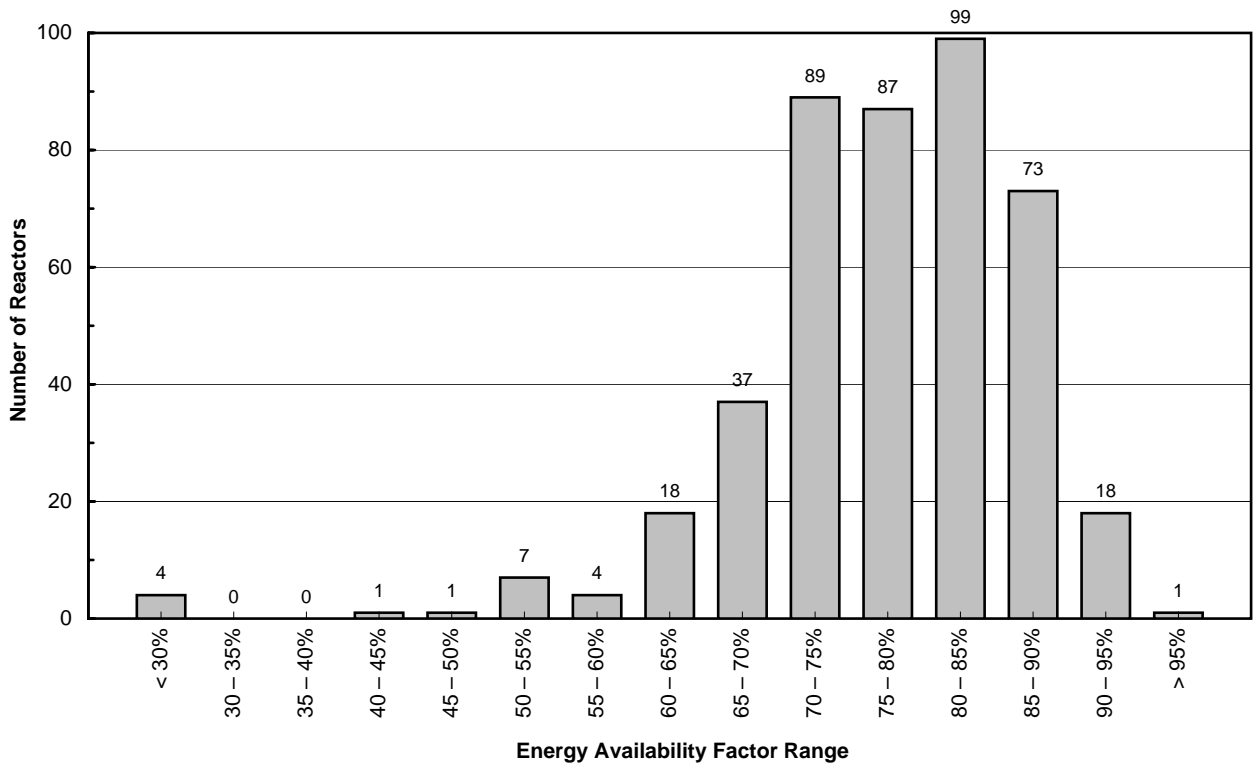


Figure 2 — Lifetime Energy Availability Factors up to 2007

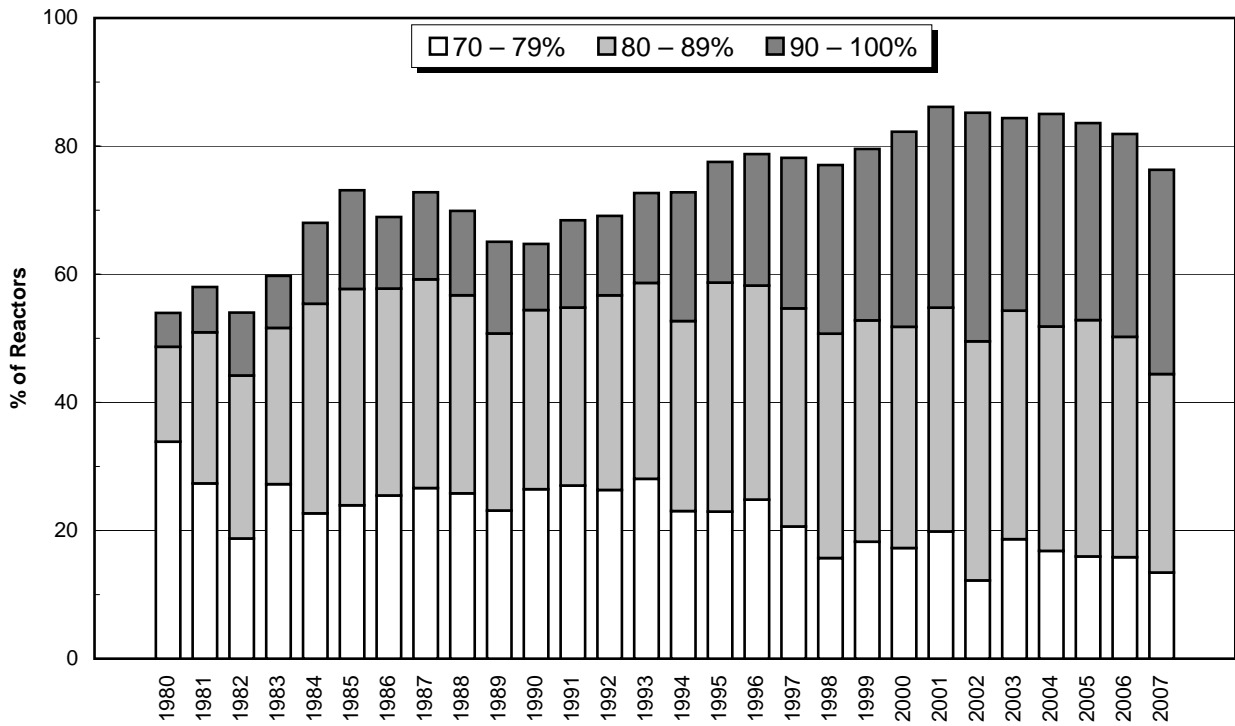


Figure 3 — Reactors with High Availability Factors

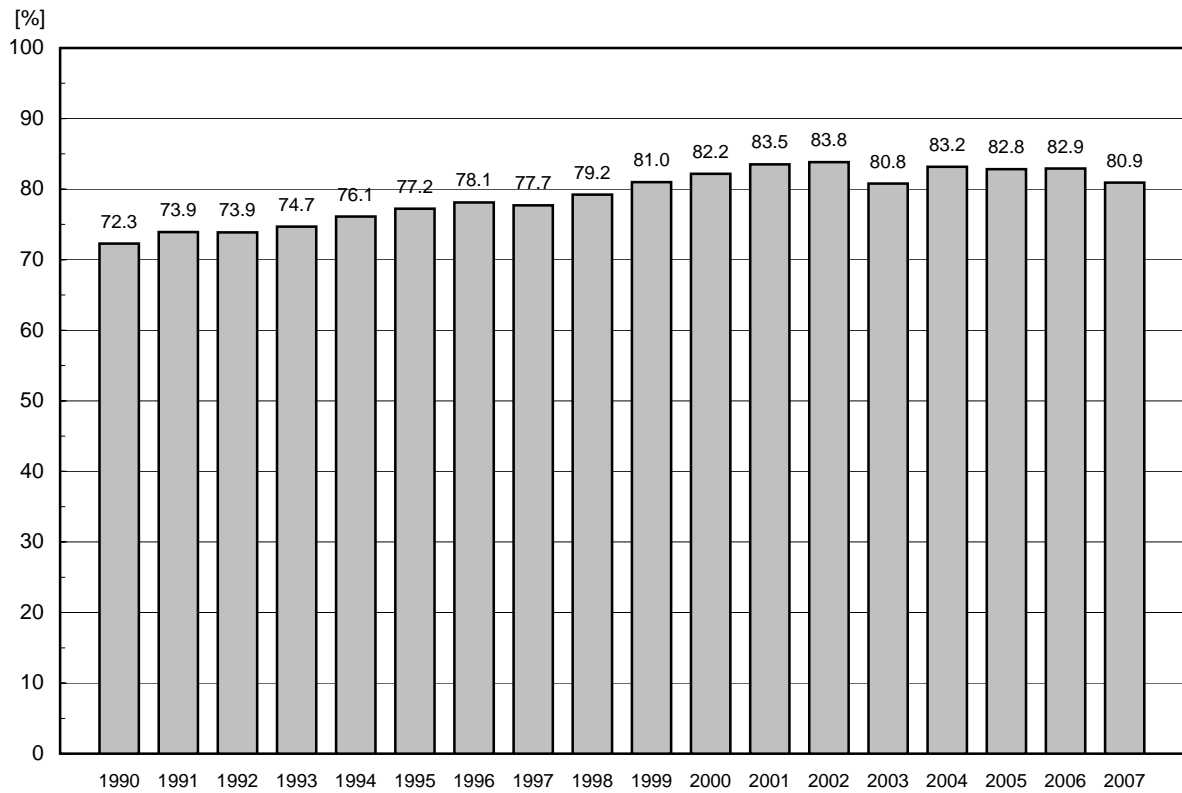


Figure 4 — Average Energy Availability Factor

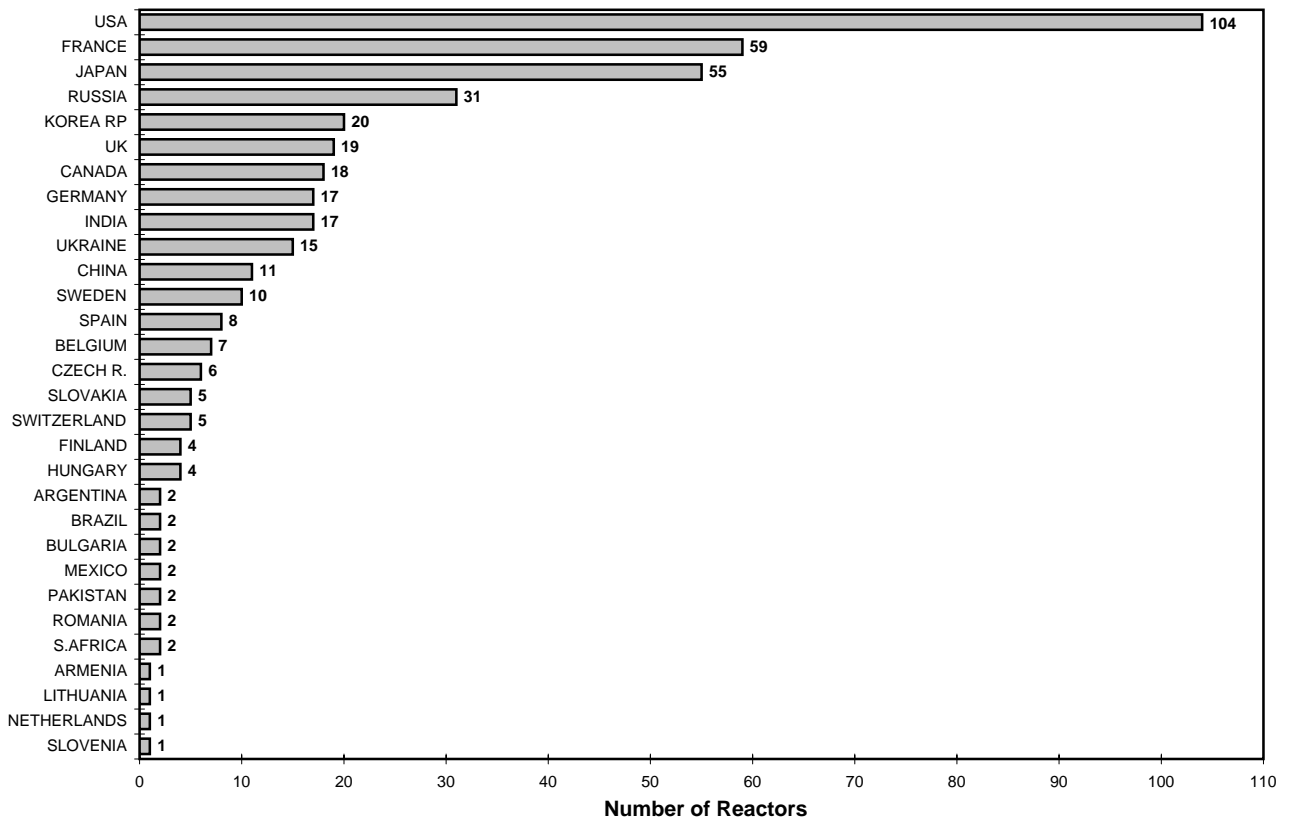


Figure 5 — Number of Reactors in Operation (as of 1 January 2008)

Note: There were 6 reactors in operation in Taiwan, China.

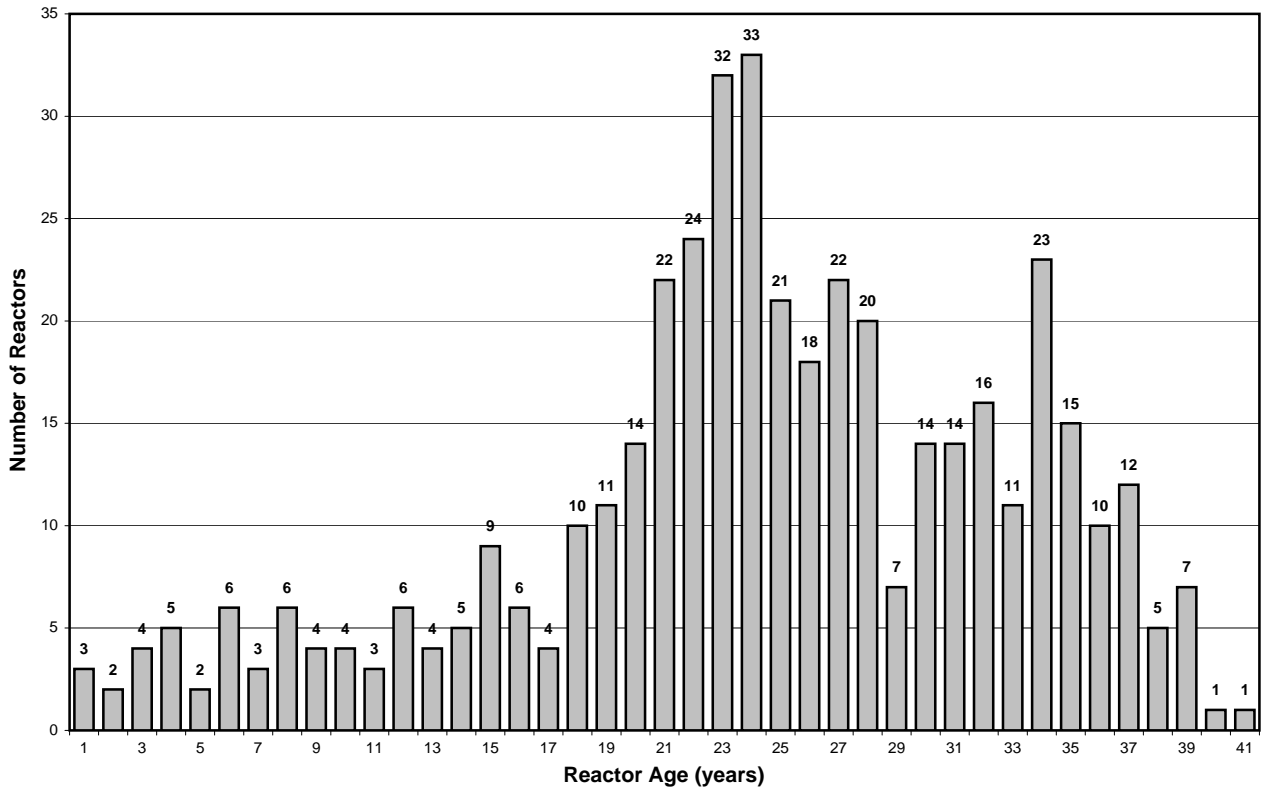


Figure 6 — Number of Reactors by Age (as of 1 January 2008)

5. DATA SHEETS ON INDIVIDUAL NUCLEAR POWER STATIONS UNITS

COUNTRY	NUMBER OF REACTORS
ARGENTINA	2
ARMENIA	1
BELGIUM	7
BRAZIL	2
BULGARIA	2
CANADA	18
CHINA	17
MAINLAND	11
TAIWAN, CHINA	6
CZECH REPUBLIC	6
FINLAND	4
FRANCE	59
GERMANY	17
HUNGARY	4
INDIA	17
JAPAN	55
KOREA, REPUBLIC OF	20
LITHUANIA, REPUBLIC OF	1
MEXICO	2
NETHERLANDS	1
PAKISTAN	2
ROMANIA	2
RUSSIAN FEDERATION	31
SLOVAK REPUBLIC	5
SLOVENIA	1
SOUTH AFRICA	2
SPAIN	8
SWEDEN	10
SWITZERLAND	5
UKRAINE	15
UNITED KINGDOM	19
UNITED STATES OF AMERICA	104

AR-1 ATUCHA-1**Operator:** NASA (NUCLEOELECTRICA ARGENTINA S.A.)**Contractor:** SIEMENS (Siemens AG, Power Generation -FRG)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 335.0 MW(e)
Design Net Capacity: 319.0 MW(e)
Design Discharge Burnup: 6000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2718.7 GW(e).h
Energy Availability Factor: 93.8%
Load Factor: 92.6%
Operating Factor: 94.7%
Energy Unavailability Factor: 6.2%
Total Off-line Time: 460 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	242.5	219.8	151.6	239.3	209.0	240.6	245.2	225.6	239.0	245.7	237.3	223.2	2718.7
EAF (%)	100.0	100.0	61.8	100.0	83.8	100.0	98.5	91.1	100.0	100.0	100.0	92.1	93.8
UCF (%)	100.0	100.0	61.8	100.0	83.8	100.0	100.0	91.1	100.0	100.0	100.0	92.1	94.0
LF (%)	97.3	97.6	60.8	99.2	83.9	99.7	98.4	90.5	99.1	98.6	98.4	89.6	92.6
OF (%)	100.0	100.0	65.7	100.0	85.3	100.0	100.0	93.4	100.0	100.0	100.0	93.7	94.7
EUF (%)	0.0	0.0	38.2	0.0	16.2	0.0	1.5	8.9	0.0	0.0	0.0	7.9	6.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	38.2	0.0	16.2	0.0	0.0	8.9	0.0	0.0	0.0	7.9	6.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

2007-01-01 AL 2007-03-16: 100% FP2007-03-16 AL 2007-03-25: MANUAL OUTAGE FOR REPAIRING STEAM GENERATOR 2 TUBE 2007-03-25 AL 2007-03-27: INCREASING POWER2007-03-27 AL 2007-03-29: RESA. PARTIAL NZ60 FOR SIMATIC CARD FAILURE2007-03-29 AL 2007-05-26: 100 % FP2007-05-26 AL 2007-05-30: MANUAL OUTAGE FOR REPAIRING HEAT EXCHANGER LOSS (RR42W002)2007-05-30 AL 2007-07-26: 100% FP2007-07-26 AL 2007-07-27: 80% FP : CLEANING OF CONDESATOR2007-07-28 AL 2007-08-03: 100 % FP2007-08-04 AL 2007-08-06: RESA. ELECTRICAL FAILURE SYNCHRONIZING TURBINE2007-08-07 AL 2007-12-15: 100 % FP2007-12-15 AL 2007-12-17: TUSA NORMALIZING EXCH TRANF 220V2007-12-17 AL 2007-12-31:100% FP

5. Historical Summary

Date of Construction Start: 01 Jun 1968
Date of First Criticality: 13 Jan 1974
Date of Grid Connection: 19 Mar 1974
Date of Commercial Operation: 24 Jun 1974

Lifetime Generation: 67480.7 GW(e).h
Cumulative Energy Availability Factor: 71.5%
Cumulative Load Factor: 68.6%
Cumulative Unit Capability Factor: 72.8%
Cumulative Energy Unavailability Factor: 28.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	831.3	321.0	51.5	51.5	50.7	50.7	50.7	50.7	3592	69.9
1975	2357.8	319.0	85.6	73.0	85.6	72.7	84.4	71.9	7730	88.2
1976	2408.6	319.0	86.9	78.4	86.9	78.2	86.0	77.4	7808	88.9
1977	1537.0	336.0	53.0	71.0	53.0	70.9	52.1	70.1	4650	53.1
1978	2711.8	345.0	90.9	75.6	90.9	75.5	89.7	74.6	8026	91.6
1979	2503.7	335.0	84.1	77.1	84.1	77.1	85.3	76.5	7551	86.2
1980	2180.5	335.0	73.5	76.6	73.5	76.5	74.1	76.2	6947	79.1
1981	2647.6	335.0	89.7	78.3	89.7	78.3	90.2	78.0	8120	92.7
1982	1753.6	335.0	59.2	76.1	59.2	76.0	59.8	75.9	5600	63.9
1983	2356.0	335.0	78.4	76.3	78.4	76.3	80.3	76.3	8101	92.5
1984	1706.1	335.0	98.7	78.4	98.7	78.4	58.0	74.6	8678	98.8
1985	1470.5	335.0	91.6	79.6	91.6	79.6	50.1	72.5	7159	81.7
1986	2205.0	335.0	75.8	79.3	75.8	79.3	75.1	72.7	7532	86.0
1987	1405.8	335.0	49.2	77.1	49.2	77.0	47.9	70.8	4391	50.1
1988	808.1	335.0	27.1	73.6	27.1	73.6	27.5	67.8	2515	28.6
1989	0.0	335.0	0.0	68.9	0.0	68.8	0.0	63.5	0	0.0
1990	1722.6	335.0	84.9	69.8	58.7	68.2	58.7	63.2	7201	82.2
1991	2721.9	335.0	92.6	71.1	92.6	69.6	92.8	64.9	8390	95.8
1992	2230.2	335.0	76.3	71.4	76.3	70.0	75.8	65.5	7089	80.7
1993	2403.7	335.0	82.2	72.0	82.2	70.6	81.9	66.3	7287	83.2
1994	2651.9	335.0	90.4	72.9	90.4	71.6	90.4	67.5	7916	90.4
1995	2671.7	335.0	92.3	73.8	92.3	72.5	91.0	68.6	8376	95.6
1996	2038.8	335.0	70.6	73.6	70.6	72.4	69.3	68.6	6990	79.6
1997	2720.1	335.0	93.4	74.5	93.4	73.3	92.7	69.6	8329	95.1
1998	2374.4	335.0	81.4	74.7	81.3	73.7	80.9	70.1	7242	82.7
1999	1395.5	335.0	47.8	73.7	47.8	72.6	47.6	69.2	4364	49.8
2000	1677.9	335.0	72.8	73.7	56.8	72.0	57.0	68.7	5038	57.4
2001	1426.0	335.0	57.2	73.1	57.2	71.5	48.6	68.0	4407	50.3
2002	1011.5	335.0	34.6	71.7	34.6	70.2	34.5	66.8	3030	34.6
2003	2020.6	335.0	68.8	71.6	68.8	70.2	68.9	66.9	6094	69.6
2004	2725.0	335.0	92.2	72.3	92.2	70.9	92.6	67.7	8250	93.9
2005	1998.0	335.0	68.5	72.2	68.5	70.8	68.1	67.8	7004	80.0
2006	2100.5	335.0	72.1	72.2	72.1	70.9	71.6	67.9	6403	73.1
2007	2718.7	335.0	94.0	72.8	93.8	71.5	92.6	68.6	8300	94.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		459			787	1
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling				39		
D. Inspection, maintenance or repair without refuelling				1147		
E. Testing of plant systems or components				6		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				41		
H. Nuclear regulatory requirements					1	82
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					14	50
Subtotal	0	459	0	1233	814	135
Total		459			2182	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		124
12. Reactor I&C Systems		52
13. Reactor Auxiliary Systems	109	171
14. Safety Systems		38
15. Reactor Cooling Systems		198
16. Steam generation systems	208	56
17. Safety I&C Systems (excluding reactor I&C)	47	11
31. Turbine and auxiliaries		10
32. Feedwater and Main Steam System		25
33. Circulating Water System		9
41. Main Generator Systems		5
42. Electrical Power Supply Systems	95	64
Total	459	763

AR-2 EMBALSE

Operator: NASA (NUCLEOELECTRICA ARGENTINA S.A.)
Contractor: AECL (ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 600.0 MW(e)
Design Net Capacity: 600.0 MW(e)
Design Discharge Burnup: 7190 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4003.7 GW(e).h
Energy Availability Factor: 76.5%
Load Factor: 76.2%
Operating Factor: 77.3%
Energy Unavailability Factor: 23.5%
Total Off-line Time: 1989 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	357.7	304.0	293.5	0.0	37.7	417.6	445.3	445.8	429.8	405.6	428.0	438.8	4003.7
EAF (%)	80.1	75.4	65.8	-0.1	8.4	96.7	100.0	100.0	100.0	91.5	100.0	99.8	76.5
UCF (%)	80.1	75.4	65.8	-0.1	8.4	96.7	100.0	100.0	100.0	91.5	100.0	99.8	76.5
LF (%)	80.1	75.4	65.8	0.0	8.4	96.7	99.8	99.9	99.5	90.7	99.1	98.3	76.2
OF (%)	81.0	76.5	66.4	0.0	11.4	100.0	100.0	100.0	100.0	91.8	100.0	99.9	77.3
EUF (%)	19.9	24.6	34.2	100.1	91.6	3.3	0.0	0.0	0.0	8.5	0.0	0.2	23.5
PUF (%)	0.0	0.0	34.2	100.1	80.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0
UCLF (%)	19.9	24.6	0.0	0.0	11.1	3.3	0.0	0.0	0.0	8.5	0.0	0.2	5.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

2007-01-03 TO 2007-01-10 OUTAGE DUE TO D2O LEAKAGE FROM SG *3
 2007-02-16 TO 2007-02-22 OUTAGE DUE TO D2O LEAKAGE FROM SG *4
 2007-03-21 TO 2007-05-26 PLANNED OUTAGE
 2007-05-30 TO 2007-05-31 OUTAGE DUE TO TURBINE TRIP ON HIGH MSR LEVEL
 2007-10-21 TO 2007-10-23 BLOKAGE OF 43230P101A DUE TO ELECTRICAL PROTETIO, WITH SUBSEQUENT PLANT OUTAGE THROUGH STEP BACK AND TRIP OF SDS1 ON LOW SG LEVEL DUE TO BLOCK OF 43230P102 'S

5. Historical Summary

Date of Construction Start: 01 Apr 1974
Date of First Criticality: 13 Mar 1983
Date of Grid Connection: 25 Apr 1983
Date of Commercial Operation: 20 Jan 1984

Lifetime Generation: 107710.0 GW(e).h
Cumulative Energy Availability Factor: 86.9%
Cumulative Load Factor: 84.4%
Cumulative Unit Capability Factor: 87.3%
Cumulative Energy Unavailability Factor: 13.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	2527.1	600.0	70.3	70.3	69.9	69.9	47.9	47.9	6355	72.3
1985	3778.6	600.0	93.4	81.9	93.4	81.6	71.9	59.9	8170	93.3
1986	3061.7	600.0	67.1	77.0	66.3	76.5	58.3	59.4	5847	66.7
1987	4577.0	600.0	87.9	79.7	87.9	79.4	87.1	66.3	7951	90.8
1988	4560.6	600.0	88.8	81.5	88.8	81.3	86.5	70.3	7798	88.8
1989	4659.0	600.0	90.1	82.9	89.1	82.6	88.6	73.4	7804	89.1
1990	5000.7	600.0	96.5	84.9	95.1	84.4	95.1	76.5	8404	95.9
1991	4498.8	600.0	89.7	85.5	85.8	84.5	85.6	77.6	7855	89.7
1992	4354.0	600.0	83.4	85.2	81.6	84.2	82.6	78.2	7440	84.7
1993	4773.3	600.0	90.7	85.8	90.6	84.8	90.8	79.4	7956	90.8
1994	5157.9	600.0	98.3	86.9	97.8	86.0	98.1	81.1	8575	97.9
1995	3897.9	600.0	74.3	85.9	74.3	85.1	74.2	80.6	6541	74.7
1996	4892.0	600.0	92.8	86.4	92.8	85.6	92.8	81.5	8176	93.1
1997	4737.0	600.0	89.3	86.6	89.3	85.9	90.1	82.1	7821	89.3
1998	4555.4	600.0	86.9	86.6	86.9	86.0	86.7	82.4	7629	87.1
1999	5201.8	598.0	99.1	87.4	99.1	86.8	99.3	83.5	8700	99.3
2000	4064.5	643.0	78.2	86.8	78.1	86.2	72.0	82.8	6837	77.8
2001	5128.1	600.0	97.5	87.4	97.4	86.9	97.6	83.6	8564	97.8
2002	4385.5	600.0	84.0	87.2	83.4	86.7	83.4	83.6	7401	84.5
2003	5004.1	600.0	95.1	87.6	95.1	87.1	95.2	84.1	8367	95.5
2004	4589.6	600.0	87.5	87.6	87.5	87.1	87.1	84.3	7704	87.7
2005	4372.5	600.0	83.3	87.4	83.3	86.9	83.2	84.2	7341	83.8
2006	5052.1	600.0	96.2	87.8	96.2	87.3	96.1	84.7	8455	96.5
2007	4003.7	600.0	76.5	87.3	76.5	86.9	76.2	84.4	6771	77.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		399		6	260	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling				96		
D. Inspection, maintenance or repair without refuelling	1546			646		
E. Testing of plant systems or components				57	1	
H. Nuclear regulatory requirements				8	2	
J. Grid failure or grid unavailability					1	18
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					3	
L. Human factor related		42				
Subtotal	1546	441	0	813	267	18
Total		1987			1098	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		9
12. Reactor I&C Systems		5
13. Reactor Auxiliary Systems		44
15. Reactor Cooling Systems		23
16. Steam generation systems	299	75
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		36
32. Feedwater and Main Steam System	100	23
33. Circulating Water System		1
41. Main Generator Systems		36
42. Electrical Power Supply Systems		7
Total	399	260

AM-19 ARMENIA-2

Operator: ANPPJSC (Joint Stock Company Armenian NPP)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 376.0 MW(e)
Design Net Capacity: 376.0 MW(e)
Design Discharge Burnup: 28600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2347.8 GW(e).h
Energy Availability Factor: 73.8%
Load Factor: 71.3%
Operating Factor: 85.0%
Energy Unavailability Factor: 26.2%
Total Off-line Time: 1313 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	267.0	233.5	248.6	206.1	172.0	230.4	205.4	236.4	222.8	74.1	32.1	219.4	2347.8
EAF (%)	90.8	89.7	88.3	78.2	78.7	88.7	77.2	89.3	87.7	28.3	15.3	74.3	73.8
UCF (%)	90.8	89.7	88.3	78.2	78.7	88.7	77.2	89.3	87.7	28.3	15.3	74.3	73.8
LF (%)	95.5	92.4	88.9	76.2	61.5	85.1	73.4	84.5	82.3	26.5	11.9	78.4	71.3
OF (%)	100.0	100.0	100.0	100.1	88.6	100.0	100.0	100.0	100.0	32.1	16.9	83.2	85.0
EUF (%)	9.2	10.3	11.7	21.8	21.3	11.3	22.8	10.7	12.3	71.7	84.7	25.7	26.2
PUF (%)	8.0	8.0	8.0	19.0	8.0	8.0	21.2	8.0	8.0	70.3	80.3	8.0	21.3
UCLF (%)	1.2	2.3	3.7	2.8	13.4	3.3	1.6	2.7	4.3	1.4	4.4	17.7	4.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

ARMENIA 2 WAS IN NORMAL OPERATION, BUT THERE WAS 1 AUTOMATIC SCRAM DURING THE YEAR. THE SCRAM WAS DUE TO THE DEAD SHORT ON THE 220 KV ELECTRIC TRANSMISSION LINE GOING FROM THE ANPP. THERE WAS NO LOSS OF THE ELECTRIC ENERGY GENERATION BECAUSE THE UNIT SHOULD BE SHUT DOWN FOR PF OUTAGE IN 35.5 HOURS. TWO MANUAL SCRAMS TOOK PLACE: ONE DUE TO THE FAILURE OF COMPONENT OF MAIN STOP VALVE (MSV-4); THE SECOND BECAUSE OF THE CHLORINE IONES CONCENTRATION GROWTH. THE LOSS OF THE ENERGY GENERATION HAS BEEN CAUSED BY THOSE TWO SCRAMS AND TOTALS TO 90233 MW(E)H. THE ANPP HAS A LICENSE TO BE OPERATED NOT MORE THAN AT 92%. THE ELECTRIC ENERGY PRODUCTION WAS LESS THAN THAT IN 2006 MAINLY BECAUSE OF THE DISPATCHER'S LIMITATIONS, HOT SUMMER AND TWO MANUAL SCRAMS.

5. Historical Summary

Date of Construction Start:	01 Jul 1975	Lifetime Generation:	46546.0 GW(e).h
Date of First Criticality:	01 Jan 1980	Cumulative Energy Availability Factor:	64.1%
Date of Grid Connection:	05 Jan 1980	Cumulative Load Factor:	62.6%
Date of Commercial Operation:	03 May 1980	Cumulative Unit Capability Factor:	66.3%
		Cumulative Energy Unavailability Factor:	35.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	Data not provided									
1981	"									
1982	"									
1983	"									
1984	"									
1985	"									
1986	"									
1987	2629.1	408.0	79.3	79.3	79.3	79.3	73.6	73.6	7040	80.4
1988	2254.5	376.0	73.4	76.5	73.4	76.5	68.3	71.0	6741	76.7
1989	671.3	376.0	99.6	78.9	99.6	78.9	82.7	72.2	1838	85.1
1990	Data not available - Long-term shutdown									
1991	"									
1992	"									
1993	"									
1994	"									
1995	Data not provided									
1996	2098.0	376.0	86.2	81.1	63.6	74.3	63.5	69.6	7561	86.1
1997	1430.0	376.0	43.4	72.4	43.4	67.2	43.4	63.6	5700	65.1
1998	1416.5	376.0	44.6	67.2	44.6	63.0	43.0	59.7	6408	73.2
1999	1890.4	376.0	57.4	65.7	57.4	62.1	57.4	59.4	6193	70.7
2000	1841.5	376.0	55.8	64.3	55.8	61.2	55.8	58.9	5699	64.9
2001	1815.4	376.0	55.1	63.2	55.1	60.5	55.1	58.4	5660	64.6
2002	2078.9	376.0	63.3	63.2	63.2	60.8	63.1	58.9	6961	79.5
2003	1997.6	376.0	63.4	63.2	60.6	60.8	60.6	59.1	6120	69.9
2004	2196.6	376.0	70.3	63.9	64.2	61.1	66.5	59.7	7135	81.2
2005	2504.5	376.0	76.3	64.9	76.3	62.3	76.0	61.1	7658	87.4
2006	2421.6	376.0	76.1	65.7	76.1	63.3	73.5	62.0	7632	87.1
2007	2347.8	376.0	73.8	66.3	73.8	64.1	71.3	62.6	7447	85.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		239			58	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	1071			969		
D. Inspection, maintenance or repair without refuelling				100		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				74		
J. Grid failure or grid unavailability		0				12
Subtotal	1071	239	0	1143	60	12
Total		1310			1215	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		0
13. Reactor Auxiliary Systems	239	
15. Reactor Cooling Systems		7
16. Steam generation systems		9
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		1
41. Main Generator Systems		1
42. Electrical Power Supply Systems		3
Total	239	23

BE-2 DOEL-1

Operator: ELECTRAB (ELECTRABEL M. V. NUCLEAIRE PRODUKTIE)
Contractor: ACECOWEN (ACECOWEN (ACEC-COCKERILL-WESTINGHOUSE))

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 392.0 MW(e)
Design Net Capacity: 392.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3029.0 GW(e).h
Energy Availability Factor: 87.6%
Load Factor: 88.2%
Operating Factor: 88.0%
Energy Unavailability Factor: 12.4%
Total Off-line Time: 1051 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	294.3	266.3	296.2	286.8	293.1	281.2	292.6	289.5	281.6	291.9	15.0	140.4	3029.0
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	5.2	47.0	87.6
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	5.4	47.0	87.7
LF (%)	100.9	101.1	101.6	101.7	100.5	99.6	100.3	99.3	99.8	100.0	5.3	48.2	88.2
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	100.0	100.0	5.7	50.0	88.0
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	94.8	53.0	12.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.6	9.5	8.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.5	3.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.2	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Jul 1969
Date of First Criticality: 18 Jul 1974
Date of Grid Connection: 28 Aug 1974
Date of Commercial Operation: 15 Feb 1975

Lifetime Generation: 97861.5 GW(e).h
Cumulative Energy Availability Factor: 85.4%
Cumulative Load Factor: 85.7%
Cumulative Unit Capability Factor: 86.4%
Cumulative Energy Unavailability Factor: 14.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	2407.2	392.0	76.6	76.6	76.6	76.6	76.6	76.6	6672	83.2
1976	2667.1	395.0	75.5	76.0	75.5	76.0	76.9	76.7	6928	78.9
1977	2830.0	395.0	81.8	78.0	81.8	78.0	81.8	78.5	7332	83.7
1978	2731.2	395.0	78.9	78.2	78.9	78.2	78.9	78.6	7071	80.7
1979	3037.0	395.0	86.4	79.9	86.4	79.9	87.8	80.5	7812	89.2
1980	2901.0	395.0	84.4	80.6	84.4	80.6	83.6	81.0	7596	86.5
1981	2946.0	395.0	85.0	81.3	85.0	81.3	85.1	81.6	7644	87.3
1982	3184.5	395.0	91.2	82.5	91.2	82.5	92.0	82.9	8103	92.5
1983	2823.0	393.0	81.8	82.4	81.8	82.4	82.0	82.8	7316	83.5
1984	3129.0	393.0	90.2	83.2	90.2	83.2	90.6	83.6	7988	90.9
1985	2896.3	392.0	82.4	83.2	82.4	83.2	84.3	83.7	7330	83.7
1986	2685.9	392.0	79.1	82.8	78.8	82.8	78.2	83.2	7040	80.4
1987	2928.4	400.0	85.5	83.0	85.4	83.0	83.6	83.2	7306	83.4
1988	2694.1	400.0	86.6	83.3	81.3	82.9	76.7	82.8	7686	87.5
1989	2513.1	400.0	73.6	82.6	71.9	82.1	71.7	82.0	6475	73.9
1990	2859.9	400.0	85.6	82.8	83.5	82.2	81.6	82.0	7380	84.2
1991	3061.4	400.0	89.5	83.2	89.2	82.6	87.4	82.3	7860	89.7
1992	2990.5	400.0	87.7	83.5	86.5	82.9	85.1	82.5	7741	88.1
1993	2908.9	400.0	86.0	83.6	84.4	82.9	83.0	82.5	7580	86.5
1994	2921.8	400.0	88.7	83.9	84.3	83.0	83.4	82.5	7635	87.2
1995	2791.5	392.0	82.7	83.8	81.0	82.9	81.3	82.5	7342	83.8
1996	3169.4	392.0	91.5	84.2	91.3	83.3	92.0	82.9	8141	92.7
1997	3113.8	392.0	89.0	84.4	88.9	83.5	90.7	83.3	7899	90.2
1998	3292.5	392.0	94.1	84.8	93.7	84.0	95.9	83.8	8277	94.5
1999	3196.8	392.0	92.6	85.1	91.1	84.2	93.1	84.1	8123	92.7
2000	3264.8	392.0	94.2	85.4	92.3	84.6	94.8	84.6	8317	94.7
2001	3157.6	392.0	91.4	85.6	90.5	84.8	91.9	84.8	8098	92.4
2002	3260.7	392.0	93.4	85.9	93.3	85.1	95.0	85.2	8308	94.8
2003	3024.6	392.0	90.3	86.1	86.4	85.1	88.1	85.3	7953	90.8
2004	2989.1	392.0	87.6	86.1	85.5	85.1	86.8	85.3	7742	88.1
2005	3062.6	392.0	89.1	86.2	88.0	85.2	89.2	85.5	7849	89.6
2006	3100.5	392.0	91.1	86.4	89.2	85.3	90.3	85.6	8030	91.7
2007	3029.0	392.0	87.7	86.4	87.6	85.4	88.2	85.7	7709	88.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					192	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	727			777		
D. Inspection, maintenance or repair without refuelling				7		
E. Testing of plant systems or components				35	1	
H. Nuclear regulatory requirements					7	
J. Grid failure or grid unavailability						6
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				24	46	
L. Human factor related		323			0	
P. Fire					0	
Z. Others					0	
Subtotal	727	323	0	843	248	6
Total		1050			1097	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		10
12. Reactor I&C Systems		12
14. Safety Systems		9
15. Reactor Cooling Systems		15
16. Steam generation systems		43
31. Turbine and auxiliaries		71
32. Feedwater and Main Steam System		20
33. Circulating Water System		0
41. Main Generator Systems		6
42. Electrical Power Supply Systems		0
Total	0	186

BE-4 DOEL-2**Operator:** ELECTRAB (ELECTRABEL M. V. NUCLEAIRE PRODUKTIE)**Contractor:** ACECOWEN (ACECOWEN (ACEC-COCKERILL-WESTINGHOUSE))**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 433.0 MW(e)
Design Net Capacity: 392.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3483.1 GW(e).h
Energy Availability Factor: 90.8%
Load Factor: 91.8%
Operating Factor: 91.2%
Energy Unavailability Factor: 9.2%
Total Off-line Time: 775 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	327.0	298.0	329.2	318.0	184.5	236.3	324.0	318.4	311.9	327.3	256.0	252.6	3483.1
EAF (%)	100.0	100.0	100.0	100.0	56.9	75.4	100.0	100.0	100.0	100.0	80.9	76.7	90.8
UCF (%)	100.0	100.0	100.0	100.0	57.0	75.4	100.0	100.0	100.0	100.0	80.9	76.7	90.8
LF (%)	101.5	102.4	102.2	102.1	57.3	75.8	100.6	98.8	100.1	101.5	82.1	78.4	91.8
OF (%)	100.0	100.0	99.9	100.1	57.1	77.8	100.0	100.0	100.0	100.0	81.9	77.7	91.2
EUF (%)	0.0	0.0	0.0	0.0	43.1	24.6	0.0	0.0	0.0	0.0	19.1	23.3	9.2
PUF (%)	0.0	0.0	0.0	0.0	43.0	24.6	0.0	0.0	0.0	0.0	18.6	6.9	7.8
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	16.5	1.4
XUF (%)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

MANUAL SCRAM : 25-11-2007

5. Historical Summary

Date of Construction Start:	01 Sep 1971	Lifetime Generation:	91897.2 GW(e).h
Date of First Criticality:	04 Aug 1975	Cumulative Energy Availability Factor:	81.2%
Date of Grid Connection:	21 Aug 1975	Cumulative Load Factor:	81.5%
Date of Commercial Operation:	01 Dec 1975	Cumulative Unit Capability Factor:	82.1%
		Cumulative Energy Unavailability Factor:	18.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	266.4	392.0	91.3	91.3	91.3	91.3	91.3	91.3	694	93.3
1976	2462.8	395.0	71.6	73.2	71.6	73.2	71.0	72.6	6519	74.2
1977	2576.8	395.0	74.3	73.7	74.3	73.7	74.5	73.5	6649	75.9
1978	2750.6	395.0	79.5	75.6	79.5	75.6	79.5	75.4	7114	81.2
1979	2593.3	395.0	74.6	75.3	74.6	75.3	74.9	75.3	6639	75.8
1980	2782.0	395.0	79.7	76.2	79.7	76.2	80.2	76.3	7111	81.0
1981	2841.7	395.0	81.4	77.1	81.4	77.1	82.1	77.2	7226	82.5
1982	2582.0	395.0	73.8	76.6	73.8	76.6	74.6	76.9	6598	75.3
1983	2017.0	393.0	58.0	74.3	58.0	74.3	58.6	74.6	5190	59.2
1984	2916.0	393.0	84.1	75.4	84.1	75.4	84.5	75.7	7508	85.5
1985	2908.7	392.0	83.0	76.1	83.0	76.1	84.7	76.6	7341	83.8
1986	2282.6	392.0	69.8	75.6	69.8	75.6	66.5	75.7	5891	67.2
1987	2616.4	400.0	77.8	75.8	76.8	75.7	74.7	75.6	6612	75.5
1988	2906.7	400.0	83.2	76.3	82.6	76.2	82.7	76.1	7408	84.3
1989	2479.8	400.0	71.8	76.0	70.8	75.8	70.8	75.8	6436	73.5
1990	1982.6	400.0	66.5	75.4	56.6	74.5	56.6	74.5	5170	59.0
1991	2779.8	400.0	81.2	75.7	81.0	74.9	79.3	74.8	7136	81.5
1992	2971.9	400.0	86.3	76.4	86.1	75.6	84.6	75.4	7617	86.7
1993	2949.5	400.0	85.9	76.9	85.7	76.2	84.2	75.9	7551	86.2
1994	2982.4	392.0	87.3	77.4	86.2	76.7	86.9	76.4	7810	89.2
1995	2867.5	392.0	82.9	77.7	82.7	77.0	83.5	76.8	7342	83.8
1996	2888.8	392.0	83.4	78.0	83.1	77.3	83.9	77.1	7390	84.1
1997	2935.0	392.0	87.7	78.4	84.5	77.6	85.5	77.5	7749	88.5
1998	3145.0	392.0	90.2	78.9	90.1	78.1	91.6	78.1	7987	91.2
1999	3091.7	392.0	89.6	79.4	88.9	78.6	90.0	78.6	7875	89.9
2000	3135.6	392.0	90.4	79.8	89.8	79.0	91.1	79.1	8022	91.3
2001	3150.5	392.0	90.9	80.2	90.3	79.4	91.7	79.6	8060	92.0
2002	3104.5	392.0	91.4	80.6	89.5	79.8	90.4	80.0	8076	92.2
2003	3142.6	392.0	93.1	81.1	90.1	80.2	91.5	80.4	8184	93.4
2004	2951.9	413.0	81.9	81.1	80.5	80.2	81.3	80.4	7174	81.7
2005	3506.7	433.0	91.3	81.5	90.8	80.6	92.4	80.8	8036	91.7
2006	3399.3	433.0	90.1	81.8	88.2	80.8	89.6	81.1	7954	90.8
2007	3483.1	433.0	90.8	82.1	90.8	81.2	91.8	81.5	7985	91.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		0			320	
B. Refuelling without a maintenance					15	
C. Inspection, maintenance or repair combined with refuelling	478			826		
D. Inspection, maintenance or repair without refuelling				164		
E. Testing of plant systems or components	178			73	14	
J. Grid failure or grid unavailability						13
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				8	10	
L. Human factor related		118			0	
Z. Others					0	
Subtotal	656	118	0	1071	359	13
Total		774			1443	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		4
12. Reactor I&C Systems		10
13. Reactor Auxiliary Systems		9
14. Safety Systems	0	9
15. Reactor Cooling Systems		25
16. Steam generation systems		91
31. Turbine and auxiliaries		89
32. Feedwater and Main Steam System		17
41. Main Generator Systems		12
42. Electrical Power Supply Systems		8
Total	0	274

BE-5 DOEL-3

Operator: ELECTRAB (ELECTRABEL M. V. NUCLEAIRE PRODUKTIE)
Contractor: FRAMACEC (FRAMACECO (FRAMATOME-AGEC-COCKERILL))

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1006.0 MW(e)
Design Net Capacity: 890.0 MW(e)
Design Discharge Burnup: 49000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7697.1 GW(e).h
Energy Availability Factor: 87.1%
Load Factor: 87.3%
Operating Factor: 88.0%
Energy Unavailability Factor: 12.9%
Total Off-line Time: 1050 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	751.4	681.6	752.9	726.6	747.9	676.0	0.0	556.2	720.4	658.0	674.3	751.8	7697.1
EAF (%)	100.0	100.0	100.0	100.0	99.8	94.1	0.0	74.2	99.8	87.4	92.8	100.0	87.1
UCF (%)	100.0	100.0	100.0	100.0	99.8	95.3	0.0	74.2	99.8	87.4	92.8	100.0	87.2
LF (%)	100.4	100.8	100.6	100.5	99.9	93.3	0.0	74.3	99.5	87.8	93.1	100.4	87.3
OF (%)	100.0	100.0	99.9	100.1	100.0	96.0	0.0	81.9	100.0	87.5	93.2	100.0	88.0
EUF (%)	0.0	0.0	0.0	0.0	0.2	5.9	100.0	25.8	0.2	12.6	7.2	0.0	12.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	4.5	88.2	6.1	0.0	0.0	0.0	0.0	8.4
UCLF (%)	0.0	0.0	0.0	0.0	0.2	0.2	11.8	19.7	0.2	12.6	7.2	0.0	4.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	01 Jan 1975	Lifetime Generation:	182638.0 GW(e).h
Date of First Criticality:	14 Jun 1982	Cumulative Energy Availability Factor:	86.1%
Date of Grid Connection:	23 Jun 1982	Cumulative Load Factor:	86.0%
Date of Commercial Operation:	01 Oct 1982	Cumulative Unit Capability Factor:	87.6%
		Cumulative Energy Unavailability Factor:	13.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1982	1764.0	944.0	88.8	88.8	88.8	88.8	88.8	88.8	2033	92.1
1983	6705.0	900.0	85.0	85.8	85.0	85.8	85.0	85.8	7807	89.1
1984	7074.0	900.0	89.5	87.5	89.5	87.5	89.5	87.4	8084	92.0
1985	6496.3	900.0	82.4	85.9	82.4	85.9	82.4	85.9	7515	85.8
1986	6860.0	897.0	88.5	86.5	88.5	86.5	87.3	86.2	8007	91.4
1987	5713.2	897.0	75.7	84.4	73.5	84.0	72.7	83.7	6905	78.8
1988	6777.5	890.0	88.7	85.1	85.9	84.3	86.7	84.1	7875	89.7
1989	5774.9	900.0	82.1	84.7	73.4	82.8	73.2	82.6	7470	85.3
1990	6811.8	900.0	89.9	85.3	86.4	83.3	86.4	83.1	8021	91.6
1991	6742.9	900.0	90.0	85.8	85.8	83.5	85.5	83.4	7913	90.3
1992	6732.2	900.0	92.3	86.5	90.1	84.2	85.2	83.5	7778	88.5
1993	5377.2	900.0	69.6	85.0	65.8	82.5	68.2	82.2	6198	70.8
1994	7482.3	970.0	88.4	85.3	87.7	83.0	88.1	82.7	7888	90.0
1995	7025.1	970.0	83.4	85.1	82.6	83.0	82.7	82.7	7396	84.4
1996	7334.2	993.0	84.4	85.1	83.8	83.0	84.0	82.8	7447	84.8
1997	8108.2	1006.0	93.5	85.7	91.9	83.7	92.0	83.4	8250	94.2
1998	8012.6	1006.0	92.0	86.1	90.9	84.2	90.9	83.9	8171	93.3
1999	8231.2	1006.0	94.8	86.6	93.4	84.7	93.4	84.5	8330	95.1
2000	7884.9	1006.0	89.3	86.8	89.0	85.0	89.2	84.8	7892	89.8
2001	7993.3	1006.0	90.9	87.0	90.2	85.3	90.7	85.1	7989	91.2
2002	7636.6	1006.0	86.7	87.0	86.2	85.3	86.7	85.2	7647	87.3
2003	7870.8	1006.0	89.8	87.1	89.7	85.5	89.3	85.4	7928	90.5
2004	7984.8	1006.0	91.6	87.4	90.8	85.8	90.4	85.7	8104	92.3
2005	7962.7	1006.0	92.4	87.6	91.1	86.0	90.4	85.9	8147	93.0
2006	7708.7	1006.0	88.2	87.6	87.3	86.1	87.5	85.9	7764	88.6
2007	7697.1	1006.0	87.2	87.6	87.1	86.1	87.3	86.0	7710	88.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		141			160	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	685			706	2	
D. Inspection, maintenance or repair without refuelling				8		
E. Testing of plant systems or components				0	1	
H. Nuclear regulatory requirements					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					10	
L. Human factor related		222			4	
P. Fire					0	
Subtotal	685	363	0	714	178	0
Total		1048			892	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		11
12. Reactor I&C Systems		2
13. Reactor Auxiliary Systems		1
14. Safety Systems		0
15. Reactor Cooling Systems		30
16. Steam generation systems		53
17. Safety I&C Systems (excluding reactor I&C)		18
31. Turbine and auxiliaries		19
32. Feedwater and Main Steam System	141	10
41. Main Generator Systems		7
42. Electrical Power Supply Systems		5
Total	141	156

BE-7 DOEL-4

Operator: ELECTRAB (ELECTRABEL M. V. NUCLEAIRE PRODUKTIE)
Contractor: ACECOWEN (ACECOWEN (ACEC-COCKERILL-WESTINGHOUSE))

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1008.0 MW(e)
Design Net Capacity: 1000.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8496.9 GW(e).h
Energy Availability Factor: 98.1%
Load Factor: 96.2%
Operating Factor: 98.3%
Energy Unavailability Factor: 1.9%
Total Off-line Time: 153 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	738.9	670.2	746.3	692.7	738.8	707.1	729.6	714.6	710.0	739.2	707.5	601.9	8496.9
EAF (%)	100.0	99.9	100.0	96.5	100.0	100.0	99.6	100.0	100.0	100.0	98.4	82.7	98.1
UCF (%)	100.0	99.9	100.0	96.5	100.0	100.0	100.0	100.0	100.0	100.0	98.4	82.7	98.1
LF (%)	98.5	98.9	99.5	95.4	98.5	97.4	97.3	95.3	97.8	98.4	97.5	80.3	96.2
OF (%)	100.0	100.0	99.9	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	82.7	98.3
EUf (%)	0.0	0.1	0.0	3.5	0.0	0.0	0.4	0.0	0.0	0.0	1.6	17.3	1.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.2	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	1.6	17.3	1.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

AUTOMATIC SCRAM : 13-04-2007

5. Historical Summary

Date of Construction Start: 01 Dec 1978 **Lifetime Generation:** 165566.9 GW(e).h
Date of First Criticality: 31 Mar 1985 **Cumulative Energy Availability Factor:** 83.9%
Date of Grid Connection: 08 Apr 1985 **Cumulative Load Factor:** 83.8%
Date of Commercial Operation: 01 Jul 1985 **Cumulative Unit Capability Factor:** 84.7%
Cumulative Energy Unavailability Factor: 16.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	3574.9	981.0	82.6	82.6	82.6	82.6	82.6	82.6	3884	87.9
1986	7722.9	1006.0	87.8	86.1	87.8	86.1	87.6	86.0	7973	91.0
1987	6809.3	1006.0	81.4	84.2	77.0	82.4	77.3	82.5	7448	85.0
1988	7552.0	1000.0	87.6	85.2	85.9	83.4	86.0	83.5	7784	88.6
1989	7445.9	1010.0	87.4	85.7	84.4	83.7	84.2	83.6	7737	88.3
1990	7535.8	1010.0	88.2	86.1	85.3	83.9	85.2	83.9	7790	88.9
1991	7425.4	1010.0	84.8	85.9	84.1	84.0	83.9	83.9	7673	87.6
1992	7418.6	1010.0	86.7	86.0	85.9	84.2	83.6	83.9	7481	85.2
1993	6980.9	1010.0	79.6	85.3	78.9	83.6	78.9	83.3	7112	81.2
1994	3462.7	1001.0	39.2	80.4	39.2	78.9	39.5	78.7	3637	41.5
1995	6769.7	1001.0	76.9	80.1	76.8	78.7	77.2	78.6	7381	84.3
1996	6186.8	1001.0	70.6	79.3	69.9	78.0	70.4	77.8	6565	74.7
1997	7548.7	1001.0	87.1	79.9	87.0	78.7	86.1	78.5	7653	87.4
1998	7844.0	985.0	90.0	80.6	90.0	79.5	90.9	79.4	7998	91.3
1999	8008.4	985.0	92.5	81.4	92.4	80.4	92.8	80.3	8150	93.0
2000	7992.9	985.0	92.0	82.1	92.0	81.1	92.4	81.1	8323	94.8
2001	8098.9	985.0	93.3	82.8	93.2	81.8	93.9	81.8	8264	94.3
2002	7831.9	985.0	90.6	83.2	90.4	82.3	90.8	82.3	8017	91.5
2003	7781.2	985.0	91.1	83.6	90.5	82.8	90.2	82.8	8015	91.5
2004	7519.8	985.0	88.4	83.9	87.0	83.0	86.9	83.0	7843	89.3
2005	7394.8	985.0	86.1	84.0	85.9	83.1	85.7	83.1	7647	87.3
2006	7462.0	1008.0	86.5	84.1	86.2	83.3	84.5	83.2	7633	87.1
2007	8496.9	1008.0	98.1	84.7	98.1	83.9	96.2	83.8	8608	98.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		168			277	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling				841		
D. Inspection, maintenance or repair without refuelling				29		
E. Testing of plant systems or components				2	1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			13		52	
L. Human factor related					12	
Subtotal	0	168	13	872	343	0
Total		181			1215	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems		1
14. Safety Systems		6
15. Reactor Cooling Systems	145	19
16. Steam generation systems		221
31. Turbine and auxiliaries		7
32. Feedwater and Main Steam System		12
33. Circulating Water System		0
41. Main Generator Systems	23	3
42. Electrical Power Supply Systems		2
Total	168	271

BE-3 TIHANGE-1**Operator:** ELECTRAB (ELECTRABEL M. V. NUCLEAIRE PRODUKTIE)**Contractor:** ACLF ((ACECOWEN - CREUSOT LOIRE - FRAMATOME))**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 962.0 MW(e)
Design Net Capacity: 870.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7055.9 GW(e).h
Energy Availability Factor: 85.1%
Load Factor: 83.7%
Operating Factor: 87.1%
Energy Unavailability Factor: 14.9%
Total Off-line Time: 1133 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	726.0	640.3	210.0	315.2	399.7	671.7	698.4	693.8	633.7	649.0	693.7	724.4	7055.9
EAF (%)	100.0	98.5	29.3	45.4	56.0	100.0	100.0	100.0	92.9	100.0	100.0	100.0	85.1
UCF (%)	100.0	98.5	29.3	47.9	59.4	100.0	100.0	100.0	92.9	100.0	100.0	100.0	85.6
LF (%)	101.4	99.0	29.3	45.6	55.8	97.0	97.6	96.9	91.5	90.6	100.2	101.2	83.7
OF (%)	100.0	100.0	29.7	59.5	60.9	100.0	100.0	100.0	96.1	100.0	100.0	100.0	87.1
EUF (%)	0.0	1.5	70.7	54.6	44.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	14.9
PUF (%)	0.0	0.0	70.7	48.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
UCLF (%)	0.0	1.5	0.0	3.6	40.6	0.0	0.0	0.0	7.1	0.0	0.0	0.0	4.4
XUF (%)	0.0	0.0	0.0	2.5	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

STOP FOR REVISION AND REFUELLING. STOP FOR PROBLEM ON ISHP PUMPS.

5. Historical Summary

Date of Construction Start: 01 Jun 1970
Date of First Criticality: 21 Feb 1975
Date of Grid Connection: 07 Mar 1975
Date of Commercial Operation: 01 Oct 1975

Lifetime Generation: 214254.0 GW(e).h
Cumulative Energy Availability Factor: 83.4%
Cumulative Load Factor: 83.0%
Cumulative Unit Capability Factor: 86.0%
Cumulative Energy Unavailability Factor: 16.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	1463.0	885.0	76.2	76.2	76.2	76.2	76.2	76.2	2087	94.5
1976	4409.5	870.0	89.8	87.0	57.5	61.3	57.7	61.4	6354	72.3
1977	5842.3	870.0	76.7	82.4	76.7	68.1	76.7	68.2	7234	82.6
1978	6371.0	870.0	84.3	83.0	84.3	73.1	83.6	72.9	7582	86.6
1979	5159.0	870.0	67.6	79.4	67.6	71.8	67.7	71.7	6121	69.9
1980	6173.0	870.0	80.7	79.6	80.7	73.5	80.8	73.4	7337	83.5
1981	6414.2	870.0	83.8	80.3	83.8	75.1	84.2	75.1	7762	88.6
1982	6164.8	870.0	80.8	80.4	80.8	75.9	80.9	75.9	7269	83.0
1983	5843.0	870.0	76.5	79.9	76.5	76.0	76.7	76.0	7135	81.4
1984	6374.0	870.0	83.4	80.3	83.4	76.8	83.4	76.8	7774	88.5
1985	5979.0	870.0	90.8	81.3	81.1	77.2	78.5	77.0	8077	92.2
1986	4005.0	870.0	59.2	79.3	54.8	75.2	52.6	74.8	5429	62.0
1987	7337.0	870.0	98.5	80.9	97.6	77.0	96.3	76.6	8733	99.7
1988	6310.0	870.0	84.9	81.2	83.9	77.6	82.6	77.0	7520	85.6
1989	6508.0	870.0	88.4	81.7	87.9	78.3	85.4	77.6	7854	89.7
1990	6683.0	870.0	90.9	82.3	88.4	78.9	87.7	78.3	8082	92.3
1991	6163.0	870.0	86.7	82.6	81.0	79.1	80.9	78.4	7714	88.1
1992	6059.0	870.0	80.5	82.5	79.1	79.1	79.3	78.5	7807	88.9
1993	7317.0	870.0	99.8	83.4	96.4	80.0	96.0	79.4	8459	96.6
1994	6737.0	863.0	90.7	83.8	90.0	80.5	89.1	79.9	8018	91.5
1995	5442.0	882.0	72.9	83.2	70.0	80.0	70.4	79.5	6488	74.1
1996	7210.7	931.0	88.4	83.5	88.2	80.4	88.2	79.9	7823	89.1
1997	7942.6	962.0	95.5	84.1	94.3	81.1	94.3	80.6	8385	95.7
1998	7264.0	962.0	87.4	84.2	86.3	81.3	86.2	80.9	7777	88.8
1999	7272.0	962.0	86.9	84.4	85.5	81.5	86.3	81.1	7905	90.2
2000	8457.0	962.0	99.3	85.0	99.3	82.3	100.1	81.9	8782	100.0
2001	6969.0	962.0	91.2	85.3	82.5	82.3	82.7	82.0	7481	85.4
2002	7047.2	962.0	86.0	85.3	83.9	82.4	83.6	82.0	7631	87.1
2003	7990.4	962.0	95.5	85.7	95.1	82.9	94.8	82.5	8552	97.6
2004	7106.5	962.0	84.5	85.6	84.5	82.9	84.1	82.6	7456	84.9
2005	6811.0	962.0	82.7	85.5	80.2	82.8	80.8	82.5	7403	84.5
2006	8186.9	962.0	98.8	86.0	98.8	83.4	97.1	83.0	8693	99.2
2007	7055.9	962.0	85.6	86.0	85.1	83.4	83.7	83.0	7627	87.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		318			102	
C. Inspection, maintenance or repair combined with refuelling	857			827		
D. Inspection, maintenance or repair without refuelling				12		
G. Major back-fitting, refurbishment or upgrading activities without refuelling						9
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					4	86
L. Human factor related					0	
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)						1
Z. Others					1	
Subtotal	857	318	0	839	107	96
Total		1175			1042	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		9
14. Safety Systems	290	2
15. Reactor Cooling Systems		32
16. Steam generation systems		15
31. Turbine and auxiliaries	28	12
32. Feedwater and Main Steam System		10
33. Circulating Water System		1
35. All other I&C Systems		0
41. Main Generator Systems		3
42. Electrical Power Supply Systems		12
XX. Miscellaneous Systems		0
Total	318	96

BE-6 TIHANGE-2

Operator: ELECTRAB (ELECTRABEL M. V. NUCLEAIRE PRODUKTIE)
Contractor: FRAMACEC (FRAMACECO (FRAMATOME-ACEC-COCKERILL))

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1008.0 MW(e)
Design Net Capacity: 902.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8751.6 GW(e).h
Energy Availability Factor: 99.9%
Load Factor: 99.1%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.1%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	737.4	681.8	751.3	719.7	740.5	711.2	740.2	734.6	713.5	743.0	726.3	751.9	8751.6
EAF (%)	99.9	99.8	100.0	100.0	99.7	100.0	100.0	100.0	100.0	99.9	100.0	100.0	99.9
UCF (%)	100.0	99.9	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	98.3	100.7	100.2	99.3	98.7	98.0	98.7	98.0	98.3	98.9	100.1	100.3	99.1
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
EUUF (%)	0.1	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

EXTRAORDINARY YEAR 2007 FOR TIHANGE 2 WITH 99,97 % UCF ! NO OUTAGE AND NO PROBLEM !

5. Historical Summary

Date of Construction Start: 01 Apr 1976 **Lifetime Generation:** 179274.0 GW(e).h
Date of First Criticality: 05 Oct 1982 **Cumulative Energy Availability Factor:** 87.8%
Date of Grid Connection: 13 Oct 1982 **Cumulative Load Factor:** 87.5%
Date of Commercial Operation: 01 Jun 1983 **Cumulative Unit Capability Factor:** 88.9%
Cumulative Energy Unavailability Factor: 12.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation								
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online		
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)	
1983	4022.0	901.0	86.9	86.9	86.9	86.9	86.9	86.9	86.9	4612	89.8
1984	6856.0	901.0	86.4	86.6	86.4	86.6	86.6	86.7	86.6	7693	87.6
1985	6636.0	900.0	89.4	87.7	87.8	87.0	84.2	85.7	84.2	7890	90.1
1986	6189.0	900.0	85.0	86.9	83.1	85.9	78.5	83.7	78.5	7509	85.7
1987	6584.0	900.0	84.3	86.3	83.4	85.4	83.5	83.7	83.5	7477	85.4
1988	6966.0	900.0	89.9	87.0	87.9	85.8	88.1	84.5	88.1	7992	91.0
1989	6663.0	901.0	86.0	86.8	84.7	85.7	84.4	84.5	84.4	7728	88.2
1990	6919.0	901.0	88.5	87.1	88.0	86.0	87.7	84.9	87.7	7827	89.3
1991	6850.0	901.0	88.4	87.2	87.7	86.2	86.8	85.1	86.8	7790	88.9
1992	6746.0	901.0	89.7	87.5	86.9	86.3	85.2	85.1	85.2	7912	90.1
1993	6555.0	901.0	86.4	87.4	83.6	86.0	83.1	84.9	83.1	7507	85.7
1994	7585.0	894.0	98.3	88.3	96.7	86.9	96.9	85.9	96.9	8501	97.0
1995	6849.0	921.0	90.2	88.5	85.0	86.8	84.9	85.9	84.9	7697	87.9
1996	7253.0	943.0	88.6	88.5	87.0	86.8	87.5	86.0	87.5	7810	88.9
1997	6854.0	960.0	82.3	88.0	81.3	86.4	81.5	85.7	81.5	7241	82.7
1998	7664.0	960.0	91.0	88.2	90.6	86.7	91.1	86.0	91.1	8015	91.5
1999	8111.0	960.0	95.5	88.7	95.5	87.2	96.4	86.7	96.4	8380	95.7
2000	7481.0	960.0	89.4	88.7	88.0	87.3	88.7	86.8	88.7	7901	89.9
2001	6976.0	960.0	80.8	88.3	80.7	86.9	83.0	86.6	83.0	7137	81.5
2002	7833.4	1008.0	89.0	88.3	87.9	87.0	88.7	86.7	88.7	7821	89.3
2003	7601.0	1008.0	86.3	88.2	85.6	86.9	86.1	86.7	86.1	7589	86.6
2004	8517.3	1008.0	96.4	88.6	96.0	87.3	96.2	87.2	96.2	8478	96.5
2005	7890.0	1008.0	90.1	88.7	89.5	87.4	89.4	87.3	89.4	7929	90.5
2006	7219.3	1008.0	83.0	88.4	82.4	87.2	81.8	87.0	81.8	7348	83.9
2007	8751.6	1008.0	100.0	88.9	99.9	87.8	99.1	87.5	99.1	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					120	
B. Refuelling without a maintenance					14	
C. Inspection, maintenance or repair combined with refuelling				721	5	
D. Inspection, maintenance or repair without refuelling				93		
E. Testing of plant systems or components					3	
G. Major back-fitting, refurbishment or upgrading activities without refuelling						15
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				15	28	
Subtotal	0	0	0	829	170	15
Total	0			1014		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		5
12. Reactor I&C Systems		6
14. Safety Systems		2
15. Reactor Cooling Systems		16
16. Steam generation systems		29
31. Turbine and auxiliaries		11
32. Feedwater and Main Steam System		11
41. Main Generator Systems		2
42. Electrical Power Supply Systems		16
Total	0	98

BE-8 TIHANGE-3

Operator: ELECTRAB (ELECTRABEL M. V. NUCLEAIRE PRODUKTIE)
Contractor: ACECOWEN (ACECOWEN (ACEC-COCKERILL-WESTINGHOUSE))

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1015.0 MW(e)
Design Net Capacity: 1020.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7339.4 GW(e).h
Energy Availability Factor: 83.0%
Load Factor: 82.5%
Operating Factor: 84.5%
Energy Unavailability Factor: 17.0%
Total Off-line Time: 1354 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	547.8	671.0	752.0	683.5	750.3	689.2	746.7	685.9	176.6	438.7	708.0	489.8	7339.4
EAF (%)	73.7	98.4	99.7	94.0	100.0	95.7	100.0	91.3	24.2	58.0	96.7	64.7	83.0
UCF (%)	73.7	98.4	99.7	94.0	100.0	96.0	100.0	94.0	26.3	58.0	96.7	64.7	83.4
LF (%)	72.5	98.4	99.6	93.7	99.4	94.3	98.9	90.8	24.2	58.0	96.9	64.9	82.5
OF (%)	75.0	98.8	100.0	95.1	100.0	98.5	100.0	95.7	27.2	62.3	97.8	64.9	84.5
EUUF (%)	26.3	1.6	0.3	6.0	0.0	4.3	0.0	8.7	75.8	42.0	3.3	35.3	17.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.7	40.1	0.0	35.3	12.5
UCLF (%)	26.3	1.6	0.3	6.0	0.0	4.0	0.0	6.0	0.0	1.9	3.4	0.0	4.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.7	2.1	0.0	0.0	0.0	0.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

REFUELLING AND REVISION IN 09 AND 10/2007.

5. Historical Summary

Date of Construction Start: 01 Nov 1978 **Lifetime Generation:** 174535.0 GW(e).h
Date of First Criticality: 05 Jun 1985 **Cumulative Energy Availability Factor:** 87.5%
Date of Grid Connection: 15 Jun 1985 **Cumulative Load Factor:** 87.2%
Date of Commercial Operation: 01 Sep 1985 **Cumulative Unit Capability Factor:** 89.2%
Cumulative Energy Unavailability Factor: 12.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985			Data not provided							
1986	7558.0	1020.0	86.5	86.5	85.6	85.6	84.6	84.6	7733	88.3
1987	7829.0	1020.0	89.0	87.8	87.3	86.4	87.6	86.1	7872	89.9
1988	7623.0	1020.0	87.4	87.6	85.0	86.0	85.1	85.8	7773	88.5
1989	7749.0	1020.0	87.5	87.6	87.0	86.2	86.7	86.0	7790	88.9
1990	7794.0	1020.0	90.0	88.1	87.1	86.4	87.2	86.2	7924	90.5
1991	7649.0	1020.0	88.3	88.1	86.2	86.4	85.6	86.1	7903	90.2
1992	8335.0	1020.0	93.4	88.9	93.3	87.4	93.0	87.1	8246	93.9
1993	7748.0	1020.0	89.5	88.9	88.1	87.4	86.7	87.1	7874	89.9
1994	7480.0	1015.0	86.8	88.7	84.7	87.1	84.1	86.7	7666	87.5
1995	7559.0	1015.0	86.7	88.5	84.7	86.9	85.0	86.6	7632	87.1
1996	7189.0	1015.0	81.1	87.8	81.1	86.4	80.6	86.0	7142	81.3
1997	8357.0	1015.0	99.2	88.8	94.4	87.0	94.0	86.7	8342	95.2
1998	6738.0	1015.0	77.9	87.9	75.9	86.2	75.8	85.9	6903	78.8
1999	8799.0	1015.0	99.1	88.7	98.9	87.1	99.0	86.8	8686	99.2
2000	7597.0	1015.0	86.4	88.6	84.9	86.9	85.2	86.7	7656	87.2
2001	7729.0	1015.0	89.9	88.7	86.5	86.9	86.9	86.7	7929	90.5
2002	8340.5	1015.0	95.7	89.1	93.7	87.3	93.8	87.1	8368	95.5
2003	7661.5	1015.0	89.4	89.1	86.5	87.3	86.2	87.1	7846	89.6
2004	7936.4	1015.0	90.4	89.2	89.2	87.4	89.0	87.2	7969	90.7
2005	8707.5	1015.0	99.8	89.7	99.6	88.0	97.9	87.7	8753	99.9
2006	7237.6	1015.0	86.1	89.5	83.3	87.8	81.4	87.4	7592	86.7
2007	7339.4	1015.0	83.4	89.2	83.0	87.5	82.5	87.2	7406	84.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		289			126	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	791			651		
D. Inspection, maintenance or repair without refuelling	261			5		
E. Testing of plant systems or components				1		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				24		17
H. Nuclear regulatory requirements					2	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				6		
L. Human factor related		14				
Subtotal	1052	303	0	687	132	17
Total		1355			836	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		6
15. Reactor Cooling Systems	194	19
16. Steam generation systems		48
31. Turbine and auxiliaries	84	31
32. Feedwater and Main Steam System		2
33. Circulating Water System		9
41. Main Generator Systems		3
42. Electrical Power Supply Systems	11	5
Total	289	123

BR-1 ANGRA-1

Operator: ELETRONU (ELETROBRAS TERMONUCLEAR SA - ELETRONUCLEAR)
Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 520.0 MW(e)
Design Net Capacity: 626.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2553.5 GW(e).h
Energy Availability Factor: 62.8%
Load Factor: 56.1%
Operating Factor: 62.6%
Energy Unavailability Factor: 37.2%
Total Off-line Time: 3279 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	121.7	0.0	287.7	339.4	350.8	5.0	0.0	299.9	224.7	205.5	353.7	365.1	2553.5
EAF (%)	38.7	0.0	88.5	100.0	100.0	3.4	0.0	91.1	63.6	62.7	100.0	100.0	62.8
UCF (%)	38.7	0.0	88.5	100.0	100.0	3.4	0.0	91.1	63.6	62.7	100.0	100.0	62.8
LF (%)	31.5	0.0	74.4	90.8	90.7	1.3	0.0	77.5	60.0	53.0	94.5	94.4	56.1
OF (%)	38.7	0.0	88.8	100.1	100.0	3.3	0.0	91.4	63.6	59.3	100.0	100.0	62.6
EUUF (%)	61.3	100.0	11.5	0.0	0.0	96.6	100.0	8.9	36.4	37.3	0.0	0.0	37.2
PUF (%)	61.3	73.3	0.0	0.0	0.0	96.6	21.6	0.0	0.0	0.0	0.0	0.0	20.6
UCLF (%)	0.0	26.7	11.5	0.0	0.0	0.0	78.4	8.9	36.4	37.3	0.0	0.0	16.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

WE ARE RUNNING AT 520MWE IN ORDER TO PRESERVE OUR STEAM GENERATOR.

5. Historical Summary

Date of Construction Start: 01 May 1971 **Lifetime Generation:** 54817.0 GW(e).h
Date of First Criticality: 13 Mar 1982 **Cumulative Energy Availability Factor:** 52.4%
Date of Grid Connection: 01 Apr 1982 **Cumulative Load Factor:** 42.3%
Date of Commercial Operation: 01 Jan 1985 **Cumulative Unit Capability Factor:** 60.0%
Cumulative Energy Unavailability Factor: 47.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	3169.4	626.0	57.8	57.8	57.8	57.8	57.8	57.8	6847	78.2
1986	132.4	626.0	3.7	30.7	3.7	30.7	2.4	30.1	512	5.8
1987	910.6	626.0	19.7	27.1	19.7	27.1	16.6	25.6	1958	22.4
1988	566.6	626.0	18.5	24.9	18.5	24.9	10.3	21.8	1488	16.9
1989	1695.1	626.0	61.8	32.3	61.3	32.2	30.9	23.6	5362	61.2
1990	2055.3	626.0	86.1	41.3	82.5	40.6	37.5	25.9	7400	84.5
1991	1306.4	626.0	57.2	43.5	57.2	43.0	23.8	25.6	5046	57.6
1992	1506.4	626.0	47.9	44.1	47.9	43.6	27.4	25.8	4275	48.7
1993	402.7	626.0	17.2	41.1	17.2	40.6	7.3	23.8	1524	17.4
1994	41.5	626.0	83.8	45.4	3.5	36.9	0.8	21.5	305	3.5
1995	2333.6	626.0	92.8	49.7	42.6	37.4	42.6	23.4	8127	92.8
1996	2288.8	626.0	67.0	51.1	55.2	38.9	41.6	24.9	5063	57.6
1997	2990.0	626.0	60.7	51.9	53.2	40.0	54.5	27.2	6219	71.0
1998	3093.8	626.0	56.4	52.2	56.4	41.2	56.4	29.3	6976	79.6
1999	3631.7	626.0	65.2	53.0	64.8	42.8	66.2	31.7	8429	96.2
2000	3164.9	626.0	58.7	53.4	58.7	43.8	57.6	33.4	6514	74.2
2001	3614.4	626.0	82.9	55.1	82.9	46.1	65.9	35.3	7295	83.3
2002	3775.2	626.0	87.7	56.9	85.9	48.3	68.8	37.1	7595	86.7
2003	3137.1	626.0	74.5	57.9	57.2	48.7	57.2	38.2	6551	74.8
2004	3890.2	626.0	70.7	58.5	70.7	49.8	70.7	39.8	7968	90.7
2005	3520.4	626.0	83.0	59.7	83.0	51.4	64.2	41.0	7275	83.0
2006	3205.2	626.0	64.0	59.9	64.0	52.0	58.4	41.8	6743	77.0
2007	2553.5	520.0	62.8	60.0	62.8	52.4	56.1	42.3	5481	62.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1475			1487	0
B. Refuelling without a maintenance				39	5	
C. Inspection, maintenance or repair combined with refuelling	856			1002		
D. Inspection, maintenance or repair without refuelling	949			212	12	
E. Testing of plant systems or components				72	0	
H. Nuclear regulatory requirements				56	0	11
J. Grid failure or grid unavailability					5	3
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					26	12
L. Human factor related					0	317
Subtotal	1805	1475	0	1381	1535	343
Total		3280			3259	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems	583	30
13. Reactor Auxiliary Systems	64	94
15. Reactor Cooling Systems		5
16. Steam generation systems	264	33
21. Fuel Handling and Storage Facilities		332
31. Turbine and auxiliaries		118
32. Feedwater and Main Steam System		57
33. Circulating Water System		8
41. Main Generator Systems	563	488
42. Electrical Power Supply Systems		262
Total	1474	1427

BR-2 ANGRA-2**Operator:** ELETRONU (ELETROBRAS TERMONUCLEAR SA - ELETRONUCLEAR)**Contractor:** KWU (SIEMENS KRAFTWERK UNION AG)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1275.0 MW(e)
Design Net Capacity: 1245.0 MW(e)
Design Discharge Burnup: 35000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9096.9 GW(e).h
Energy Availability Factor: 84.7%
Load Factor: 81.4%
Operating Factor: 86.8%
Energy Unavailability Factor: 15.3%
Total Off-line Time: 1154 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	818.3	678.9	357.2	205.1	665.6	918.0	939.4	949.9	916.8	946.2	871.7	829.9	9096.9
EAF (%)	100.0	100.0	37.7	24.1	73.6	100.0	98.8	100.0	100.0	100.0	94.4	88.5	84.7
UCF (%)	100.0	100.0	52.1	24.1	73.6	100.0	98.8	100.0	100.0	100.0	94.4	88.5	85.9
LF (%)	86.3	79.2	37.7	22.4	70.2	100.0	99.0	100.1	99.9	99.6	95.0	87.5	81.4
OF (%)	100.0	100.0	52.0	30.5	76.9	100.0	98.8	100.0	100.0	99.9	94.4	89.9	86.8
EUF (%)	0.0	0.0	62.3	75.9	26.4	0.0	1.2	0.0	0.0	0.0	5.6	11.5	15.3
PUF (%)	0.0	0.0	47.9	40.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4
UCLF (%)	0.0	0.0	0.0	35.4	26.4	0.0	1.2	0.0	0.0	0.0	5.6	11.5	6.7
XUF (%)	0.0	0.0	14.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

IN MARCH BEGAN OPERATING IN FUEL STRETCH OUT MODE. IN MARCH BEGAN REFUELING OUTAGE 2P5IN
 APRIL UNPLANNED OUTAGE EXTENSION (216.15H) IN APRIL UNPLANNED LOSSE ENERGY DUE CIRCULATING
 WATER PUMP VIBRATION HIGH. IN MAY FORCED LOSS. HIGH RATE GAS INTO MAIN TRASFORMER IN JULY
 FEEDWATER TO STEAM GENERATOR VALVE, FAULT IN NOVEMBER TURBINE PROTECTION SYSTEM FAULT IN
 DECEMBER HIGH TEMPERATURE IN CONNECTION OF THE MAIN TRANSFORMER. IN DECEMBER CHANGE SEAL OF
 THE REACTOR COOLANT PUMP

5. Historical Summary

Date of Construction Start: 01 Jan 1976 **Lifetime Generation:** 62455.1 GW(e).h
Date of First Criticality: 14 Jul 2000 **Cumulative Energy Availability Factor:** 81.7%
Date of Grid Connection: 21 Jul 2000 **Cumulative Load Factor:** 76.3%
Date of Commercial Operation: 01 Feb 2001 **Cumulative Unit Capability Factor:** 84.0%
Cumulative Energy Unavailability Factor: 18.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2001	9272.9	1350.0	94.3	94.3	94.2	94.2	85.7	85.7	7797	97.3
2002	9238.2	1275.0	91.3	92.8	83.3	88.7	82.7	84.2	8060	92.0
2003	9419.0	1275.0	91.0	92.2	84.3	87.2	84.3	84.2	8019	91.5
2004	6919.8	1275.0	72.8	87.3	72.8	83.6	61.8	78.6	6497	74.0
2005	5676.7	1275.0	63.7	82.5	63.7	79.6	50.8	73.0	5581	63.7
2006	9778.3	1275.0	89.3	83.7	89.3	81.2	87.5	75.4	8014	91.5
2007	9096.9	1275.0	85.9	84.0	84.7	81.7	81.4	76.3	7606	86.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2000 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		523			256	
C. Inspection, maintenance or repair combined with refuelling	648			373	66	
D. Inspection, maintenance or repair without refuelling				411		
E. Testing of plant systems or components				7		
J. Grid failure or grid unavailability						3
Subtotal	648	523	0	791	322	3
Total		1171			1116	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2000 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		78
15. Reactor Cooling Systems	279	4
16. Steam generation systems		0
31. Turbine and auxiliaries	40	5
32. Feedwater and Main Steam System	9	1
41. Main Generator Systems		97
42. Electrical Power Supply Systems	195	69
Total	523	254

BG-5 KOZLODUY-5

Operator: KOZNPP (KOZLODUY NPP-plc)
Contractor: AEE (ATOMENERGOEXPORT)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 953.0 MW(e)
Design Net Capacity: 953.0 MW(e)
Design Discharge Burnup: 27000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6669.9 GW(e).h
Energy Availability Factor: 80.2%
Load Factor: 79.9%
Operating Factor: 80.9%
Energy Unavailability Factor: 19.8%
Total Off-line Time: 1670 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	707.8	646.2	716.0	695.1	649.9	309.5	0.0	323.4	486.8	717.1	697.3	720.8	6669.9
EAF (%)	100.0	100.0	100.0	100.0	100.0	47.4	0.0	45.8	71.6	100.0	100.0	100.0	80.2
UCF (%)	100.0	100.0	100.0	100.0	100.0	49.4	0.0	45.9	71.6	100.0	100.0	100.0	80.4
LF (%)	99.8	100.9	101.0	101.4	91.7	45.1	0.0	45.6	70.9	101.0	101.6	101.7	79.9
OF (%)	100.0	100.0	100.0	100.1	100.0	50.4	0.0	49.2	73.5	99.9	100.0	100.0	80.9
EUF (%)	0.0	0.0	0.0	0.0	0.0	52.6	100.0	54.2	28.4	0.0	0.0	0.0	19.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	50.4	100.0	54.2	0.0	0.0	0.0	0.0	17.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	28.4	0.0	0.0	0.0	2.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

IN 2007 WAS REGISTERED THE BIGGEST PRODUCTION OF ELECTRICITY AND 7 YEARS OPERATION WITHOUT REACTOR SCRAMS. UNIT 5 WAS OPERATED IN BASE LOAD MODE N=100% IN ACCORDANCE WITH THE LOAD SCHEDULE DURING THE PERIOD JANUARY-APRIL AND SEPTEMBER-DECEMBER AND IN LOWER POWER (90-95%) IN MAY AND JUNE DUE TO FORCED PERFORMANCE OF THE HYDRO PLANTS. THE UNIT 5 WAS PLANNED SHUTDOWN ON 16TH JUNE FOR ANNUAL MAINTENANCE, REFUELING AND MODERNIZATION. THE MOST IMPORTANT MODERNIZATION PROJECTS IMPLEMENTED DURING THE PLANNED OUTAGE ARE RELATED TO THE CONTROL SYSTEM UPGRADING, SAFETY SYSTEMS EQUIPMENT REPLACEMENT ETC. THE TOTAL DURATION OF THE PLANNED OUTAGE WAS 1 478,8 H (~62 DAYS). THERE WAS ONE UNPLANNED OUTAGE - TG TRIPPING BY ELECTRICAL PROTECTION DUE TO SHORT CURRENT AND DAMAGE OF THE MAIN GENERATOR EXCITER ROTOR IN SEPTEMBER. DURING THE TRANSIENT THE OPERATING STAFF WAS ACTIVATED REACTOR SCRAM MANUALLY.

5. Historical Summary

Date of Construction Start:	09 Jul 1980	Lifetime Generation:	83156.0 GW(e).h
Date of First Criticality:	05 Nov 1987	Cumulative Energy Availability Factor:	62.5%
Date of Grid Connection:	29 Nov 1987	Cumulative Load Factor:	52.1%
Date of Commercial Operation:	23 Dec 1988	Cumulative Unit Capability Factor:	65.8%
		Cumulative Energy Unavailability Factor:	37.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	635.9	887.0	100.0	100.0	100.0	100.0	96.4	96.4	744	100.0
1989	3355.1	953.0	51.5	55.1	51.5	55.1	40.2	44.3	4663	53.2
1990	3380.9	953.0	58.1	56.5	41.8	48.7	40.5	42.5	5592	63.8
1991	1950.4	953.0	31.7	48.5	31.7	43.2	23.4	36.3	2777	31.7
1992	3540.7	953.0	56.7	50.5	47.0	44.1	42.3	37.7	4982	56.7
1993	3278.0	953.0	50.5	50.5	47.5	44.8	39.3	38.0	4675	53.4
1994	2880.4	953.0	52.6	50.8	48.1	45.3	34.5	37.5	4350	49.7
1995	4699.3	953.0	68.1	53.3	59.4	47.3	56.3	40.1	5988	68.4
1996	4720.3	953.0	73.8	55.8	73.8	50.6	56.4	42.1	6468	73.6
1997	4410.2	953.0	68.7	57.2	68.7	52.6	52.8	43.3	6034	68.9
1998	3741.0	953.0	73.3	58.8	73.3	54.6	44.8	43.5	6467	73.8
1999	3423.2	953.0	54.8	58.5	50.4	54.3	41.0	43.2	4838	55.2
2000	4340.8	1000.0	63.4	58.9	54.3	54.3	49.6	43.8	5406	61.7
2001	5049.6	953.0	66.6	59.5	61.5	54.8	60.5	45.1	5940	67.8
2002	5095.8	953.0	79.8	60.9	79.4	56.6	61.0	46.2	7003	79.9
2003	5596.7	953.0	98.6	63.4	98.6	59.3	67.0	47.6	8579	97.9
2004	4842.0	953.0	67.2	63.6	67.2	59.8	57.8	48.2	5906	67.2
2005	5513.5	953.0	75.2	64.3	75.2	60.7	66.0	49.2	6641	75.8
2006	6047.0	953.0	75.8	65.0	75.7	61.5	72.4	50.5	6691	76.4
2007	6669.9	953.0	80.4	65.8	80.2	62.5	79.9	52.1	7090	80.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		190			181	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	1478			1646		
D. Inspection, maintenance or repair without refuelling				219		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				122		
H. Nuclear regulatory requirements				31		
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						0
Subtotal	1478	190	0	2018	183	2
Total		1668			2203	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		10
13. Reactor Auxiliary Systems		0
15. Reactor Cooling Systems		9
16. Steam generation systems		12
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		18
32. Feedwater and Main Steam System		18
35. All other I&C Systems		2
41. Main Generator Systems	190	103
42. Electrical Power Supply Systems		2
Total	190	176

BG-6 KOZLODUY-6

Operator: KOZNPP (KOZLODUY NPP-plc)
Contractor: AEE (ATOMENERGOEXPORT)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 953.0 MW(e)
Design Net Capacity: 953.0 MW(e)
Design Discharge Burnup: 27000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7024.8 GW(e).h
Energy Availability Factor: 84.7%
Load Factor: 84.1%
Operating Factor: 85.5%
Energy Unavailability Factor: 15.3%
Total Off-line Time: 1267 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	706.2	639.6	711.9	689.8	677.8	667.5	683.0	688.1	172.8	7.6	654.4	726.3	7024.8
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	99.4	97.5	25.4	1.1	94.2	100.0	84.7
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	99.4	98.7	28.0	1.1	94.2	100.0	85.0
LF (%)	99.6	99.9	100.4	100.7	95.6	97.3	96.3	97.0	25.2	1.1	95.4	102.4	84.1
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	28.8	3.6	94.9	100.0	85.5
EUUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.5	74.6	98.9	5.8	0.0	15.3
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.3	72.0	98.9	0.2	0.0	14.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.6	0.0	0.0	0.0	0.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

HIGHLIGHTS OF OPERATION DURING THE YEAR: IN 2007 WAS REGISTERED THE BIGGEST PRODUCTION OF ELECTRICITY AND 11 YEARS OPERATION WITHOUT REACTOR SCRAMS. UNIT 6 WAS OPERATED IN BASE LOAD MODE N=100% IN ACCORDANCE WITH THE LOAD SCHEDULE EXCEPT MAY AND JUNE (OPERATION IN LOWER POWER 95-98% DUE TO FORCED PERFORMANCE OF THE HYDRO PLANTS). THE UNIT 6 WAS PLANNED SHUTDOWN ON 9TH SEPTEMBER FOR ANNUAL MAINTENANCE, REFUELING AND MODERNIZATION. THE MOST IMPORTANT MODERNIZATION PROJECTS IMPLEMENTED DURING THE PLANNED OUTAGE ARE RELATED TO THE EQUIPMENT SEISMIC STABILITY ENHANCEMENT. THE TOTAL DURATION OF THE PLANNED OUTAGE WAS 1 231,3 H (~51 DAYS). THERE WAS ONE UNPLANNED OUTAGE - TG WAS SHUTDOWN FOR REPAIRING OF LEAKAGE FROM STEAM LINE TO THE HP CONDENSATE DEAERATOR IN NOVEMBER.

5. Historical Summary

Date of Construction Start: 01 Apr 1982 **Lifetime Generation:** 70878.0 GW(e).h
Date of First Criticality: 29 May 1991 **Cumulative Energy Availability Factor:** 70.4%
Date of Grid Connection: 02 Aug 1991 **Cumulative Load Factor:** 60.1%
Date of Commercial Operation: 30 Dec 1993 **Cumulative Unit Capability Factor:** 73.2%
Cumulative Energy Unavailability Factor: 29.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1993	59.9	953.0	91.2	91.2	91.2	91.2	8.4	8.4	678	91.1
1994	4862.6	953.0	88.7	88.9	87.6	87.9	58.2	54.3	7817	89.2
1995	3831.9	953.0	63.6	76.8	63.6	76.2	45.9	50.3	5568	63.6
1996	5495.9	953.0	76.2	76.6	76.2	76.2	65.7	55.3	6698	76.3
1997	4825.4	953.0	72.8	75.7	72.8	75.4	57.8	55.9	6380	72.8
1998	3970.0	953.0	63.7	73.3	63.7	73.1	47.6	54.3	6079	69.4
1999	4407.8	953.0	69.6	72.7	60.7	71.1	52.8	54.0	6194	70.7
2000	4064.3	1000.0	66.7	71.8	51.1	68.1	46.4	52.9	5772	65.9
2001	4189.4	953.0	63.4	70.8	50.4	66.0	50.2	52.6	5441	62.1
2002	5324.9	953.0	71.5	70.9	71.5	66.6	63.8	53.8	6256	71.4
2003	5480.6	953.0	72.9	71.1	72.9	67.2	65.6	55.0	6474	73.9
2004	5298.1	953.0	75.3	71.4	75.2	67.9	63.3	55.7	6614	75.3
2005	6150.0	953.0	77.0	71.9	76.9	68.7	73.7	57.2	6772	77.3
2006	5917.3	953.0	77.1	72.3	77.0	69.3	70.9	58.2	6821	77.9
2007	7024.8	953.0	85.0	73.2	84.7	70.4	84.1	60.1	7493	85.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1992 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		36			206	
C. Inspection, maintenance or repair combined with refuelling	1231			1529		
D. Inspection, maintenance or repair without refuelling				141		
E. Testing of plant systems or components				10	0	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				135		
J. Grid failure or grid unavailability						5
Subtotal	1231	36	0	1815	206	5
Total		1267			2026	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1992 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		6
14. Safety Systems		32
32. Feedwater and Main Steam System	36	
41. Main Generator Systems		9
42. Electrical Power Supply Systems		158
Total	36	205

CA-10 BRUCE-3**Operator:** BRUCEPOW (BRUCE POWER)**Contractor:** NEI.P (NEI PARSONS)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 750.0 MW(e)
Design Net Capacity: 750.0 MW(e)
Design Discharge Burnup: 8750 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4966.7 GW(e).h
Energy Availability Factor: 76.0%
Load Factor: 75.6%
Operating Factor: 78.9%
Energy Unavailability Factor: 24.0%
Total Off-line Time: 1849 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	551.3	494.8	551.4	442.6	245.5	530.9	448.5	531.9	474.4	0.0	148.5	546.8	4966.7
EAF (%)	98.8	98.2	98.8	82.1	44.2	98.3	81.2	95.3	88.2	0.1	28.2	100.0	76.0
UCF (%)	98.8	98.2	98.8	82.1	44.2	98.3	82.9	97.7	92.9	0.1	28.2	100.0	76.7
LF (%)	98.8	98.2	98.8	82.1	44.0	98.3	80.4	95.3	87.9	0.0	27.5	98.0	75.6
OF (%)	100.0	100.0	100.0	83.3	49.1	100.0	86.7	100.0	92.9	0.0	36.8	100.0	78.9
EUF (%)	1.2	1.8	1.2	17.9	55.8	1.7	18.8	4.7	11.8	99.9	71.8	0.0	24.0
PUF (%)	1.2	1.8	1.2	11.1	54.2	0.0	0.0	0.0	7.1	99.9	61.3	0.0	20.0
UCLF (%)	0.0	0.0	0.0	6.8	1.6	1.7	17.1	2.3	0.0	0.0	10.5	0.0	3.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	1.7	2.4	4.7	0.0	0.0	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PLANNED OUTAGES: 1)2007-04-25 TO 2007-05-16 BOILER INSPECTION, CIGAR.

2)2007-09-28 TO 2007-11-19 WEST SHIFT. FORCED OUTAGES: 1)2007-07-09 TO 2007-07-12 FAILURE

OF 34330-MV15. 2)2007-07-25 TO 2007-07-27 SDS1 TRIP.

5. Historical Summary

Date of Construction Start:	01 Jul 1972	Lifetime Generation:	110037.9 GW(e).h
Date of First Criticality:	28 Nov 1977	Cumulative Energy Availability Factor:	72.7%
Date of Grid Connection:	12 Dec 1977	Cumulative Load Factor:	72.6%
Date of Commercial Operation:	01 Feb 1978	Cumulative Unit Capability Factor:	73.5%
		Cumulative Energy Unavailability Factor:	27.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	4793.0	740.0	87.6	87.6	87.6	87.6	82.0	82.0	7361	93.2
1979	4797.9	740.0	77.8	82.4	77.8	82.4	73.2	77.4	6885	77.7
1980	5939.8	740.0	91.4	85.5	91.4	85.5	91.4	82.2	8276	94.2
1981	5795.0	740.0	89.5	86.5	89.5	86.5	89.4	84.0	7873	89.9
1982	6381.9	740.0	96.7	88.6	96.7	88.6	98.4	87.0	8497	97.0
1983	6091.1	740.0	89.2	88.7	89.2	88.7	94.0	88.1	7905	90.2
1984	6148.7	740.0	91.2	89.1	91.2	89.1	94.6	89.1	8077	92.0
1985	6015.1	775.0	93.9	89.7	88.6	89.0	88.6	89.0	8118	92.7
1986	5891.2	796.0	86.9	89.4	84.2	88.4	84.5	88.5	7600	86.8
1987	6073.3	848.0	85.8	89.0	81.9	87.7	81.8	87.7	7724	88.2
1988	3310.6	848.0	45.6	84.6	45.6	83.4	44.4	83.3	4044	46.0
1989	4031.7	848.0	57.4	82.1	54.8	80.8	54.3	80.7	5364	61.2
1990	5652.7	848.0	76.8	81.6	76.3	80.4	76.1	80.3	7472	85.3
1991	6126.3	848.0	84.3	81.8	82.4	80.6	82.5	80.5	7950	90.8
1992	5801.0	848.0	77.9	81.6	77.9	80.4	77.9	80.3	7438	84.7
1993	3158.2	848.0	43.0	79.0	43.0	77.9	42.5	77.7	6557	74.9
1994	2737.6	848.0	36.9	76.3	36.9	75.3	36.9	75.2	5006	57.1
1995	4225.8	848.0	56.9	75.2	56.9	74.2	56.9	74.1	7000	79.9
1996	3321.5	848.0	44.6	73.5	44.6	72.5	44.6	72.4	5684	64.7
1997	4214.8	848.0	56.8	72.6	56.8	71.7	56.7	71.6	6325	72.2
1998	1642.5	848.0	81.6	72.7	81.6	71.8	81.6	71.7	2328	98.1
1999	Data not available - Long-term shutdown									
2000	"									
2001	"									
2002	"									
2003	"									
2004	4971.6	750.0	76.5	72.9	76.1	72.0	75.3	71.9	7154	81.4
2005	4938.1	750.0	75.5	73.0	75.2	72.2	75.2	72.0	6782	77.4
2006	5440.2	750.0	83.3	73.4	82.9	72.6	82.8	72.5	7435	84.9
2007	4966.7	750.0	76.7	73.5	76.0	72.7	75.6	72.6	6911	78.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		219			632	
B. Refuelling without a maintenance					6	
C. Inspection, maintenance or repair combined with refuelling	72			24	0	
D. Inspection, maintenance or repair without refuelling	1557			564	1	
E. Testing of plant systems or components				17	1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	16
L. Human factor related					2	
Subtotal	1629	219	0	605	643	16
Total		1848			1264	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1978 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		71
12. Reactor I&C Systems	48	49
13. Reactor Auxiliary Systems		29
14. Safety Systems		46
15. Reactor Cooling Systems	50	64
16. Steam generation systems	71	122
31. Turbine and auxiliaries		113
32. Feedwater and Main Steam System		36
35. All other I&C Systems	48	5
41. Main Generator Systems		68
42. Electrical Power Supply Systems		8
XX. Miscellaneous Systems		1
Total	217	612

CA-11 BRUCE-4**Operator:** BRUCEPOW (BRUCE POWER)**Contractor:** NEI.P (NEI PARSONS)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 750.0 MW(e)
Design Net Capacity: 733.0 MW(e)
Design Discharge Burnup: 8750 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5251.0 GW(e).h
Energy Availability Factor: 80.1%
Load Factor: 79.9%
Operating Factor: 83.3%
Energy Unavailability Factor: 19.9%
Total Off-line Time: 1462 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	548.9	494.9	279.3	218.5	450.0	529.4	540.4	524.7	98.2	531.3	527.1	508.4	5251.0
EAF (%)	98.4	98.2	51.3	40.8	80.7	98.0	96.8	94.0	19.1	95.2	97.6	91.1	80.1
UCF (%)	98.4	98.2	51.3	40.8	80.8	98.3	100.0	98.0	19.1	95.2	97.6	91.1	80.8
LF (%)	98.4	98.2	50.1	40.5	80.6	98.0	96.8	94.0	18.2	95.1	97.6	91.1	79.9
OF (%)	100.0	100.0	51.5	45.9	84.7	100.0	100.0	100.0	23.5	99.9	100.0	93.8	83.3
EUF (%)	1.6	1.8	48.7	59.2	19.3	2.0	3.2	6.0	80.9	4.8	2.4	8.9	19.9
PUF (%)	0.0	0.0	48.6	58.5	1.5	0.0	0.0	0.0	79.9	0.0	0.0	0.0	15.6
UCLF (%)	1.6	1.8	0.2	0.7	17.7	1.7	0.0	2.0	1.0	4.8	2.4	8.9	3.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.2	3.2	4.0	0.0	0.0	0.0	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PLANNED OUTAGES: 1)2007-03-16 TO 2007-04-17 21T4-H MAINTENANCE.

2)2007-09-04 TO 2007-09-27 PHT LEAK REPAIR. FORCED OUTAGES: 1)2007-05-13 TO 2007-05-18 SDS2

TRIP. 2)2007-12-19 TO 2007-12-21 PHT P1 BEARING COOLER LEAK.

5. Historical Summary

Date of Construction Start:	01 Sep 1972	Lifetime Generation:	104242.7 GW(e).h
Date of First Criticality:	10 Dec 1978	Cumulative Energy Availability Factor:	70.5%
Date of Grid Connection:	21 Dec 1978	Cumulative Load Factor:	70.0%
Date of Commercial Operation:	18 Jan 1979	Cumulative Unit Capability Factor:	71.4%
		Cumulative Energy Unavailability Factor:	29.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	4966.4	740.0	84.8	84.8	84.8	84.8	80.4	80.4	7084	84.8
1980	4945.1	740.0	76.1	80.4	76.1	80.4	76.1	78.2	6962	79.3
1981	5753.5	740.0	89.1	83.3	89.1	83.3	88.8	81.7	7874	89.9
1982	6050.2	740.0	92.2	85.6	92.2	85.6	93.3	84.7	8150	93.0
1983	6407.4	740.0	94.3	87.3	94.3	87.3	98.8	87.5	8345	95.3
1984	6664.6	740.0	97.8	89.1	97.8	89.1	102.5	90.1	8625	98.2
1985	4995.2	788.0	79.0	87.6	73.2	86.7	72.3	87.4	6518	74.4
1986	6891.6	848.0	95.5	88.7	92.8	87.5	92.8	88.1	8644	98.7
1987	5045.0	848.0	71.5	86.6	67.9	85.1	67.9	85.6	6366	72.7
1988	4663.7	848.0	66.9	84.4	65.7	83.0	62.6	83.1	5997	68.3
1989	5584.2	848.0	77.0	83.7	75.3	82.2	75.2	82.3	7290	83.2
1990	3533.0	848.0	48.3	80.5	47.5	79.1	47.6	79.2	4611	52.6
1991	5940.7	848.0	81.6	80.6	79.9	79.2	80.0	79.3	7955	90.8
1992	5843.4	848.0	80.1	80.6	78.4	79.1	78.4	79.2	8070	91.9
1993	350.1	848.0	4.7	75.2	4.7	73.9	4.7	73.9	527	6.0
1994	3656.0	848.0	49.3	73.5	49.3	72.2	49.2	72.3	7206	82.3
1995	3034.9	848.0	40.9	71.5	40.9	70.3	40.9	70.4	5024	57.4
1996	5296.3	848.0	71.2	71.4	71.2	70.3	71.1	70.4	8686	98.9
1997	2923.0	848.0	39.4	69.7	39.4	68.6	39.3	68.7	4968	56.7
1998	12.3	848.0	0.8	68.9	0.8	67.9	0.8	67.9	45	2.5
1999	Data not available - Long-term shutdown									
2000	"									
2001	"									
2002	"									
2003	934.5	769.0	100.0	69.3	100.0	68.3	55.0	67.8	802	36.3
2004	5418.8	769.0	83.4	69.9	83.4	69.0	82.1	68.4	7469	85.0
2005	5499.1	750.0	84.1	70.5	83.7	69.6	83.7	69.1	7469	85.3
2006	5308.2	750.0	81.6	71.0	80.8	70.1	80.8	69.6	7261	82.9
2007	5251.0	750.0	80.8	71.4	80.1	70.5	79.9	70.0	7298	83.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1979 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		160			771	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling				41		
D. Inspection, maintenance or repair without refuelling	1301			576		
E. Testing of plant systems or components				52		
H. Nuclear regulatory requirements					5	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					14	22
L. Human factor related					5	
Z. Others	0					
Subtotal	1301	160	0	669	799	22
Total		1461			1490	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1979 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		117
12. Reactor I&C Systems		40
14. Safety Systems		12
15. Reactor Cooling Systems		74
16. Steam generation systems		206
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		52
32. Feedwater and Main Steam System	46	39
35. All other I&C Systems		120
41. Main Generator Systems		21
42. Electrical Power Supply Systems		28
XX. Miscellaneous Systems	114	12
Total	160	722

CA-18 BRUCE-5

Operator: BRUCEPOW (BRUCE POWER)

Contractor: OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 795.0 MW(e)
Design Net Capacity: 750.0 MW(e)
Design Discharge Burnup: 7710 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6710.9 GW(e).h
Energy Availability Factor: 97.2%
Load Factor: 96.4%
Operating Factor: 100.0%
Energy Unavailability Factor: 2.8%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	579.8	528.2	579.3	545.1	576.9	557.1	567.1	564.5	549.9	574.9	520.2	567.8	6710.9
EAF (%)	98.0	98.9	97.9	98.2	97.5	97.3	95.9	95.4	96.1	97.2	96.4	97.9	97.2
UCF (%)	98.0	98.9	98.0	98.2	97.5	97.3	96.4	96.9	98.0	98.8	96.4	97.9	97.7
LF (%)	98.0	98.9	97.9	95.4	97.5	97.3	95.9	95.4	96.1	97.1	90.9	96.0	96.4
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
EUF (%)	2.0	1.1	2.1	1.8	2.5	2.7	4.1	4.6	3.9	2.8	3.6	2.1	2.8
PUF (%)	1.0	0.0	1.2	0.0	1.2	1.8	2.7	2.9	2.0	1.2	2.7	2.1	1.6
UCLF (%)	1.0	1.1	0.8	1.8	1.3	0.9	0.8	0.2	0.0	0.0	0.9	0.0	0.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.4	1.9	1.6	0.0	0.0	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Jun 1978
Date of First Criticality: 15 Nov 1984
Date of Grid Connection: 02 Dec 1984
Date of Commercial Operation: 01 Mar 1985

Lifetime Generation: 137580.5 GW(e).h
Cumulative Energy Availability Factor: 83.6%
Cumulative Load Factor: 83.4%
Cumulative Unit Capability Factor: 84.2%
Cumulative Energy Unavailability Factor: 16.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	4992.2	805.0	91.6	91.6	85.9	85.9	84.2	84.2	6324	86.1
1986	7078.0	835.0	98.4	95.4	96.7	91.8	96.8	91.2	8675	99.0
1987	5730.1	835.0	80.2	90.0	78.2	87.0	78.3	86.6	7197	82.2
1988	6673.6	860.0	88.5	89.6	88.5	87.4	88.3	87.1	7824	89.1
1989	7130.8	860.0	97.1	91.2	94.1	88.8	94.7	88.7	8589	98.0
1990	5534.7	860.0	74.6	88.3	73.5	86.1	73.5	86.0	6656	76.0
1991	6769.6	860.0	90.7	88.6	90.3	86.8	89.9	86.6	8130	92.8
1992	6452.1	860.0	85.8	88.3	85.8	86.6	85.4	86.4	7636	86.9
1993	5118.3	860.0	68.1	86.0	68.1	84.5	67.9	84.3	7457	85.1
1994	5629.3	860.0	75.0	84.8	75.0	83.5	74.7	83.3	7671	87.6
1995	6125.3	860.0	81.4	84.5	81.4	83.3	81.3	83.1	7859	89.7
1996	5767.6	860.0	76.4	83.8	76.4	82.7	76.3	82.6	7153	81.4
1997	6388.3	860.0	84.8	83.9	84.8	82.9	84.8	82.7	8148	93.0
1998	5623.1	785.0	81.7	83.7	81.7	82.8	81.8	82.7	7305	83.4
1999	5281.9	785.0	76.6	83.3	76.6	82.4	76.8	82.3	6719	76.7
2000	6908.7	785.0	99.1	84.2	99.1	83.4	100.2	83.4	8719	99.3
2001	4902.1	790.0	70.9	83.5	70.9	82.7	70.8	82.7	6220	71.0
2002	5993.1	790.0	86.3	83.6	86.3	82.9	86.6	82.9	7630	87.1
2003	5302.5	790.0	77.3	83.3	77.3	82.6	76.6	82.6	6783	77.4
2004	5889.1	790.0	85.1	83.4	85.1	82.7	84.9	82.7	7543	85.9
2005	5109.6	790.0	74.6	83.0	74.1	82.3	73.8	82.3	6678	76.2
2006	6723.5	806.0	97.2	83.6	96.8	83.0	95.9	82.9	8694	99.2
2007	6710.9	795.0	97.7	84.2	97.2	83.6	96.4	83.4	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					276	
D. Inspection, maintenance or repair without refuelling				742	10	
E. Testing of plant systems or components				8	0	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					5	17
L. Human factor related					6	
Subtotal	0	0	0	750	297	17
Total	0			1064		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems		31
13. Reactor Auxiliary Systems		13
14. Safety Systems		20
15. Reactor Cooling Systems		112
16. Steam generation systems		13
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries		10
32. Feedwater and Main Steam System		28
33. Circulating Water System		2
41. Main Generator Systems		17
42. Electrical Power Supply Systems		10
XX. Miscellaneous Systems		3
Total	0	260

CA-19 BRUCE-6**Operator:** BRUCEPOW (BRUCE POWER)**Contractor:** OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 822.0 MW(e)
Design Net Capacity: 750.0 MW(e)
Design Discharge Burnup: 7710 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5145.0 GW(e).h
Energy Availability Factor: 71.8%
Load Factor: 71.5%
Operating Factor: 72.6%
Energy Unavailability Factor: 28.2%
Total Off-line Time: 2397 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	370.4	1.5	2.2	387.1	601.3	333.2	610.1	443.8	587.0	606.5	591.0	611.1	5145.0
EAF (%)	60.7	0.0	0.0	66.5	98.1	57.2	99.8	73.2	100.0	100.0	100.0	100.0	71.8
UCF (%)	60.7	0.0	0.0	66.5	98.1	57.2	99.8	73.2	100.0	100.0	100.0	100.0	71.8
LF (%)	60.6	0.3	0.4	65.5	98.3	56.3	99.8	72.6	99.2	99.0	99.9	99.9	71.5
OF (%)	61.6	0.0	0.0	69.0	100.0	61.0	100.0	74.5	100.0	99.9	100.0	100.0	72.6
EUUF (%)	39.3	100.0	100.0	33.5	1.9	42.8	0.2	26.8	0.0	0.0	0.0	0.0	28.2
PUF (%)	39.3	100.0	100.0	33.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4
UCLF (%)	0.0	0.0	0.0	0.0	0.0	42.8	0.2	26.8	0.0	0.0	0.0	0.0	5.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PLANNED OUTAGES: 1)2007-01-20 TO 2007-04-10 OVERHAUL T6H6. FORCED OUTAGES: 1)2007-06-08 TO 2007-06-20 HTS LEAK REPAIR. 2)2007-08-16 TO 2007-08-24 LEAK ON 6-33310-NV6.

5. Historical Summary

Date of Construction Start: 01 Jan 1978 **Lifetime Generation:** 134194.8 GW(e).h
Date of First Criticality: 29 May 1984 **Cumulative Energy Availability Factor:** 79.9%
Date of Grid Connection: 26 Jun 1984 **Cumulative Load Factor:** 79.7%
Date of Commercial Operation: 14 Sep 1984 **Cumulative Unit Capability Factor:** 80.8%
Cumulative Energy Unavailability Factor: 20.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	2301.0	822.0	99.4	99.4	98.8	98.8	98.9	98.9	2926	99.9
1985	5900.1	805.0	88.7	91.3	84.0	87.7	83.7	87.4	7369	84.1
1986	5716.0	835.0	81.7	87.1	77.8	83.4	78.1	83.4	7213	82.3
1987	7017.1	837.0	97.9	90.4	95.3	87.0	95.7	87.1	8610	98.3
1988	6139.5	837.0	89.2	90.1	89.1	87.5	83.5	86.3	7880	89.7
1989	5386.2	837.0	78.9	88.0	73.4	84.8	73.5	83.8	7069	80.7
1990	6213.6	852.0	83.9	87.3	82.3	84.4	83.2	83.7	7429	84.8
1991	7013.4	860.0	93.3	88.2	93.0	85.6	93.1	85.1	8194	93.5
1992	5328.2	860.0	70.5	86.0	70.5	83.8	70.5	83.3	6393	72.8
1993	4351.0	860.0	58.0	82.9	58.0	81.0	57.8	80.5	6950	79.3
1994	6451.7	860.0	85.7	83.2	85.7	81.4	85.6	81.0	8760	100.0
1995	4671.6	860.0	62.1	81.3	62.1	79.7	62.0	79.3	6049	69.1
1996	6822.8	860.0	90.4	82.1	90.4	80.6	90.3	80.2	8682	98.8
1997	4796.4	860.0	63.7	80.7	63.7	79.3	63.7	78.9	6201	70.8
1998	4678.6	785.0	68.1	79.9	68.0	78.6	68.0	78.2	6137	70.1
1999	6860.1	785.0	99.4	81.0	99.3	79.8	99.8	79.5	8760	100.0
2000	4668.2	785.0	66.8	80.2	66.8	79.1	67.7	78.9	5912	67.3
2001	6840.1	790.0	98.3	81.2	98.3	80.1	98.8	79.9	8624	98.4
2002	3522.5	790.0	50.6	79.6	50.6	78.6	50.9	78.4	4539	51.8
2003	6750.9	790.0	98.2	80.5	98.2	79.6	97.6	79.4	8559	97.7
2004	5379.1	790.0	76.6	80.4	76.6	79.4	75.4	79.2	6698	76.3
2005	5721.1	841.0	79.6	80.3	79.6	79.4	78.9	79.2	7151	81.6
2006	7104.4	822.0	99.4	81.2	99.3	80.3	98.7	80.0	8760	100.0
2007	5145.0	822.0	71.8	80.8	71.8	79.9	71.5	79.7	6363	72.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		471			449	
B. Refuelling without a maintenance					4	
D. Inspection, maintenance or repair without refuelling	1926			773	2	
E. Testing of plant systems or components				0	3	
J. Grid failure or grid unavailability						3
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					19	17
L. Human factor related					3	
S. Fuel management limitation (including high flux tilt, stretch out or coast-down operation)					16	
Subtotal	1926	471	0	773	496	20
Total		2397			1289	

7. Equipment Related Full Outages, Analysis by System

System	2007	1984 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		107
12. Reactor I&C Systems		52
14. Safety Systems		26
15. Reactor Cooling Systems	471	94
16. Steam generation systems		84
31. Turbine and auxiliaries		16
32. Feedwater and Main Steam System		19
33. Circulating Water System		9
41. Main Generator Systems		1
42. Electrical Power Supply Systems		29
Total	471	437

CA-20 BRUCE-7**Operator:** BRUCEPOW (BRUCE POWER)**Contractor:** OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 822.0 MW(e)
Design Net Capacity: 822.0 MW(e)
Design Discharge Burnup: 7710 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6969.9 GW(e).h
Energy Availability Factor: 97.1%
Load Factor: 96.8%
Operating Factor: 97.8%
Energy Unavailability Factor: 2.9%
Total Off-line Time: 190 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	606.4	547.8	610.4	588.4	485.7	587.2	603.8	600.7	586.9	548.2	591.5	612.9	6969.9
EAF (%)	99.2	98.6	100.0	99.6	81.2	99.2	98.7	98.2	100.0	90.8	100.0	100.0	97.1
UCF (%)	99.2	98.6	100.0	99.6	81.2	99.2	100.0	100.0	100.0	90.8	100.0	100.0	97.3
LF (%)	99.2	99.2	99.8	99.6	79.4	99.2	98.7	98.2	99.2	89.5	99.9	100.2	96.8
OF (%)	100.0	100.0	100.0	100.1	82.4	100.0	100.0	100.0	100.0	91.9	100.0	100.0	97.8
EUF (%)	0.8	1.4	0.0	0.4	18.8	0.8	1.3	1.8	0.0	9.2	0.0	0.0	2.9
PUF (%)	0.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
UCLF (%)	0.0	0.0	0.0	0.4	18.8	0.8	0.0	0.0	0.0	9.2	0.0	0.0	2.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.8	0.0	0.0	0.0	0.0	0.3

UCLF replaces previously used UUF.

4. 2007 Summary of OperationFORCED OUTAGES: 1)2007-05-21 TO 2007-05-26 DEFECTIVE LZC CV134.
TO 2007-10-16 FOLLOWING STEP BACK.

2)2007-10-14

5. Historical Summary

Date of Construction Start: 01 May 1979 **Lifetime Generation:** 131196.3 GW(e).h
Date of First Criticality: 07 Jan 1986 **Cumulative Energy Availability Factor:** 83.9%
Date of Grid Connection: 22 Feb 1986 **Cumulative Load Factor:** 83.4%
Date of Commercial Operation: 10 Apr 1986 **Cumulative Unit Capability Factor:** 85.0%
Cumulative Energy Unavailability Factor: 16.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	4952.8	838.0	96.7	96.7	89.8	89.8	89.7	89.7	6438	97.5
1987	6288.1	837.0	96.9	96.8	85.9	87.6	85.8	87.4	8489	96.9
1988	4866.2	846.0	74.8	88.7	74.8	82.9	65.4	79.4	6636	75.5
1989	7280.8	860.0	97.8	91.2	96.4	86.6	96.6	84.0	8632	98.5
1990	6659.4	860.0	90.7	91.1	88.5	87.0	88.4	85.0	8065	92.1
1991	5733.6	860.0	76.4	88.5	76.3	85.1	76.1	83.4	6835	78.0
1992	6413.4	860.0	85.2	88.0	85.1	85.1	84.9	83.6	7589	86.4
1993	5802.3	860.0	78.1	86.7	78.1	84.2	77.0	82.8	8760	100.0
1994	5496.7	860.0	73.2	85.2	73.2	82.9	73.0	81.7	7577	86.5
1995	6285.1	860.0	83.5	85.0	83.5	83.0	83.4	81.8	8092	92.4
1996	5475.7	860.0	72.6	83.8	72.5	82.0	72.5	81.0	7000	79.7
1997	6154.5	860.0	81.7	83.6	81.7	82.0	81.7	81.0	7874	89.9
1998	4990.8	785.0	72.4	82.8	72.4	81.3	72.6	80.4	6474	73.9
1999	6315.7	785.0	92.3	83.5	91.8	82.0	91.8	81.2	8208	93.7
2000	5322.7	785.0	78.2	83.1	76.9	81.7	77.2	80.9	6790	77.3
2001	7026.3	790.0	100.0	84.1	100.0	82.8	101.5	82.2	8760	100.0
2002	4819.4	790.0	69.5	83.3	69.5	82.0	69.6	81.5	6121	69.9
2003	6730.2	790.0	97.7	84.1	97.7	82.9	97.3	82.3	8592	98.1
2004	6428.8	790.0	92.8	84.5	92.8	83.4	92.6	82.8	8188	93.2
2005	4890.5	790.0	70.2	83.8	70.2	82.7	70.1	82.2	6310	72.0
2006	6740.5	806.0	95.1	84.4	94.8	83.3	94.4	82.8	8486	96.9
2007	6969.9	822.0	97.3	85.0	97.1	83.9	96.8	83.4	8570	97.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		190			256	
B. Refuelling without a maintenance					1	
D. Inspection, maintenance or repair without refuelling				685	13	
E. Testing of plant systems or components				13		
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					4	5
L. Human factor related					4	
Z. Others					10	
Subtotal	0	190	0	698	288	5
Total		190			991	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		3
12. Reactor I&C Systems	190	30
13. Reactor Auxiliary Systems		3
15. Reactor Cooling Systems		63
16. Steam generation systems		13
21. Fuel Handling and Storage Facilities		6
31. Turbine and auxiliaries		14
32. Feedwater and Main Steam System		23
41. Main Generator Systems		7
42. Electrical Power Supply Systems		25
XX. Miscellaneous Systems		48
Total	190	235

CA-21 BRUCE-8**Operator:** BRUCEPOW (BRUCE POWER)**Contractor:** OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 795.0 MW(e)
Design Net Capacity: 795.0 MW(e)
Design Discharge Burnup: 7710 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6485.3 GW(e).h
Energy Availability Factor: 93.4%
Load Factor: 93.1%
Operating Factor: 95.2%
Energy Unavailability Factor: 6.6%
Total Off-line Time: 419 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	591.5	529.5	492.0	565.6	583.7	564.0	577.9	575.3	557.3	577.4	411.8	459.3	6485.3
EAF (%)	100.0	100.0	83.9	98.8	98.7	98.5	97.7	97.3	97.4	97.6	73.6	77.7	93.4
UCF (%)	100.0	100.0	83.9	98.8	98.7	98.5	97.7	100.0	100.0	100.0	73.6	77.7	94.0
LF (%)	100.0	99.1	83.2	98.9	98.7	98.5	97.7	97.3	97.4	97.5	71.9	77.7	93.1
OF (%)	100.0	100.0	87.8	100.1	100.0	100.0	100.0	100.0	100.0	99.9	74.0	81.0	95.2
EUF (%)	0.0	0.0	16.1	1.2	1.3	1.5	2.3	2.7	2.6	2.4	26.4	22.3	6.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6	20.0	3.6
UCLF (%)	0.0	0.0	16.1	1.2	1.3	1.5	2.3	0.0	0.0	0.0	2.8	2.3	2.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.6	2.4	0.0	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PLANNED OUTAGES: 1)2007-11-23 TO 2007-12-06 BOILER TUBE LEAK, PHT P2 SEAL REPAIR. **FORCED OUTAGES:** 1)2007-03-06 TO 2007-03-10 WEST BRIDGE STOP. 2)2007-11-04 TO 2007-11-05 TURBINE TRIP, LOSS OF EXCITATION.

5. Historical Summary

Date of Construction Start: 01 Aug 1979 **Lifetime Generation:** 120482.6 GW(e).h
Date of First Criticality: 15 Feb 1987 **Cumulative Energy Availability Factor:** 81.6%
Date of Grid Connection: 09 Mar 1987 **Cumulative Load Factor:** 81.3%
Date of Commercial Operation: 22 May 1987 **Cumulative Unit Capability Factor:** 83.0%
Cumulative Energy Unavailability Factor: 18.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	3673.2	844.0	95.7	95.7	74.7	74.7	74.6	74.6	5849	99.5
1988	5958.5	837.0	86.8	90.4	86.5	81.8	81.0	78.5	7659	87.2
1989	6523.5	837.0	98.4	93.4	89.2	84.6	89.0	82.4	8661	98.9
1990	5758.7	842.0	80.7	89.9	78.1	82.8	78.0	81.2	7186	82.0
1991	6932.7	860.0	93.0	90.6	92.5	84.9	92.0	83.6	8213	93.8
1992	5451.1	860.0	72.4	87.3	72.4	82.7	72.2	81.5	6587	75.0
1993	4675.9	860.0	62.3	83.5	62.3	79.6	62.1	78.6	7064	80.6
1994	6443.2	860.0	86.0	83.8	86.0	80.4	85.5	79.5	8760	100.0
1995	6113.4	860.0	81.3	83.6	81.3	80.5	81.1	79.7	7876	89.9
1996	6957.8	860.0	92.1	84.5	92.1	81.7	92.1	81.0	8783	100.0
1997	6346.5	860.0	84.2	84.4	84.2	82.0	84.2	81.3	8003	91.4
1998	4122.4	785.0	59.9	82.5	59.8	80.2	59.9	79.6	5368	61.3
1999	4114.4	785.0	60.0	80.8	59.8	78.7	59.8	78.1	5414	61.8
2000	6530.9	785.0	93.7	81.7	93.7	79.7	94.7	79.3	8293	94.4
2001	5424.8	790.0	78.0	81.5	78.0	79.6	78.4	79.2	6852	78.2
2002	6686.0	790.0	97.0	82.4	97.0	80.7	96.6	80.3	8543	97.5
2003	4960.0	790.0	71.9	81.8	71.9	80.2	71.7	79.8	6301	71.9
2004	5695.8	790.0	83.0	81.9	82.8	80.3	82.1	79.9	7374	83.9
2005	6889.2	790.0	99.7	82.8	99.4	81.3	99.5	80.9	8745	99.8
2006	5283.9	790.0	76.6	82.5	76.4	81.1	76.3	80.7	6791	77.5
2007	6485.3	795.0	94.0	83.0	93.4	81.6	93.1	81.3	8341	95.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		108			350	
B. Refuelling without a maintenance					2	
D. Inspection, maintenance or repair without refuelling	310			740	46	
E. Testing of plant systems or components				0		
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					3	
L. Human factor related					2	
Subtotal	310	108	0	740	403	0
Total		418			1143	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		17
12. Reactor I&C Systems		5
14. Safety Systems		26
15. Reactor Cooling Systems		84
16. Steam generation systems		157
17. Safety I&C Systems (excluding reactor I&C)		0
21. Fuel Handling and Storage Facilities	90	
31. Turbine and auxiliaries		14
32. Feedwater and Main Steam System		10
33. Circulating Water System		7
35. All other I&C Systems		1
41. Main Generator Systems	17	0
42. Electrical Power Supply Systems		15
XX. Miscellaneous Systems		4
Total	107	340

CA-22 DARLINGTON-1**Operator:** OPG (ONTARIO POWER GENERATION)**Contractor:** OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 878.0 MW(e)
Design Net Capacity: 881.0 MW(e)
Design Discharge Burnup: 8625 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7412.6 GW(e).h
Energy Availability Factor: 96.8%
Load Factor: 96.4%
Operating Factor: 98.7%
Energy Unavailability Factor: 3.2%
Total Off-line Time: 113 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	647.2	584.9	642.1	622.5	640.5	595.5	555.0	621.8	603.4	618.4	630.7	650.7	7412.6
EAF (%)	100.0	100.0	98.4	98.5	99.1	94.1	85.6	95.5	95.8	95.0	100.0	100.0	96.8
UCF (%)	100.0	100.0	99.4	100.0	99.6	94.1	89.1	99.8	99.0	97.0	100.0	100.0	98.2
LF (%)	99.1	99.1	98.3	98.5	98.0	94.2	85.0	95.2	95.5	94.7	99.8	99.6	96.4
OF (%)	100.0	100.0	100.0	100.0	100.0	95.1	91.1	100.0	100.0	98.4	100.0	100.0	98.7
EUF (%)	0.0	0.0	1.6	1.5	0.9	5.9	14.4	4.5	4.2	5.0	0.0	0.0	3.2
PUF (%)	0.0	0.0	0.0	0.0	0.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.1
UCLF (%)	0.0	0.0	0.6	0.0	0.0	4.9	10.9	0.2	1.0	3.0	0.0	0.0	1.7
XUF (%)	0.0	0.0	1.0	1.5	0.4		3.5	4.3	3.2	2.0	0.0	0.0	1.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Apr 1982 **Lifetime Generation:** 102122.0 GW(e).h
Date of First Criticality: 29 Oct 1990 **Cumulative Energy Availability Factor:** 83.9%
Date of Grid Connection: 19 Dec 1990 **Cumulative Load Factor:** 83.2%
Date of Commercial Operation: 14 Nov 1992 **Cumulative Unit Capability Factor:** 84.8%
Cumulative Energy Unavailability Factor: 16.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1992	974.0	881.0	96.8	96.8	96.8	96.8	75.5	75.5	1152	78.7
1993	6016.2	881.0	79.2	81.7	78.7	81.3	78.0	77.6	7213	82.3
1994	6326.6	881.0	83.5	82.5	83.1	82.2	82.0	79.6	7446	85.0
1995	6853.3	881.0	90.7	85.1	89.7	84.5	88.8	82.5	8046	91.8
1996	5745.3	881.0	75.7	82.8	75.0	82.3	74.2	80.5	6827	77.7
1997	4765.1	881.0	63.0	79.0	62.3	78.4	61.7	76.9	7236	82.6
1998	6427.5	881.0	84.3	79.9	83.3	79.2	83.3	77.9	7717	88.1
1999	7175.1	881.0	94.4	81.9	93.0	81.1	93.0	80.0	8705	99.4
2000	6280.6	881.0	82.0	81.9	81.2	81.1	81.2	80.2	7615	86.7
2001	6980.8	881.0	91.2	82.9	90.5	82.1	90.5	81.3	8502	97.1
2002	6532.9	881.0	85.5	83.2	84.7	82.4	84.6	81.6	7887	90.0
2003	6562.4	881.0	87.5	83.5	85.1	82.6	85.0	81.9	7846	89.6
2004	5612.1	881.0	73.5	82.7	72.7	81.8	72.7	81.2	6540	74.7
2005	7366.3	881.0	97.0	83.8	96.2	82.9	95.7	82.3	8553	97.6
2006	6388.9	878.0	85.2	83.9	83.4	82.9	83.1	82.3	7520	85.8
2007	7412.6	878.0	98.2	84.8	96.8	83.9	96.4	83.2	8647	98.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1991 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		113			582	
D. Inspection, maintenance or repair without refuelling				587		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				62		
J. Grid failure or grid unavailability						4
Z. Others					1	
Subtotal	0	113	0	649	583	4
Total		113			1236	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1991 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		18
12. Reactor I&C Systems		45
13. Reactor Auxiliary Systems		6
14. Safety Systems		22
15. Reactor Cooling Systems		296
21. Fuel Handling and Storage Facilities		35
31. Turbine and auxiliaries		18
32. Feedwater and Main Steam System		2
35. All other I&C Systems		38
41. Main Generator Systems	113	68
42. Electrical Power Supply Systems		13
XX. Miscellaneous Systems		11
Total	113	572

CA-23 DARLINGTON-2**Operator:** OPG (ONTARIO POWER GENERATION)**Contractor:** OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 878.0 MW(e)
Design Net Capacity: 881.0 MW(e)
Design Discharge Burnup: 8625 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6362.8 GW(e).h
Energy Availability Factor: 82.9%
Load Factor: 82.7%
Operating Factor: 83.6%
Energy Unavailability Factor: 17.1%
Total Off-line Time: 1433 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	652.9	590.9	655.8	632.3	647.2	632.0	641.1	629.8	411.4	2.0	222.1	645.2	6362.8
EAF (%)	100.0	100.0	100.0	100.0	99.5	100.0	98.4	96.6	65.2	0.0	35.1	99.9	82.9
UCF (%)	100.0	100.0	100.0	100.0	99.5	100.0	100.0	100.0	66.4	0.0	35.2	99.9	83.4
LF (%)	100.0	100.2	100.4	100.0	99.1	100.0	98.1	96.4	65.1	0.3	35.1	98.8	82.7
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	66.4	0.0	37.9	100.0	83.6
EUUF (%)	0.0	0.0	0.0	0.0	0.5	0.0	1.6	3.4	34.8	100.0	64.9	0.1	17.1
PUF (%)	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	33.6	100.0	64.8	0.0	16.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	1.6	3.3	1.2	0.0	0.0	0.0	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Sep 1981 **Lifetime Generation:** 101445.0 GW(e).h
Date of First Criticality: 05 Nov 1989 **Cumulative Energy Availability Factor:** 75.3%
Date of Grid Connection: 15 Jan 1990 **Cumulative Load Factor:** 75.0%
Date of Commercial Operation: 09 Oct 1990 **Cumulative Unit Capability Factor:** 76.3%
Cumulative Energy Unavailability Factor: 24.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1990	1153.5	881.0	64.9	64.9	64.9	64.9	65.7	65.7	1608	80.7
1991	51.5	881.0	0.7	12.6	0.7	12.6	0.7	12.7	102	1.2
1992	1290.2	881.0	16.7	14.4	16.7	14.4	16.7	14.5	2418	27.5
1993	6370.2	881.0	83.3	35.7	82.7	35.6	82.5	35.6	7594	86.7
1994	6750.8	881.0	88.9	48.3	88.5	48.1	87.5	47.8	8069	92.1
1995	6953.0	881.0	91.3	56.5	90.7	56.2	90.1	55.9	8104	92.5
1996	6705.7	881.0	87.8	61.6	87.2	61.2	86.7	60.9	7752	88.3
1997	4710.4	881.0	61.7	61.6	61.5	61.3	61.0	60.9	7069	80.7
1998	6227.9	881.0	81.9	64.0	80.7	63.6	80.7	63.3	7492	85.5
1999	6469.1	881.0	85.1	66.3	83.8	65.8	83.8	65.5	7824	89.3
2000	6885.4	881.0	90.1	68.7	89.0	68.1	89.0	67.8	8221	93.6
2001	5826.4	881.0	76.3	69.3	75.5	68.7	75.5	68.5	7030	80.3
2002	7268.9	881.0	95.4	71.5	94.2	70.8	94.2	70.6	8627	98.5
2003	6084.1	881.0	81.6	72.2	79.3	71.5	78.8	71.2	7245	82.7
2004	7038.4	881.0	96.7	74.0	91.4	72.9	91.0	72.6	8737	99.5
2005	6056.2	878.0	79.7	74.3	78.9	73.3	78.7	73.0	7031	80.3
2006	7548.4	878.0	99.4	75.9	98.6	74.8	98.1	74.5	8745	99.8
2007	6362.8	878.0	83.4	76.3	82.9	75.3	82.7	75.0	7327	83.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1990 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					744	
D. Inspection, maintenance or repair without refuelling	1432			453	19	
J. Grid failure or grid unavailability						4
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					364	
Subtotal	1432	0	0	453	1127	4
Total	1432			1584		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1990 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		35
12. Reactor I&C Systems		42
13. Reactor Auxiliary Systems		2
14. Safety Systems		12
15. Reactor Cooling Systems		472
16. Steam generation systems		69
17. Safety I&C Systems (excluding reactor I&C)		2
21. Fuel Handling and Storage Facilities		2
31. Turbine and auxiliaries		27
32. Feedwater and Main Steam System		8
35. All other I&C Systems		18
41. Main Generator Systems		10
42. Electrical Power Supply Systems		5
XX. Miscellaneous Systems		9
Total	0	713

CA-24 DARLINGTON-3

Operator: OPG (ONTARIO POWER GENERATION)

Contractor: OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 878.0 MW(e)
Design Net Capacity: 881.0 MW(e)
Design Discharge Burnup: 8625 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7221.1 GW(e).h
Energy Availability Factor: 93.9%
Load Factor: 93.9%
Operating Factor: 94.9%
Energy Unavailability Factor: 6.1%
Total Off-line Time: 449 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	660.2	589.5	652.5	635.4	256.0	631.5	642.0	629.7	615.0	637.6	625.8	645.9	7221.1
EAF (%)	100.0	100.0	100.0	100.0	38.5	100.0	98.5	96.5	97.4	97.7	99.6	99.9	93.9
UCF (%)	100.0	100.0	100.0	100.0	38.5	100.0	100.0	100.0	100.0	100.0	99.8	100.0	94.8
LF (%)	101.1	99.9	99.9	100.5	39.2	99.9	98.3	96.4	97.3	97.6	99.0	98.9	93.9
OF (%)	100.0	100.0	100.0	100.0	39.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.9
EUF (%)	0.0	0.0	0.0	0.0	61.5	0.0	1.5	3.5	2.6	2.3	0.4	0.1	6.1
PUF (%)	0.0	0.0	0.0	0.0	52.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
UCLF (%)	0.0	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.5	2.6	2.3	0.1	0.1	0.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Sep 1984
Date of First Criticality: 09 Nov 1992
Date of Grid Connection: 07 Dec 1992
Date of Commercial Operation: 14 Feb 1993

Lifetime Generation: 97453.0 GW(e).h
Cumulative Energy Availability Factor: 84.9%
Cumulative Load Factor: 84.4%
Cumulative Unit Capability Factor: 85.7%
Cumulative Energy Unavailability Factor: 15.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1993	6003.4	881.0	89.8	89.8	89.2	89.2	85.0	85.0	7141	89.1
1994	6528.5	881.0	85.6	87.6	85.3	87.2	84.6	84.8	7642	87.2
1995	7061.5	881.0	92.9	89.5	92.2	88.9	91.5	87.1	8219	93.8
1996	7391.6	881.0	97.3	91.5	96.7	90.9	95.5	89.2	8574	97.6
1997	4010.8	881.0	52.4	83.5	52.1	83.0	52.0	81.7	6314	72.1
1998	7244.9	881.0	94.7	85.4	93.9	84.8	93.9	83.7	8593	98.1
1999	5629.1	881.0	75.1	83.9	72.9	83.1	72.9	82.2	6929	79.1
2000	6517.0	881.0	85.1	84.1	84.2	83.3	84.2	82.4	7822	89.0
2001	6578.0	881.0	86.3	84.3	85.2	83.5	85.2	82.7	7901	90.2
2002	6371.8	881.0	83.7	84.2	82.6	83.4	82.6	82.7	7595	86.7
2003	6827.2	881.0	89.5	84.7	88.6	83.9	88.5	83.3	8004	91.4
2004	6601.6	881.0	86.9	84.9	85.6	84.0	85.3	83.4	7649	87.1
2005	7562.0	878.0	99.1	86.0	98.3	85.1	98.2	84.6	8760	100.0
2006	5573.1	878.0	73.1	85.1	72.5	84.2	72.5	83.7	6452	73.7
2007	7221.1	878.0	94.8	85.7	93.9	84.9	93.9	84.4	8311	94.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1993 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		64			315	
B. Refuelling without a maintenance					6	
D. Inspection, maintenance or repair without refuelling	384			601		
E. Testing of plant systems or components					9	
Subtotal	384	64	0	601	330	0
Total		448			931	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1993 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		24
13. Reactor Auxiliary Systems		18
14. Safety Systems		4
15. Reactor Cooling Systems		71
16. Steam generation systems		22
17. Safety I&C Systems (excluding reactor I&C)		2
21. Fuel Handling and Storage Facilities		36
31. Turbine and auxiliaries		81
32. Feedwater and Main Steam System	64	
35. All other I&C Systems		35
42. Electrical Power Supply Systems		11
XX. Miscellaneous Systems		6
Total	64	310

CA-25 DARLINGTON-4**Operator:** OPG (ONTARIO POWER GENERATION)**Contractor:** OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 878.0 MW(e)
Design Net Capacity: 881.0 MW(e)
Design Discharge Burnup: 8625 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6210.2 GW(e).h
Energy Availability Factor: 80.8%
Load Factor: 80.7%
Operating Factor: 81.8%
Energy Unavailability Factor: 19.2%
Total Off-line Time: 1590 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	652.2	581.1	167.4	0.0	539.6	629.8	651.0	637.1	613.6	640.6	443.9	654.0	6210.2
EAF (%)	100.0	100.0	25.7	0.0	81.2	100.0	99.1	97.4	97.2	98.0	70.7	100.0	80.8
UCF (%)	100.0	100.0	25.7	0.0	81.2	100.0	100.0	100.0	99.9	99.8	70.7	100.0	81.4
LF (%)	99.8	98.5	25.6	0.0	82.6	99.6	99.7	97.5	97.1	98.1	70.2	100.1	80.7
OF (%)	100.0	100.0	25.7	0.0	82.3	100.0	100.0	100.0	100.0	100.0	74.3	100.0	81.8
EUF (%)	0.0	0.0	74.3	100.0	18.8	0.0	0.9	2.6	2.8	2.0	29.3	0.0	19.2
PUF (%)	0.0	0.0	74.3	100.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	29.3	0.0	2.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.6	2.7	1.8	0.0	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Jul 1985 **Lifetime Generation:** 95670.0 GW(e).h
Date of First Criticality: 13 Mar 1993 **Cumulative Energy Availability Factor:** 84.7%
Date of Grid Connection: 17 Apr 1993 **Cumulative Load Factor:** 84.4%
Date of Commercial Operation: 14 Jun 1993 **Cumulative Unit Capability Factor:** 85.4%
Cumulative Energy Unavailability Factor: 15.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1993	3057.8	881.0	74.0	74.0	73.9	73.9	67.6	67.6	3616	70.4
1994	7038.7	881.0	92.2	85.5	91.8	85.2	91.2	82.5	8143	93.0
1995	6750.6	881.0	88.1	86.5	87.7	86.2	87.5	84.4	7751	88.5
1996	6105.4	881.0	79.4	84.5	79.1	84.2	78.9	82.9	7023	80.0
1997	5069.6	881.0	66.0	80.5	65.7	80.2	65.7	79.1	7428	84.8
1998	6520.9	881.0	85.3	81.3	84.5	81.0	84.5	80.1	7699	87.9
1999	6216.1	881.0	81.6	81.4	80.5	80.9	80.5	80.2	7431	84.8
2000	6975.0	881.0	90.8	82.6	90.1	82.1	90.1	81.5	8219	93.6
2001	6836.3	881.0	89.6	83.4	88.6	82.9	88.6	82.3	8037	91.7
2002	7449.8	881.0	97.3	84.9	96.5	84.3	96.5	83.8	8760	100.0
2003	5428.9	881.0	72.3	83.7	70.6	83.0	70.3	82.5	6320	72.1
2004	7321.1	881.0	95.2	84.7	94.6	84.0	94.6	83.6	8451	96.2
2005	6569.7	878.0	86.5	84.8	85.6	84.1	85.3	83.7	7617	87.0
2006	7449.4	878.0	97.1	85.7	96.5	85.0	96.9	84.7	8541	97.5
2007	6210.2	878.0	81.4	85.4	80.8	84.7	80.7	84.4	7170	81.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1993 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		184			317	
D. Inspection, maintenance or repair without refuelling	1404			556		
E. Testing of plant systems or components				22	3	
J. Grid failure or grid unavailability						6
Z. Others					19	
Subtotal	1404	184	0	578	339	6
Total		1588			923	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1993 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	57	55
13. Reactor Auxiliary Systems		13
14. Safety Systems		22
15. Reactor Cooling Systems		125
16. Steam generation systems		5
31. Turbine and auxiliaries		41
32. Feedwater and Main Steam System	126	6
33. Circulating Water System		10
42. Electrical Power Supply Systems		27
XX. Miscellaneous Systems		9
Total	183	313

CA-12 GENTILLY-2

Operator: HQ (HYDRO QUEBEC)
Contractor: BBC (BROWN BOVERI ET CIE)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 635.0 MW(e)
Design Net Capacity: 645.0 MW(e)
Design Discharge Burnup: 7000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4328.6 GW(e).h
Energy Availability Factor: 77.8%
Load Factor: 77.8%
Operating Factor: 81.3%
Energy Unavailability Factor: 22.2%
Total Off-line Time: 1634 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	435.9	417.3	455.1	446.4	457.1	443.3	451.6	448.6	403.4	358.4	11.4	0.0	4328.6
EAF (%)	92.3	97.8	96.3	97.8	96.8	97.0	95.6	95.0	88.2	75.7	2.5	0.0	77.8
UCF (%)	94.5	100.0	99.1	100.0	100.0	100.0	100.0	100.0	93.1	85.8	4.7	0.0	81.3
LF (%)	92.3	97.8	96.3	97.6	96.8	97.0	95.6	95.0	88.2	75.9	2.5	0.0	77.8
OF (%)	94.5	100.0	99.1	100.0	100.0	100.0	100.0	100.0	93.1	85.8	4.7	0.0	81.3
EUF (%)	7.7	2.2	3.7	2.2	3.2	3.0	4.4	5.0	11.8	24.3	97.5	100.0	22.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	5.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	6.9	14.3	95.3	100.0	18.7
XUF (%)	2.2	2.2	2.7	2.2	3.2	3.0	4.4	5.0	4.8	10.0	2.2	0.0	3.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

25-26 JANUARY 2007 : UNPLANNED MANUAL SCRAM DUE TO DCC FAILURE (RRS) 27 MARCH 2007 : FORCED OUTAGE DUE TO TURBIN TRIP (SPURIOUS SIGNAL) 19-21 SEPTEMBER 2007 : FORCED OUTAGE DUE TO MODERATOR LEAK (MODERATOR PUMP 3231-P1). 11-15 OCTOBER 2007 : FORCED OUTAGE DUE TO EMERGENCY CORE COOLING VALVE REPAIR (3432-MV79). 2 NOVEMBER - ??? : FORCED OUTAGE DUE TO FUELING MACHINE FAILURE, MOV REPAIR (EMERGENCY COOLING INJECTION AND SHUTDOWN COOLING SYSTEM) AND MODERATOR HEAT EXCHANGER (HX) REPAIR.

5. Historical Summary

Date of Construction Start:	01 Apr 1974	Lifetime Generation:	106551.8 GW(e).h
Date of First Criticality:	11 Sep 1982	Cumulative Energy Availability Factor:	82.1%
Date of Grid Connection:	04 Dec 1982	Cumulative Load Factor:	78.5%
Date of Commercial Operation:	01 Oct 1983	Cumulative Unit Capability Factor:	84.0%
		Cumulative Energy Unavailability Factor:	17.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	937.7	645.0	65.9	65.9	65.9	65.9	65.8	65.8	1580	71.6
1984	3426.0	645.0	67.8	67.4	67.8	67.4	60.5	61.5	6742	76.8
1985	3189.4	645.0	72.7	69.8	71.1	69.1	56.4	59.3	6347	72.5
1986	3792.1	645.0	85.8	74.7	85.8	74.2	67.1	61.7	7488	85.5
1987	4658.5	640.0	86.3	77.4	85.5	76.8	83.1	66.7	7654	87.4
1988	5283.6	640.0	96.0	80.9	95.3	80.4	94.0	71.9	8372	95.3
1989	4870.3	640.0	90.0	82.4	89.5	81.8	86.9	74.3	7722	88.2
1990	4080.6	640.0	90.4	83.5	72.9	80.6	72.8	74.1	7748	88.4
1991	3925.5	640.0	71.4	82.0	69.9	79.3	70.0	73.6	6317	72.1
1992	4701.5	640.0	84.8	82.3	84.8	79.9	83.9	74.7	7431	84.8
1993	4827.1	685.0	92.9	83.4	92.4	81.2	80.4	75.3	7731	88.3
1994	5405.5	635.0	98.6	84.8	98.6	82.7	97.2	77.2	8634	98.6
1995	4519.0	635.0	82.5	84.6	82.5	82.7	81.2	77.5	7229	82.5
1996	5242.0	635.0	94.4	85.3	94.4	83.6	94.0	78.7	8289	94.4
1997	4217.5	635.0	78.8	84.9	78.8	83.2	75.8	78.5	6901	78.8
1998	3825.1	635.0	71.4	84.0	71.4	82.5	68.8	77.9	6258	71.4
1999	3793.3	635.0	88.6	84.3	69.9	81.7	68.2	77.3	6132	70.0
2000	4886.2	635.0	89.7	84.6	89.7	82.2	87.6	77.9	7879	89.7
2001	4711.2	635.0	88.3	84.8	88.3	82.5	84.7	78.3	7766	88.7
2002	4532.3	635.0	83.3	84.7	83.3	82.5	81.5	78.4	7366	84.1
2003	3567.1	635.0	65.2	83.7	65.2	81.7	64.1	77.7	5833	66.6
2004	4875.4	635.0	89.2	84.0	89.2	82.0	87.4	78.2	7905	90.0
2005	4486.2	635.0	83.7	84.0	83.5	82.1	80.6	78.3	7329	83.7
2006	4595.3	635.0	86.1	84.1	86.1	82.3	82.6	78.5	7541	86.1
2007	4328.6	635.0	81.3	84.0	77.8	82.1	77.8	78.5	7126	81.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1634			215	
B. Refuelling without a maintenance					21	
D. Inspection, maintenance or repair without refuelling				885	0	
E. Testing of plant systems or components				0	4	
H. Nuclear regulatory requirements					21	
J. Grid failure or grid unavailability				1	1	3
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						71
Z. Others					57	
Subtotal	0	1634	0	886	319	74
Total		1634			1279	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	50	38
12. Reactor I&C Systems	41	6
13. Reactor Auxiliary Systems		4
14. Safety Systems	106	
15. Reactor Cooling Systems		28
16. Steam generation systems		2
17. Safety I&C Systems (excluding reactor I&C)		2
21. Fuel Handling and Storage Facilities	1430	
31. Turbine and auxiliaries	7	37
32. Feedwater and Main Steam System		8
41. Main Generator Systems		51
42. Electrical Power Supply Systems		5
XX. Miscellaneous Systems		12
Total	1634	193

CA-4 PICKERING-1

Operator: OPG (ONTARIO POWER GENERATION)

Contractor: OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 515.0 MW(e)
Design Net Capacity: 508.0 MW(e)
Design Discharge Burnup: 9080 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1750.3 GW(e).h
Energy Availability Factor: 38.9%
Load Factor: 38.8%
Operating Factor: 39.3%
Energy Unavailability Factor: 61.1%
Total Off-line Time: 5313 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	382.1	341.9	225.1	365.9	380.1	55.3	0.0	0.0	0.0	0.0	0.0	0.0	1750.3
EAF (%)	100.0	98.9	59.4	98.7	99.2	15.2	0.0	0.0	0.0	0.0	0.0	0.0	38.9
UCF (%)	100.0	98.9	59.4	98.9	99.4	15.2	0.0	0.0	0.0	0.0	0.0	0.0	38.9
LF (%)	99.7	98.8	58.7	98.7	99.2	14.9	0.0	0.0	0.0	0.0	0.0	0.0	38.8
OF (%)	100.0	100.0	61.6	100.0	100.0	15.1	0.0	0.0	0.0	0.0	0.0	0.0	39.3
EUF (%)	0.0	1.1	40.6	1.3	0.8	84.8	100.0	100.0	100.0	100.0	100.0	100.0	61.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.8	100.0	64.5	17.8
UCLF (%)	0.0	1.1	40.6	1.1	0.6	84.8	100.0	100.0	100.0	51.2	0.0	35.5	43.2
XUF (%)	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Jun 1966
Date of First Criticality: 25 Feb 1971
Date of Grid Connection: 04 Apr 1971
Date of Commercial Operation: 29 Jul 1971

Lifetime Generation: 81597.0 GW(e).h
Cumulative Energy Availability Factor: 65.7%
Cumulative Load Factor: 62.5%
Cumulative Unit Capability Factor: 65.8%
Cumulative Energy Unavailability Factor: 34.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1971	1921.7	514.0	100.0	100.0	100.0	100.0	84.7	84.7	3546	80.3
1972	2207.9	514.0	100.0	100.0	100.0	100.0	48.9	60.9	4117	46.9
1973	4222.4	514.0	94.0	97.6	94.0	97.6	92.3	73.5	8523	95.7
1974	3232.0	514.0	71.9	90.3	71.9	90.3	72.0	73.1	6979	79.9
1975	3592.8	512.0	80.2	88.1	80.2	88.1	80.3	74.7	7234	82.8
1976	4169.7	514.0	92.7	88.9	92.7	88.9	92.9	78.0	8136	93.1
1977	3852.8	514.0	85.8	88.4	85.8	88.4	85.8	79.2	7545	86.4
1978	4273.7	515.0	95.1	89.3	95.1	89.3	95.0	81.3	8359	95.7
1979	3781.4	515.0	85.3	88.8	85.3	88.8	82.9	81.5	7554	85.3
1980	3356.9	515.0	73.7	87.2	73.7	87.2	74.2	80.7	6640	75.6
1981	3947.7	515.0	88.0	87.3	88.0	87.3	87.5	81.3	7795	89.0
1982	3499.3	515.0	77.8	86.5	77.8	86.5	77.6	81.0	6915	78.9
1983	3070.8	515.0	68.1	85.0	68.1	85.0	68.1	80.0	6101	69.6
1984	0.0	515.0	0.0	78.7	0.0	78.7	0.0	74.0	0	0.0
1985	0.0	515.0	0.0	73.3	0.0	73.3	0.0	68.9	0	0.0
1986	0.0	515.0	0.0	68.6	0.0	68.6	0.0	64.5	0	0.0
1987	832.8	515.0	19.7	65.6	17.4	65.5	18.5	61.7	1981	22.6
1988	3986.5	515.0	89.2	66.9	89.1	66.8	88.1	63.2	8224	93.6
1989	3222.1	515.0	72.7	67.3	72.6	67.1	71.4	63.7	6943	79.3
1990	3041.7	515.0	70.9	67.4	70.6	67.3	67.4	63.9	7435	84.9
1991	3051.1	515.0	67.8	67.5	67.8	67.3	67.6	64.0	6525	74.5
1992	2920.0	515.0	65.4	67.4	65.4	67.2	64.5	64.1	5798	66.0
1993	3451.2	515.0	78.4	67.9	78.4	67.7	76.5	64.6	6908	78.9
1994	897.6	515.0	20.1	65.8	20.1	65.7	19.9	62.7	1835	20.9
1995	2013.2	515.0	45.7	65.0	44.8	64.9	44.6	62.0	4234	48.3
1996	3011.8	515.0	66.8	65.1	66.8	64.9	66.6	62.2	6202	70.6
1997	3950.8	515.0	89.7	66.0	89.7	65.9	88.5	63.1	8205	94.7
1998	Data not available - Long-term shutdown									
1999	"									
2000	"									
2001	"									
2002	"									
2003	"									
2004	"									
2005	585.0	515.0	96.9	66.4	96.9	66.2	38.8	62.8	1230	42.0
2006	3470.5	515.0	77.2	66.8	77.0	66.6	76.9	63.3	7260	82.9
2007	1750.3	515.0	38.9	65.8	38.9	65.7	38.8	62.5	3447	39.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		3749			1455	
B. Refuelling without a maintenance					62	
D. Inspection, maintenance or repair without refuelling	1563			542		
E. Testing of plant systems or components				5	6	
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					12	81
Subtotal	1563	3749	0	547	1535	82
Total		5312			2164	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		940
12. Reactor I&C Systems		64
13. Reactor Auxiliary Systems		53
14. Safety Systems		67
15. Reactor Cooling Systems	264	102
16. Steam generation systems		64
31. Turbine and auxiliaries		23
32. Feedwater and Main Steam System		13
35. All other I&C Systems		2
41. Main Generator Systems		56
42. Electrical Power Supply Systems	3199	37
XX. Miscellaneous Systems	286	1
Total	3749	1422

CA-7 PICKERING-4

Operator: OPG (ONTARIO POWER GENERATION)

Contractor: OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 515.0 MW(e)
Design Net Capacity: 508.0 MW(e)
Design Discharge Burnup: 9080 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1959.1 GW(e).h
Energy Availability Factor: 43.4%
Load Factor: 43.4%
Operating Factor: 46.6%
Energy Unavailability Factor: 56.6%
Total Off-line Time: 4674 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	78.3	377.5	175.4	356.1	44.1	0.0	0.0	0.0	210.7	349.9	367.1	1959.1
EAF (%)	0.0	22.6	98.7	47.3	93.0	11.9	0.0	0.0	0.0	55.0	94.4	95.8	43.4
UCF (%)	0.0	22.6	98.7	47.3	93.0	11.9	0.0	0.0	0.0	55.0	94.4	95.8	43.4
LF (%)	0.0	22.6	98.5	47.3	92.9	11.9	0.0	0.0	0.0	55.0	94.4	95.8	43.4
OF (%)	0.0	35.1	100.0	52.5	100.0	12.1	0.0	0.0	0.0	58.2	100.0	100.0	46.6
EUF (%)	100.0	77.4	1.3	52.7	7.0	88.1	100.0	100.0	100.0	45.0	5.6	4.2	56.6
PUF (%)	0.0	12.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
UCLF (%)	100.0	64.9	1.2	52.7	7.0	88.1	100.0	100.0	100.0	45.0	5.6	4.2	55.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 May 1968
Date of First Criticality: 16 May 1973
Date of Grid Connection: 21 May 1973
Date of Commercial Operation: 17 Jun 1973

Lifetime Generation: 85963.0 GW(e).h
Cumulative Energy Availability Factor: 66.0%
Cumulative Load Factor: 65.8%
Cumulative Unit Capability Factor: 66.4%
Cumulative Energy Unavailability Factor: 34.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	2226.6	514.0	90.5	90.5	90.5	90.5	90.2	90.2	4402	91.7
1974	4221.0	514.0	94.0	92.8	94.0	92.8	94.0	92.7	8356	95.7
1975	1094.2	513.0	24.2	65.9	24.2	65.9	24.4	65.9	2201	25.2
1976	3089.0	514.0	68.1	66.5	68.1	66.5	68.8	66.7	6063	69.4
1977	4107.2	514.0	90.3	71.8	90.3	71.8	91.5	72.2	7975	91.3
1978	4033.9	515.0	89.7	75.0	89.7	75.0	89.7	75.3	7876	90.2
1979	4102.2	515.0	91.0	77.5	91.0	77.5	89.9	77.6	8059	91.0
1980	3700.5	515.0	81.8	78.0	81.8	78.0	81.8	78.2	7321	83.3
1981	4142.0	515.0	91.7	79.6	91.7	79.6	91.8	79.8	8078	92.2
1982	4137.9	515.0	91.8	80.9	91.8	80.9	91.7	81.0	8087	92.3
1983	4170.2	515.0	92.3	82.0	92.3	82.0	92.4	82.1	8183	93.4
1984	3733.3	515.0	82.7	82.1	82.7	82.1	82.5	82.1	7425	84.5
1985	3438.9	515.0	83.5	82.2	77.5	81.7	76.2	81.7	6824	77.9
1986	3687.4	515.0	83.2	82.2	83.2	81.8	81.7	81.7	7410	84.6
1987	3770.4	515.0	84.3	82.4	84.0	82.0	83.6	81.8	7495	85.6
1988	3166.2	515.0	70.1	81.6	70.1	81.2	70.0	81.0	6525	74.3
1989	2255.5	515.0	50.0	79.7	50.0	79.3	50.0	79.2	5468	62.4
1990	1070.8	515.0	23.7	76.5	23.7	76.1	23.7	76.0	2851	32.5
1991	2130.8	515.0	47.3	74.9	47.3	74.6	47.2	74.4	5185	59.2
1992	0.0	515.0	0.0	71.1	0.0	70.8	0.0	70.6	0	0.0
1993	3309.6	515.0	74.2	71.2	73.8	70.9	73.4	70.8	6711	76.6
1994	4009.6	515.0	89.7	72.1	89.5	71.8	88.9	71.6	7915	90.4
1995	2807.0	515.0	63.8	71.7	63.3	71.4	62.2	71.2	5684	64.9
1996	1134.9	515.0	25.1	69.7	25.1	69.4	25.1	69.2	2230	25.4
1997	0.0	515.0	0.0	66.9	0.0	66.6	0.0	66.4	0	0.0
1998	Data not available - Long-term shutdown									
1999	"									
2000	"									
2001	"									
2002	"									
2003	844.8	515.0	69.7	66.9	69.7	66.6	69.7	66.4	1880	79.9
2004	3266.8	515.0	75.6	67.3	72.1	66.8	72.2	66.7	6739	76.7
2005	2996.5	515.0	66.5	67.2	66.4	66.8	66.4	66.7	5900	67.4
2006	2976.5	515.0	66.3	67.2	66.0	66.8	66.0	66.6	6149	70.2
2007	1959.1	515.0	43.4	66.4	43.4	66.0	43.4	65.8	4086	46.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1973 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		4634			897	
B. Refuelling without a maintenance					4	
D. Inspection, maintenance or repair without refuelling				1139		
E. Testing of plant systems or components				63		
J. Grid failure or grid unavailability						5
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					7	14
Subtotal	0	4634	0	1202	908	19
Total		4634			2129	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1973 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		45
12. Reactor I&C Systems	1050	43
13. Reactor Auxiliary Systems		180
14. Safety Systems		14
15. Reactor Cooling Systems	701	461
31. Turbine and auxiliaries		39
32. Feedwater and Main Steam System		29
35. All other I&C Systems		3
41. Main Generator Systems		54
42. Electrical Power Supply Systems	2883	16
XX. Miscellaneous Systems		1
Total	4634	885

CA-13 PICKERING-5**Operator:** OPG (ONTARIO POWER GENERATION)**Contractor:** OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 516.0 MW(e)
Design Net Capacity: 516.0 MW(e)
Design Discharge Burnup: 8330 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2567.6 GW(e).h
Energy Availability Factor: 57.0%
Load Factor: 56.8%
Operating Factor: 64.3%
Energy Unavailability Factor: 43.0%
Total Off-line Time: 3123 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	328.5	164.6	375.4	15.1	0.0	0.0	143.4	270.0	351.9	365.6	301.5	251.7	2567.6
EAF (%)	85.6	47.8	99.0	4.1	0.0	0.0	37.5	70.4	94.7	95.2	81.1	65.6	57.0
UCF (%)	86.2	47.8	99.0	4.1	0.0	0.0	37.7	73.2	96.6	96.3	81.2	65.6	57.5
LF (%)	85.6	47.5	97.8	4.1	0.0	0.0	37.3	70.3	94.7	95.2	81.1	65.6	56.8
OF (%)	88.0	52.8	100.0	5.3	0.0	0.0	45.0	86.8	100.0	100.0	100.0	91.4	64.3
EUUF (%)	14.4	52.2	1.0	95.9	100.0	100.0	62.5	29.6	5.3	4.8	18.9	34.4	43.0
PUF (%)	0.0	0.0	0.0	95.9	100.0	33.3	6.3	0.0	0.0	0.0	0.0	0.0	19.7
UCLF (%)	13.8	52.2	1.0	0.0	0.0	66.7	56.0	26.8	3.4	3.7	18.9	34.4	22.8
XUF (%)	0.6	0.0	0.0	0.0	0.0	0.0	0.2	2.7	1.9	1.1	0.0	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Nov 1974 **Lifetime Generation:** 81506.0 GW(e).h
Date of First Criticality: 23 Oct 1982 **Cumulative Energy Availability Factor:** 72.9%
Date of Grid Connection: 19 Dec 1982 **Cumulative Load Factor:** 72.7%
Date of Commercial Operation: 10 May 1983 **Cumulative Unit Capability Factor:** 73.4%
Cumulative Energy Unavailability Factor: 27.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	2719.9	516.0	90.3	90.3	90.3	90.3	89.6	89.6	5446	92.6
1984	3517.5	516.0	77.8	82.8	77.8	82.8	77.6	82.4	7035	80.1
1985	3366.5	516.0	83.1	82.9	77.7	80.9	74.5	79.5	6989	79.8
1986	4068.6	516.0	91.2	85.1	90.7	83.6	90.0	82.3	8057	92.0
1987	3600.1	516.0	80.3	84.1	79.6	82.7	79.6	81.8	7148	81.6
1988	4397.2	516.0	97.5	86.5	97.5	85.3	97.0	84.5	8683	98.9
1989	3400.8	516.0	75.7	84.9	75.4	83.8	75.2	83.1	6862	78.3
1990	3885.0	516.0	86.4	85.1	86.4	84.2	85.9	83.4	7821	89.3
1991	2887.1	516.0	64.6	82.7	64.4	81.9	63.9	81.2	5724	65.3
1992	1345.2	516.0	29.8	77.2	29.8	76.5	29.7	75.9	2621	29.8
1993	3841.8	516.0	85.6	78.0	85.4	77.3	85.0	76.7	8307	94.8
1994	3074.4	516.0	68.5	77.2	68.5	76.6	68.0	76.0	6196	70.7
1995	3372.9	516.0	75.0	77.0	74.8	76.4	74.6	75.9	7008	80.0
1996	3042.6	516.0	67.1	76.3	67.1	75.7	67.1	75.2	6429	73.2
1997	3924.9	516.0	86.8	77.0	86.8	76.5	86.8	76.0	7908	90.3
1998	3490.6	516.0	77.2	77.0	77.2	76.5	77.2	76.1	7296	83.3
1999	2511.6	516.0	55.6	75.7	55.6	75.3	55.6	74.9	5302	60.5
2000	2631.5	516.0	58.1	74.7	58.0	74.3	58.1	73.9	5457	62.1
2001	2980.2	516.0	66.6	74.3	65.9	73.9	65.9	73.5	5986	68.3
2002	2655.7	516.0	59.2	73.5	58.8	73.1	58.8	72.7	5565	63.5
2003	3295.0	516.0	71.1	73.4	69.1	72.9	72.9	72.7	6566	75.0
2004	4159.8	516.0	92.6	74.3	92.2	73.8	91.8	73.6	8264	94.1
2005	2352.8	516.0	53.6	73.4	52.6	72.9	52.1	72.7	4818	55.0
2006	4010.9	516.0	89.7	74.1	88.9	73.5	88.7	73.3	8113	92.6
2007	2567.6	516.0	57.5	73.4	57.0	72.9	56.8	72.7	5637	64.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1457			877	
B. Refuelling without a maintenance					73	
D. Inspection, maintenance or repair without refuelling	1666			834		
E. Testing of plant systems or components				0	2	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				36	11	18
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Z. Others					21	
Subtotal	1666	1457	0	870	984	19
Total		3123			1873	

7. Equipment Related Full Outages, Analysis by System

System	2007	1982 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		3
12. Reactor I&C Systems		86
13. Reactor Auxiliary Systems		71
14. Safety Systems		25
15. Reactor Cooling Systems	699	84
16. Steam generation systems	24	378
31. Turbine and auxiliaries	95	43
32. Feedwater and Main Steam System	40	9
33. Circulating Water System	81	3
35. All other I&C Systems		7
41. Main Generator Systems		104
42. Electrical Power Supply Systems	518	54
Total	1457	867

CA-14 PICKERING-6

Operator: OPG (ONTARIO POWER GENERATION)

Contractor: OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 516.0 MW(e)
Design Net Capacity: 516.0 MW(e)
Design Discharge Burnup: 8330 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3216.5 GW(e).h
Energy Availability Factor: 70.8%
Load Factor: 71.2%
Operating Factor: 75.2%
Energy Unavailability Factor: 29.2%
Total Off-line Time: 2172 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	136.0	346.5	385.0	375.8	389.8	376.7	383.1	361.0	109.9	0.0	3.4	349.2	3216.5
EAF (%)	35.5	99.9	99.8	100.0	100.0	100.0	99.3	94.0	29.6	0.0	0.9	91.1	70.8
UCF (%)	35.5	100.0	99.9	100.0	100.0	100.0	99.4	99.4	30.0	0.0	0.9	91.1	71.3
LF (%)	35.4	99.9	100.3	101.2	101.5	101.4	99.8	94.0	29.6	0.0	0.9	91.0	71.2
OF (%)	59.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	31.9	0.0	11.4	100.0	75.2
EUF (%)	64.5	0.1	0.2	0.0	0.0	0.0	0.7	6.0	70.4	100.0	99.1	8.9	29.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.8	100.0	40.0	6.3	18.0
UCLF (%)	64.5	0.0	0.2	0.0	0.0	0.0	0.6	0.6	1.2	0.0	59.0	2.7	10.8
XUF (%)	0.0	0.1	0.0	0.0	0.0	0.0	0.1	5.4	0.4	0.0	0.0	0.0	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Oct 1975
Date of First Criticality: 15 Oct 1983
Date of Grid Connection: 08 Nov 1983
Date of Commercial Operation: 01 Feb 1984

Lifetime Generation: 83186.0 GW(e).h
Cumulative Energy Availability Factor: 76.5%
Cumulative Load Factor: 76.4%
Cumulative Unit Capability Factor: 77.1%
Cumulative Energy Unavailability Factor: 23.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	3562.9	516.0	86.1	86.1	86.1	86.1	85.9	85.9	7048	87.7
1985	3289.1	516.0	79.5	82.6	73.1	79.3	72.8	79.0	6540	74.7
1986	3395.2	516.0	76.1	80.4	75.8	78.1	75.1	77.7	6763	77.2
1987	3949.9	516.0	88.5	82.5	86.6	80.3	87.4	80.2	7791	88.9
1988	4496.8	516.0	98.5	85.7	98.4	84.0	99.2	84.0	8775	99.9
1989	3950.2	516.0	87.9	86.1	87.6	84.6	87.4	84.6	7794	89.0
1990	3473.5	516.0	77.7	84.9	76.9	83.5	76.8	83.5	7017	80.1
1991	4469.7	516.0	99.2	86.7	99.0	85.4	98.9	85.4	8721	99.6
1992	4050.5	516.0	89.3	87.0	89.3	85.9	89.4	85.9	7936	90.3
1993	2689.2	516.0	60.4	84.3	59.9	83.3	59.5	83.2	5506	62.9
1994	4043.0	516.0	90.2	84.8	90.1	83.9	89.4	83.8	8036	91.7
1995	3493.3	516.0	77.5	84.2	77.2	83.3	77.3	83.2	6962	79.5
1996	2591.7	516.0	57.2	82.1	57.2	81.3	57.2	81.2	5707	65.0
1997	3386.2	516.0	74.9	81.6	74.9	80.8	74.9	80.8	6841	78.1
1998	3130.1	516.0	69.7	80.8	69.2	80.1	69.2	80.0	6384	72.9
1999	3353.7	516.0	74.4	80.4	74.2	79.7	74.2	79.6	6863	78.3
2000	2738.7	516.0	60.6	79.2	60.5	78.5	60.4	78.5	6449	73.4
2001	2618.1	516.0	57.7	78.0	57.7	77.4	57.9	77.3	5286	60.3
2002	3982.3	516.0	88.9	78.6	88.3	78.0	88.1	77.9	7985	91.2
2003	3267.4	516.0	74.3	78.4	72.5	77.7	72.3	77.6	6566	75.0
2004	2780.8	516.0	61.7	77.6	61.5	76.9	61.4	76.9	5597	63.7
2005	2850.1	516.0	64.3	77.0	63.1	76.3	63.1	76.2	5596	63.9
2006	3899.5	516.0	86.1	77.4	86.0	76.7	86.3	76.7	7635	87.2
2007	3216.5	516.0	71.3	77.1	70.8	76.5	71.2	76.4	6588	75.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		673			654	
B. Refuelling without a maintenance					53	
D. Inspection, maintenance or repair without refuelling	1498			897		
E. Testing of plant systems or components				0	4	
J. Grid failure or grid unavailability						25
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					3	24
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						2
Subtotal	1498	673	0	897	714	51
Total		2171			1662	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		65
12. Reactor I&C Systems	199	50
13. Reactor Auxiliary Systems		43
14. Safety Systems		55
15. Reactor Cooling Systems	57	52
16. Steam generation systems		140
21. Fuel Handling and Storage Facilities		13
31. Turbine and auxiliaries		56
32. Feedwater and Main Steam System		48
33. Circulating Water System		3
35. All other I&C Systems		4
41. Main Generator Systems		83
42. Electrical Power Supply Systems	117	10
XX. Miscellaneous Systems	300	17
Total	673	639

CA-15 PICKERING-7**Operator:** OPG (ONTARIO POWER GENERATION)**Contractor:** OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 516.0 MW(e)
Design Net Capacity: 516.0 MW(e)
Design Discharge Burnup: 8330 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3667.9 GW(e).h
Energy Availability Factor: 81.7%
Load Factor: 81.1%
Operating Factor: 86.1%
Energy Unavailability Factor: 18.3%
Total Off-line Time: 1220 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	4.4	289.1	255.3	372.0	381.0	234.0	376.7	369.6	290.4	372.9	364.8	357.7	3667.9
EAF (%)	1.1	83.4	67.0	100.0	100.0	63.8	99.2	96.4	78.3	97.6	99.8	94.4	81.7
UCF (%)	1.1	83.5	67.0	100.0	100.0	63.8	99.6	98.7	79.2	98.0	99.8	94.4	82.0
LF (%)	1.1	83.4	66.5	100.1	99.2	63.0	98.1	96.3	78.2	97.1	98.2	93.2	81.1
OF (%)	9.8	100.0	70.6	100.0	100.0	66.9	100.0	100.0	87.2	100.0	100.0	100.0	86.1
EUUF (%)	98.9	16.6	33.0	0.0	0.0	36.2	0.8	3.6	21.7	2.4	0.2	5.6	18.3
PUF (%)	8.6	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
UCLF (%)	90.3	10.2	33.0	0.0	0.0	36.2	0.4	1.3	20.8	2.0	0.2	5.6	16.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.3	0.9	0.4	0.0	0.0	0.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Mar 1976 **Lifetime Generation:** 82091.0 GW(e).h
Date of First Criticality: 22 Oct 1984 **Cumulative Energy Availability Factor:** 78.9%
Date of Grid Connection: 17 Nov 1984 **Cumulative Load Factor:** 78.6%
Date of Commercial Operation: 01 Jan 1985 **Cumulative Unit Capability Factor:** 79.6%
Cumulative Energy Unavailability Factor: 21.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	4094.0	516.0	99.0	99.0	92.6	92.6	90.6	90.6	8277	94.5
1986	3373.3	516.0	75.5	87.2	75.2	83.9	74.6	82.6	7002	79.9
1987	4339.9	516.0	97.4	90.6	96.0	87.9	96.0	87.1	8642	98.7
1988	4340.4	516.0	95.9	92.0	95.4	89.8	95.8	89.2	8519	97.0
1989	3408.7	516.0	77.1	89.0	75.4	86.9	75.4	86.5	6939	79.2
1990	3500.8	516.0	78.4	87.2	77.7	85.4	77.4	85.0	7420	84.7
1991	4258.8	516.0	94.9	88.3	94.5	86.7	94.2	86.3	8436	96.3
1992	3727.4	516.0	82.4	87.6	82.4	86.2	82.2	85.8	7349	83.7
1993	4415.9	516.0	99.9	89.0	99.0	87.6	97.7	87.1	8760	100.0
1994	3709.9	516.0	83.4	88.4	83.4	87.2	82.1	86.6	7386	84.3
1995	4056.8	516.0	90.4	88.6	90.0	87.4	89.7	86.9	8140	92.9
1996	2050.7	516.0	45.4	85.0	45.4	83.9	45.2	83.4	4416	50.3
1997	2936.2	516.0	65.0	83.4	65.0	82.5	65.0	82.0	6208	70.9
1998	3084.7	516.0	68.9	82.4	68.2	81.4	68.2	81.0	6495	74.1
1999	4433.8	516.0	98.8	83.5	98.0	82.5	98.1	82.2	8751	99.9
2000	2099.0	516.0	46.4	81.2	46.3	80.3	46.3	79.9	4445	50.6
2001	4020.8	516.0	89.0	81.6	88.7	80.8	89.0	80.4	7968	91.0
2002	4246.9	516.0	94.4	82.3	93.9	81.5	94.0	81.2	8538	97.5
2003	1790.7	516.0	39.8	80.1	39.7	79.3	39.6	79.0	3811	43.5
2004	3116.1	516.0	68.9	79.5	68.9	78.8	68.7	78.5	6127	69.8
2005	4390.8	516.0	97.8	80.4	97.4	79.7	97.1	79.4	8658	98.8
2006	2652.6	516.0	59.1	79.4	59.1	78.7	58.7	78.4	5311	60.6
2007	3667.9	516.0	82.0	79.6	81.7	78.9	81.1	78.6	7540	86.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1220			406	
B. Refuelling without a maintenance					176	
D. Inspection, maintenance or repair without refuelling				806		
E. Testing of plant systems or components				1	12	
J. Grid failure or grid unavailability						3
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					9	19
Z. Others					40	
Subtotal	0	1220	0	807	643	22
Total		1220			1472	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		1
12. Reactor I&C Systems	85	23
13. Reactor Auxiliary Systems		19
14. Safety Systems	72	42
15. Reactor Cooling Systems	389	75
16. Steam generation systems		25
31. Turbine and auxiliaries	69	28
32. Feedwater and Main Steam System	36	15
33. Circulating Water System		14
41. Main Generator Systems	24	100
42. Electrical Power Supply Systems	5	9
XX. Miscellaneous Systems	540	45
Total	1220	396

CA-16 PICKERING-8

Operator: OPG (ONTARIO POWER GENERATION)

Contractor: OH/AECL (ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
 Net Reference Unit Power
 at the beginning of 2007: 516.0 MW(e)
 Design Net Capacity: 516.0 MW(e)
 Design Discharge Burnup: 8330 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3843.2 GW(e).h
 Energy Availability Factor: 85.5%
 Load Factor: 85.0%
 Operating Factor: 91.5%
 Energy Unavailability Factor: 14.5%
 Total Off-line Time: 745 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	80.0	318.9	376.1	366.2	376.2	363.0	370.8	208.3	352.0	357.8	305.3	368.5	3843.2
EAF (%)	21.4	92.8	99.6	100.0	99.0	98.1	96.6	54.3	94.8	93.2	82.2	96.0	85.5
UCF (%)	21.4	92.8	99.6	100.0	99.4	98.3	97.6	71.2	96.3	94.1	82.2	96.0	87.3
LF (%)	20.8	92.0	98.0	98.6	98.0	97.7	96.6	54.3	94.8	93.2	82.2	96.0	85.0
OF (%)	38.2	100.0	100.0	100.0	100.0	100.0	100.0	61.7	100.0	100.0	100.0	100.0	91.5
EUUF (%)	78.6	7.2	0.4	0.0	1.0	1.9	3.4	45.7	5.2	6.8	17.8	4.0	14.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	78.6	7.2	0.4	0.1	0.6	1.7	2.4	28.8	3.7	5.9	17.8	4.0	12.7
XUF (%)	0.0	0.0	0.0	0.0	0.4	0.2	1.0	17.0	1.6	0.9	0.0	0.0	1.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Sep 1976 Lifetime Generation: 75125.0 GW(e).h
 Date of First Criticality: 17 Dec 1985 Cumulative Energy Availability Factor: 76.0%
 Date of Grid Connection: 21 Jan 1986 Cumulative Load Factor: 75.8%
 Date of Commercial Operation: 28 Feb 1986 Cumulative Unit Capability Factor: 76.7%
 Cumulative Energy Unavailability Factor: 24.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	3771.0	516.0	92.2	92.2	91.9	91.9	91.2	91.2	7846	97.9
1987	3759.4	516.0	84.7	88.3	83.3	87.4	83.2	87.0	7585	86.6
1988	3710.4	516.0	82.5	86.3	82.3	85.6	81.9	85.2	7296	83.1
1989	4295.2	516.0	96.6	88.9	95.4	88.1	95.0	87.7	8569	97.8
1990	3014.7	516.0	66.7	84.4	66.6	83.7	66.7	83.5	6743	77.0
1991	4485.0	516.0	99.5	87.0	98.9	86.3	99.2	86.1	8759	100.0
1992	4212.0	516.0	93.0	87.8	92.9	87.3	92.9	87.1	8280	94.3
1993	3670.5	516.0	82.1	87.1	81.7	86.6	81.2	86.4	7233	82.6
1994	4341.9	516.0	96.8	88.2	96.8	87.7	96.1	87.4	8579	97.9
1995	4012.1	516.0	89.4	88.3	89.0	87.9	88.8	87.6	8066	92.1
1996	1300.3	516.0	28.7	82.9	28.7	82.4	28.7	82.2	2597	29.6
1997	360.8	516.0	8.0	76.6	8.0	76.2	8.0	75.9	995	11.3
1998	3493.6	516.0	78.0	76.7	77.3	76.3	77.3	76.0	7009	80.0
1999	3509.1	516.0	78.4	76.8	77.6	76.4	77.6	76.2	7077	80.8
2000	2711.2	516.0	60.8	75.7	59.9	75.2	59.8	75.1	5508	62.7
2001	3502.2	516.0	78.2	75.9	77.5	75.4	77.5	75.2	6999	79.9
2002	3605.4	516.0	81.1	76.2	80.0	75.7	79.8	75.5	7244	82.7
2003	3921.3	516.0	89.7	76.9	86.9	76.3	86.8	76.1	8026	91.6
2004	2489.5	516.0	55.4	75.8	55.1	75.2	54.9	75.0	5182	59.0
2005	4195.2	516.0	94.6	76.7	93.4	76.1	92.8	75.9	8431	96.2
2006	2908.5	516.0	65.1	76.2	64.8	75.5	64.3	75.3	5853	66.8
2007	3843.2	516.0	87.3	76.7	85.5	76.0	85.0	75.8	8015	91.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		628			401	
B. Refuelling without a maintenance				243	236	
D. Inspection, maintenance or repair without refuelling				897		
E. Testing of plant systems or components				1		
J. Grid failure or grid unavailability						6
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					4	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			116			2
Subtotal	0	628	116	1141	641	8
Total		744			1790	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		34
13. Reactor Auxiliary Systems		3
14. Safety Systems		22
15. Reactor Cooling Systems	168	90
16. Steam generation systems		25
21. Fuel Handling and Storage Facilities		17
31. Turbine and auxiliaries		39
32. Feedwater and Main Steam System		38
33. Circulating Water System		11
35. All other I&C Systems		1
41. Main Generator Systems		15
42. Electrical Power Supply Systems		27
XX. Miscellaneous Systems	460	
Total	628	322

CA-17 POINT LEPREAU

Operator: NBEPC (NEW BRUNSWICK ELECTRIC POWER COMMISSION)

Contractor: AECL (ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 635.0 MW(e)
Design Net Capacity: 630.0 MW(e)
Design Discharge Burnup: 8000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4121.8 GW(e).h
Energy Availability Factor: 85.9%
Load Factor: 74.1%
Operating Factor: 85.7%
Energy Unavailability Factor: 14.1%
Total Off-line Time: 1249 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	420.0	380.8	418.3	74.8	387.2	403.1	412.6	412.2	314.5	261.5	325.7	311.2	4121.8
EAF (%)	100.0	100.0	100.0	23.7	93.8	100.0	100.0	100.0	81.0	68.3	84.8	79.4	85.9
UCF (%)	100.0	100.0	100.0	23.7	93.8	100.0	100.0	100.0	81.0	68.3	84.8	79.4	85.9
LF (%)	88.9	89.2	88.5	16.4	81.9	88.2	87.3	87.2	68.8	55.3	71.2	65.9	74.1
OF (%)	100.0	100.0	100.0	19.7	96.8	100.0	100.0	100.0	79.7	66.7	86.1	79.3	85.7
EUF (%)	0.0	0.0	0.0	76.3	6.2	0.0	0.0	0.0	19.0	31.7	15.2	20.6	14.1
PUF (%)	0.0	0.0	0.0	72.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
UCLF (%)	0.0	0.0	0.0	3.8	5.1	0.0	0.0	0.0	19.0	31.7	15.3	20.6	8.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

WILL CELEBRATE 25 YEARS OF RUNNING AT FULL POWER IN MARCH 2008 AND COME DOWN ON MARCH 28TH FOR AN 18 MONTH OUTAGE. THREE FORCED OUTAGES FOR THE YEAR, SEP, NOVEMBER, DECEMBER. LIQUID ZONE CONTROL, SDS1 CHANNELS AND FUELING MACHINE FAILURE

5. Historical Summary

Date of Construction Start: 01 May 1975
Date of First Criticality: 25 Jul 1982
Date of Grid Connection: 11 Sep 1982
Date of Commercial Operation: 01 Feb 1983

Lifetime Generation: 114537.7 GW(e).h
Cumulative Energy Availability Factor: 82.6%
Cumulative Load Factor: 81.8%
Cumulative Unit Capability Factor: 83.8%
Cumulative Energy Unavailability Factor: 17.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	4404.5	640.0	86.0	86.0	86.0	86.0	85.9	85.9	7164	89.4
1984	5000.9	635.0	89.0	87.6	88.9	87.5	89.7	87.8	7927	90.2
1985	5421.9	635.0	96.9	90.8	96.9	90.7	97.5	91.1	8547	97.6
1986	5223.1	635.0	94.0	91.6	93.4	91.4	93.9	91.8	8257	94.3
1987	5107.7	635.0	91.2	91.5	91.2	91.4	91.8	91.8	8110	92.6
1988	5338.3	635.0	94.9	92.1	94.9	92.0	95.7	92.5	8383	95.4
1989	5266.7	635.0	93.8	92.3	93.6	92.2	94.7	92.8	8271	94.4
1990	5333.7	635.0	95.0	92.7	94.7	92.5	95.9	93.2	8384	95.7
1991	5437.2	635.0	96.7	93.1	96.7	93.0	97.7	93.7	8500	97.0
1992	4829.8	635.0	85.8	92.4	85.8	92.3	86.6	93.0	7748	88.2
1993	5320.0	635.0	95.1	92.6	95.1	92.5	95.6	93.2	8391	95.8
1994	5230.1	635.0	93.5	92.7	93.5	92.6	94.0	93.3	8270	94.4
1995	1611.4	635.0	29.0	87.8	29.0	87.7	29.0	88.3	2615	29.9
1996	4587.8	635.0	81.4	87.3	81.4	87.2	82.3	87.9	7363	83.8
1997	3455.6	635.0	62.2	85.6	61.6	85.5	62.1	86.2	5564	63.5
1998	3782.4	635.0	67.1	84.5	66.0	84.3	68.0	85.0	6111	69.8
1999	4082.7	635.0	75.5	83.9	72.0	83.6	73.4	84.3	6797	77.6
2000	3966.9	635.0	77.6	83.6	70.5	82.8	71.1	83.6	6792	77.3
2001	4451.3	635.0	84.6	83.6	79.1	82.6	80.0	83.4	7418	84.7
2002	3760.6	635.0	71.6	83.0	67.6	81.9	67.6	82.6	6107	69.7
2003	4739.5	635.0	89.8	83.4	84.4	82.0	85.2	82.7	7869	89.8
2004	4299.7	635.0	83.3	83.4	82.6	82.0	77.1	82.5	7310	83.2
2005	4372.6	635.0	86.8	83.5	86.8	82.2	78.6	82.3	7632	87.1
2006	4362.0	635.0	88.7	83.7	88.7	82.5	78.4	82.1	7755	88.5
2007	4121.8	635.0	85.9	83.8	85.9	82.6	74.1	81.8	7511	85.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		716			253	1
B. Refuelling without a maintenance					81	
C. Inspection, maintenance or repair combined with refuelling				22		
D. Inspection, maintenance or repair without refuelling	550			489		
E. Testing of plant systems or components				0	2	
G. Major back-fitting, refurbishment or upgrading activities without refuelling				35		
H. Nuclear regulatory requirements					2	
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						1
L. Human factor related					2	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						2
Z. Others					36	
Subtotal	550	716	0	546	376	5
Total		1266			927	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		20
12. Reactor I&C Systems	393	11
13. Reactor Auxiliary Systems	69	3
14. Safety Systems	100	24
15. Reactor Cooling Systems		73
16. Steam generation systems		61
21. Fuel Handling and Storage Facilities	154	
31. Turbine and auxiliaries		16
32. Feedwater and Main Steam System		22
41. Main Generator Systems		8
42. Electrical Power Supply Systems		7
Total	716	245

CN-2 GUANGDONG-1**Operator:** GNPJVC (GUANDONG NUCLEAR POWER JOINT VENTURE COMPANY LIMITED(GNPJVC))**Contractor:** GEC (GENERAL ELECTRIC COMPANY (UK))**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 944.0 MW(e)
Design Net Capacity: 930.0 MW(e)
Design Discharge Burnup: 35000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7542.1 GW(e).h
Energy Availability Factor: 91.2%
Load Factor: 91.2%
Operating Factor: 92.2%
Energy Unavailability Factor: 8.8%
Total Off-line Time: 686 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	694.1	628.6	699.6	677.7	702.3	679.7	702.3	702.3	679.6	387.0	286.6	702.3	7542.1
EAF (%)	98.8	99.1	99.6	99.7	100.0	100.0	100.0	100.0	100.0	55.2	42.2	100.0	91.2
UCF (%)	98.8	99.1	99.6	99.7	100.0	100.0	100.0	100.0	100.0	55.2	42.2	100.0	91.2
LF (%)	98.8	99.1	99.6	99.8	100.0	100.0	100.0	100.0	100.0	55.0	42.2	100.0	91.2
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	55.6	50.6	100.0	92.2
EUf (%)	1.2	0.9	0.4	0.3	0.0	0.0	0.0	0.0	0.0	44.8	57.8	0.0	8.8
PUF (%)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.8	57.8	0.0	8.6
UCLF (%)	0.9	0.9	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1.CN2 WAS BASICALLY OPERATED IN BASE-LOAD MODE.2.THERE WAS NO SCRAM IN 2007 ON CN2.3.CN2 WAS BEARING ITS TWELFTH REFUELING OUTAGE FROM OCT.18 TO NOV.15, LASTING 28.59 DAYS AND TOTAL ENERY LOSSES WAS ABOUT 708391MWE.H.

5. Historical Summary

Date of Construction Start: 07 Aug 1987 **Lifetime Generation:** 93096.9 GW(e).h
Date of First Criticality: 28 Jul 1993 **Cumulative Energy Availability Factor:** 81.2%
Date of Grid Connection: 31 Aug 1993 **Cumulative Load Factor:** 81.5%
Date of Commercial Operation: 01 Feb 1994 **Cumulative Unit Capability Factor:** 85.8%
Cumulative Energy Unavailability Factor: 18.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1994	5808.2	944.0	77.4	77.4	76.3	76.3	76.8	76.8	6385	79.7
1995	3723.6	944.0	84.6	81.2	46.2	60.6	45.0	60.2	4088	46.7
1996	6252.7	944.0	76.8	79.7	76.0	65.9	75.4	65.4	6847	77.9
1997	6491.2	944.0	82.1	80.3	74.6	68.1	78.5	68.8	7272	83.0
1998	6040.5	944.0	79.6	80.1	72.0	68.9	73.0	69.6	7344	83.8
1999	6723.7	944.0	87.7	81.4	82.7	71.2	81.3	71.6	7680	87.7
2000	6986.6	944.0	85.4	82.0	85.1	73.2	84.5	73.5	7641	87.2
2001	7009.3	944.0	87.5	82.7	84.8	74.7	84.8	74.9	7619	87.0
2002	7387.2	944.0	89.6	83.5	89.5	76.4	89.3	76.5	7924	90.5
2003	7400.8	944.0	90.9	84.2	90.4	77.8	89.5	77.8	7958	90.8
2004	7540.9	944.0	88.5	84.6	88.2	78.7	90.9	79.0	7789	88.7
2005	8260.5	944.0	100.0	85.9	100.0	80.5	99.9	80.8	8760	100.0
2006	6635.1	944.0	79.9	85.4	79.9	80.5	80.2	80.7	7133	81.4
2007	7542.1	944.0	91.2	85.8	91.2	81.2	91.2	81.5	8074	92.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1994 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					149	
C. Inspection, maintenance or repair combined with refuelling	686			937		
D. Inspection, maintenance or repair without refuelling				20		
E. Testing of plant systems or components					0	
J. Grid failure or grid unavailability						19
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						220
Subtotal	686	0	0	957	149	239
Total		686			1345	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1994 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		12
13. Reactor Auxiliary Systems		6
15. Reactor Cooling Systems		0
31. Turbine and auxiliaries		1
32. Feedwater and Main Steam System		22
33. Circulating Water System		3
41. Main Generator Systems		69
42. Electrical Power Supply Systems		32
Total	0	145

CN-3 GUANGDONG-2

Operator: GNPJVC (GUANDONG NUCLEAR POWER JOINT VENTURE COMPANY LIMITED(GNPJVC))
Contractor: GEC (GENERAL ELECTRIC COMPANY (UK))

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 944.0 MW(e)
Design Net Capacity: 930.0 MW(e)
Design Discharge Burnup: 35000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7344.2 GW(e).h
Energy Availability Factor: 88.8%
Load Factor: 88.8%
Operating Factor: 89.7%
Energy Unavailability Factor: 11.2%
Total Off-line Time: 902 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	702.3	634.4	702.3	589.1	0.4	614.3	702.1	702.3	679.7	702.2	620.8	694.2	7344.2
EAF (%)	100.0	100.0	100.0	86.6	0.1	90.4	100.0	100.0	100.0	100.0	91.3	98.8	88.8
UCF (%)	100.0	100.0	100.0	86.7	0.1	90.4	100.0	100.0	100.0	100.0	91.3	98.8	88.8
LF (%)	100.0	100.0	100.0	86.8	0.1	90.4	100.0	100.0	100.0	99.9	91.3	98.8	88.8
OF (%)	100.0	100.0	100.0	86.8	0.5	100.0	100.0	100.0	100.0	99.9	91.3	99.6	89.7
EUf (%)	0.0	0.0	0.0	13.4	99.9	9.6	0.0	0.0	0.0	0.0	8.7	1.2	11.2
PUf (%)	0.0	0.0	0.0	13.4	82.7	9.6	0.0	0.0	0.0	0.0	0.0	0.1	8.9
UCLF (%)	0.0	0.0	0.0	0.0	17.2	0.0	0.0	0.0	0.0	0.0	8.7	1.1	2.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1.CN3 WAS BASICALLY OPERATED IN BASE-LOAD MODE. 2.THERE WAS ONE SCRAM ON APR.27 DUE TO THE RECORDER FAILURE CAUSING TURBINE GENERATOR PROTECTION AND RESULTING IN TRIPPING OF MAIN TRANSFORMER AND SCRAM WHEN CN3 DISCONNECTED WITH THE GRID TO PERFORM OUTAGE, WHICH DID NOT CAUSE ENERGY LOSSES. 3.CN3 WAS BEARING ITS TWELFTH REFUELING OUTAGE FROM APR.27 TO MAR.31, LASTING 34.78 DAYS. 4.THERE WAS ONE SCRAM ON NOV.28 DUE TO GENERATOR STATOR 100% EARTHLING PROTECTION ACTUATION, WHICH CAUSED 61356 MWE.H ENERGY LOSSES.

5. Historical Summary

Date of Construction Start: 07 Apr 1988 **Lifetime Generation:** 91559.4 GW(e).h
Date of First Criticality: 21 Jan 1994 **Cumulative Energy Availability Factor:** 81.6%
Date of Grid Connection: 07 Feb 1994 **Cumulative Load Factor:** 81.5%
Date of Commercial Operation: 07 May 1994 **Cumulative Unit Capability Factor:** 83.7%
Cumulative Energy Unavailability Factor: 18.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1994	5014.2	944.0	99.4	99.4	92.3	92.3	90.3	90.3	5761	98.0
1995	6343.3	944.0	81.1	88.4	77.5	83.4	76.7	82.2	7146	81.6
1996	5276.9	944.0	67.4	80.6	63.9	76.1	63.6	75.2	5740	65.3
1997	5914.8	944.0	70.1	77.7	67.4	73.8	71.5	74.2	6194	70.7
1998	6259.1	944.0	82.9	78.8	74.7	74.0	75.7	74.5	7302	83.4
1999	6789.5	944.0	86.2	80.1	83.3	75.6	82.1	75.9	7594	86.7
2000	6995.5	944.0	89.1	81.5	88.4	77.5	84.6	77.2	7840	89.5
2001	7355.5	944.0	91.1	82.7	89.5	79.1	88.9	78.7	7986	91.2
2002	6728.9	944.0	82.2	82.7	81.6	79.4	81.4	79.0	7224	82.5
2003	6983.1	944.0	84.6	82.9	84.5	79.9	84.4	79.6	7503	85.7
2004	6358.9	944.0	74.4	82.1	74.2	79.4	76.7	79.3	6580	74.9
2005	6587.0	944.0	79.6	81.9	79.6	79.4	79.7	79.3	7075	80.8
2006	8222.8	944.0	99.9	83.3	99.9	81.0	99.4	80.9	8760	100.0
2007	7344.2	944.0	88.8	83.7	88.8	81.6	88.8	81.5	7858	89.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1994 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		194			151	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	708			929		
D. Inspection, maintenance or repair without refuelling				19		
J. Grid failure or grid unavailability						23
L. Human factor related					25	
Subtotal	708	194	0	948	180	23
Total		902			1151	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1994 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	128	
17. Safety I&C Systems (excluding reactor I&C)		1
21. Fuel Handling and Storage Facilities		77
31. Turbine and auxiliaries		4
32. Feedwater and Main Steam System		2
35. All other I&C Systems		2
41. Main Generator Systems	66	63
42. Electrical Power Supply Systems		0
Total	194	149

CN-6 LINGAO 1

Operator: LANPC (LINGAO NUCLEAR POWER COMPANY LTD.)
Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 938.0 MW(e)
Design Net Capacity: 938.0 MW(e)
Design Discharge Burnup: —
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6835.0 GW(e).h
Energy Availability Factor: 83.2%
Load Factor: 83.2%
Operating Factor: 83.8%
Energy Unavailability Factor: 16.8%
Total Off-line Time: 1415 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	696.2	204.3	0.0	419.4	697.8	675.2	697.9	697.8	675.4	697.9	675.4	697.8	6835.0
EAF (%)	99.8	32.4	0.0	62.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.2
UCF (%)	99.8	32.4	0.0	62.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.2
LF (%)	99.8	32.4	0.0	62.2	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	83.2
OF (%)	100.0	32.9	0.0	69.5	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	83.8
EUUF (%)	0.2	67.6	100.0	37.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.8
PUF (%)	0.2	67.6	51.6	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2
UCLF (%)	0.0	0.0	48.4	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1.CN6 WAS BASICALLY OPERATED IN BASE-LOAD MODE.2.THERE WAS NO SCRAM IN 2006 ON CN6.3.CN6 WAS BEARING ITS 5TH REFUELING OUTAGE FROM FEB. 10 TO APR.10, LASTING 58.98 DAYS.AND THE OUTAGE WAS POSTPONED DUE TO THE DAMAGE OF BEARING AND BUSHING OF NO.2 PRIMARY COOLANT PUMP.4.IN ITS OPERATION TIME,NO SIGIFICANT POWER DELOADING RELATED WITH HUMAN FAILURE OR EQUIPMENT FAILURE WAS SEEN.

5. Historical Summary

Date of Construction Start: 15 May 1997 **Lifetime Generation:** 39445.4 GW(e).h
Date of First Criticality: 04 Feb 2002 **Cumulative Energy Availability Factor:** 86.6%
Date of Grid Connection: 26 Feb 2002 **Cumulative Load Factor:** 84.6%
Date of Commercial Operation: 28 May 2002 **Cumulative Unit Capability Factor:** 86.9%
Cumulative Energy Unavailability Factor: 13.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2002	4583.8	938.0	95.7	95.7	95.7	95.7	83.1	83.1	5184	88.1
2003	6375.0	938.0	82.3	87.7	80.4	86.5	77.6	79.8	7215	82.4
2004	7331.4	938.0	89.0	88.2	88.7	87.3	89.0	83.2	7884	89.8
2005	6906.4	938.0	84.3	87.1	84.3	86.5	84.1	83.5	7424	84.7
2006	7401.0	938.0	90.1	87.7	90.1	87.3	90.1	84.9	7964	90.9
2007	6835.0	938.0	83.2	86.9	83.2	86.6	83.2	84.6	7345	83.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2003 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling	838	576		811	104	
Subtotal	838	576	0	811	104	0
Total	1414			915		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2003 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		4
15. Reactor Cooling Systems	576	
42. Electrical Power Supply Systems		99
Total	576	103

CN-7 LINGAO 2

Operator: LANPC (LINGAO NUCLEAR POWER COMPANY LTD.)
Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 938.0 MW(e)
Design Net Capacity: 938.0 MW(e)
Design Discharge Burnup: —
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7215.1 GW(e).h
Energy Availability Factor: 87.8%
Load Factor: 87.8%
Operating Factor: 89.0%
Energy Unavailability Factor: 12.2%
Total Off-line Time: 964 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	11.8	601.0	697.6	427.7	690.0	659.8	684.4	697.9	675.4	697.7	674.8	697.0	7215.1
EAF (%)	1.7	95.3	100.0	63.3	98.9	97.7	98.1	100.0	100.0	100.0	99.9	99.9	87.8
UCF (%)	1.7	95.4	100.0	63.3	98.9	97.7	98.1	100.0	100.0	100.0	99.9	99.9	87.8
LF (%)	1.7	95.3	100.0	63.4	98.9	97.7	98.1	100.0	100.0	99.8	99.9	99.9	87.8
OF (%)	5.9	100.0	100.0	63.4	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	89.0
EUf (%)	98.3	4.7	0.0	36.7	1.1	2.3	1.9	0.0	0.0	0.0	0.1	0.1	12.2
PUf (%)	98.3	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	8.7
UCLF (%)	0.0	0.0	0.0	36.7	1.1	2.3	1.9	0.0	0.0	0.0	0.0	0.1	3.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1CN7 WAS BASICALLY OPERATED IN BASE-LOAD MODE.2THERE WAS ONE SCRAM IN 2007 DUE TO MAIN TRANSFORMER C PHASE FAILURE.3CN7 WAS BEARING ITS FORTH REFUELING OUTAGE FROM DEC. 28, 2006 TO JAN. 30,2007 LASTING 33.05 DAYS.

5. Historical Summary

Date of Construction Start: 28 Nov 1997 **Lifetime Generation:** 36071.5 GW(e).h
Date of First Criticality: 27 Aug 2002 **Cumulative Energy Availability Factor:** 88.2%
Date of Grid Connection: 15 Dec 2002 **Cumulative Load Factor:** 87.6%
Date of Commercial Operation: 08 Jan 2003 **Cumulative Unit Capability Factor:** 88.4%
Cumulative Energy Unavailability Factor: 11.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2003	6934.9	938.0	90.6	90.6	89.9	89.9	84.4	84.4	7494	85.5
2004	6669.4	938.0	79.9	85.2	79.8	84.9	80.9	82.7	7109	80.9
2005	7530.9	938.0	91.6	87.3	91.3	87.0	91.7	85.7	8075	92.2
2006	7661.0	938.0	92.1	88.5	92.1	88.3	93.2	87.6	8164	93.2
2007	7215.1	938.0	87.8	88.4	87.8	88.2	87.8	87.6	7796	89.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2003 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling L. Human factor related	700	264		724	22	
Subtotal	700	264	0	724	22	0
Total	964			746		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2003 to 2007 Average Hours Lost Per Year
32. Feedwater and Main Steam System		9
41. Main Generator Systems	264	12
Total	264	21

CN-1 QINSHAN 1

Operator: QNPC (QINSHAN NUCLEAR POWER COMPANY)
Contractor: CNNC (CHINA NATIONAL NUCLEAR CORPORATION)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 288.0 MW(e)
Design Net Capacity: 288.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2061.4 GW(e).h
Energy Availability Factor: 82.0%
Load Factor: 81.7%
Operating Factor: 82.4%
Energy Unavailability Factor: 18.0%
Total Off-line Time: 1542 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	216.9	184.9	216.1	208.7	206.3	207.1	213.2	212.0	207.5	188.9	0.0	0.0	2061.4
EAF (%)	99.9	100.0	100.0	99.8	99.6	99.3	99.3	98.8	100.0	88.0	0.0	0.0	82.0
UCF (%)	99.9	100.0	100.0	99.8	99.9	100.0	99.9	100.0	100.0	88.0	0.0	0.0	82.2
LF (%)	101.2	95.6	100.8	100.8	96.3	99.9	99.5	98.9	100.1	88.0	0.0	0.0	81.7
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	89.4	0.0	0.0	82.4
EUUF (%)	0.1	0.0	0.0	0.2	0.4	0.7	0.7	1.2	0.0	12.0	100.0	100.0	18.0
PUF (%)	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	11.2	100.0	100.0	17.7
UCLF (%)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.1
XUF (%)	0.0	0.0	0.0	0.0	0.3	0.7	0.5	1.2	0.0	0.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

IN 2007, UNIT REMAINED STABLE OPERATION FOR 300.75 DAYS. THE PLANNING OUTAGE BEGAN ON 28TH OCT.FROM 12:38 17TH FEB. TO 17:50 21TH, THE SPRING FESTIVAL VACATION, UNIT OPERATED AT 200MWE ACCORDING TO THE GRID ADJUSTING SCHEDULE, WHICH CAUSED 10194.03MWE POWER LOSING. FROM 5:40 18TH MAY TO 8:55 2ND JUNE, UNIT POWER REMAINED TO 220MWE AND 260MWE RESPECTIVELY, BECAUSE OF THE MAINTENANCE TASK TO THE ELECTRICITY OUTLET LINE INITIATED BY GRID INSTITUTION.FROM 12:22 7TH JULY TO 31TH AUG.UNIT POWER WAS REDUCED TO 308MWE AND 305 MWE RESPECTIVELY, BECAUSE OF THE TEMPERATURE OF COOLANT WATER, THEREFORE 3678.24 MWE-HR LOST IN CAPACITY.

5. Historical Summary

Date of Construction Start: 20 Mar 1985 **Lifetime Generation:** 28895.0 GW(e).h
Date of First Criticality: 31 Oct 1991 **Cumulative Energy Availability Factor:** 75.9%
Date of Grid Connection: 15 Dec 1991 **Cumulative Load Factor:** 77.1%
Date of Commercial Operation: 01 Apr 1994 **Cumulative Unit Capability Factor:** 77.8%
Cumulative Energy Unavailability Factor: 24.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1994	1153.9	279.0	67.5	67.5	62.0	62.0	62.7	62.7	4624	70.1
1995	2063.9	300.0	86.8	78.8	82.3	74.0	78.5	72.0	7886	90.0
1996	2073.7	279.0	81.2	79.7	81.2	76.5	84.6	76.5	7479	85.1
1997	2011.7	300.0	81.8	80.2	76.1	76.4	76.5	76.5	7185	82.0
1998	1149.5	279.0	48.8	73.8	42.6	69.5	47.0	70.5	4331	49.4
1999	680.9	279.0	27.8	66.0	27.8	62.4	27.9	63.3	2519	28.8
2000	2035.5	300.0	77.6	67.8	77.6	64.8	77.2	65.4	6840	77.9
2001	2319.4	279.0	93.5	71.0	92.8	68.3	94.9	69.1	8370	95.5
2002	1783.2	279.0	69.2	70.8	66.3	68.1	73.0	69.5	5989	68.4
2003	2256.6	288.0	88.5	72.6	88.4	70.2	89.4	71.6	7798	89.0
2004	2565.2	288.0	99.8	75.2	99.1	72.9	101.4	74.4	8784	100.0
2005	2194.6	288.0	87.0	76.2	86.8	74.1	87.0	75.5	7693	87.8
2006	2310.4	288.0	91.8	77.4	91.8	75.5	91.6	76.7	8086	92.3
2007	2061.4	288.0	82.2	77.8	82.0	75.9	81.7	77.1	7218	82.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1993 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					44	
B. Refuelling without a maintenance					7	
C. Inspection, maintenance or repair combined with refuelling	1542			1052		
D. Inspection, maintenance or repair without refuelling				83		
E. Testing of plant systems or components					3	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					413	2
Subtotal	1542	0	0	1135	467	2
Total		1542			1604	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1993 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		3
13. Reactor Auxiliary Systems		6
15. Reactor Cooling Systems		1
31. Turbine and auxiliaries		4
32. Feedwater and Main Steam System		16
33. Circulating Water System		5
35. All other I&C Systems		2
41. Main Generator Systems		2
XX. Miscellaneous Systems		2
Total	0	41

CN-4 QINSHAN 2-1**Operator:** NPQJVC (NUCLEAR POWER PLANT QINSHAN JOINT VENTURE COMPANY LTD.)**Contractor:** CNNC (CHINA NATIONAL NUCLEAR CORPORATION)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 610.0 MW(e)
Design Net Capacity: 610.0 MW(e)
Design Discharge Burnup: —
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3503.0 GW(e).h
Energy Availability Factor: 64.1%
Load Factor: 65.6%
Operating Factor: 64.9%
Energy Unavailability Factor: 35.9%
Total Off-line Time: 3079 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	261.5	455.7	468.3	448.8	452.9	452.1	209.9	0.0	352.5	401.3	3503.0
EAF (%)	0.0	0.0	55.8	100.0	100.0	100.0	100.0	100.0	47.0	0.1	77.7	85.1	64.1
UCF (%)	0.0	0.0	55.8	100.0	100.0	100.0	100.0	100.0	47.0	0.1	77.7	85.1	64.1
LF (%)	0.0	0.0	57.6	103.9	103.2	102.2	99.8	99.6	47.8	0.0	80.3	88.4	65.6
OF (%)	0.0	0.0	58.1	100.1	100.0	100.0	100.0	100.0	47.2	0.0	83.3	85.6	64.9
EUAF (%)	100.0	100.0	44.2	0.0	0.0	0.0	0.0	0.0	53.0	99.9	22.3	14.9	35.9
PUF (%)	100.0	100.0	44.2	0.0	0.0	0.0	0.0	0.0	53.0	99.9	22.3	14.9	35.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE IS NO UNPLANNED AUTOMATIC SCRAM.FROM 2007-01-01 TO 2007-03-13, MAINTENANCEFROM 2007-09-14 TO 2007-11-10, MAINTENANCE WITH REFUELING.FROM 2007-12-18 TO 2007-12-23, MAINTENANCE OUTAGE DUE TO HIGH BIBRATION OF TURBINE

5. Historical Summary

Date of Construction Start: 02 Jun 1996 **Lifetime Generation:** 23356.1 GW(e).h
Date of First Criticality: 15 Nov 2001 **Cumulative Energy Availability Factor:** 75.2%
Date of Grid Connection: 06 Feb 2002 **Cumulative Load Factor:** 75.0%
Date of Commercial Operation: 18 Apr 2002 **Cumulative Unit Capability Factor:** 75.2%
Cumulative Energy Unavailability Factor: 24.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2002	2965.3	610.0	81.6	81.6	81.6	81.6	73.6	73.6	4631	70.2
2003	4327.3	610.0	81.0	81.2	80.9	81.2	81.0	77.8	7123	81.3
2004	4395.7	610.0	80.1	80.8	80.1	80.8	82.0	79.4	7117	81.0
2005	4944.8	610.0	90.6	83.4	90.6	83.4	92.5	82.9	7982	91.1
2006	2938.2	610.0	55.2	77.5	55.2	77.5	55.0	77.0	4890	55.8
2007	3503.0	610.0	64.1	75.2	64.1	75.2	65.6	75.0	5681	64.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2003 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					215	
C. Inspection, maintenance or repair combined with refuelling	1243			920		
D. Inspection, maintenance or repair without refuelling	107					
G. Major back-fitting, refurbishment or upgrading activities without refuelling	1727			441		
Z. Others					29	
Subtotal	3077	0	0	1361	244	0
Total	3077			1605		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2003 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		144
31. Turbine and auxiliaries		30
32. Feedwater and Main Steam System		0
41. Main Generator Systems		40
Total	0	214

CN-5 QINSHAN 2-2

Operator: NPQJVC (NUCLEAR POWER PLANT QINSHAN JOINT VENTURE COMPANY LTD.)

Contractor: CNNC (CHINA NATIONAL NUCLEAR CORPORATION)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 610.0 MW(e)
Design Net Capacity: 610.0 MW(e)
Design Discharge Burnup: —
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4817.0 GW(e).h
Energy Availability Factor: 88.3%
Load Factor: 90.1%
Operating Factor: 88.9%
Energy Unavailability Factor: 11.7%
Total Off-line Time: 968 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	464.7	423.9	469.5	454.4	134.6	138.3	451.6	450.3	443.3	460.9	456.4	469.1	4817.0
EAF (%)	99.6	100.0	100.0	100.0	29.2	31.9	100.0	100.0	100.0	99.7	100.0	99.7	88.3
UCF (%)	99.6	100.0	100.0	100.0	29.2	31.9	100.0	100.0	100.0	99.7	100.0	99.7	88.3
LF (%)	102.4	103.4	103.5	103.6	29.7	31.5	99.5	99.2	100.9	101.4	103.9	103.4	90.1
OF (%)	100.0	100.0	100.0	100.1	29.4	38.5	100.0	100.0	100.0	99.9	100.0	100.0	88.9
EUF (%)	0.4	0.0	0.0	0.0	70.8	68.1	0.0	0.0	0.0	0.3	0.0	0.3	11.7
PUF (%)	0.4	0.0	0.0	0.0	70.8	68.1	0.0	0.0	0.0	0.3	0.0	0.3	11.7
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE IS NO UNPLANNED SCRAM IN 2007. FROM 2007-5-10 TO 2007-6-24, MAINTENANCE WITH REFUELING.

5. Historical Summary

Date of Construction Start: 01 Apr 1997 **Lifetime Generation:** 17893.4 GW(e).h
Date of First Criticality: 25 Feb 2004 **Cumulative Energy Availability Factor:** 88.4%
Date of Grid Connection: 11 Mar 2004 **Cumulative Load Factor:** 89.9%
Date of Commercial Operation: 03 May 2004 **Cumulative Unit Capability Factor:** 88.4%
Cumulative Energy Unavailability Factor: 11.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2004	3514.3	610.0	96.2	96.2	96.2	96.2	98.0	98.0	5682	96.6
2005	4521.5	610.0	82.8	88.2	82.7	88.1	84.6	90.0	7331	83.7
2006	4790.4	610.0	88.8	88.4	88.8	88.4	89.6	89.9	7822	89.3
2007	4817.0	610.0	88.3	88.4	88.3	88.4	90.1	89.9	7792	88.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2004 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					36	
C. Inspection, maintenance or repair combined with refuelling	968			584		
D. Inspection, maintenance or repair without refuelling				41		
Subtotal	968	0	0	625	36	0
Total	968			661		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2004 to 2007 Average Hours Lost Per Year
31. Turbine and auxiliaries		28
32. Feedwater and Main Steam System		1
42. Electrical Power Supply Systems		6
Total	0	35

CN-8 QINSHAN 3-1**Operator:** TQNPC (The Third Qinshan Jointed Venture Company Ltda.)**Contractor:** AECL (ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 650.0 MW(e)
Design Net Capacity: 650.0 MW(e)
Design Discharge Burnup: 7186 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5020.4 GW(e).h
Energy Availability Factor: 86.4%
Load Factor: 88.2%
Operating Factor: 86.7%
Energy Unavailability Factor: 13.6%
Total Off-line Time: 1163 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	502.5	450.9	501.7	338.5	0.0	441.9	477.5	476.5	472.0	495.8	486.1	377.1	5020.4
EAF (%)	100.0	100.0	100.0	69.7	0.0	94.1	100.0	100.0	100.0	100.0	100.0	75.2	86.4
UCF (%)	100.0	100.0	100.0	69.7	0.0	94.1	100.0	100.0	100.0	100.0	100.0	75.2	86.4
LF (%)	103.9	103.2	103.7	72.4	0.0	94.4	98.7	98.5	100.9	102.4	103.9	78.0	88.2
OF (%)	100.0	100.0	100.0	70.5	0.0	96.9	100.0	100.0	100.0	99.9	100.0	75.3	86.7
EUF (%)	0.0	0.0	0.0	30.3	100.0	5.9	0.0	0.0	0.0	0.0	0.0	24.8	13.6
PUF (%)	0.0	0.0	0.0	30.3	100.0	5.9	0.0	0.0	0.0	0.0	0.0	15.1	12.8
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7	0.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE IS NO UNPLANNED AUTOMATIC SCRAM. FROM 2007-04-22 TO 2007-06-03, PLAN OUTAGE OT103. FROM 2007-12-24 TO 2007-12-31, UNPLANNED MANUAL SCRAM DUE TO WELDING LEAKAGE AND CONDUCT PLANNED MINI-OVERHAUL.

5. Historical Summary

Date of Construction Start: 08 Jun 1998 **Lifetime Generation:** 25147.3 GW(e).h
Date of First Criticality: 21 Sep 2002 **Cumulative Energy Availability Factor:** 85.5%
Date of Grid Connection: 19 Nov 2002 **Cumulative Load Factor:** 87.6%
Date of Commercial Operation: 31 Dec 2002 **Cumulative Unit Capability Factor:** 86.1%
Cumulative Energy Unavailability Factor: 14.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2002			Data not provided							
2003	5174.7	650.0	89.7	89.7	86.6	86.6	90.9	90.9	7977	91.1
2004	4405.5	650.0	75.6	82.6	75.6	81.1	77.2	84.0	6745	76.8
2005	4781.6	650.0	82.5	82.6	82.4	81.5	84.0	84.0	7249	82.8
2006	5577.8	650.0	96.3	86.0	96.3	85.2	98.0	87.5	8484	96.8
2007	5020.4	650.0	86.4	86.1	86.4	85.5	88.2	87.6	7597	86.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2003 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure D. Inspection, maintenance or repair without refuelling	1091	72		721	192	
Subtotal	1091	72	0	721	192	0
Total	1163			913		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2003 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	72	
12. Reactor I&C Systems		26
15. Reactor Cooling Systems		59
32. Feedwater and Main Steam System		7
42. Electrical Power Supply Systems		99
Total	72	191

CN-9 QINSHAN 3-2

Operator: TQNPC (The Third Qinshan Jointed Venture Company Ltda.)
Contractor: AECL (ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 650.0 MW(e)
Design Net Capacity: 650.0 MW(e)
Design Discharge Burnup: 7186 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5675.7 GW(e).h
Energy Availability Factor: 97.6%
Load Factor: 99.7%
Operating Factor: 97.7%
Energy Unavailability Factor: 2.4%
Total Off-line Time: 201 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	503.2	449.4	357.5	486.5	497.1	475.0	474.8	476.7	471.2	495.4	486.1	502.7	5675.7
EAF (%)	100.0	100.0	71.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.6
UCF (%)	100.0	100.0	71.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.6
LF (%)	104.1	102.9	73.9	104.1	102.8	101.5	98.2	98.6	100.7	102.3	103.9	104.0	99.7
OF (%)	100.0	100.0	73.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	97.7
EUF (%)	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
PUF (%)	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE IS NO UNPLANNED AUTOMATIC SCRAM. FROM 2007-03-16 TO 2007-03-24, THE PLANNED MAINTENANCE OUTAGE.

5. Historical Summary

Date of Construction Start: 25 Sep 1998 **Lifetime Generation:** 22782.8 GW(e).h
Date of First Criticality: 18 Jan 2003 **Cumulative Energy Availability Factor:** 89.2%
Date of Grid Connection: 12 Jun 2003 **Cumulative Load Factor:** 89.7%
Date of Commercial Operation: 24 Jul 2003 **Cumulative Unit Capability Factor:** 89.3%
Cumulative Energy Unavailability Factor: 10.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2003	Data not provided									
2004	5358.6	665.0	93.0	93.0	92.4	92.4	91.7	91.7	8236	93.8
2005	4604.6	665.0	80.2	86.6	80.1	86.3	79.0	85.4	7014	80.1
2006	5038.2	650.0	86.7	86.7	86.7	86.4	88.5	86.4	7721	88.1
2007	5675.7	650.0	97.6	89.3	97.6	89.2	99.7	89.7	8559	97.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2004 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure D. Inspection, maintenance or repair without refuelling L. Human factor related N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)	200			771	32 23	11
Subtotal	200	0	0	771	55	11
Total	200			837		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2004 to 2007 Average Hours Lost Per Year
16. Steam generation systems		13
42. Electrical Power Supply Systems		19
Total	0	32

CN-10 TIANWAN 1

Operator: JNPC (Jiangsu Nuclear Power Corporation)

Contractor: IZ (Izhorskiye Zavody)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1000.0 MW(e)
Design Net Capacity: 933.0 MW(e)
Design Discharge Burnup: —
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4687.0 GW(e).h
Energy Availability Factor: 85.7%
Load Factor: 79.7%
Operating Factor: 84.3%
Energy Unavailability Factor: 14.3%
Total Off-line Time: 926 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h					625.0	699.0	703.0	680.0	691.0	725.0	564.0	0.0	4687.0
EAF (%)					100.0	100.0	100.0	98.1	99.6	100.0	81.9	6.7	85.7
UCF (%)					100.0	100.0	100.0	98.1	99.6	100.0	81.9	6.7	85.7
LF (%)					84.0	97.1	94.5	91.4	96.0	97.3	78.3	0.0	79.7
OF (%)					95.0	100.0	100.0	100.0	100.0	99.9	80.0	0.0	84.3
EUF (%)					0.0	0.0	0.0	1.9	0.4	0.0	18.1	93.3	14.3
PUF (%)					0.0	0.0	0.0	0.0	0.0	0.0	18.1	93.3	14.0
UCLF (%)					0.0	0.0	0.0	1.9	0.4	0.0	0.0	0.0	0.3
XUF (%)					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

IN 2007, UNIT COME TO COMMERCIAL OPERATION ON 17TH MAY 2007. THE PLANNED OUTAGE BEGAN ON 25TH NOV. DURING THIS PERIOD UNIT REMAINED STABLE OPERATION.

5. Historical Summary

Date of Construction Start: 20 Oct 1999
Date of First Criticality: 20 Dec 2005
Date of Grid Connection: 12 May 2006
Date of Commercial Operation: 17 May 2007

Lifetime Generation: 6546.0 GW(e).h
Cumulative Energy Availability Factor: 85.7%
Cumulative Load Factor: 79.7%
Cumulative Unit Capability Factor: 85.7%
Cumulative Energy Unavailability Factor: 14.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2007	4687.0	1000.0	85.7	85.7	85.7	85.7	79.7	79.7	4955	84.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2007 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External

The reactor has not yet completed a full year of commercial operation.

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2007 to 2007 Average Hours Lost Per Year

The reactor has not yet completed a full year of commercial operation.

CN-11 TIANWAN 2

Operator: JNPC (Jiangsu Nuclear Power Corporation)
Contractor: IZ (Izhorskiye Zavody)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1000.0 MW(e)
Design Net Capacity: 933.0 MW(e)
Design Discharge Burnup: —
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3459.0 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 94.2%
Operating Factor: 97.6%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 87 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h								587.0	702.0	732.0	710.0	728.0	3459.0
EAF (%)								100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)								100.0	100.0	100.0	100.0	100.0	100.0
LF (%)								78.9	97.5	98.3	98.6	97.8	94.2
OF (%)								88.4	100.0	99.9	100.0	100.0	97.6
EUF (%)								0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)								0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)								0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)								0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

IN 2007, UNIT COME TO COMMERCIAL OPERATION ON 16TH AUG 2007. UNIT REMAINED STABLE OPERATION.

5. Historical Summary

Date of Construction Start: 20 Oct 2000 **Lifetime Generation:** 3974.0 GW(e).h
Date of First Criticality: 01 May 2007 **Cumulative Energy Availability Factor:** 100.0%
Date of Grid Connection: 14 May 2007 **Cumulative Load Factor:** 94.2%
Date of Commercial Operation: 16 Aug 2007 **Cumulative Unit Capability Factor:** 100.0%
Cumulative Energy Unavailability Factor: 0.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2007	3459.0	1000.0	100.0	100.0	100.0	100.0	94.2	94.2	3586	97.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2007 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External

The reactor has not yet completed a full year of commercial operation.

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2007 to 2007 Average Hours Lost Per Year

The reactor has not yet completed a full year of commercial operation.

TW-1 CHIN SHAN-1**Operator:** TPC (TAI POWER CO.)**Contractor:** GE (GENERAL ELECTRIC CO.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 604.0 MW(e)
Design Net Capacity: 604.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4607.9 GW(e).h
Energy Availability Factor: 88.2%
Load Factor: 87.1%
Operating Factor: 89.4%
Energy Unavailability Factor: 11.8%
Total Off-line Time: 926 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	444.3	390.8	48.3	247.8	440.7	426.5	432.1	435.7	425.5	433.4	433.7	449.1	4607.9
EAF (%)	99.2	96.7	11.5	57.1	99.0	100.0	99.2	99.8	100.0	97.2	99.8	99.8	88.2
UCF (%)	99.3	100.0	12.8	57.1	99.0	100.0	99.2	99.9	100.0	99.9	99.8	99.8	88.8
LF (%)	98.9	96.3	10.8	57.0	98.1	98.1	96.2	97.0	97.8	96.4	99.7	99.9	87.1
OF (%)	100.0	100.0	12.8	61.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.4
EUF (%)	0.8	3.3	88.5	42.9	1.0	0.0	0.8	0.2	0.0	2.8	0.2	0.2	11.8
PUF (%)	0.7	0.0	87.2	40.6	0.0	0.0	0.5	0.2	0.0	0.1	0.1	0.2	10.9
UCLF (%)	0.1	0.0	0.0	2.4	1.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
XUF (%)	0.0	3.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1. POWER REDUCTION FOR CONTROL ROD PATTERN ADJUSTMENT AND FEEDWATER HEATER 5A(LCV-103-4A1)REPAIR ON JAN.14,2007. 2.EOC-22 COASTDOWN OPERATION DURING FEB.10 TILL MAR.04,2007. 3.EOC-22 REFUELING OUTAGE DURING MAR.04 TILL APR.11,2007. 4.GENERATOR OFF-LINE FOR MAIN T'B OVERSPEED TEST AND DISCHARGE VALVE REPAIR ON APR.12,2007. 5.POWER REDUCTION FOR STARTUP TRANSFORMER POWER LOADING TEST ON MAY.10,2007. 6.POWER REDUCTION FOR ROUTINE SURVEILLANCE TEST AND WATER LEVEL TRANSMITTER OF MSR REPAIR ON JUL.01,2007. 7.POWER RESTRICTION DUE TO TYPHOON ON OCT.06,2007.

5. Historical Summary

Date of Construction Start:	02 Jun 1972	Lifetime Generation:	122858.3 GW(e).h
Date of First Criticality:	16 Oct 1977	Cumulative Energy Availability Factor:	82.2%
Date of Grid Connection:	16 Nov 1977	Cumulative Load Factor:	81.5%
Date of Commercial Operation:	10 Dec 1978	Cumulative Unit Capability Factor:	83.3%
		Cumulative Energy Unavailability Factor:	17.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	Data not provided									
1979	"									
1980	"									
1981	"									
1982	"									
1983	"									
1984	"									
1985	"									
1986	"									
1987	"									
1988	"									
1989	2783.4	604.0	55.3	55.3	55.3	55.3	52.6	52.6	5226	59.7
1990	2968.5	591.0	55.4	55.3	54.8	55.1	57.3	54.9	5315	60.7
1991	4391.4	604.0	83.9	64.9	82.0	64.1	83.0	64.4	7602	86.8
1992	4017.7	604.0	77.6	68.1	76.6	67.3	75.7	67.2	7260	82.7
1993	4424.0	604.0	86.5	71.8	83.0	70.4	83.6	70.5	7854	89.7
1994	3645.4	604.0	69.4	71.4	67.7	70.0	68.9	70.2	6458	73.7
1995	4154.3	604.0	81.0	72.8	80.5	71.5	78.5	71.4	7168	81.8
1996	4070.9	604.0	81.8	73.9	78.6	72.4	76.7	72.1	7051	80.3
1997	4990.5	604.0	96.4	76.4	96.2	75.0	94.3	74.6	8558	97.7
1998	4295.1	604.0	85.2	77.3	83.5	75.9	81.2	75.2	7448	85.0
1999	4081.1	604.0	81.2	77.7	78.8	76.1	77.1	75.4	7156	81.7
2000	5226.1	604.0	99.8	79.5	99.2	78.1	98.5	77.3	8784	100.0
2001	4319.7	604.0	82.1	79.7	81.5	78.3	81.6	77.7	7282	83.1
2002	4376.0	604.0	83.5	80.0	83.4	78.7	82.7	78.0	7367	84.1
2003	5240.0	604.0	99.6	81.3	99.4	80.1	99.0	79.4	8760	100.0
2004	4541.9	604.0	86.4	81.6	85.8	80.4	85.6	79.8	7646	87.0
2005	4573.8	604.0	87.9	82.0	86.8	80.8	86.4	80.2	7745	88.4
2006	5201.8	604.0	99.5	83.0	99.5	81.8	98.3	81.2	8760	100.0
2007	4607.9	604.0	88.8	83.3	88.2	82.2	87.1	81.5	7834	89.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		16			180	
B. Refuelling without a maintenance	909			53		
C. Inspection, maintenance or repair combined with refuelling				965		
D. Inspection, maintenance or repair without refuelling				37		
E. Testing of plant systems or components				0	11	
H. Nuclear regulatory requirements						1
J. Grid failure or grid unavailability						7
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						16
Subtotal	909	16	0	1055	191	24
Total		925			1270	

7. Equipment Related Full Outages, Analysis by System

System	2007	1989 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		2
14. Safety Systems		59
15. Reactor Cooling Systems		44
31. Turbine and auxiliaries	16	32
32. Feedwater and Main Steam System		3
41. Main Generator Systems		0
42. Electrical Power Supply Systems		38
Total	16	178

TW-2 CHIN SHAN-2

Operator: TPC (TAI POWER CO.)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 604.0 MW(e)
Design Net Capacity: 604.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5218.8 GW(e).h
Energy Availability Factor: 98.3%
Load Factor: 98.6%
Operating Factor: 98.8%
Energy Unavailability Factor: 1.7%
Total Off-line Time: 106 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	453.9	412.9	454.9	437.0	448.1	431.3	435.9	441.2	427.0	382.2	440.8	453.7	5218.8
EAF (%)	99.3	99.8	100.0	99.2	99.5	99.8	98.7	100.0	99.3	84.6	100.0	99.7	98.3
UCF (%)	99.3	99.8	100.0	99.2	99.5	99.8	98.7	100.0	99.3	99.9	100.0	99.7	99.6
LF (%)	101.0	101.7	101.2	100.6	99.7	99.2	97.0	98.2	98.2	84.9	101.4	101.0	98.6
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	85.6	100.0	100.0	98.8
EUF (%)	0.7	0.2	0.0	0.8	0.5	0.2	1.3	0.0	0.7	15.4	0.0	0.3	1.7
PUF (%)	0.0	0.2	0.0	0.6	0.0	0.2	0.4	0.0	0.4	0.1	0.0	0.3	0.2
UCLF (%)	0.7	0.0	0.0	0.3	0.5	0.0	0.8	0.0	0.4	0.0	0.0	0.0	0.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3	0.0	0.0	1.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1. POWER REDUCTION FOR ISOLATION VALVE OF RCIC REPAIR ON JAN.04,2007. 2. POWER REDUCTION FOR CONTROL ROD SEQUENCE EXCHANGE AND CONDENSATE FLOWMETER REPAIR ON APR.28,2007. 3. POWER REDUCTION FOR STARTUP TRANSFORMERPOWER LOADING TEST ON MAY.11,2007. 4. POWER REDUCTION FOR FLANGE OF 3-HV-9BS PIPING ORIFICE LEAKAGE REPAIR ON JUL.29,2007. 5. POWER REDUCTION FOR ROUTINE SURVEILLANCE TEST AND LT-103-21A1 & LT-103-22A2 PIPING LEAKAGE REPAIR ON SEP.30,2007. 6. GENERATOR AND TURBINE TRIPPED DUE TO MAIN TRANSFORMER RELAY WHICH RESULT FROM TYPHOON ON OCT.06,2007.

5. Historical Summary

Date of Construction Start:	07 Dec 1973	Lifetime Generation:	121070.9 GW(e).h
Date of First Criticality:	09 Nov 1978	Cumulative Energy Availability Factor:	81.4%
Date of Grid Connection:	19 Dec 1978	Cumulative Load Factor:	81.4%
Date of Commercial Operation:	15 Jul 1979	Cumulative Unit Capability Factor:	82.5%
		Cumulative Energy Unavailability Factor:	18.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	Data not provided									
1980	"									
1981	"									
1982	"									
1983	"									
1984	"									
1985	"									
1986	"									
1987	"									
1988	"									
1989	3059.8	604.0	59.3	59.3	59.3	59.3	57.8	57.8	6010	68.6
1990	3436.8	593.0	65.4	62.3	64.8	62.1	66.2	62.0	6242	71.3
1991	3783.5	604.0	72.5	65.8	70.1	64.8	71.5	65.2	6847	78.2
1992	4129.2	604.0	79.1	69.1	78.5	68.2	77.8	68.3	7326	83.4
1993	3934.9	604.0	76.7	70.6	73.1	69.2	74.4	69.6	6992	79.8
1994	3979.5	604.0	78.8	72.0	76.6	70.4	75.2	70.5	7001	79.9
1995	3885.7	604.0	77.5	72.8	75.9	71.2	73.4	70.9	6808	77.7
1996	4001.5	604.0	78.0	73.4	77.5	72.0	75.4	71.5	6897	78.5
1997	4325.5	604.0	80.6	74.2	80.1	72.9	81.8	72.6	7168	81.8
1998	4841.5	604.0	96.0	76.4	94.7	75.1	91.5	74.5	8422	96.1
1999	4296.3	604.0	82.6	77.0	80.7	75.6	81.2	75.1	7274	83.0
2000	4596.5	604.0	85.9	77.7	85.3	76.4	86.6	76.1	7584	86.3
2001	5018.1	604.0	95.0	79.0	93.9	77.8	94.8	77.5	8515	97.2
2002	4290.4	604.0	80.6	79.2	80.5	77.9	81.1	77.8	7414	84.6
2003	4574.5	604.0	86.5	79.6	86.0	78.5	86.5	78.4	7595	86.7
2004	5247.6	604.0	98.6	80.8	98.0	79.7	98.9	79.7	8704	99.1
2005	4530.5	604.0	86.3	81.2	85.2	80.0	85.6	80.0	7641	87.2
2006	4650.8	604.0	88.4	81.6	87.5	80.4	87.9	80.4	7812	89.2
2007	5218.8	604.0	99.6	82.5	98.3	81.4	98.6	81.4	8654	98.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					195	
B. Refuelling without a maintenance				93	9	
C. Inspection, maintenance or repair combined with refuelling				924		
D. Inspection, maintenance or repair without refuelling				56		
E. Testing of plant systems or components				2		
H. Nuclear regulatory requirements						1
J. Grid failure or grid unavailability						5
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						6
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			106			
Subtotal	0	0	106	1075	204	12
Total		106			1291	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		7
12. Reactor I&C Systems		1
14. Safety Systems		1
15. Reactor Cooling Systems		62
21. Fuel Handling and Storage Facilities		7
31. Turbine and auxiliaries		46
32. Feedwater and Main Steam System		17
33. Circulating Water System		11
41. Main Generator Systems		27
42. Electrical Power Supply Systems		11
Total	0	190

TW-3 KUOSHENG-1

Operator: TPC (TAI POWER CO.)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 985.0 MW(e)
Design Net Capacity: 985.0 MW(e)
Design Discharge Burnup: —
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7104.6 GW(e).h
Energy Availability Factor: 82.3%
Load Factor: 82.3%
Operating Factor: 84.8%
Energy Unavailability Factor: 17.7%
Total Off-line Time: 1331 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	731.5	394.9	716.7	701.2	723.6	691.8	710.1	706.0	61.5	255.5	695.9	715.8	7104.6
EAF (%)	99.7	59.7	97.8	98.9	98.7	97.6	96.9	96.3	8.7	35.0	98.1	97.7	82.3
UCF (%)	99.7	60.0	98.2	99.4	100.0	99.5	99.6	99.4	9.0	35.6	100.0	98.6	83.5
LF (%)	99.8	59.7	97.8	99.0	98.7	97.6	96.9	96.3	8.7	34.8	98.1	97.7	82.3
OF (%)	100.0	64.7	100.0	100.1	100.0	100.0	100.0	100.0	9.0	40.9	100.0	100.0	84.8
EUF (%)	0.3	40.3	2.2	1.1	1.3	2.4	3.1	3.7	91.3	65.0	1.9	2.3	17.7
PUF (%)	0.3	40.0	1.8	0.6	0.0	0.4	0.4	0.3	83.3	64.4	0.0	1.4	15.8
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	7.7	0.0	0.0	0.0	0.7
XUF (%)	0.0	0.3	0.4	0.6	1.2	1.9	2.7	3.0	0.3	0.7	1.8	1.0	1.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1.FEB.14~28 RX VESSEL OPENED FOR INCORE SIPPING.2.SEP.3~5 RX SCRAMED DUE TO GEN. FAILURE.3.SEP.6~OCT.18 EOC-19 REFUELING OUTAGE.4.OCT.19 OVERSPEED TRIP TEST AND WEIGHTING OF T/B.5.NOV.30 INCREASED THE FULL THERMAL POWER FROM 2894 TO 2943MW.

5. Historical Summary

Date of Construction Start:	19 Nov 1975	Lifetime Generation:	168860.4 GW(e).h
Date of First Criticality:	01 Feb 1981	Cumulative Energy Availability Factor:	81.6%
Date of Grid Connection:	21 May 1981	Cumulative Load Factor:	80.3%
Date of Commercial Operation:	28 Dec 1981	Cumulative Unit Capability Factor:	82.3%
		Cumulative Energy Unavailability Factor:	18.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	Data not provided									
1982	"									
1983	"									
1984	"									
1985	"									
1986	"									
1987	"									
1988	"									
1989	5329.1	951.0	64.9	64.9	63.0	63.0	64.0	64.0	6447	73.6
1990	6898.0	918.0	87.4	76.0	86.8	74.7	85.8	74.7	8201	93.6
1991	5850.8	951.0	71.4	74.4	71.4	73.6	70.2	73.2	6678	76.2
1992	6152.4	951.0	78.4	75.4	78.4	74.8	73.6	73.3	7126	81.1
1993	5679.5	951.0	71.1	74.6	71.1	74.0	68.2	72.3	6457	73.7
1994	6302.3	950.0	77.8	75.1	76.9	74.5	75.7	72.8	7077	80.8
1995	6897.9	948.0	84.7	76.5	84.6	76.0	83.1	74.3	7734	88.3
1996	6950.8	948.0	84.8	77.5	84.3	77.0	83.5	75.5	7573	86.2
1997	6277.8	948.0	77.7	77.5	77.5	77.1	75.6	75.5	6978	79.7
1998	6426.0	948.0	81.2	77.9	79.7	77.3	77.4	75.7	7209	82.3
1999	7686.8	948.0	95.1	79.5	93.8	78.8	92.6	77.2	8439	96.3
2000	6588.6	948.0	81.3	79.6	80.2	78.9	79.1	77.4	7391	84.1
2001	6452.3	948.0	79.4	79.6	78.8	78.9	77.7	77.4	7070	80.7
2002	8068.5	948.0	98.5	81.0	98.1	80.3	97.2	78.8	8693	99.2
2003	6444.9	948.0	78.5	80.8	78.3	80.2	77.6	78.7	6968	79.5
2004	6978.5	948.0	85.1	81.1	84.7	80.5	83.8	79.0	7516	85.6
2005	8150.1	948.0	99.7	82.2	98.4	81.5	98.1	80.2	8749	99.9
2006	6903.6	948.0	82.6	82.2	81.9	81.5	81.0	80.2	7325	83.6
2007	7104.6	985.0	83.5	82.3	82.3	81.6	82.3	80.3	7429	84.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		55		6	142	
B. Refuelling without a maintenance				91	12	
C. Inspection, maintenance or repair combined with refuelling	1027			934		
D. Inspection, maintenance or repair without refuelling	237			70		
E. Testing of plant systems or components	12			9		
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						6
L. Human factor related					3	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						0
Subtotal	1276	55	0	1110	157	8
Total		1331			1275	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		6
13. Reactor Auxiliary Systems		3
15. Reactor Cooling Systems		6
21. Fuel Handling and Storage Facilities		20
31. Turbine and auxiliaries		31
32. Feedwater and Main Steam System		43
33. Circulating Water System		12
35. All other I&C Systems		2
41. Main Generator Systems	55	9
42. Electrical Power Supply Systems		9
Total	55	143

TW-4 KUOSHENG-2

Operator: TPC (TAI POWER CO.)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 948.0 MW(e)
Design Net Capacity: 951.0 MW(e)
Design Discharge Burnup: —
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7031.5 GW(e).h
Energy Availability Factor: 86.1%
Load Factor: 84.7%
Operating Factor: 88.1%
Energy Unavailability Factor: 13.9%
Total Off-line Time: 1044 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	694.2	629.6	691.5	271.6	188.2	660.3	671.7	681.3	658.8	604.8	667.1	612.4	7031.5
EAF (%)	99.0	99.6	99.5	40.2	27.0	99.1	98.1	99.3	98.8	87.1	98.7	87.5	86.1
UCF (%)	99.4	99.7	99.8	42.8	27.0	99.3	98.8	99.7	99.3	89.2	99.4	87.5	86.7
LF (%)	98.4	98.8	98.0	39.8	26.7	96.7	95.2	96.6	96.5	85.6	97.7	86.8	84.7
OF (%)	100.0	100.0	100.0	43.7	32.7	100.0	100.0	100.0	100.0	91.5	100.0	89.9	88.1
EUF (%)	1.0	0.4	0.5	59.8	73.0	0.9	1.9	0.7	1.2	12.9	1.3	12.5	13.9
PUF (%)	0.6	0.3	0.2	57.2	73.0	0.7	1.2	0.1	0.6	10.8	0.6	0.1	12.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	12.4	1.1
XUF (%)	0.4	0.1	0.3	2.6	0.0	0.2	0.7	0.4	0.4	2.1	0.7	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1.APR.13~MAY.20 EOC-18 REFUELING OUTAGE.2.MAY.21~22 OVERSPEED TEST AND WEIGHTING OF MAIN TURBINE.3.OCT.6~8 TYPHOON INVASION.4.OCT.20~23 WEIGHTING OF MAIN TURBINE.5.DEC.17-20 GENERATOR TRIP,RX SCRAM.6.JUL.7 INCREASED FULL THERMAL POWER FROM 2894MW TO 2943MW.

5. Historical Summary

Date of Construction Start:	15 Mar 1976	Lifetime Generation:	163805.2 GW(e).h
Date of First Criticality:	26 Mar 1982	Cumulative Energy Availability Factor:	81.4%
Date of Grid Connection:	29 Jun 1982	Cumulative Load Factor:	80.3%
Date of Commercial Operation:	16 Mar 1983	Cumulative Unit Capability Factor:	82.5%
		Cumulative Energy Unavailability Factor:	18.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	Data not provided									
1984	"									
1985	"									
1986	"									
1987	"									
1988	"									
1989	5227.3	951.0	65.3	65.3	61.9	61.9	62.7	62.7	6390	72.9
1990	6000.6	936.0	74.0	69.6	73.5	67.6	73.2	67.9	6819	77.8
1991	7186.3	951.0	89.3	76.2	89.3	74.9	86.3	74.1	8101	92.5
1992	6176.3	951.0	76.8	76.4	76.8	75.4	73.9	74.0	6985	79.5
1993	6138.1	951.0	74.9	76.1	74.9	75.3	73.7	74.0	6921	79.0
1994	6224.1	950.0	76.0	76.1	74.8	75.2	74.8	74.1	6868	78.4
1995	5999.7	948.0	72.9	75.6	72.2	74.8	72.2	73.8	6543	74.7
1996	7423.2	948.0	90.0	77.4	89.6	76.6	89.1	75.8	7978	90.8
1997	7087.2	948.0	88.7	78.7	86.1	77.7	85.3	76.8	7745	88.4
1998	6549.6	948.0	80.3	78.8	79.3	77.8	78.9	77.0	7242	82.7
1999	6831.9	948.0	85.9	79.5	84.2	78.4	82.3	77.5	7544	86.1
2000	7237.6	948.0	91.4	80.5	89.3	79.3	86.9	78.3	8234	93.7
2001	5976.7	948.0	74.1	80.0	72.4	78.8	72.0	77.8	6772	77.3
2002	6922.6	948.0	85.5	80.4	85.1	79.2	83.4	78.2	7530	86.0
2003	7623.1	948.0	93.7	81.3	93.5	80.2	91.8	79.1	8427	96.2
2004	6494.0	948.0	81.3	81.3	79.8	80.2	78.0	79.0	7301	83.1
2005	6737.8	948.0	83.5	81.4	82.3	80.3	81.1	79.2	7424	84.7
2006	7868.4	948.0	96.6	82.2	95.9	81.2	94.7	80.0	8560	97.7
2007	7031.5	948.0	86.7	82.5	86.1	81.4	84.7	80.3	7716	88.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		75			129	
B. Refuelling without a maintenance				58	17	
C. Inspection, maintenance or repair combined with refuelling	878			924		
D. Inspection, maintenance or repair without refuelling	62			103		
E. Testing of plant systems or components	29			20		
J. Grid failure or grid unavailability					6	4
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	14
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						3
Subtotal	969	75	0	1105	153	21
Total	1044			1279		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems		2
14. Safety Systems		5
15. Reactor Cooling Systems		22
21. Fuel Handling and Storage Facilities		34
31. Turbine and auxiliaries		16
32. Feedwater and Main Steam System		23
33. Circulating Water System		5
35. All other I&C Systems		10
41. Main Generator Systems	75	0
42. Electrical Power Supply Systems		5
Total	75	126

TW-5 MAANSHAN-1**Operator:** TPC (TAI POWER CO.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 890.0 MW(e)
Design Net Capacity: 890.0 MW(e)
Design Discharge Burnup: 43000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7168.2 GW(e).h
Energy Availability Factor: 90.8%
Load Factor: 91.9%
Operating Factor: 91.3%
Energy Unavailability Factor: 9.2%
Total Off-line Time: 759 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	674.3	608.1	672.5	649.1	668.5	647.0	659.8	667.5	645.4	552.3	48.9	675.0	7168.2
EAF (%)	100.0	100.0	99.9	100.0	99.7	100.0	99.0	99.9	99.9	82.9	7.6	99.9	90.8
UCF (%)	100.0	100.0	100.0	100.0	99.7	100.0	99.0	99.9	99.9	83.5	7.6	99.9	90.9
LF (%)	101.8	101.7	101.6	101.3	101.0	101.0	99.6	100.8	100.7	83.4	7.6	101.9	91.9
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.1	11.0	100.0	91.3
EUf (%)	0.0	0.0	0.1	0.0	0.3	0.0	1.0	0.1	0.1	17.1	92.4	0.1	9.2
PUf (%)	0.0	0.0	0.1	0.0	0.3	0.0	0.1	0.1	0.1	16.5	92.4	0.0	9.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1. MAANSHAN UNIT 1 OPERATED AT FULL POWER IN BASE-LOAD OVER THE YEAR EXCEPT REFUELING OUTAGE, SURVEILLANCE TEST AND SO ON.2. EOC-17 REFUELING OUTAGE WAS FROM 2007-10-27 TO 2007-11-27.

5. Historical Summary

Date of Construction Start:	21 Aug 1978	Lifetime Generation:	141894.5 GW(e).h
Date of First Criticality:	30 Mar 1984	Cumulative Energy Availability Factor:	82.7%
Date of Grid Connection:	09 May 1984	Cumulative Load Factor:	84.2%
Date of Commercial Operation:	27 Jul 1984	Cumulative Unit Capability Factor:	84.3%
		Cumulative Energy Unavailability Factor:	17.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	Data not provided									
1985	"									
1986	"									
1987	"									
1988	"									
1989	5418.4	890.0	66.3	66.3	66.0	66.0	69.5	69.5	6305	72.0
1990	6098.9	894.0	77.8	72.0	76.8	71.4	77.9	73.7	7079	80.8
1991	6479.1	890.0	84.0	76.0	82.7	75.2	83.1	76.8	7368	84.1
1992	6038.8	890.0	76.7	76.2	76.2	75.4	77.2	76.9	6826	77.7
1993	6258.8	890.0	78.5	76.7	78.5	76.0	80.3	77.6	6930	79.1
1994	6322.6	890.0	79.7	77.2	79.6	76.6	81.1	78.2	7098	81.0
1995	6741.1	890.0	84.5	78.2	84.4	77.7	86.5	79.4	7495	85.6
1996	7537.0	890.0	95.8	80.4	93.8	79.7	96.4	81.5	8329	94.8
1997	5949.2	890.0	74.8	79.8	74.3	79.1	76.3	80.9	6752	77.1
1998	5514.5	890.0	69.2	78.7	69.2	78.1	70.7	79.9	6101	69.6
1999	7392.7	890.0	96.3	80.3	92.6	79.5	94.8	81.3	8328	95.1
2000	6729.0	890.0	84.6	80.7	84.3	79.9	86.1	81.7	7502	85.4
2001	5333.3	890.0	86.1	81.1	67.6	78.9	68.4	80.6	6046	69.0
2002	7800.8	890.0	98.8	82.4	98.7	80.3	100.1	82.0	8726	99.6
2003	6751.0	890.0	87.3	82.7	86.2	80.7	86.6	82.3	7579	86.5
2004	6793.7	890.0	87.4	83.0	86.8	81.1	86.9	82.6	7742	88.1
2005	7701.7	890.0	98.1	83.9	98.0	82.1	98.8	83.6	8693	99.2
2006	6763.2	890.0	85.8	84.0	85.8	82.3	86.7	83.7	7599	86.7
2007	7168.2	890.0	90.9	84.3	90.8	82.7	91.9	84.2	8001	91.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					207	
B. Refuelling without a maintenance	758				7	
C. Inspection, maintenance or repair combined with refuelling				910	95	
D. Inspection, maintenance or repair without refuelling				7	0	
E. Testing of plant systems or components				8		
H. Nuclear regulatory requirements					0	
J. Grid failure or grid unavailability						87
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						9
L. Human factor related					3	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						4
Subtotal	758	0	0	925	312	100
Total		758			1337	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		13
13. Reactor Auxiliary Systems		2
15. Reactor Cooling Systems		24
16. Steam generation systems		18
31. Turbine and auxiliaries		19
32. Feedwater and Main Steam System		8
41. Main Generator Systems		82
42. Electrical Power Supply Systems		38
Total	0	204

TW-6 MAANSHAN-2

Operator: TPC (TAI POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 890.0 MW(e)
 Design Net Capacity: 890.0 MW(e)
 Design Discharge Burnup: 43000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7829.9 GW(e).h
 Energy Availability Factor: 98.3%
 Load Factor: 100.4%
 Operating Factor: 98.5%
 Energy Unavailability Factor: 1.7%
 Total Off-line Time: 129 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	680.0	611.3	548.8	655.3	676.3	652.6	672.7	673.6	651.8	674.8	654.7	677.8	7829.9
EAF (%)	100.0	99.7	80.9	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	98.3
UCF (%)	100.0	99.7	80.9	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	98.3
LF (%)	102.7	102.2	82.9	102.4	102.1	101.8	101.6	101.7	101.7	101.8	102.2	102.4	100.4
OF (%)	100.0	100.0	82.7	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	98.5
EUF (%)	0.0	0.3	19.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.7
PUF (%)	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
UCLF (%)	0.0	0.3	18.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1. MAANSHAN UNIT 1 OPERATED AT FULL POWER IN BASE-LOAD OVER THE YEAR EXCEPT REFUELING OUTAGE, SURVEILLANCE TEST AND SO ON.2. BECAUSE OF PZR MANHOLE LEAKAGE, UNIT OFF-LINE AT 2007-03-19 16:58.

5. Historical Summary

Date of Construction Start: 21 Feb 1979 Lifetime Generation: 145546.2 GW(e).h
 Date of First Criticality: 01 Feb 1985 Cumulative Energy Availability Factor: 83.6%
 Date of Grid Connection: 25 Feb 1985 Cumulative Load Factor: 85.5%
 Date of Commercial Operation: 18 May 1985 Cumulative Unit Capability Factor: 85.6%
 Cumulative Energy Unavailability Factor: 16.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985			Data not provided							
1986			"							
1987			"							
1988			"							
1989	5283.3	890.0	58.8	58.8	58.1	58.1	67.8	67.8	6434	73.4
1990	6141.3	896.0	78.8	68.9	77.3	67.7	78.2	73.0	7143	81.5
1991	6187.1	890.0	80.4	72.7	78.6	71.3	79.4	75.1	7155	81.7
1992	5956.6	890.0	84.3	75.6	75.5	72.4	76.2	75.4	7541	85.8
1993	6551.0	890.0	84.1	77.3	84.1	74.7	84.0	77.1	7442	85.0
1994	7006.5	890.0	93.3	80.0	88.7	77.0	89.9	79.2	8216	93.8
1995	6118.6	890.0	77.1	79.6	77.1	77.1	78.5	79.1	6947	79.3
1996	6349.8	890.0	81.0	79.7	79.8	77.4	81.2	79.4	7091	80.7
1997	6415.4	890.0	81.6	79.9	81.1	77.8	82.3	79.7	7153	81.7
1998	7781.1	890.0	97.4	81.7	97.2	79.7	99.8	81.7	8557	97.7
1999	6628.4	890.0	85.3	82.0	82.7	80.0	85.0	82.0	7427	84.8
2000	6618.6	890.0	84.1	82.2	82.6	80.2	84.7	82.2	7401	84.3
2001	6993.8	890.0	99.4	83.5	87.3	80.8	89.7	82.8	7729	88.2
2002	6639.8	890.0	82.4	83.4	82.4	80.9	85.2	83.0	7507	85.7
2003	6737.6	890.0	86.6	83.6	85.2	81.2	86.4	83.2	7549	86.2
2004	7883.0	890.0	99.5	84.6	99.5	82.3	100.8	84.3	8784	100.0
2005	6710.0	890.0	85.5	84.7	85.1	82.5	86.1	84.4	7656	87.4
2006	6928.8	890.0	87.7	84.8	87.2	82.8	88.9	84.7	7729	88.2
2007	7829.9	890.0	98.3	85.6	98.3	83.6	100.4	85.5	8631	98.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		129			143	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling				960	3	
D. Inspection, maintenance or repair without refuelling				15		
E. Testing of plant systems or components				1		
J. Grid failure or grid unavailability						54
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					2	2
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						7
Subtotal	0	129	0	976	149	63
Total		129			1188	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		17
13. Reactor Auxiliary Systems		6
15. Reactor Cooling Systems	129	31
16. Steam generation systems		2
31. Turbine and auxiliaries		23
32. Feedwater and Main Steam System		7
35. All other I&C Systems		6
41. Main Generator Systems		42
42. Electrical Power Supply Systems		6
Total	129	140

CZ-4 DUKOVANY-1**Operator:** CEZ (CZECH POWER COMPANY , CEZ a.s.)**Contractor:** SKODA (SKODA CONCERN NUCLEAR POWER PLANT WORKS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 412.0 MW(e)
Design Net Capacity: 427.0 MW(e)
Design Discharge Burnup: 44000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2967.3 GW(e).h
Energy Availability Factor: 80.9%
Load Factor: 81.7%
Operating Factor: 82.2%
Energy Unavailability Factor: 19.1%
Total Off-line Time: 1562 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	312.5	284.5	313.1	300.7	309.5	296.8	305.1	297.9	59.7	0.0	199.9	287.6	2967.3
EAF (%)	100.0	100.0	100.0	100.0	99.9	99.9	99.6	97.6	20.4	0.1	65.9	88.6	80.9
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	22.8	0.1	65.9	88.6	81.4
LF (%)	102.0	102.8	102.1	101.5	101.0	100.1	99.5	97.2	20.1	0.0	65.0	90.5	81.7
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	23.2	0.0	73.8	89.9	82.2
EUf (%)	0.0	0.0	0.0	0.0	0.1	0.1	0.4	2.4	79.6	99.9	34.1	11.4	19.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.2	99.9	34.0	0.0	17.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	11.4	1.0
XUF (%)	0.0	0.0	0.0	0.0	0.1	0.1	0.4	2.4	2.4	0.0	0.0	0.0	0.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

RECONSTRUCTION OF THE LOW-PRESSURE FLOW ELEMENTS OF THE STEAM TURBINES – WAS CARRIED OUT ON THE UNIT 1. NEW ROTORS WITH IMPROVED BLADES WILL CUT THE HEAT SPECIFIC CONSUMPTION OF THE TURBINE SYSTEM BY AT LEAST 3.5%.

5. Historical Summary

Date of Construction Start: 01 Jan 1979 **Lifetime Generation:** 67941.1 GW(e).h
Date of First Criticality: 12 Feb 1985 **Cumulative Energy Availability Factor:** 82.3%
Date of Grid Connection: 24 Feb 1985 **Cumulative Load Factor:** 83.3%
Date of Commercial Operation: 03 May 1985 **Cumulative Unit Capability Factor:** 83.2%
Cumulative Energy Unavailability Factor: 17.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	1993.9	396.0	88.1	88.1	88.1	88.1	86.7	86.7	5178	88.1
1986	2658.4	403.0	76.1	80.9	76.1	80.8	75.3	79.8	7094	81.0
1987	2575.9	408.0	74.7	78.5	70.7	77.0	72.1	76.9	6867	78.4
1988	2524.0	408.0	74.2	77.3	71.5	75.5	70.4	75.1	6996	79.6
1989	2940.6	408.0	82.6	78.5	82.0	76.9	82.3	76.6	7579	86.5
1990	2965.6	408.0	84.3	79.5	82.5	77.9	83.0	77.8	7658	87.4
1991	2581.1	408.0	70.7	78.2	70.5	76.8	72.2	76.9	6751	77.1
1992	3172.8	408.0	80.9	78.5	80.5	77.3	88.5	78.5	7537	85.8
1993	3239.7	442.0	83.7	79.2	83.7	78.1	83.7	79.1	7649	87.3
1994	3278.5	442.0	84.6	79.8	84.6	78.8	84.7	79.7	7656	87.4
1995	2966.1	442.0	76.8	79.5	76.8	78.6	76.6	79.4	7022	80.2
1996	3144.6	412.0	86.0	80.0	85.4	79.2	86.9	80.0	7592	86.4
1997	3295.6	440.0	86.8	80.6	85.3	79.7	85.5	80.5	7678	87.6
1998	2973.4	412.0	85.4	80.9	82.6	79.9	82.4	80.6	7518	85.8
1999	2901.1	412.0	79.8	80.9	79.2	79.8	80.4	80.6	7034	80.3
2000	3327.9	412.0	89.8	81.4	89.7	80.5	92.0	81.3	7934	90.3
2001	3328.9	412.0	90.6	82.0	90.2	81.0	92.2	82.0	7996	91.3
2002	3267.5	412.0	89.6	82.4	88.9	81.5	90.5	82.5	7926	90.5
2003	3032.0	412.0	82.9	82.4	82.6	81.5	84.0	82.5	7261	82.9
2004	3035.5	412.0	83.6	82.5	82.9	81.6	83.9	82.6	7349	83.7
2005	3324.5	412.0	91.3	82.9	90.6	82.0	92.1	83.1	8015	91.5
2006	3271.6	412.0	91.2	83.3	89.7	82.4	90.6	83.4	8014	91.5
2007	2967.3	427.0	81.4	83.2	80.9	82.3	81.7	83.3	7198	82.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		75			57	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1486			1081		
D. Inspection, maintenance or repair without refuelling				118		
J. Grid failure or grid unavailability						5
L. Human factor related					0	
Subtotal	1486	75	0	1199	57	5
Total		1561			1261	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		4
14. Safety Systems	75	6
15. Reactor Cooling Systems		21
31. Turbine and auxiliaries		3
41. Main Generator Systems		0
42. Electrical Power Supply Systems		21
Total	75	55

CZ-5 DUKOVANY-2

Operator: CEZ (CZECH POWER COMPANY , CEZ a.s.)

Contractor: SKODA (SKODA CONCERN NUCLEAR POWER PLANT WORKS)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 412.0 MW(e)
 Design Net Capacity: 420.0 MW(e)
 Design Discharge Burnup: 44000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3274.7 GW(e).h
 Energy Availability Factor: 90.1%
 Load Factor: 90.7%
 Operating Factor: 91.1%
 Energy Unavailability Factor: 9.9%
 Total Off-line Time: 777 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	311.8	276.5	137.1	119.8	308.3	293.4	302.6	303.9	299.0	313.1	299.0	310.3	3274.7
EAF (%)	100.0	98.9	45.2	40.0	99.8	99.0	99.3	99.5	100.0	100.0	99.8	99.9	90.1
UCF (%)	100.0	100.0	51.4	40.0	100.0	99.5	100.0	100.0	100.0	100.0	99.8	99.9	90.9
LF (%)	101.7	99.9	44.7	40.4	100.6	98.9	98.7	99.1	100.8	102.0	100.8	101.2	90.7
OF (%)	100.0	100.0	51.5	42.3	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	91.1
EUF (%)	0.0	1.1	54.8	60.0	0.2	1.0	0.7	0.5	0.0	0.0	0.2	0.1	9.9
PUF (%)	0.0	0.0	48.6	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	9.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1
XUF (%)	0.0	1.1	6.1	0.0	0.2	0.4	0.7	0.5	0.0	0.0	0.0	0.0	0.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

REPLACEMENT OF MAIN TURBOGENERATOR EXCITERS

5. Historical Summary

Date of Construction Start: 01 Jan 1979 Lifetime Generation: 66293.9 GW(e).h
 Date of First Criticality: 23 Jan 1986 Cumulative Energy Availability Factor: 83.3%
 Date of Grid Connection: 30 Jan 1986 Cumulative Load Factor: 84.4%
 Date of Commercial Operation: 21 Mar 1986 Cumulative Unit Capability Factor: 84.1%
 Cumulative Energy Unavailability Factor: 16.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	2693.7	408.0	94.4	94.4	94.4	94.4	89.9	89.9	6906	94.0
1987	2668.6	408.0	76.6	84.7	71.6	82.0	74.7	81.6	6997	79.9
1988	2771.3	408.0	74.9	81.2	74.6	79.4	77.3	80.1	6963	79.3
1989	3011.0	408.0	82.7	81.6	82.2	80.1	84.2	81.2	7713	88.0
1990	2822.7	408.0	80.1	81.3	76.5	79.4	79.0	80.7	7566	86.4
1991	2901.4	408.0	81.6	81.3	81.2	79.7	81.2	80.8	7600	86.8
1992	2830.6	408.0	71.6	79.9	71.4	78.5	79.0	80.5	6551	74.6
1993	3256.9	440.0	84.2	80.5	84.2	79.2	84.5	81.1	7496	85.6
1994	3094.3	440.0	80.8	80.5	79.6	79.3	80.3	81.0	7315	83.5
1995	3263.3	440.0	85.5	81.1	84.3	79.8	84.7	81.4	7720	88.1
1996	2831.0	412.0	78.3	80.8	77.3	79.6	78.2	81.1	6917	78.7
1997	3144.8	440.0	81.1	80.8	81.1	79.7	81.6	81.1	7179	82.0
1998	3209.2	412.0	88.2	81.4	87.7	80.3	88.9	81.7	7803	89.1
1999	3198.1	412.0	88.4	81.9	87.8	80.9	88.6	82.2	7812	89.2
2000	2954.1	412.0	81.8	81.9	81.2	80.9	81.6	82.2	7223	82.2
2001	3121.1	412.0	86.9	82.2	86.4	81.2	86.5	82.4	7646	87.3
2002	3159.6	412.0	88.3	82.6	87.8	81.6	87.5	82.7	7716	88.1
2003	3252.6	412.0	89.8	83.0	89.2	82.0	90.1	83.2	7939	90.6
2004	3087.7	412.0	84.4	83.0	84.2	82.2	85.3	83.3	7439	84.7
2005	3313.2	412.0	91.3	83.5	90.8	82.6	91.8	83.7	8048	91.9
2006	3294.7	412.0	91.1	83.8	90.6	83.0	91.3	84.1	8017	91.5
2007	3274.7	412.0	90.9	84.1	90.1	83.3	90.7	84.4	7983	91.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					44	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling	776			1069		
D. Inspection, maintenance or repair without refuelling				83		
J. Grid failure or grid unavailability					1	3
L. Human factor related					0	
Subtotal	776	0	0	1152	57	3
Total		776			1212	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		8
15. Reactor Cooling Systems		5
16. Steam generation systems		6
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		1
32. Feedwater and Main Steam System		18
42. Electrical Power Supply Systems		4
XX. Miscellaneous Systems		0
Total	0	43

CZ-8 DUKOVANY-3**Operator:** CEZ (CZECH POWER COMPANY , CEZ a.s.)**Contractor:** SKODA (SKODA CONCERN NUCLEAR POWER PLANT WORKS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 427.0 MW(e)
Design Net Capacity: 420.0 MW(e)
Design Discharge Burnup: 44000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3427.9 GW(e).h
Energy Availability Factor: 90.9%
Load Factor: 91.6%
Operating Factor: 92.1%
Energy Unavailability Factor: 9.1%
Total Off-line Time: 692 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	314.8	17.1	283.8	307.8	313.3	296.9	312.0	313.1	310.0	322.8	313.3	323.0	3427.9
EAF (%)	98.4	7.4	87.5	98.6	97.8	97.1	98.6	98.7	99.9	99.9	99.8	99.9	90.9
UCF (%)	100.0	7.9	87.5	98.6	98.3	98.0	100.0	100.0	100.0	99.9	99.8	99.9	91.4
LF (%)	99.1	6.0	89.3	100.3	98.6	96.6	98.2	98.5	100.8	101.5	101.9	101.7	91.6
OF (%)	100.0	8.2	89.9	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	92.1
EUF (%)	1.6	92.6	12.5	1.4	2.2	2.9	1.4	1.3	0.1	0.1	0.2	0.1	9.1
PUF (%)	0.0	92.1	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	8.1
UCLF (%)	0.0	0.0	0.0	1.4	1.7	2.1	0.0	0.0	0.0	0.1	0.2	0.0	0.5
XUF (%)	1.6	0.5	0.0	0.0	0.5	0.9	1.4	1.3	0.1	0.0	0.0	0.0	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

REACTOR TRIP DUE TO A HIGH LEVEL IN PRESSURERISER DURING PUTTING UNIT INTO OUTAGE MODE
(HUMAN FAILURE) 03.02.2007

5. Historical Summary

Date of Construction Start: 01 Mar 1979 **Lifetime Generation:** 64149.0 GW(e).h
Date of First Criticality: 28 Oct 1986 **Cumulative Energy Availability Factor:** 82.5%
Date of Grid Connection: 14 Nov 1986 **Cumulative Load Factor:** 83.9%
Date of Commercial Operation: 20 Dec 1986 **Cumulative Unit Capability Factor:** 84.2%
Cumulative Energy Unavailability Factor: 17.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	253.0	408.0	100.0	100.0	100.0	100.0	87.6	87.6	744	100.0
1987	3109.9	408.0	86.4	87.4	84.3	85.5	87.0	87.1	7644	87.3
1988	2988.9	408.0	81.4	84.5	80.0	82.8	83.4	85.3	7672	87.3
1989	2685.7	408.0	71.4	80.3	71.0	79.0	75.1	82.0	6678	76.2
1990	2982.0	408.0	85.0	81.4	80.3	79.3	83.4	82.4	7763	88.6
1991	2987.0	408.0	81.6	81.4	81.3	79.7	83.6	82.6	7784	88.9
1992	2917.9	408.0	72.6	80.0	72.3	78.5	81.4	82.4	6678	76.0
1993	3190.5	452.0	80.5	80.1	80.5	78.8	80.6	82.1	7259	82.9
1994	3343.9	452.0	84.5	80.7	84.5	79.6	84.5	82.4	7870	89.8
1995	2689.6	452.0	87.4	81.4	70.0	78.4	67.9	80.7	7788	88.9
1996	2871.2	412.0	80.4	81.3	78.3	78.4	79.3	80.6	7114	81.0
1997	2904.6	440.0	75.5	80.8	74.9	78.1	75.4	80.1	6774	77.3
1998	3090.1	412.0	85.7	81.2	85.0	78.6	85.6	80.5	7564	86.3
1999	3246.2	412.0	89.9	81.8	89.3	79.4	89.9	81.2	7849	89.6
2000	3187.9	412.0	88.7	82.3	87.4	80.0	88.1	81.7	7776	88.5
2001	3006.0	412.0	83.8	82.4	82.7	80.2	83.3	81.8	7309	83.4
2002	3259.4	412.0	89.9	82.9	89.6	80.7	90.3	82.3	7880	90.0
2003	3280.1	412.0	90.5	83.3	89.8	81.3	90.9	82.8	7934	90.6
2004	3302.5	412.0	90.3	83.7	90.2	81.7	91.2	83.3	7957	90.6
2005	2964.9	427.0	80.0	83.5	79.6	81.6	80.2	83.1	7034	80.3
2006	3396.2	427.0	90.8	83.9	90.0	82.1	90.8	83.5	8004	91.4
2007	3427.9	427.0	91.4	84.2	90.9	82.5	91.6	83.9	8068	92.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					88	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	691			1079		
D. Inspection, maintenance or repair without refuelling				31		
J. Grid failure or grid unavailability						3
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					8	
Subtotal	691	0	0	1110	100	3
Total		691			1213	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		2
15. Reactor Cooling Systems		36
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		3
32. Feedwater and Main Steam System		3
35. All other I&C Systems		0
41. Main Generator Systems		38
42. Electrical Power Supply Systems		4
Total	0	86

CZ-9 DUKOVANY-4**Operator:** CEZ (CZECH POWER COMPANY , CEZ a.s.)**Contractor:** SKODA (SKODA CONCERN NUCLEAR POWER PLANT WORKS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 427.0 MW(e)
Design Net Capacity: 427.0 MW(e)
Design Discharge Burnup: 44000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3319.0 GW(e).h
Energy Availability Factor: 88.1%
Load Factor: 88.7%
Operating Factor: 89.7%
Energy Unavailability Factor: 11.9%
Total Off-line Time: 906 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	216.5	293.2	324.1	310.9	317.2	303.1	303.1	316.7	311.6	324.2	216.2	82.2	3319.0
EAF (%)	67.9	100.0	100.0	100.0	99.2	99.3	95.8	99.6	100.0	99.9	70.6	26.3	88.1
UCF (%)	67.9	100.0	100.0	100.0	99.5	100.0	96.6	100.0	100.0	100.0	76.0	26.3	88.7
LF (%)	68.1	102.2	102.0	101.3	99.8	98.6	95.4	99.7	101.3	101.9	70.3	25.9	88.7
OF (%)	73.8	100.0	99.9	100.1	100.0	100.0	100.0	100.0	100.0	99.9	76.5	27.3	89.7
EUUF (%)	32.1	0.0	0.0	0.0	0.8	0.7	4.2	0.4	0.0	0.1	29.4	73.7	11.9
PUF (%)	32.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	73.7	11.0
UCLF (%)	0.0	0.0	0.0	0.0	0.5	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.3
XUF (%)	0.0	0.0	0.0	0.0	0.4	0.7	0.8	0.4	0.0	0.1	5.4	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

RECONSTRUCTION OF THE I&C SYSTEM (M-MODULE 1,2) – RECONSTRUCTION OF THE M1 AND M2 MODULES REPRESENTS THE LARGEST INVESTMENT PROJECT AT THE DUKOVANY NPP IN PRESENT.

5. Historical Summary

Date of Construction Start: 01 Mar 1979 **Lifetime Generation:** 63359.7 GW(e).h
Date of First Criticality: 01 Jun 1987 **Cumulative Energy Availability Factor:** 83.5%
Date of Grid Connection: 11 Jun 1987 **Cumulative Load Factor:** 85.3%
Date of Commercial Operation: 19 Jul 1987 **Cumulative Unit Capability Factor:** 84.4%
Cumulative Energy Unavailability Factor: 16.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	1596.5	408.0	99.9	99.9	98.2	98.2	88.6	88.6	4117	93.2
1988	2764.0	408.0	74.5	83.0	73.8	82.0	77.1	81.0	7092	80.7
1989	2984.5	408.0	80.8	82.1	80.4	81.3	83.5	82.0	7314	83.5
1990	2995.3	408.0	82.8	82.3	80.0	80.9	83.8	82.5	7836	89.5
1991	2672.0	408.0	78.0	81.3	77.9	80.3	74.8	80.8	7301	83.3
1992	3328.4	408.0	84.5	81.9	83.7	80.9	92.9	83.0	7614	86.7
1993	2939.8	448.0	62.1	78.6	62.1	77.8	74.9	81.6	6859	78.3
1994	3259.8	448.0	84.5	79.5	83.1	78.5	83.1	81.8	7538	86.1
1995	3311.1	448.0	85.5	80.2	85.3	79.4	84.4	82.2	7712	88.0
1996	3202.1	412.0	88.2	81.0	87.1	80.2	88.5	82.8	7762	88.4
1997	3149.2	440.0	80.9	81.0	80.9	80.2	81.7	82.7	7202	82.2
1998	3078.6	412.0	85.7	81.4	83.8	80.5	85.3	82.9	7536	86.0
1999	3179.4	412.0	88.6	82.0	86.6	81.0	88.1	83.3	7792	88.9
2000	3234.5	412.0	89.5	82.5	88.1	81.5	89.4	83.8	7839	89.2
2001	3258.1	412.0	90.4	83.1	89.2	82.1	90.3	84.2	7946	90.7
2002	2748.2	412.0	77.3	82.7	75.6	81.6	76.1	83.7	6745	77.0
2003	3309.8	412.0	91.4	83.2	90.7	82.2	91.7	84.2	8009	91.4
2004	3335.4	412.0	91.1	83.6	90.9	82.7	92.2	84.6	8029	91.4
2005	3267.0	412.0	90.3	84.0	89.6	83.0	90.5	84.9	8008	91.4
2006	3159.5	412.0	87.8	84.2	86.9	83.2	87.5	85.1	7704	87.9
2007	3319.0	427.0	88.7	84.4	88.1	83.5	88.7	85.3	7854	89.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					23	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	905			916		
D. Inspection, maintenance or repair without refuelling				88		
J. Grid failure or grid unavailability					3	1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						4
Subtotal	905	0	0	1004	27	5
Total		905			1036	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		6
15. Reactor Cooling Systems		8
32. Feedwater and Main Steam System		4
33. Circulating Water System		0
35. All other I&C Systems		1
42. Electrical Power Supply Systems		1
Total	0	20

CZ-23 TEMELIN-1**Operator:** CEZ (CZECH POWER COMPANY , CEZ a.s.)**Contractor:** SKODA (SKODA CONCERN NUCLEAR POWER PLANT WORKS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 930.0 MW(e)
Design Net Capacity: 963.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4901.4 GW(e).h
Energy Availability Factor: 60.0%
Load Factor: 59.6%
Operating Factor: 60.3%
Energy Unavailability Factor: 40.0%
Total Off-line Time: 3478 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	548.4	0.0	0.0	172.5	658.5	667.9	691.6	63.2	61.1	697.6	664.8	675.8	4901.4
EAF (%)	79.8	0.0	0.0	28.5	95.2	100.0	100.0	9.2	10.4	97.2	95.9	94.2	60.0
UCF (%)	79.8	0.0	0.0	28.6	95.3	100.0	100.0	9.2	10.4	97.2	95.9	94.2	60.0
LF (%)	79.3	0.0	0.0	25.8	95.2	99.7	99.9	9.1	9.1	97.2	95.9	94.3	59.6
OF (%)	80.2	0.0	0.0	29.3	96.0	100.0	100.0	9.3	12.9	98.4	96.5	94.9	60.3
EUUF (%)	20.2	100.0	100.0	71.5	4.8	0.0	0.0	90.8	89.6	2.8	4.1	5.8	40.0
PUF (%)	20.2	100.0	71.0	0.0	4.8	0.0	0.0	90.8	89.6	2.2	1.6	5.6	31.4
UCLF (%)	0.0	0.0	29.0	71.5	0.0	0.0	0.0	0.0	0.0	0.6	2.6	0.2	8.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

RECONSTRUCTION OF THE HIGH-PRESSURE PART OF THE TURBINE – THE FLOW-THROUGH PART OF THE HIGH-PRESSURE TURBINE WAS REPLACED; THE MODERNISATION APPLIED TO THE CIRCUIT AND DISTRIBUTION ELEMENTS OF TURBINES AT BOTH UNITS. THIS INCREASED THE RELIABILITY OF THE HIGH-PRESSURE ELEMENTS AND THE DESIGNED OUTPUT OF THE TURBINES.

5. Historical Summary

Date of Construction Start: 01 Feb 1987 **Lifetime Generation:** 33850.2 GW(e).h
Date of First Criticality: 11 Oct 2000 **Cumulative Energy Availability Factor:** 70.5%
Date of Grid Connection: 21 Dec 2000 **Cumulative Load Factor:** 68.6%
Date of Commercial Operation: 10 Jun 2002 **Cumulative Unit Capability Factor:** 70.5%
Cumulative Energy Unavailability Factor: 29.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2002	3675.6	930.0	100.0	100.0	100.0	100.0	76.9	76.9	4233	82.4
2003	5455.3	912.0	65.3	78.3	65.3	78.3	68.3	71.5	5861	66.9
2004	5715.8	950.0	68.1	74.3	68.0	74.2	68.5	70.3	6029	68.6
2005	5444.0	950.0	66.3	72.0	66.3	72.0	66.4	69.2	5846	66.7
2006	6124.9	930.0	75.7	72.8	75.7	72.8	75.2	70.5	6731	76.8
2007	4901.4	963.0	60.0	70.5	60.0	70.5	59.6	68.6	5282	60.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2003 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		194			578	
C. Inspection, maintenance or repair combined with refuelling	2625			1327		
D. Inspection, maintenance or repair without refuelling	21			37		
E. Testing of plant systems or components	92			56		
L. Human factor related		546				
S. Fuel management limitation (including high flux tilt, stretch out or coast-down operation)				119		
Subtotal	2738	740	0	1539	578	0
Total		3478			2117	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2003 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		132
12. Reactor I&C Systems		41
15. Reactor Cooling Systems	19	75
21. Fuel Handling and Storage Facilities		32
31. Turbine and auxiliaries		154
32. Feedwater and Main Steam System		13
33. Circulating Water System	11	7
41. Main Generator Systems	163	116
42. Electrical Power Supply Systems		3
Total	193	573

CZ-24 TEMELIN-2

Operator: CEZ (CZECH POWER COMPANY , CEZ a.s.)
Contractor: SKODA (SKODA CONCERN NUCLEAR POWER PLANT WORKS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 963.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6745.1 GW(e).h
Energy Availability Factor: 79.9%
Load Factor: 80.5%
Operating Factor: 80.5%
Energy Unavailability Factor: 20.1%
Total Off-line Time: 1709 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	717.2	615.6	715.3	693.1	88.8	0.0	425.0	717.2	694.8	686.4	691.2	700.5	6745.1
EAF (%)	100.0	95.2	99.9	100.0	12.4	0.0	59.5	99.0	99.7	95.6	99.7	97.8	79.9
UCF (%)	100.0	95.3	99.9	100.0	12.4	0.0	59.8	100.0	99.9	95.7	99.7	97.8	80.1
LF (%)	101.5	96.4	101.2	101.5	12.6	0.0	59.3	100.1	100.2	95.7	99.7	97.8	80.5
OF (%)	100.0	96.0	99.9	100.1	12.5	0.0	62.6	100.0	100.0	96.6	100.0	98.9	80.5
EUF (%)	0.0	4.8	0.1	0.0	87.6	100.0	40.5	1.0	0.3	4.4	0.3	2.2	20.1
PUF (%)	0.0	4.6	0.0	0.0	87.6	100.0	15.1	0.0	0.0	3.6	0.0	0.0	17.5
UCLF (%)	0.0	0.2	0.1	0.0	0.0	0.0	25.1	0.0	0.1	0.7	0.3	2.2	2.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	0.2	0.1	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

RECONSTRUCTION OF THE HIGH-PRESSURE PART OF THE TURBINE – THE FLOW-THROUGH PART OF THE HIGH-PRESSURE TURBINE WAS REPLACED; THE MODERNISATION APPLIED TO THE CIRCUIT AND DISTRIBUTION ELEMENTS OF TURBINES AT BOTH UNITS. THIS INCREASED THE RELIABILITY OF THE HIGH-PRESSURE ELEMENTS AND THE DESIGNED OUTPUT OF THE TURBINES.

5. Historical Summary

Date of Construction Start: 01 Feb 1987 **Lifetime Generation:** 29303.6 GW(e).h
Date of First Criticality: 31 May 2002 **Cumulative Energy Availability Factor:** 71.6%
Date of Grid Connection: 29 Dec 2002 **Cumulative Load Factor:** 72.0%
Date of Commercial Operation: 18 Apr 2003 **Cumulative Unit Capability Factor:** 71.8%
Cumulative Energy Unavailability Factor: 28.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2003			Data not provided							
2004	6340.1	950.0	75.2	75.2	75.2	75.2	76.0	76.0	6678	76.0
2005	4941.4	950.0	65.3	70.5	65.1	70.4	65.3	70.9	6135	70.0
2006	5251.9	780.0	65.8	68.9	65.3	68.7	65.4	69.0	5765	65.8
2007	6745.1	963.0	80.1	71.8	79.9	71.6	80.5	72.0	7051	80.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2004 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		190			366	
C. Inspection, maintenance or repair combined with refuelling	1467			1215		
D. Inspection, maintenance or repair without refuelling				183		
E. Testing of plant systems or components	51			25	6	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						0
L. Human factor related					134	
Subtotal	1518	190	0	1423	506	0
Total		1708			1929	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2004 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		131
15. Reactor Cooling Systems	153	18
31. Turbine and auxiliaries	29	55
32. Feedwater and Main Steam System		20
35. All other I&C Systems	8	
41. Main Generator Systems		40
42. Electrical Power Supply Systems		101
Total	190	365

FI-1 LOVIISA-1**Operator:** FORTUMPH (FORTUM POWER AND HEAT OY (former IVO))**Contractor:** AEE (ATOMENERGOEXPORT)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 488.0 MW(e)
Design Net Capacity: 420.0 MW(e)
Design Discharge Burnup: 38000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4028.1 GW(e).h
Energy Availability Factor: 93.5%
Load Factor: 94.2%
Operating Factor: 94.6%
Energy Unavailability Factor: 6.5%
Total Off-line Time: 475 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	370.4	332.4	363.2	354.9	367.0	351.3	357.4	180.9	260.5	365.2	355.7	369.3	4028.1
EAF (%)	100.0	100.0	98.3	99.3	100.0	100.0	99.0	51.3	74.6	99.9	100.0	100.0	93.5
UCF (%)	100.0	100.0	98.4	99.3	100.0	100.0	99.7	56.6	74.6	99.9	100.0	100.0	94.0
LF (%)	102.0	101.4	100.0	101.2	101.1	100.0	98.4	49.8	74.1	100.5	101.2	101.7	94.2
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	56.7	78.8	100.0	100.0	100.0	94.6
EUF (%)	0.0	0.0	1.7	0.7	0.0	0.0	1.0	48.7	25.4	0.1	0.0	0.0	6.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	43.4	13.4	0.0	0.0	0.0	4.8
UCLF (%)	0.0	0.0	1.7	0.7	0.0	0.0	0.0	0.0	12.0	0.1	0.0	0.0	1.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.7	5.2	0.0	0.0	0.0	0.0	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PLANNED ENERGY LOSSES: ANNUAL TESTING OF MAIN STEAM SAFETY VALVES (20070714), ANNUAL MAINTENANCE AND REFUELLING (20070818-20070907). UNPLANNED ENERGY LOSSES: REPAIR OF LEAKING PLUG OF PRESSURE METERING INTERGRATE IN THE SA10 HIGHPRESSURE TURBINE (20070211), REPAIR OF LEAKAGE IN COOLING SYSTEM OF GENERATOR HYDROGEN CIRCUIT (20070330-20070401), TURBINE TRIP; FAULT IN POWER CONTROLLER (20070913), REPAIR OF CONDENSATEVALVE (20070913), REPAIR OF LEAKAGE IN COOLING WATER LINE OF ONE PCP (20071009). OTHER ENERGY LOSSES: STRETCH-OUT/COAST DOWN (20070722-20070818).

5. Historical Summary

Date of Construction Start:	01 May 1971	Lifetime Generation:	106318.2 GW(e).h
Date of First Criticality:	21 Jan 1977	Cumulative Energy Availability Factor:	86.7%
Date of Grid Connection:	08 Feb 1977	Cumulative Load Factor:	86.3%
Date of Commercial Operation:	09 May 1977	Cumulative Unit Capability Factor:	87.2%
		Cumulative Energy Unavailability Factor:	13.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	2118.6	431.0	83.8	83.8	83.8	83.8	83.8	83.8	5591	95.1
1978	2975.8	430.0	78.9	80.9	78.9	80.9	79.0	80.9	7531	86.0
1979	2901.7	405.0	81.8	81.2	81.8	81.2	81.8	81.2	7404	84.5
1980	1407.8	445.0	36.6	68.5	36.6	68.5	36.0	68.4	3482	39.6
1981	3105.1	440.0	81.9	71.5	81.9	71.5	80.6	71.0	7642	87.2
1982	3245.4	440.0	84.2	73.8	84.2	73.8	84.2	73.4	7576	86.5
1983	3337.4	445.0	86.7	75.7	86.7	75.7	85.6	75.3	7982	91.1
1984	3343.9	445.0	85.8	77.1	85.8	77.1	85.5	76.7	7653	87.1
1985	3600.0	440.0	92.5	78.9	92.5	78.9	93.4	78.6	8248	94.2
1986	3522.4	445.0	91.1	80.2	91.1	80.2	90.4	79.8	8093	92.4
1987	3600.4	445.0	94.6	81.5	94.6	81.5	92.4	81.0	8257	94.3
1988	3354.6	445.0	87.0	82.0	87.0	82.0	85.8	81.5	7678	87.4
1989	3575.7	445.0	92.8	82.9	92.6	82.9	91.7	82.3	8183	93.4
1990	3271.1	445.0	85.5	83.1	85.5	83.1	83.9	82.4	7605	86.8
1991	3360.9	445.0	88.8	83.5	88.6	83.4	86.2	82.7	7927	90.5
1992	3108.4	445.0	80.3	83.3	80.2	83.2	79.5	82.5	7186	81.8
1993	3443.2	445.0	89.5	83.6	89.5	83.6	88.4	82.8	8052	92.0
1994	3497.6	445.0	90.8	84.1	90.7	84.0	89.7	83.2	8017	91.5
1995	3389.1	445.0	88.5	84.3	87.7	84.2	86.9	83.4	7834	89.4
1996	3203.5	445.0	82.5	84.2	82.0	84.1	82.0	83.3	7281	82.9
1997	3794.8	445.0	93.9	84.7	93.0	84.5	97.3	84.0	8309	94.9
1998	3852.4	488.0	93.4	85.1	91.3	84.9	90.1	84.3	8234	94.0
1999	3883.3	488.0	92.4	85.5	91.6	85.2	90.8	84.6	8304	94.8
2000	3618.0	488.0	86.5	85.5	84.9	85.2	84.4	84.6	7720	87.9
2001	3921.0	488.0	93.4	85.9	92.4	85.5	91.7	84.9	8233	94.0
2002	3790.1	488.0	91.4	86.1	89.3	85.7	88.7	85.1	8095	92.4
2003	3939.0	488.0	93.2	86.4	92.4	85.9	92.1	85.4	8194	93.5
2004	3715.0	488.0	86.9	86.4	86.5	86.0	86.7	85.4	7647	87.0
2005	4062.4	488.0	95.0	86.7	94.6	86.3	95.0	85.8	8351	95.3
2006	3964.8	488.0	92.6	86.9	92.1	86.5	92.7	86.0	8138	92.9
2007	4028.1	488.0	94.0	87.2	93.5	86.7	94.2	86.3	8285	94.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					220	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	397			717		
D. Inspection, maintenance or repair without refuelling				19		
E. Testing of plant systems or components				2		
H. Nuclear regulatory requirements				0		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	2	5
Z. Others		78			6	
Subtotal	397	78	0	738	229	5
Total		475			972	

7. Equipment Related Full Outages, Analysis by System

System	2007	1977 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		14
14. Safety Systems		4
15. Reactor Cooling Systems		169
16. Steam generation systems		2
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		18
32. Feedwater and Main Steam System		8
42. Electrical Power Supply Systems		1
Total	0	216

FI-2 LOVIISA-2**Operator:** FORTUMPH (FORTUM POWER AND HEAT OY (former IVO))**Contractor:** AEE (ATOMENERGOEXPORT)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 488.0 MW(e)
Design Net Capacity: 420.0 MW(e)
Design Discharge Burnup: 38000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4090.9 GW(e).h
Energy Availability Factor: 94.9%
Load Factor: 95.7%
Operating Factor: 95.9%
Energy Unavailability Factor: 5.1%
Total Off-line Time: 357 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	371.1	334.3	369.6	357.9	367.3	350.3	355.1	341.7	154.2	365.1	354.3	370.0	4090.9
EAF (%)	100.0	100.0	100.0	100.0	100.0	99.8	98.5	96.0	44.4	99.6	99.3	100.0	94.9
UCF (%)	100.0	100.0	100.0	100.0	100.0	99.8	98.5	99.8	47.9	99.6	99.3	100.0	95.5
LF (%)	102.2	102.0	101.8	102.0	101.2	99.7	97.8	94.1	43.9	100.4	100.8	101.9	95.7
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	50.4	100.0	100.0	100.0	95.9
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.2	1.5	4.0	55.6	0.4	0.7	0.0	5.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	52.1	0.0	0.0	0.0	4.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.2	1.5	0.0	0.0	0.4	0.7	0.0	0.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	3.5	0.0	0.0	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PLANNED ENERGY LOSSES: ANNUAL TESTING OF MAIN STEAM SAFETY VALVES (20070804), ANNUAL MAINTENANCE AND REFUELLING (20070908-20070923). UNPLANNED ENERGY LOSSES: TRIP OF ONE PCP (20070630), TRIP OF ONE SEA WATER PUMP (20070723-20070725), REPAIR OF OIL LEAK IN PCP (20071005-20071006), REPAIR OF OIL LEAK IN PCP (20071117). OTHER ENERGY LOSSES: STRETCH-OUT (20070811-20070908).

5. Historical Summary

Date of Construction Start:	01 Aug 1972	Lifetime Generation:	96394.0 GW(e).h
Date of First Criticality:	17 Oct 1980	Cumulative Energy Availability Factor:	88.5%
Date of Grid Connection:	04 Nov 1980	Cumulative Load Factor:	88.2%
Date of Commercial Operation:	05 Jan 1981	Cumulative Unit Capability Factor:	89.2%
		Cumulative Energy Unavailability Factor:	11.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	2714.2	440.0	72.2	72.2	72.2	72.2	70.4	70.4	7062	80.6
1982	2997.4	440.0	78.0	75.1	78.0	75.1	77.8	74.1	7046	80.4
1983	3474.5	445.0	90.1	80.1	90.1	80.1	89.1	79.1	8063	92.0
1984	3608.6	445.0	92.6	83.3	92.6	83.3	92.3	82.5	8251	93.9
1985	3549.8	440.0	92.2	85.0	92.2	85.0	92.1	84.4	8162	93.2
1986	3174.9	445.0	81.5	84.4	81.5	84.4	81.4	83.9	7273	83.0
1987	3572.1	445.0	93.4	85.7	93.4	85.7	91.6	85.0	8242	94.1
1988	3602.3	445.0	94.7	86.8	94.7	86.8	92.2	85.9	8305	94.5
1989	3551.0	445.0	91.8	87.4	91.7	87.4	91.1	86.5	8128	92.8
1990	3251.1	445.0	85.3	87.2	85.3	87.2	83.4	86.2	7584	86.6
1991	3442.2	445.0	89.9	87.4	89.0	87.3	88.3	86.4	7941	90.7
1992	3468.4	445.0	89.5	87.6	89.1	87.5	88.7	86.6	7931	90.3
1993	3550.8	445.0	91.3	87.9	91.2	87.8	91.2	86.9	8050	92.0
1994	3124.7	445.0	81.2	87.4	80.5	87.3	80.2	86.4	7170	81.8
1995	3060.3	445.0	78.4	86.8	77.6	86.6	78.5	85.9	7064	80.6
1996	3621.3	445.0	93.1	87.2	92.7	87.0	92.6	86.3	8227	93.7
1997	3804.7	445.0	92.9	87.5	92.0	87.3	97.6	87.0	8267	94.4
1998	3687.9	488.0	88.6	87.6	86.4	87.2	86.3	86.9	7892	90.1
1999	3974.3	488.0	94.2	88.0	93.5	87.6	93.0	87.3	8281	94.5
2000	3885.1	488.0	94.1	88.3	90.9	87.8	90.6	87.5	8314	94.6
2001	3781.1	488.0	92.3	88.5	89.6	87.9	88.4	87.5	8149	93.0
2002	3498.7	488.0	84.5	88.3	82.6	87.6	81.8	87.2	7463	85.2
2003	3736.7	488.0	90.1	88.4	90.0	87.7	87.4	87.3	8358	95.4
2004	4009.2	488.0	93.6	88.6	93.1	88.0	93.5	87.5	8231	93.7
2005	4076.1	488.0	95.4	88.9	94.5	88.2	95.4	87.9	8376	95.6
2006	3766.6	488.0	88.5	88.9	87.5	88.2	88.1	87.9	7863	89.8
2007	4090.9	488.0	95.5	89.2	94.9	88.5	95.7	88.2	8403	95.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					97	
C. Inspection, maintenance or repair combined with refuelling	356			653		
D. Inspection, maintenance or repair without refuelling				43		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				1	2	
Subtotal	356	0	0	697	99	0
Total		356			796	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		5
14. Safety Systems		5
15. Reactor Cooling Systems		43
16. Steam generation systems		2
21. Fuel Handling and Storage Facilities		14
31. Turbine and auxiliaries		1
32. Feedwater and Main Steam System		17
41. Main Generator Systems		0
XX. Miscellaneous Systems		0
Total	0	87

FI-3 OLKILUOTO-1

Operator: TVO (TEOLLISUUDEN VOIMA OY)
Contractor: ASEASTAL (ASEA-ATOM / STAL-LAVAL)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 860.0 MW(e)
Design Net Capacity: 660.0 MW(e)
Design Discharge Burnup: 37000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7334.9 GW(e).h
Energy Availability Factor: 96.7%
Load Factor: 97.4%
Operating Factor: 97.6%
Energy Unavailability Factor: 3.3%
Total Off-line Time: 206 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	646.2	585.1	645.6	620.4	447.0	614.3	630.7	621.7	614.2	640.2	624.6	645.0	7334.9
EAF (%)	99.8	100.0	99.9	99.4	69.6	98.8	98.4	97.3	98.8	99.8	100.0	99.8	96.7
UCF (%)	99.8	100.0	99.9	99.6	70.4	100.0	100.0	99.8	100.0	99.8	100.0	99.8	97.4
LF (%)	101.0	101.2	100.9	100.3	69.9	99.2	98.6	97.2	99.2	99.9	100.9	100.8	97.4
OF (%)	100.0	100.0	99.9	100.1	72.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.6
EUF (%)	0.2	0.0	0.1	0.6	30.4	1.2	1.6	2.7	1.2	0.2	0.0	0.2	3.3
PUF (%)	0.2	0.0	0.1	0.0	29.6	0.0	0.0	0.2	0.0	0.2	0.0	0.2	2.6
UCLF (%)	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.2	0.8	1.2	1.6	2.5	1.2	0.0	0.0	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

YEAR 2007 WAS VERY GOOD. PRODUCTION (NET) 7 335 WAS BEST OF THE PLANT HISTORY AND LOAD FACTOR WAS 97,5 %. THERE WAS ONLY ONE UNPLANNED POWER REDUCTION IN WHOLE YEAR. ALL OTHER POWER REDUCTIONS WAS PERIODICAL TEST, COAST-DOWN OR ANNUAL OUTAGES.

5. Historical Summary

Date of Construction Start: 01 Feb 1974
Date of First Criticality: 21 Jul 1978
Date of Grid Connection: 02 Sep 1978
Date of Commercial Operation: 10 Oct 1979

Lifetime Generation: 173550.0 GW(e).h
Cumulative Energy Availability Factor: 92.4%
Cumulative Load Factor: 92.0%
Cumulative Unit Capability Factor: 92.7%
Cumulative Energy Unavailability Factor: 7.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	1265.2	660.0	86.9	86.9	86.9	86.9	86.8	86.8	1996	90.4
1980	4280.8	658.0	76.3	78.4	76.3	78.4	74.1	76.6	6849	78.0
1981	4549.2	660.0	80.8	79.5	80.8	79.5	78.7	77.5	7353	83.9
1982	4997.5	658.0	86.7	81.7	86.7	81.7	86.7	80.4	7903	90.2
1983	4808.3	669.0	81.9	81.7	81.9	81.7	82.0	80.7	7651	87.3
1984	5505.6	694.0	91.9	83.8	91.9	83.8	90.3	82.6	8247	93.9
1985	5414.5	710.0	88.8	84.6	88.8	84.6	87.1	83.4	8180	93.4
1986	5463.2	710.0	90.1	85.4	90.1	85.4	87.8	84.0	8008	91.4
1987	5636.5	710.0	92.1	86.2	92.1	86.2	90.6	84.9	8142	92.9
1988	5778.9	710.0	94.3	87.1	94.1	87.1	92.7	85.7	8248	93.9
1989	5056.2	710.0	83.2	86.7	83.2	86.7	81.3	85.3	7278	83.1
1990	5857.3	710.0	95.6	87.5	95.6	87.5	94.2	86.1	8356	95.4
1991	5873.2	710.0	95.7	88.2	94.9	88.1	94.4	86.8	8373	95.6
1992	5803.0	710.0	93.7	88.7	93.2	88.5	93.0	87.3	8251	93.9
1993	5944.9	710.0	95.8	89.2	95.3	89.0	95.6	87.9	8433	96.3
1994	5978.0	710.0	96.5	89.7	96.0	89.5	96.1	88.4	8485	96.9
1995	5931.5	710.0	96.1	90.1	95.5	89.9	95.4	88.9	8427	96.2
1996	5938.6	710.0	92.2	90.2	92.1	90.0	95.2	89.2	8212	93.5
1997	6374.2	772.0	93.9	90.4	93.8	90.2	94.2	89.5	8254	94.2
1998	6807.0	840.0	95.6	90.7	95.0	90.5	92.5	89.7	8384	95.7
1999	7111.8	840.0	97.2	91.1	96.4	90.9	96.6	90.1	8542	97.5
2000	7043.1	840.0	95.8	91.4	95.2	91.1	95.5	90.4	8448	96.2
2001	7163.8	840.0	97.6	91.7	97.2	91.4	97.4	90.8	8561	97.7
2002	6997.5	840.0	95.5	91.9	95.1	91.6	95.1	91.0	8377	95.6
2003	7127.4	840.0	97.1	92.1	96.5	91.8	96.9	91.3	8515	97.2
2004	7009.0	840.0	94.7	92.2	94.7	91.9	95.0	91.4	8329	94.8
2005	7221.1	840.0	97.8	92.5	97.7	92.2	98.1	91.7	8588	98.0
2006	6973.4	840.0	93.3	92.5	92.6	92.2	93.6	91.8	8206	93.7
2007	7334.9	860.0	97.4	92.7	96.7	92.4	97.4	92.0	8554	97.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1979 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					91	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	209			445		
D. Inspection, maintenance or repair without refuelling				18		
E. Testing of plant systems or components					6	
J. Grid failure or grid unavailability						4
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					46	0
Z. Others					2	
Subtotal	209	0	0	463	145	4
Total		209			612	

7. Equipment Related Full Outages, Analysis by System

System	2007	1979 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		8
12. Reactor I&C Systems		2
14. Safety Systems		5
15. Reactor Cooling Systems		12
31. Turbine and auxiliaries		20
32. Feedwater and Main Steam System		2
33. Circulating Water System		1
41. Main Generator Systems		37
42. Electrical Power Supply Systems		0
Total	0	87

FI-4 OLKILUOTO-2

Operator: TVO (TEOLLISUUDEN VOIMA OY)
Contractor: ASEASTAL (ASEA-ATOM / STAL-LAVAL)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 860.0 MW(e)
Design Net Capacity: 660.0 MW(e)
Design Discharge Burnup: 37000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7051.3 GW(e).h
Energy Availability Factor: 93.2%
Load Factor: 93.6%
Operating Factor: 94.3%
Energy Unavailability Factor: 6.8%
Total Off-line Time: 502 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	646.4	582.8	645.5	620.6	375.7	459.3	629.9	622.0	591.4	641.1	625.5	611.1	7051.3
EAF (%)	100.0	99.8	100.0	99.7	61.3	73.9	98.0	97.0	95.0	99.9	100.0	94.4	93.2
UCF (%)	100.0	99.8	100.0	99.7	63.5	75.2	100.0	99.9	96.2	99.9	100.0	94.4	94.0
LF (%)	101.0	100.8	100.9	100.4	58.7	74.2	98.4	97.2	95.5	100.1	101.0	95.5	93.6
OF (%)	100.0	100.0	99.9	100.1	62.1	77.1	100.0	100.0	96.7	100.0	100.0	95.8	94.3
EUF (%)	0.0	0.2	0.0	0.3	38.7	26.1	2.0	3.0	5.0	0.1	0.0	5.6	6.8
PUF (%)	0.0	0.2	0.0	0.2	36.5	15.5	0.0	0.1	0.0	0.1	0.0	0.3	4.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	9.3	0.0	0.0	3.8	0.0	0.0	5.3	1.5
XUF (%)	0.0	0.0	0.0	0.1	2.3	1.2	2.0	2.8	1.2	0.0	0.0	0.0	0.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE PLANT WAS OPERATE QUITE GOOD. TOTAL PRODUCTION (NET) WAS 7 051 GWH AND LOAD FACTOR 93,7 %. THERE WAS THREE REACTOR SCRAMS IN 2007. IN MAY REACTOR SCRAM DUE FAULT IN OUTER 400 KV GRID. IN SEPTEMBER TURBINE BY-PASS VALVE CLOSED AFTER TURBINE SCAM WHEN THE PLANT WAS IN 30 % POWER. AND THEN END OF YEAR REACTOR SCRAM DUE TO ONE TURBINE CONTROL VALVE CLOSED WHEN THE PLANT WAS OPERATE IN 80 % POWER.

5. Historical Summary

Date of Construction Start: 01 Aug 1975
Date of First Criticality: 13 Oct 1979
Date of Grid Connection: 18 Feb 1980
Date of Commercial Operation: 10 Jul 1982

Lifetime Generation: 164596.0 GW(e).h
Cumulative Energy Availability Factor: 93.5%
Cumulative Load Factor: 93.0%
Cumulative Unit Capability Factor: 93.9%
Cumulative Energy Unavailability Factor: 6.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1982	2256.6	658.0	77.7	77.7	77.7	77.7	77.6	77.6	3513	79.5
1983	5087.2	657.0	86.7	83.7	86.7	83.7	88.4	84.8	8221	93.8
1984	5341.3	696.0	89.6	86.1	89.6	86.1	87.3	85.8	8031	91.4
1985	5415.8	710.0	88.2	86.7	88.2	86.7	87.1	86.2	7912	90.3
1986	5840.2	710.0	95.1	88.6	95.1	88.6	93.9	88.0	8437	96.3
1987	5725.0	710.0	93.7	89.6	93.7	89.6	92.0	88.7	8379	95.7
1988	5713.2	710.0	92.7	90.1	92.7	90.1	91.6	89.2	8220	93.6
1989	5827.0	710.0	94.9	90.7	94.9	90.7	93.7	89.8	8363	95.5
1990	5749.9	710.0	93.8	91.1	93.8	91.1	92.4	90.1	8265	94.3
1991	5731.0	710.0	93.7	91.4	93.0	91.3	92.1	90.3	8216	93.8
1992	5790.4	710.0	94.5	91.7	93.3	91.5	92.8	90.6	8306	94.6
1993	5861.6	710.0	95.1	92.0	94.4	91.7	94.2	90.9	8327	95.1
1994	5732.6	710.0	93.2	92.1	92.3	91.8	92.2	91.0	8130	92.8
1995	5747.2	710.0	93.7	92.2	92.5	91.8	92.4	91.1	8236	94.0
1996	5915.4	710.0	95.3	92.4	95.0	92.1	94.8	91.4	8413	95.8
1997	6077.0	736.0	94.6	92.6	93.7	92.2	94.1	91.5	8258	94.3
1998	6628.5	840.0	94.3	92.7	93.2	92.2	90.1	91.4	8207	93.7
1999	7091.2	840.0	96.9	93.0	96.4	92.5	96.4	91.8	8505	97.1
2000	7028.9	840.0	95.9	93.1	95.3	92.7	95.3	92.0	8457	96.3
2001	6988.0	840.0	95.1	93.3	95.1	92.8	95.0	92.2	8387	95.7
2002	7108.5	840.0	97.0	93.5	96.8	93.1	96.6	92.4	8472	96.7
2003	7026.9	840.0	95.5	93.6	95.2	93.2	95.5	92.6	8378	95.6
2004	7080.7	840.0	95.8	93.7	95.8	93.3	96.0	92.7	8485	96.6
2005	6996.7	840.0	93.8	93.7	93.8	93.3	94.0	92.8	8248	94.2
2006	7294.4	860.0	97.4	93.9	96.4	93.5	96.8	93.0	8562	97.7
2007	7051.3	860.0	94.0	93.9	93.2	93.5	93.6	93.0	8258	94.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		105			339	
B. Refuelling without a maintenance					10	
C. Inspection, maintenance or repair combined with refuelling	374			383		
D. Inspection, maintenance or repair without refuelling				16		
E. Testing of plant systems or components				25		
H. Nuclear regulatory requirements					1	
J. Grid failure or grid unavailability			11			12
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					2	4
P. Fire		15				
Z. Others					1	
Subtotal	374	120	11	424	353	16
Total		505			793	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		8
12. Reactor I&C Systems		0
13. Reactor Auxiliary Systems		0
14. Safety Systems		2
15. Reactor Cooling Systems		11
31. Turbine and auxiliaries	73	3
32. Feedwater and Main Steam System		7
33. Circulating Water System	8	1
35. All other I&C Systems		1
41. Main Generator Systems	23	297
42. Electrical Power Supply Systems		4
XX. Miscellaneous Systems		0
Total	104	334

FR-54 BELLEVILLE-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1310.0 MW(e)
 Design Net Capacity: 1310.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8512.1 GW(e).h
 Energy Availability Factor: 75.8%
 Load Factor: 74.2%
 Operating Factor: 82.3%
 Energy Unavailability Factor: 24.2%
 Total Off-line Time: 1547 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	767.3	845.1	932.0	912.9	899.9	571.8	0.0	238.9	793.3	854.3	800.0	896.5	8512.1
EAF (%)	85.7	99.8	99.9	99.5	92.3	61.1	0.0	26.1	84.1	87.6	85.1	92.0	75.8
UCF (%)	85.7	99.8	99.9	100.0	99.8	73.5	0.0	26.2	84.1	87.6	85.1	92.0	77.5
LF (%)	78.7	96.0	95.6	96.9	92.3	60.6	0.0	24.5	84.1	87.5	84.8	92.0	74.2
OF (%)	87.5	100.0	99.9	100.1	100.0	73.6	0.0	38.8	99.3	98.3	93.5	100.0	82.3
EUF (%)	14.3	0.2	0.1	0.5	7.7	38.9	100.0	73.9	15.9	12.4	14.9	8.0	24.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	26.5	61.3	10.2	0.0	0.0	0.0	0.0	8.3
UCLF (%)	14.3	0.2	0.1	0.0	0.3	0.0	38.7	63.7	15.9	12.4	15.0	8.0	14.2
XUF (%)	0.0	0.0	0.0	0.4	7.4	12.4	0.0	0.0	0.0	0.0	0.0	0.0	1.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 May 1980 Lifetime Generation: 160195.2 GW(e).h
 Date of First Criticality: 09 Sep 1987 Cumulative Energy Availability Factor: 76.2%
 Date of Grid Connection: 14 Oct 1987 Cumulative Load Factor: 69.8%
 Date of Commercial Operation: 01 Jun 1988 Cumulative Unit Capability Factor: 77.6%
 Cumulative Energy Unavailability Factor: 23.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	4334.0	1310.0	86.1	86.1	85.8	85.8	64.4	64.4	4421	86.1
1989	5152.6	1310.0	46.5	61.1	46.0	60.7	44.9	52.1	4244	48.4
1990	7914.3	1310.0	71.4	65.1	71.2	64.7	69.0	58.6	6408	73.2
1991	8660.2	1310.0	80.8	69.5	79.3	68.8	75.5	63.3	7092	81.0
1992	8494.3	1310.0	91.8	74.4	91.2	73.7	73.8	65.6	7600	86.5
1993	7921.5	1310.0	77.5	74.9	71.3	73.2	69.0	66.2	6873	78.5
1994	6575.8	1310.0	65.2	73.4	64.0	71.8	57.3	64.9	5848	66.8
1995	7740.9	1310.0	76.2	73.8	73.4	72.1	67.5	65.2	6796	77.6
1996	7365.1	1310.0	76.8	74.2	76.5	72.6	64.0	65.1	6002	68.3
1997	9785.3	1310.0	93.4	76.2	93.2	74.7	85.3	67.2	8294	94.7
1998	5740.9	1310.0	53.7	74.0	51.2	72.5	50.0	65.6	4865	55.5
1999	9580.5	1310.0	92.0	75.6	90.4	74.0	83.5	67.1	7957	90.8
2000	4238.6	1310.0	38.0	72.6	37.9	71.2	36.8	64.7	3459	39.4
2001	9564.5	1310.0	87.3	73.7	86.8	72.3	83.3	66.1	7774	88.7
2002	9567.3	1310.0	99.6	75.5	98.9	74.1	83.4	67.3	8447	96.4
2003	8401.7	1310.0	77.6	75.6	75.4	74.2	73.2	67.6	6871	78.4
2004	9291.0	1310.0	88.6	76.4	88.0	75.1	80.7	68.4	7645	87.0
2005	10236.4	1310.0	98.8	77.7	97.1	76.3	89.2	69.6	8646	98.7
2006	7926.7	1310.0	77.1	77.6	74.8	76.2	69.1	69.6	6870	78.4
2007	8512.1	1310.0	77.5	77.6	75.8	76.2	74.2	69.8	7213	82.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		897			437	
B. Refuelling without a maintenance					19	
C. Inspection, maintenance or repair combined with refuelling	646			1055	10	
D. Inspection, maintenance or repair without refuelling				9		
E. Testing of plant systems or components				61	3	0
H. Nuclear regulatory requirements		4			110	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					83	1
L. Human factor related					3	
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)						3
Z. Others					0	
Subtotal	646	901	0	1125	665	4
Total		1547			1794	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		27
12. Reactor I&C Systems		75
13. Reactor Auxiliary Systems		47
14. Safety Systems		36
15. Reactor Cooling Systems	33	41
16. Steam generation systems	714	8
21. Fuel Handling and Storage Facilities		2
31. Turbine and auxiliaries	122	11
32. Feedwater and Main Steam System		81
35. All other I&C Systems	20	
41. Main Generator Systems		45
42. Electrical Power Supply Systems		19
XX. Miscellaneous Systems	8	5
Total	897	397

FR-55 BELLEVILLE-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1310.0 MW(e)
 Design Net Capacity: 1310.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9516.0 GW(e).h
 Energy Availability Factor: 88.6%
 Load Factor: 82.9%
 Operating Factor: 90.1%
 Energy Unavailability Factor: 11.4%
 Total Off-line Time: 865 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	924.7	834.4	910.4	867.7	698.1	810.2	878.8	886.6	879.0	931.7	894.5	0.0	9516.0
EAF (%)	99.5	99.9	99.8	99.7	79.2	95.4	99.3	99.2	99.5	99.4	94.8	0.0	88.6
UCF (%)	99.5	99.9	99.9	100.0	79.7	96.4	100.0	99.9	100.0	99.9	100.0	0.3	89.4
LF (%)	94.9	94.8	93.4	92.1	71.6	85.9	90.2	91.0	93.2	95.5	94.8	0.0	82.9
OF (%)	100.0	100.0	99.9	100.1	83.5	100.0	100.0	100.0	100.0	100.0	100.0	0.3	90.1
EUF (%)	0.5	0.1	0.2	0.3	20.8	4.6	0.7	0.8	0.5	0.6	5.2	100.0	11.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.3	7.9
UCLF (%)	0.5	0.0	0.1	0.0	20.3	3.6	0.0	0.1	0.0	0.1	0.0	6.5	2.6
XUF (%)	0.0	0.0	0.0	0.3	0.5	1.0	0.7	0.7	0.5	0.5	5.2	0.3	0.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Aug 1980 Lifetime Generation: 157673.1 GW(e).h
 Date of First Criticality: 25 May 1988 Cumulative Energy Availability Factor: 77.5%
 Date of Grid Connection: 06 Jul 1988 Cumulative Load Factor: 71.4%
 Date of Commercial Operation: 01 Jan 1989 Cumulative Unit Capability Factor: 79.3%
 Cumulative Energy Unavailability Factor: 22.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	8505.7	1310.0	87.0	87.0	86.6	86.6	74.1	74.1	7419	84.7
1990	6324.0	1310.0	58.4	72.7	56.9	71.8	55.1	64.6	5350	61.1
1991	7876.3	1310.0	73.3	72.9	70.3	71.3	68.6	66.0	6578	75.1
1992	8262.1	1310.0	75.9	73.7	75.3	72.3	71.8	67.4	6904	78.6
1993	8871.3	1310.0	83.4	75.6	80.1	73.8	77.3	69.4	7435	84.9
1994	8241.3	1310.0	80.4	76.4	76.9	74.4	71.8	69.8	7122	81.3
1995	7960.5	1310.0	99.3	79.7	97.5	77.7	69.4	69.7	7438	84.9
1996	7229.8	1310.0	74.5	79.0	71.2	76.8	62.8	68.9	6666	75.9
1997	8508.1	1310.0	84.9	79.7	82.0	77.4	74.1	69.5	7339	83.8
1998	5068.0	1310.0	45.0	76.2	45.0	74.2	44.2	66.9	4239	48.4
1999	4899.3	1310.0	44.8	73.3	43.3	71.4	42.7	64.7	4040	46.1
2000	9882.5	1310.0	97.4	75.4	96.7	73.5	85.9	66.5	8271	94.2
2001	8458.0	1310.0	79.2	75.7	78.6	73.9	73.7	67.0	6935	79.2
2002	9378.7	1310.0	86.1	76.4	84.3	74.6	81.7	68.1	7687	87.8
2003	8624.7	1310.0	80.4	76.7	79.4	74.9	75.2	68.6	7135	81.4
2004	10202.6	1310.0	98.0	78.0	97.1	76.3	88.7	69.8	8621	98.1
2005	9242.3	1310.0	86.9	78.5	84.4	76.8	80.5	70.5	7767	88.7
2006	8743.6	1310.0	81.7	78.7	79.1	76.9	76.2	70.8	7309	83.4
2007	9516.0	1310.0	89.4	79.3	88.6	77.5	82.9	71.4	7895	90.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		147			339	
B. Refuelling without a maintenance					15	
C. Inspection, maintenance or repair combined with refuelling	694			979		
E. Testing of plant systems or components				56		
H. Nuclear regulatory requirements					141	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					70	
L. Human factor related		24			5	0
Z. Others					2	
Subtotal	694	171	0	1035	572	0
Total		865			1607	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		46
12. Reactor I&C Systems	123	51
13. Reactor Auxiliary Systems	24	12
14. Safety Systems		31
15. Reactor Cooling Systems		50
16. Steam generation systems		35
17. Safety I&C Systems (excluding reactor I&C)		1
21. Fuel Handling and Storage Facilities		2
31. Turbine and auxiliaries		22
32. Feedwater and Main Steam System		16
33. Circulating Water System		2
41. Main Generator Systems		6
42. Electrical Power Supply Systems		12
XX. Miscellaneous Systems		1
Total	147	287

FR-32 BLAYAIS-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 910.0 MW(e)
 Design Net Capacity: 910.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6891.0 GW(e).h
 Energy Availability Factor: 86.4%
 Load Factor: 86.4%
 Operating Factor: 88.9%
 Energy Unavailability Factor: 13.6%
 Total Off-line Time: 970 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	685.1	419.5	628.7	232.8	339.7	644.9	665.4	661.9	643.4	671.8	626.3	671.6	6891.0
EAF (%)	99.9	69.1	93.0	36.0	51.1	98.4	98.3	97.8	98.2	99.0	95.2	98.6	86.4
UCF (%)	99.9	69.2	100.0	43.2	51.3	99.7	99.9	99.8	99.4	99.6	97.1	98.8	88.3
LF (%)	101.2	68.6	92.9	35.5	50.2	98.4	98.3	97.8	98.2	99.1	95.6	99.2	86.4
OF (%)	100.0	70.2	99.9	43.3	55.4	100.0	100.0	100.0	100.0	100.0	96.0	100.0	88.9
EUF (%)	0.1	30.9	7.0	64.0	48.9	1.6	1.7	2.2	1.8	1.0	4.8	1.4	13.6
PUF (%)	0.1	0.0	0.0	56.7	34.8	0.3	0.0	0.2	0.0	0.4	0.1	0.1	7.7
UCLF (%)	0.0	30.8	0.0	0.1	13.9	0.0	0.1	0.1	0.6	0.1	2.8	1.1	3.9
XUF (%)	0.0	0.1	7.0	7.2	0.2	1.3	1.6	2.0	1.2	0.6	1.8	0.2	1.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BASE LOAD OPERATION

5. Historical Summary

Date of Construction Start:	01 Jan 1977	Lifetime Generation:	150254.5 GW(e).h
Date of First Criticality:	20 May 1981	Cumulative Energy Availability Factor:	76.8%
Date of Grid Connection:	12 Jun 1981	Cumulative Load Factor:	71.7%
Date of Commercial Operation:	01 Dec 1981	Cumulative Unit Capability Factor:	79.2%
		Cumulative Energy Unavailability Factor:	23.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	449.0	915.0	65.6	65.6	65.6	65.6	65.6	65.6	522	70.2
1982	6129.8	910.0	81.5	80.2	81.5	80.2	76.9	76.0	7588	86.6
1983	3453.0	910.0	43.9	62.8	43.9	62.8	43.3	60.3	4285	48.9
1984	6509.0	910.0	84.6	69.9	84.6	69.9	81.4	67.2	7536	85.8
1985	6225.2	910.0	83.0	73.1	82.8	73.0	78.1	69.8	7348	83.9
1986	6460.6	910.0	87.8	76.0	87.0	75.8	81.0	72.1	7754	88.5
1987	5586.6	910.0	78.2	76.3	76.2	75.8	70.1	71.7	6793	77.5
1988	5730.0	910.0	82.1	77.1	81.3	76.6	71.7	71.7	7069	80.5
1989	6222.4	910.0	84.2	78.0	83.3	77.4	78.1	72.5	7419	84.7
1990	5822.6	910.0	77.2	77.9	76.9	77.4	73.0	72.6	6834	78.0
1991	6379.0	910.0	83.8	78.5	83.3	78.0	80.0	73.3	7400	84.5
1992	4349.2	910.0	57.5	76.6	56.6	76.0	54.4	71.6	5079	57.8
1993	5979.2	910.0	83.7	77.2	78.3	76.2	75.0	71.9	7253	82.8
1994	3474.9	910.0	86.6	77.9	85.8	77.0	43.6	69.7	5119	58.4
1995	6075.8	910.0	87.1	78.6	84.3	77.5	76.2	70.2	7206	82.3
1996	6639.1	910.0	88.5	79.2	85.6	78.0	83.1	71.0	7798	88.8
1997	6196.6	910.0	90.1	79.9	84.6	78.4	77.7	71.4	7621	87.0
1998	5917.6	910.0	81.1	80.0	78.2	78.4	74.2	71.6	7078	80.8
1999	6046.8	910.0	80.9	80.0	77.9	78.4	75.9	71.8	7082	80.8
2000	2854.1	910.0	53.4	78.6	36.6	76.2	35.7	69.9	3602	41.0
2001	4881.5	910.0	66.2	78.0	64.0	75.6	61.2	69.5	5768	65.8
2002	6861.1	910.0	95.0	78.8	93.0	76.4	86.1	70.3	8251	94.2
2003	4541.7	910.0	61.8	78.0	58.1	75.6	57.0	69.7	5321	60.7
2004	6144.3	910.0	81.5	78.2	79.2	75.7	76.9	70.0	7217	82.2
2005	6883.6	910.0	87.7	78.6	86.8	76.2	86.3	70.7	7841	89.5
2006	6508.0	910.0	84.0	78.8	81.6	76.4	81.6	71.1	7440	84.9
2007	6891.0	910.0	88.3	79.2	86.4	76.8	86.4	71.7	7791	88.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		215			404	0
B. Refuelling without a maintenance	638			25		
C. Inspection, maintenance or repair combined with refuelling				980	6	
D. Inspection, maintenance or repair without refuelling				44		
E. Testing of plant systems or components				1	1	
H. Nuclear regulatory requirements					78	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					29	56
L. Human factor related		102			11	1
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)			13			
Z. Others					6	
Subtotal	638	317	13	1050	535	57
Total		968			1642	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		31
12. Reactor I&C Systems		48
13. Reactor Auxiliary Systems		5
14. Safety Systems		5
15. Reactor Cooling Systems		75
16. Steam generation systems		3
17. Safety I&C Systems (excluding reactor I&C)		0
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries	6	32
32. Feedwater and Main Steam System		37
33. Circulating Water System		0
35. All other I&C Systems	9	
41. Main Generator Systems	200	82
42. Electrical Power Supply Systems		15
Total	215	334

FR-33 BLAYAIS-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 910.0 MW(e)
 Design Net Capacity: 910.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6035.6 GW(e).h
 Energy Availability Factor: 74.3%
 Load Factor: 75.7%
 Operating Factor: 76.3%
 Energy Unavailability Factor: 25.7%
 Total Off-line Time: 2074 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	687.8	628.0	696.6	671.6	672.7	580.7	103.2	0.0	0.0	652.1	654.0	689.0	6035.6
EAF (%)	98.7	99.9	100.0	100.0	98.8	88.6	15.8	0.0	0.0	94.4	98.3	98.9	74.3
UCF (%)	98.7	99.9	100.0	100.0	100.0	100.0	19.3	0.0	0.0	94.4	100.0	100.0	75.8
LF (%)	101.6	102.7	102.9	102.5	99.4	88.6	15.2	0.0	0.0	96.3	99.8	101.8	75.7
OF (%)	99.2	100.0	99.9	100.0	100.0	100.0	19.4	0.0	0.0	99.6	100.0	100.0	76.3
EUf (%)	1.3	0.1	0.0	0.0	1.2	11.4	84.2	100.0	100.0	5.6	1.7	1.1	25.7
PUF (%)	0.0	0.1	0.0	0.0	0.0	0.0	80.7	43.8	0.0	4.7	0.0	0.0	11.0
UCLF (%)	1.3	0.0	0.0	0.0	0.0	0.0	0.0	56.2	100.0	1.0	0.0	0.0	13.2
XUF (%)	0.0	0.0	0.0	0.0	1.2	11.4	3.5	0.0	0.0	0.0	1.7	1.1	1.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Jan 1977 Lifetime Generation: 152882.3 GW(e).h
 Date of First Criticality: 28 Jun 1982 Cumulative Energy Availability Factor: 80.1%
 Date of Grid Connection: 17 Jul 1982 Cumulative Load Factor: 75.8%
 Date of Commercial Operation: 01 Feb 1983 Cumulative Unit Capability Factor: 82.2%
 Cumulative Energy Unavailability Factor: 19.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	4490.0	910.0	62.3	62.3	62.3	62.3	61.6	61.6	5120	63.9
1984	6645.0	910.0	85.5	74.5	85.5	74.5	83.1	72.8	7716	87.8
1985	6819.7	910.0	90.0	79.8	89.9	79.8	85.5	77.2	7937	90.6
1986	6048.4	910.0	83.2	80.7	82.9	80.5	75.9	76.9	7142	81.5
1987	5987.1	910.0	84.8	81.5	84.2	81.3	75.1	76.5	7218	82.4
1988	4162.0	910.0	91.2	83.1	90.8	82.9	52.1	72.4	5718	65.1
1989	5561.0	910.0	77.0	82.3	73.4	81.5	69.8	72.0	6720	76.7
1990	5656.4	910.0	87.4	82.9	85.7	82.1	71.0	71.9	7381	84.3
1991	5326.5	910.0	78.3	82.4	75.1	81.3	66.8	71.3	6789	77.5
1992	5953.3	910.0	86.9	82.8	83.7	81.5	74.5	71.6	7505	85.4
1993	5253.2	910.0	71.0	81.8	67.0	80.2	65.9	71.1	6203	70.8
1994	6692.6	910.0	88.7	82.3	88.1	80.9	84.0	72.2	7658	87.4
1995	6725.5	910.0	87.9	82.8	85.6	81.2	84.4	73.1	7775	88.8
1996	6709.8	910.0	87.4	83.1	85.0	81.5	83.9	73.9	7587	86.4
1997	6769.9	910.0	88.7	83.5	84.8	81.7	84.9	74.6	7681	87.7
1998	6974.3	910.0	90.0	83.9	87.2	82.1	87.5	75.4	7883	90.0
1999	5836.2	910.0	75.1	83.4	73.1	81.5	73.2	75.3	6544	74.7
2000	4941.1	910.0	75.2	82.9	63.0	80.5	61.8	74.6	5592	63.7
2001	6548.0	910.0	83.6	83.0	81.9	80.6	82.1	75.0	7358	84.0
2002	5972.0	910.0	84.3	83.0	82.7	80.7	74.9	75.0	7357	84.0
2003	5181.2	910.0	66.0	82.2	63.7	79.9	65.0	74.5	5784	66.0
2004	6734.6	910.0	82.6	82.2	81.5	79.9	84.3	74.9	7346	83.6
2005	6918.8	910.0	85.0	82.3	84.6	80.1	86.8	75.4	7513	85.8
2006	6786.7	910.0	86.0	82.5	85.4	80.4	85.1	75.8	7599	86.7
2007	6035.6	910.0	75.8	82.2	74.3	80.1	75.7	75.8	6686	76.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1148			160	
B. Refuelling without a maintenance				42	2	
C. Inspection, maintenance or repair combined with refuelling	926			1066	2	
D. Inspection, maintenance or repair without refuelling				26		
E. Testing of plant systems or components				78	0	
H. Nuclear regulatory requirements					15	
J. Grid failure or grid unavailability						4
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					10	54
Z. Others					11	
Subtotal	926	1148	0	1212	200	58
Total		2074			1470	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		25
12. Reactor I&C Systems		6
13. Reactor Auxiliary Systems		8
14. Safety Systems		14
15. Reactor Cooling Systems		29
16. Steam generation systems		3
31. Turbine and auxiliaries	6	19
32. Feedwater and Main Steam System	1142	12
33. Circulating Water System		5
41. Main Generator Systems		5
42. Electrical Power Supply Systems		5
Total	1148	131

FR-34 BLAYAIS-3

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 910.0 MW(e)
 Design Net Capacity: 910.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7441.7 GW(e).h
 Energy Availability Factor: 90.9%
 Load Factor: 93.4%
 Operating Factor: 91.7%
 Energy Unavailability Factor: 9.1%
 Total Off-line Time: 725 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	705.4	637.8	702.2	631.7	663.8	667.8	681.4	684.0	144.6	543.1	677.3	702.5	7441.7
EAF (%)	99.9	100.0	99.7	93.5	95.9	99.9	99.3	100.0	22.9	78.7	100.0	100.0	90.9
UCF (%)	100.0	100.0	99.7	93.5	95.9	99.9	99.3	100.0	23.5	78.7	100.0	100.0	90.9
LF (%)	104.2	104.3	103.7	96.4	98.0	101.9	100.6	101.0	22.1	80.2	103.4	103.8	93.4
OF (%)	100.0	100.0	99.9	93.6	96.2	100.0	100.0	100.0	23.6	86.6	100.0	100.0	91.7
EUF (%)	0.1	0.0	0.3	6.5	4.1	0.1	0.7	0.0	77.1	21.3	0.0	0.0	9.1
PUF (%)	0.0	0.0	0.3	0.0	0.0	0.1	0.1	0.0	76.5	20.4	0.0	0.0	8.1
UCLF (%)	0.0	0.0	0.0	6.5	4.1	0.0	0.6	0.0	0.0	0.9	0.0	0.0	1.0
XUF (%)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BASE LOAD OPERATION

5. Historical Summary

Date of Construction Start: 01 Apr 1978 Lifetime Generation: 147838.7 GW(e).h
 Date of First Criticality: 29 Jul 1983 Cumulative Energy Availability Factor: 80.4%
 Date of Grid Connection: 17 Aug 1983 Cumulative Load Factor: 76.4%
 Date of Commercial Operation: 14 Nov 1983 Cumulative Unit Capability Factor: 82.4%
 Cumulative Energy Unavailability Factor: 19.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	1164.0	910.0	87.4	87.4	87.4	87.4	87.4	87.4	1273	87.0
1984	5944.0	910.0	80.3	81.4	80.3	81.4	74.4	76.2	7055	80.3
1985	6568.9	910.0	87.0	83.9	86.6	83.8	82.4	79.1	7729	88.2
1986	6504.9	910.0	88.3	85.3	88.1	85.1	81.6	79.9	7759	88.6
1987	4304.7	910.0	93.9	87.4	93.5	87.1	54.0	73.7	5473	62.5
1988	5287.0	910.0	82.8	86.5	81.6	86.1	66.1	72.2	6708	76.4
1989	6086.4	910.0	82.7	85.9	78.5	84.8	76.4	72.9	7292	83.2
1990	4871.2	910.0	64.3	82.9	62.8	81.8	61.1	71.2	5673	64.8
1991	6372.3	910.0	84.6	83.1	84.0	82.0	79.9	72.3	7448	85.0
1992	5967.9	910.0	83.0	83.1	81.8	82.0	74.7	72.6	7220	82.2
1993	6285.3	910.0	87.7	83.5	79.8	81.8	78.8	73.2	7728	88.2
1994	4212.8	910.0	57.8	81.2	57.7	79.6	52.8	71.4	4979	56.8
1995	6739.6	910.0	85.9	81.6	85.4	80.1	84.5	72.4	7525	85.9
1996	6924.1	910.0	87.1	82.0	86.8	80.6	86.6	73.5	7744	88.2
1997	6614.1	910.0	86.4	82.3	86.4	81.0	83.0	74.2	7659	87.4
1998	6970.2	910.0	90.1	82.8	87.8	81.5	87.4	75.1	7954	90.8
1999	5123.0	910.0	66.8	81.9	64.2	80.4	64.3	74.4	5861	66.9
2000	6183.6	910.0	80.3	81.8	78.2	80.3	77.4	74.6	7143	81.3
2001	6707.1	910.0	85.4	82.0	84.2	80.5	84.1	75.1	7540	86.1
2002	6882.0	910.0	87.5	82.2	86.4	80.8	86.3	75.7	7682	87.7
2003	5844.9	910.0	86.5	82.5	73.6	80.4	73.3	75.6	6725	76.8
2004	5822.8	910.0	75.2	82.1	72.5	80.1	72.8	75.4	6699	76.3
2005	5868.1	910.0	80.3	82.0	76.4	79.9	73.6	75.4	6875	78.5
2006	6515.7	910.0	82.8	82.1	81.5	80.0	81.7	75.6	7340	83.8
2007	7441.7	910.0	90.9	82.4	90.9	80.4	93.4	76.4	8035	91.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		74			283	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	651			977	6	
D. Inspection, maintenance or repair without refuelling				28		
E. Testing of plant systems or components				6	0	
H. Nuclear regulatory requirements					31	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					56	15
L. Human factor related					1	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						23
Subtotal	651	74	0	1011	377	38
Total		725			1426	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		14
12. Reactor I&C Systems		13
13. Reactor Auxiliary Systems		39
14. Safety Systems		6
15. Reactor Cooling Systems		12
16. Steam generation systems		65
31. Turbine and auxiliaries		7
32. Feedwater and Main Steam System	74	4
33. Circulating Water System		0
41. Main Generator Systems		44
42. Electrical Power Supply Systems		15
XX. Miscellaneous Systems		0
Total	74	219

FR-35 BLAYAIS-4

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 910.0 MW(e)
 Design Net Capacity: 910.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6607.8 GW(e).h
 Energy Availability Factor: 84.2%
 Load Factor: 82.9%
 Operating Factor: 85.4%
 Energy Unavailability Factor: 15.8%
 Total Off-line Time: 1276 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	658.3	614.1	675.1	643.2	233.9	113.3	629.4	641.4	630.7	456.5	640.5	671.4	6607.8
EAF (%)	98.9	100.0	99.7	99.7	35.3	18.5	93.9	98.9	99.2	69.8	98.4	99.3	84.2
UCF (%)	98.9	100.0	99.7	99.9	35.5	18.5	95.7	99.9	100.0	70.1	98.7	100.0	84.7
LF (%)	97.2	100.4	99.7	98.2	34.5	17.3	93.0	94.7	96.3	67.4	97.8	99.2	82.9
OF (%)	100.0	100.0	99.9	100.0	35.8	22.4	97.4	100.0	100.0	71.5	99.0	100.0	85.4
EUf (%)	1.1	0.0	0.3	0.3	64.7	81.5	6.1	1.1	0.8	30.2	1.6	0.7	15.8
PUF (%)	0.0	0.0	0.2	0.1	64.5	65.7	0.2	0.0	0.0	0.2	0.0	0.0	10.9
UCLF (%)	1.1	0.0	0.0	0.0	0.0	15.7	4.1	0.1	0.0	29.7	1.3	0.0	4.4
XUF (%)	0.0	0.0	0.0	0.2	0.3	0.1	1.8	1.0	0.8	0.4	0.3	0.7	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Apr 1978 Lifetime Generation: 146650.0 GW(e).h
 Date of First Criticality: 01 May 1983 Cumulative Energy Availability Factor: 79.9%
 Date of Grid Connection: 16 May 1983 Cumulative Load Factor: 75.1%
 Date of Commercial Operation: 01 Oct 1983 Cumulative Unit Capability Factor: 82.1%
 Cumulative Energy Unavailability Factor: 20.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	1898.0	910.0	93.5	93.5	93.5	93.5	94.5	94.5	2092	94.7
1984	6012.0	910.0	76.0	79.5	76.0	79.5	75.2	79.1	6780	77.2
1985	5972.6	910.0	78.8	79.2	78.7	79.2	74.9	77.2	7024	80.2
1986	6278.1	910.0	82.5	80.2	81.9	80.0	78.8	77.7	7412	84.6
1987	6104.6	910.0	85.6	81.5	83.9	80.9	76.6	77.4	7437	84.9
1988	4337.0	910.0	71.5	79.6	70.2	78.9	54.3	73.0	5662	64.5
1989	5816.3	910.0	89.4	81.1	87.5	80.2	73.0	73.0	7250	82.8
1990	5912.3	910.0	83.4	81.5	78.2	80.0	74.2	73.2	7347	83.9
1991	5467.7	910.0	73.5	80.5	73.1	79.1	68.6	72.6	6496	74.2
1992	6120.6	910.0	84.1	80.9	83.5	79.6	76.6	73.0	7430	84.6
1993	5096.4	910.0	85.3	81.3	72.9	78.9	63.9	72.2	6854	78.2
1994	5897.1	910.0	82.6	81.4	81.8	79.2	74.0	72.3	7308	83.4
1995	5342.4	910.0	75.2	80.9	71.5	78.6	67.0	71.9	6198	70.8
1996	6719.6	910.0	88.2	81.5	86.9	79.2	84.1	72.8	7761	88.4
1997	6497.2	910.0	89.1	82.0	86.6	79.7	81.5	73.4	7705	88.0
1998	6692.6	910.0	90.3	82.6	87.9	80.3	84.0	74.1	7930	90.5
1999	6161.2	910.0	83.3	82.6	80.2	80.3	77.3	74.3	7369	84.1
2000	5467.5	910.0	75.1	82.2	72.5	79.8	68.4	74.0	6559	74.7
2001	6370.0	910.0	82.4	82.2	82.1	79.9	79.9	74.3	7297	83.3
2002	6462.2	910.0	86.2	82.4	85.1	80.2	81.1	74.6	7623	87.0
2003	5311.1	910.0	72.9	81.9	68.4	79.6	66.6	74.2	6292	71.8
2004	6560.3	910.0	88.3	82.2	84.6	79.9	82.1	74.6	7749	88.2
2005	5454.7	910.0	71.5	81.7	69.6	79.4	68.4	74.3	6357	72.6
2006	6758.4	910.0	88.5	82.0	86.5	79.7	84.8	74.8	7827	89.3
2007	6607.8	910.0	84.7	82.1	84.2	79.9	82.9	75.1	7484	85.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		238			291	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	924			992	35	
D. Inspection, maintenance or repair without refuelling				8	0	
E. Testing of plant systems or components				1	0	
G. Major back-fitting, refurbishment or upgrading activities without refuelling						2
H. Nuclear regulatory requirements		48				
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					13	23
L. Human factor related		33			2	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						6
Z. Others		32			12	
Subtotal	924	351	0	1001	354	31
Total		1275			1386	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		58
13. Reactor Auxiliary Systems		13
15. Reactor Cooling Systems		5
16. Steam generation systems		19
31. Turbine and auxiliaries	7	50
32. Feedwater and Main Steam System	92	4
33. Circulating Water System		10
41. Main Generator Systems		50
42. Electrical Power Supply Systems	139	14
XX. Miscellaneous Systems		0
Total	238	225

FR-13 BUGEY-2**Operator:** EDF (ELECTRICITE DE FRANCE)**Contractor:** FRAM (FRAMATOME)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 910.0 MW(e)
Design Net Capacity: 920.0 MW(e)
Design Discharge Burnup: 33735 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6925.1 GW(e).h
Energy Availability Factor: 87.6%
Load Factor: 86.9%
Operating Factor: 89.9%
Energy Unavailability Factor: 12.4%
Total Off-line Time: 881 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	671.9	547.4	674.1	634.2	665.1	635.9	659.9	203.3	332.4	644.4	640.9	615.6	6925.1
EAF (%)	99.6	89.8	99.7	97.1	98.4	98.2	97.6	30.6	51.4	98.8	98.5	92.1	87.6
UCF (%)	100.0	90.1	100.0	99.2	99.9	99.9	99.9	31.6	51.7	99.7	100.0	92.8	88.7
LF (%)	99.2	89.5	99.6	96.8	98.2	97.0	97.5	30.0	50.7	95.1	97.8	90.9	86.9
OF (%)	100.0	90.8	99.9	100.0	100.0	100.0	100.0	32.5	62.8	100.0	100.0	93.5	89.9
EUF (%)	0.4	10.2	0.3	2.9	1.6	1.8	2.4	69.4	48.6	1.2	1.5	7.9	12.4
PUF (%)	0.0	2.1	0.0	0.3	0.0	0.1	0.1	68.4	44.2	0.0	0.0	0.0	9.7
UCLF (%)	0.0	7.8	0.0	0.5	0.1	0.1	0.1	0.0	4.1	0.3	0.0	7.2	1.6
XUF (%)	0.4	0.3	0.3	2.0	1.5	1.7	2.2	1.0	0.3	0.9	1.5	0.7	1.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Nov 1972	Lifetime Generation:	156360.6 GW(e).h
Date of First Criticality:	20 Apr 1978	Cumulative Energy Availability Factor:	72.1%
Date of Grid Connection:	10 May 1978	Cumulative Load Factor:	67.1%
Date of Commercial Operation:	01 Mar 1979	Cumulative Unit Capability Factor:	74.1%
		Cumulative Energy Unavailability Factor:	27.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	3535.0	925.0	53.2	53.2	53.2	53.2	52.0	52.0	4442	60.5
1980	4460.0	920.0	55.7	54.5	55.7	54.5	55.2	53.7	5271	60.0
1981	5209.6	920.0	65.2	58.3	65.2	58.3	64.6	57.6	6017	68.7
1982	3341.7	920.0	41.6	53.9	41.6	53.9	41.5	53.4	3863	44.1
1983	6725.0	920.0	85.3	60.4	85.3	60.4	83.4	59.6	7689	87.8
1984	5748.0	920.0	87.9	65.1	87.9	65.1	71.1	61.6	6580	74.9
1985	5948.8	920.0	79.7	67.3	76.0	66.7	73.8	63.4	7118	81.3
1986	5945.6	920.0	86.4	69.7	84.5	69.0	73.8	64.7	7515	85.8
1987	3581.1	920.0	53.4	67.9	51.6	67.0	44.4	62.4	4729	54.0
1988	4495.0	920.0	67.0	67.8	63.1	66.6	55.6	61.7	5718	65.1
1989	4700.8	920.0	64.7	67.5	61.1	66.1	58.3	61.4	5721	65.3
1990	4878.7	920.0	69.7	67.7	69.3	66.4	60.5	61.3	6213	70.9
1991	4927.2	920.0	66.7	67.6	64.4	66.2	61.1	61.3	6001	68.5
1992	3918.3	910.0	53.9	66.6	50.2	65.1	49.0	60.4	4781	54.4
1993	4509.9	910.0	99.2	68.8	94.2	67.0	56.6	60.2	5718	65.3
1994	5782.2	910.0	77.7	69.3	76.5	67.6	72.5	60.9	6811	77.8
1995	6045.7	910.0	79.6	70.0	78.1	68.2	75.8	61.8	7051	80.5
1996	5533.9	910.0	78.7	70.4	75.4	68.6	69.2	62.2	6863	78.1
1997	5477.7	910.0	84.4	71.2	81.0	69.3	68.7	62.6	6815	77.8
1998	5379.4	910.0	77.6	71.5	72.9	69.5	67.5	62.8	6605	75.4
1999	5960.3	910.0	78.9	71.9	77.5	69.9	74.8	63.4	7050	80.5
2000	5183.5	910.0	68.5	71.7	66.3	69.7	64.8	63.5	6025	68.6
2001	5685.9	910.0	72.3	71.7	72.2	69.8	71.3	63.8	6493	74.1
2002	5542.3	910.0	70.2	71.7	69.9	69.8	69.5	64.0	6212	70.9
2003	5521.7	910.0	74.8	71.8	71.0	69.9	69.3	64.2	6579	75.1
2004	7593.4	910.0	97.1	72.8	96.0	70.9	95.0	65.4	8571	97.6
2005	6373.9	910.0	86.7	73.3	81.7	71.3	80.0	66.0	7607	86.8
2006	6125.7	910.0	80.9	73.6	79.2	71.5	76.9	66.4	7158	81.7
2007	6925.1	910.0	88.7	74.1	87.6	72.1	86.9	67.1	7880	89.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		69			551	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	744			1161	44	
D. Inspection, maintenance or repair without refuelling				125		
E. Testing of plant systems or components	10			11	0	
H. Nuclear regulatory requirements		7		43		
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			4	3	54	15
L. Human factor related		46			12	0
Z. Others					10	
Subtotal	754	122	4	1343	672	15
Total		880			2030	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1978 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		178
12. Reactor I&C Systems		22
13. Reactor Auxiliary Systems	5	10
14. Safety Systems		69
15. Reactor Cooling Systems		35
16. Steam generation systems		17
21. Fuel Handling and Storage Facilities		64
31. Turbine and auxiliaries	9	24
32. Feedwater and Main Steam System	4	25
33. Circulating Water System		1
35. All other I&C Systems		0
41. Main Generator Systems	39	71
42. Electrical Power Supply Systems		5
XX. Miscellaneous Systems	12	0
Total	69	521

FR-14 BUGEY-3

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 910.0 MW(e)
 Design Net Capacity: 920.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7277.8 GW(e).h
 Energy Availability Factor: 91.4%
 Load Factor: 91.3%
 Operating Factor: 94.3%
 Energy Unavailability Factor: 8.6%
 Total Off-line Time: 502 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	676.4	612.4	676.1	620.7	598.9	640.1	660.8	657.3	636.5	666.8	554.6	277.2	7277.8
EAF (%)	99.9	99.9	99.9	94.8	88.6	97.8	97.6	97.1	97.1	98.4	84.9	41.7	91.4
UCF (%)	100.0	100.0	100.0	96.2	90.0	100.0	100.0	100.0	100.0	100.0	89.5	46.7	93.4
LF (%)	99.9	100.1	99.9	94.9	88.5	97.7	97.6	97.1	97.1	98.4	84.6	40.9	91.3
OF (%)	100.0	100.0	99.9	96.7	93.7	100.0	100.0	100.0	100.0	100.0	91.9	50.0	94.3
EUF (%)	0.1	0.1	0.1	5.2	11.4	2.2	2.4	2.9	2.9	1.6	15.1	58.3	8.6
PUF (%)	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	32.1	2.8
UCLF (%)	0.0	0.0	0.0	3.8	9.0	0.0	0.0	0.0	0.0	0.0	10.5	21.1	3.7
XUF (%)	0.1	0.1	0.1	1.4	1.3	2.2	2.4	2.9	2.8	1.6	4.6	5.0	2.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

STEAM GENERATOR PRESSURE LOSS

5. Historical Summary

Date of Construction Start: 01 Sep 1973
Date of First Criticality: 31 Aug 1978
Date of Grid Connection: 21 Sep 1978
Date of Commercial Operation: 01 Mar 1979

Lifetime Generation: 156604.6 GW(e).h
Cumulative Energy Availability Factor: 73.3%
Cumulative Load Factor: 67.5%
Cumulative Unit Capability Factor: 75.4%
Cumulative Energy Unavailability Factor: 26.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	2744.0	925.0	39.9	39.9	39.9	39.9	40.4	40.4	3308	45.0
1980	5960.0	920.0	74.7	58.8	74.7	58.8	73.8	58.5	6951	79.1
1981	4849.6	920.0	61.0	59.6	61.0	59.6	60.2	59.1	5646	64.5
1982	6002.2	920.0	78.9	64.6	78.9	64.6	74.5	63.1	7661	87.5
1983	5525.0	920.0	74.0	66.5	74.0	66.5	68.6	64.2	6556	74.8
1984	5793.0	920.0	78.0	68.5	78.0	68.5	71.7	65.5	6905	78.6
1985	4571.1	920.0	58.7	67.1	57.2	66.8	56.7	64.2	5235	59.8
1986	6558.1	920.0	87.7	69.7	87.1	69.4	81.4	66.4	7634	87.1
1987	5482.5	920.0	78.4	70.7	76.4	70.2	68.0	66.6	6637	75.8
1988	3812.0	920.0	64.7	70.1	62.4	69.4	47.2	64.6	4935	56.2
1989	4914.3	920.0	88.7	71.8	87.4	71.1	61.0	64.3	6467	73.8
1990	4538.6	920.0	68.0	71.5	62.9	70.4	56.3	63.6	5474	62.5
1991	3442.8	920.0	55.7	70.2	51.7	68.9	42.7	62.0	4168	47.6
1992	2490.0	910.0	32.5	67.5	32.2	66.3	31.2	59.8	2879	32.8
1993	5954.4	910.0	80.2	68.4	76.1	67.0	74.7	60.8	7117	81.2
1994	4717.7	910.0	70.0	68.5	65.2	66.9	59.2	60.7	5872	67.0
1995	5535.7	910.0	95.9	70.1	95.2	68.5	69.4	61.2	6564	74.9
1996	5652.9	910.0	78.7	70.6	76.4	69.0	70.7	61.7	7012	79.8
1997	5596.6	910.0	75.0	70.8	74.9	69.3	70.2	62.2	6561	74.9
1998	6680.4	910.0	89.1	71.7	89.0	70.3	83.8	63.2	7875	89.9
1999	5786.6	910.0	77.6	72.0	77.3	70.6	72.6	63.7	7001	79.9
2000	5745.1	910.0	75.7	72.2	74.7	70.8	71.9	64.1	6765	77.0
2001	6230.6	910.0	81.8	72.6	81.2	71.2	78.2	64.7	7129	81.4
2002	4634.7	880.0	65.3	72.3	62.7	70.9	60.1	64.5	5654	64.5
2003	6646.1	910.0	97.2	73.3	85.2	71.5	83.4	65.2	7924	90.5
2004	6447.3	910.0	88.2	73.9	87.9	72.1	80.7	65.8	7461	84.9
2005	5805.4	910.0	82.3	74.2	76.8	72.3	72.8	66.1	7017	80.1
2006	6563.5	910.0	89.1	74.7	83.9	72.7	82.3	66.7	7624	87.0
2007	7277.8	910.0	93.4	75.4	91.4	73.3	91.3	67.5	8258	94.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		235			516	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	238			993	42	
D. Inspection, maintenance or repair without refuelling				77		
E. Testing of plant systems or components	7			48	1	
H. Nuclear regulatory requirements					0	3
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					65	59
L. Human factor related		41			2	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						20
Z. Others					3	
Subtotal	245	276	0	1118	633	82
Total		521			1833	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1978 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		215
12. Reactor I&C Systems	3	7
13. Reactor Auxiliary Systems		15
14. Safety Systems		22
15. Reactor Cooling Systems		43
16. Steam generation systems		22
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries	66	39
32. Feedwater and Main Steam System	127	21
33. Circulating Water System		1
41. Main Generator Systems		104
42. Electrical Power Supply Systems		16
XX. Miscellaneous Systems	39	
Total	235	505

FR-15 BUGEY-4**Operator:** EDF (ELECTRICITE DE FRANCE)**Contractor:** FRAM (FRAMATOME)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 880.0 MW(e)
Design Net Capacity: 900.0 MW(e)
Design Discharge Burnup: 33735 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3586.2 GW(e).h
Energy Availability Factor: 46.8%
Load Factor: 46.5%
Operating Factor: 48.1%
Energy Unavailability Factor: 53.2%
Total Off-line Time: 4543 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	465.7	621.3	613.2	620.2	625.0	640.7	3586.2
EAF (%)	0.0	0.0	0.1	0.0	0.0	0.0	72.0	95.0	97.1	94.4	98.9	99.4	46.8
UCF (%)	0.0	0.0	0.1	0.0	0.0	0.0	72.3	96.8	98.5	94.8	99.7	99.9	47.2
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	71.1	94.9	96.8	94.7	98.6	97.9	46.5
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	80.2	97.4	100.0	95.6	100.0	100.0	48.1
EUF (%)	100.0	100.0	99.9	100.0	100.0	100.0	28.0	5.0	2.9	5.6	1.1	0.6	53.2
PUF (%)	100.0	100.0	99.9	100.0	37.2	0.0	7.5	0.5	0.1	3.8	0.0	0.0	37.0
UCLF (%)	0.0	0.0	0.0	0.0	62.8	100.0	20.2	2.7	1.5	1.3	0.3	0.1	15.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.8	1.4	0.5	0.8	0.5	0.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

STEAM GENERATOR PRESSURE LOSS

5. Historical Summary

Date of Construction Start:	01 Jun 1974	Lifetime Generation:	148923.2 GW(e).h
Date of First Criticality:	17 Feb 1979	Cumulative Energy Availability Factor:	72.4%
Date of Grid Connection:	08 Mar 1979	Cumulative Load Factor:	66.7%
Date of Commercial Operation:	01 Jul 1979	Cumulative Unit Capability Factor:	74.7%
		Cumulative Energy Unavailability Factor:	27.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	2323.0	900.0	64.6	64.6	64.6	64.6	58.4	58.4	2854	64.6
1980	5063.0	900.0	65.8	65.4	65.8	65.4	64.0	62.2	5983	68.1
1981	5671.9	900.0	75.6	69.5	75.6	69.5	71.9	66.1	6834	78.0
1982	5474.9	900.0	69.8	69.6	69.8	69.6	69.4	67.0	6276	71.6
1983	6329.0	900.0	83.3	72.6	83.2	72.6	80.3	70.0	7389	84.3
1984	5882.0	900.0	75.8	73.2	75.8	73.2	74.4	70.8	6896	78.5
1985	6224.4	900.0	87.2	75.3	86.7	75.3	78.9	72.0	7696	87.9
1986	5312.7	900.0	78.7	75.8	76.1	75.4	67.4	71.4	6622	75.6
1987	4670.9	900.0	79.8	76.3	78.2	75.7	59.2	70.0	6180	70.5
1988	3323.0	900.0	67.3	75.3	51.5	73.1	42.0	67.0	4524	51.5
1989	5541.3	900.0	76.7	75.5	76.2	73.4	70.3	67.3	6846	78.2
1990	3186.6	880.0	56.7	73.9	53.5	71.7	41.3	65.1	4312	49.2
1991	4984.9	880.0	71.8	73.7	69.3	71.6	64.7	65.1	6317	72.1
1992	1649.1	880.0	22.2	69.9	22.2	68.0	21.3	61.9	2012	22.9
1993	5748.6	880.0	82.2	70.8	74.2	68.4	74.6	62.8	7506	85.7
1994	5209.3	880.0	83.5	71.6	82.2	69.3	67.6	63.1	6619	75.6
1995	3989.9	880.0	64.3	71.1	59.1	68.7	51.8	62.4	4843	55.3
1996	4188.1	880.0	62.6	70.7	62.4	68.3	54.2	61.9	5333	60.7
1997	5652.5	880.0	83.6	71.3	80.7	69.0	73.3	62.5	7420	84.7
1998	6304.0	880.0	88.3	72.2	86.3	69.8	81.8	63.5	7791	88.9
1999	5591.3	880.0	81.5	72.7	77.5	70.2	72.5	63.9	7231	82.5
2000	5988.0	880.0	85.1	73.2	82.6	70.8	77.5	64.6	7544	85.9
2001	4746.0	880.0	65.8	72.9	63.4	70.5	61.6	64.4	5921	67.6
2002	5590.8	880.0	83.5	73.3	83.4	71.0	72.5	64.8	7130	81.4
2003	6645.3	880.0	95.6	74.2	94.2	71.9	86.2	65.6	8192	93.5
2004	6098.3	880.0	83.0	74.6	81.3	72.3	78.9	66.2	7367	83.9
2005	6073.2	880.0	84.0	74.9	80.3	72.6	78.8	66.6	7672	87.6
2006	6846.7	880.0	94.6	75.6	93.1	73.3	88.8	67.4	8341	95.2
2007	3586.2	880.0	47.2	74.7	46.8	72.4	46.5	66.7	4217	48.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1979 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1189			596	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	3156			1066	22	
D. Inspection, maintenance or repair without refuelling				109		
E. Testing of plant systems or components	25			10	0	
H. Nuclear regulatory requirements						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					9	32
L. Human factor related		130			1	
Z. Others		43			2	
Subtotal	3181	1362	0	1185	638	33
Total		4543			1856	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1979 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		282
12. Reactor I&C Systems		22
13. Reactor Auxiliary Systems		4
14. Safety Systems		11
15. Reactor Cooling Systems		25
16. Steam generation systems	977	32
17. Safety I&C Systems (excluding reactor I&C)		0
21. Fuel Handling and Storage Facilities		2
31. Turbine and auxiliaries		34
32. Feedwater and Main Steam System	9	10
33. Circulating Water System		3
35. All other I&C Systems		4
41. Main Generator Systems	203	32
42. Electrical Power Supply Systems		127
XX. Miscellaneous Systems		0
Total	1189	588

FR-16 BUGEY-5

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 880.0 MW(e)
 Design Net Capacity: 900.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5752.9 GW(e).h
 Energy Availability Factor: 75.1%
 Load Factor: 74.6%
 Operating Factor: 80.5%
 Energy Unavailability Factor: 24.9%
 Total Off-line Time: 1709 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	621.5	519.6	649.4	580.4	566.6	136.3	0.0	292.3	591.5	599.2	595.5	600.7	5752.9
EAF (%)	95.1	88.0	99.2	91.6	86.5	21.9	0.0	45.8	93.5	91.6	94.6	94.1	75.1
UCF (%)	95.9	88.8	100.0	94.5	96.5	26.7	0.0	46.3	95.0	94.0	96.9	94.9	77.4
LF (%)	94.9	87.9	99.2	91.6	86.5	21.5	0.0	44.6	93.3	91.5	94.0	91.7	74.6
OF (%)	96.1	99.0	99.9	100.0	100.0	26.9	0.0	59.4	96.9	95.7	97.8	96.0	80.5
EUF (%)	4.9	12.0	0.8	8.4	13.5	78.1	100.0	54.2	6.5	8.4	5.4	5.9	24.9
PUF (%)	0.0	0.1	0.0	0.0	0.0	73.3	90.6	13.2	0.6	0.0	0.0	0.0	14.9
UCLF (%)	4.0	11.2	0.0	5.5	3.5	0.0	9.4	40.6	4.4	5.9	3.1	5.1	7.7
XUF (%)	0.9	0.7	0.7	2.9	10.0	4.8	0.0	0.5	1.5	2.4	2.3	0.8	2.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Jul 1974	Lifetime Generation:	151996.0 GW(e).h
Date of First Criticality:	15 Jul 1979	Cumulative Energy Availability Factor:	75.3%
Date of Grid Connection:	31 Jul 1979	Cumulative Load Factor:	69.3%
Date of Commercial Operation:	03 Jan 1980	Cumulative Unit Capability Factor:	77.7%
		Cumulative Energy Unavailability Factor:	24.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	6589.0	900.0	84.5	84.5	84.5	84.5	83.3	83.3	8050	91.6
1981	4869.3	900.0	62.7	73.6	62.7	73.6	61.8	72.6	6061	69.2
1982	5738.5	900.0	76.4	74.5	76.4	74.5	72.8	72.6	6956	79.4
1983	5578.0	900.0	73.9	74.4	73.9	74.4	70.8	72.2	6649	75.9
1984	5778.0	900.0	74.1	74.3	74.1	74.3	73.1	72.4	6884	78.4
1985	6079.7	900.0	84.6	76.0	80.5	75.4	77.1	73.1	7314	83.5
1986	5465.5	900.0	75.7	76.0	75.5	75.4	69.3	72.6	6493	74.1
1987	5015.9	900.0	67.8	75.0	66.6	74.3	63.6	71.5	6044	69.0
1988	5466.0	900.0	89.7	76.6	84.6	75.4	69.1	71.2	6465	73.6
1989	4758.0	900.0	68.8	75.8	64.7	74.4	60.3	70.1	6185	70.6
1990	5586.0	880.0	80.7	76.3	74.9	74.4	72.5	70.3	7156	81.7
1991	3358.4	880.0	47.9	73.9	44.0	71.9	43.6	68.2	4258	48.6
1992	4035.0	880.0	56.4	72.6	52.5	70.5	52.2	66.9	5003	57.0
1993	4416.6	880.0	60.5	71.8	57.4	69.5	57.3	66.3	5329	60.8
1994	4487.3	880.0	85.9	72.7	85.7	70.6	58.2	65.7	6311	72.0
1995	5582.8	880.0	79.9	73.1	78.0	71.1	72.4	66.1	7060	80.6
1996	5361.4	880.0	79.0	73.5	77.5	71.4	69.4	66.3	6844	77.9
1997	5592.9	880.0	88.0	74.3	84.3	72.1	72.6	66.7	7302	83.4
1998	5320.4	880.0	83.9	74.8	80.5	72.6	69.0	66.8	6844	78.1
1999	6108.8	880.0	86.8	75.4	82.7	73.1	79.2	67.4	7679	87.7
2000	5403.2	880.0	77.3	75.5	74.6	73.1	69.9	67.5	6889	78.4
2001	4358.6	880.0	77.9	75.6	72.1	73.1	56.5	67.0	5604	64.0
2002	6146.9	900.0	91.2	76.3	91.2	73.9	78.0	67.5	7925	90.5
2003	5711.1	880.0	83.5	76.6	80.0	74.1	74.1	67.8	7220	82.4
2004	5256.1	880.0	72.7	76.4	71.4	74.0	68.0	67.8	6438	73.3
2005	7022.8	880.0	98.9	77.3	97.5	74.9	91.1	68.7	8573	97.9
2006	6118.1	880.0	88.5	77.7	86.6	75.4	79.4	69.1	7765	88.6
2007	5752.9	880.0	77.4	77.7	75.1	75.3	74.6	69.3	7051	80.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		184			354	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	1200			1259	13	
D. Inspection, maintenance or repair without refuelling				23		
E. Testing of plant systems or components	30			8	2	
H. Nuclear regulatory requirements					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					54	39
L. Human factor related		298			0	0
P. Fire						5
Z. Others					11	
Subtotal	1230	482	0	1290	439	44
Total		1712			1773	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		25
12. Reactor I&C Systems	67	50
13. Reactor Auxiliary Systems		8
14. Safety Systems		4
15. Reactor Cooling Systems		29
16. Steam generation systems		153
21. Fuel Handling and Storage Facilities	11	
31. Turbine and auxiliaries	38	38
32. Feedwater and Main Steam System	35	6
33. Circulating Water System	33	
41. Main Generator Systems		17
42. Electrical Power Supply Systems		9
XX. Miscellaneous Systems		2
Total	184	341

FR-50 CATTENOM-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1300.0 MW(e)
 Design Net Capacity: 1300.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9696.2 GW(e).h
 Energy Availability Factor: 92.4%
 Load Factor: 85.1%
 Operating Factor: 96.2%
 Energy Unavailability Factor: 7.6%
 Total Off-line Time: 334 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	807.1	784.9	652.3	820.3	835.8	744.0	857.6	791.8	799.7	880.2	863.5	859.1	9696.2
EAF (%)	98.2	100.0	75.6	99.0	97.1	95.6	93.9	92.9	85.7	90.9	92.3	88.8	92.4
UCF (%)	98.4	100.0	75.6	99.6	97.9	96.4	95.5	94.6	87.1	91.9	92.7	98.4	94.0
LF (%)	83.4	89.8	67.4	87.8	86.4	79.5	88.7	81.9	85.4	90.9	92.3	88.8	85.1
OF (%)	100.0	100.0	75.7	100.1	100.0	96.8	96.1	91.3	94.9	100.0	100.0	100.0	96.2
EUF (%)	1.8	0.0	24.4	1.0	2.9	4.4	6.1	7.1	14.3	9.1	7.7	11.2	7.6
PUF (%)	1.6	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
UCLF (%)	0.0	0.0	24.3	0.4	2.1	3.4	4.5	5.4	12.9	8.1	7.4	1.6	5.9
XUF (%)	0.2	0.0	0.1	0.6	0.8	0.8	1.6	1.7	1.4	1.0	0.4	9.6	1.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 29 Oct 1979 Lifetime Generation: 163017.8 GW(e).h
 Date of First Criticality: 24 Oct 1986 Cumulative Energy Availability Factor: 72.7%
 Date of Grid Connection: 13 Nov 1986 Cumulative Load Factor: 68.3%
 Date of Commercial Operation: 01 Apr 1987 Cumulative Unit Capability Factor: 73.9%
 Cumulative Energy Unavailability Factor: 27.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	5472.0	1265.0	69.5	69.5	68.8	68.8	65.5	65.5	4514	68.4
1988	5283.0	1300.0	47.8	57.0	47.4	56.4	46.3	54.4	4369	49.7
1989	6802.4	1300.0	60.3	58.2	60.3	57.8	59.7	56.4	5548	63.3
1990	7781.9	1300.0	75.7	62.9	75.3	62.5	68.3	59.6	6710	76.6
1991	1509.3	1300.0	13.5	52.4	13.5	52.2	13.3	49.8	1336	15.3
1992	7933.3	1300.0	71.5	55.8	71.0	55.5	69.5	53.2	6595	75.1
1993	6956.6	1300.0	63.5	56.9	61.5	56.3	61.1	54.4	5608	64.0
1994	6775.4	1300.0	64.1	57.8	64.0	57.3	59.5	55.0	6006	68.6
1995	6634.3	1300.0	59.8	58.1	59.5	57.6	58.3	55.4	6346	72.4
1996	9539.2	1300.0	87.5	61.1	87.3	60.6	83.5	58.3	7783	88.6
1997	8688.9	1300.0	84.1	63.2	81.4	62.6	76.3	60.0	7374	84.2
1998	9365.8	1300.0	85.9	65.2	85.7	64.5	82.2	61.9	7644	87.3
1999	8273.0	1300.0	79.8	66.3	76.3	65.5	72.6	62.7	7028	80.2
2000	8053.8	1300.0	81.0	67.4	78.1	66.4	70.5	63.3	6873	78.2
2001	9220.2	1300.0	96.4	69.3	96.4	68.4	81.0	64.5	8094	92.4
2002	8270.2	1300.0	79.4	70.0	79.2	69.1	72.6	65.0	7011	80.0
2003	8531.0	1300.0	80.4	70.6	78.4	69.7	74.9	65.6	7150	81.6
2004	9764.2	1300.0	96.9	72.1	96.4	71.2	85.5	66.7	8583	97.7
2005	9323.8	1300.0	89.1	73.0	83.2	71.8	81.9	67.5	7919	90.4
2006	7449.0	1300.0	71.5	72.9	68.6	71.7	65.4	67.4	6480	74.0
2007	9696.2	1300.0	94.0	73.9	92.4	72.7	85.1	68.3	8426	96.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		232			818	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling				946	16	
D. Inspection, maintenance or repair without refuelling				49	8	
E. Testing of plant systems or components				69		
H. Nuclear regulatory requirements					7	
J. Grid failure or grid unavailability			5			1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					68	
L. Human factor related		37			2	
Z. Others		1				
Subtotal	0	270	5	1064	924	1
Total		275			1989	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		17
12. Reactor I&C Systems		40
13. Reactor Auxiliary Systems	180	29
14. Safety Systems		9
15. Reactor Cooling Systems		93
16. Steam generation systems		38
17. Safety I&C Systems (excluding reactor I&C)		1
21. Fuel Handling and Storage Facilities		4
31. Turbine and auxiliaries		39
32. Feedwater and Main Steam System		94
33. Circulating Water System		21
41. Main Generator Systems		388
42. Electrical Power Supply Systems		15
XX. Miscellaneous Systems		5
Total	180	793

FR-53 CATTENOM-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1300.0 MW(e)
 Design Net Capacity: 1300.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9526.5 GW(e).h
 Energy Availability Factor: 85.7%
 Load Factor: 83.7%
 Operating Factor: 88.6%
 Energy Unavailability Factor: 14.3%
 Total Off-line Time: 1002 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	649.6	0.0	602.1	902.4	915.2	874.0	931.6	939.1	909.4	934.0	929.6	939.4	9526.5
EAF (%)	67.5	0.0	63.4	99.2	99.1	99.0	98.6	99.0	99.2	97.7	99.4	99.9	85.7
UCF (%)	83.7	0.0	64.2	99.8	99.7	100.0	99.9	100.0	100.0	99.9	99.9	100.0	87.8
LF (%)	67.2	0.0	62.3	96.5	94.6	93.4	96.3	97.1	97.2	96.4	99.3	97.1	83.7
OF (%)	84.0	0.0	71.5	100.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.6
EUF (%)	32.5	100.0	36.6	0.8	0.9	1.0	1.4	1.0	0.8	2.3	0.6	0.1	14.3
PUF (%)	16.3	100.0	35.8	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	12.1
UCLF (%)	0.0	0.0	0.1	0.2	0.2	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1
XUF (%)	16.1	0.0	0.8	0.5	0.6	0.9	1.3	1.0	0.8	2.2	0.5	0.1	2.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 28 Jul 1980 Lifetime Generation: 167041.0 GW(e).h
 Date of First Criticality: 07 Aug 1987 Cumulative Energy Availability Factor: 78.3%
 Date of Grid Connection: 17 Sep 1987 Cumulative Load Factor: 72.8%
 Date of Commercial Operation: 01 Feb 1988 Cumulative Unit Capability Factor: 80.3%
 Cumulative Energy Unavailability Factor: 21.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	7457.0	1300.0	91.0	91.0	90.8	90.8	71.3	71.3	6588	81.9
1989	1765.5	1300.0	16.5	52.2	15.5	51.5	15.5	42.2	1452	16.6
1990	8137.6	1300.0	83.0	62.7	82.7	62.2	71.5	52.2	6670	76.1
1991	7543.1	1300.0	71.7	65.0	68.2	63.7	66.2	55.8	6472	73.9
1992	8134.3	1300.0	75.6	67.2	72.4	65.5	71.2	59.0	6752	76.9
1993	8627.0	1300.0	78.8	69.2	76.2	67.3	75.8	61.8	6990	79.8
1994	8526.3	1300.0	80.5	70.8	77.7	68.8	74.9	63.7	7158	81.7
1995	8603.7	1300.0	79.9	71.9	78.3	70.0	75.6	65.2	7138	81.5
1996	9018.1	1300.0	99.6	75.1	98.1	73.2	79.0	66.7	7804	88.8
1997	8487.4	1300.0	84.4	76.0	82.2	74.1	74.5	67.5	7503	85.7
1998	7259.5	1300.0	69.0	75.3	68.0	73.5	63.7	67.2	6144	70.1
1999	9367.5	1300.0	90.2	76.6	87.3	74.7	82.3	68.4	7781	88.8
2000	9164.3	1300.0	88.6	77.5	88.6	75.7	80.3	69.4	7868	89.6
2001	8649.0	1300.0	79.4	77.7	77.5	75.9	75.9	69.8	7033	80.3
2002	8288.0	1300.0	76.9	77.6	76.9	75.9	72.8	70.0	6918	79.0
2003	10197.5	1300.0	99.3	79.0	93.5	77.0	89.5	71.3	8217	93.8
2004	7368.2	1300.0	68.7	78.4	66.8	76.4	64.5	70.9	6183	70.4
2005	9247.8	1300.0	87.9	78.9	84.7	76.9	81.2	71.4	7845	89.6
2006	9870.3	1300.0	98.0	79.9	96.1	77.9	86.7	72.2	8626	98.5
2007	9526.5	1300.0	87.8	80.3	85.7	78.3	83.7	72.8	7758	88.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					493	
B. Refuelling without a maintenance					11	
C. Inspection, maintenance or repair combined with refuelling	996			876	8	
D. Inspection, maintenance or repair without refuelling				57	21	
E. Testing of plant systems or components	0			58	0	2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					12	24
L. Human factor related					4	
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)			6			
Z. Others					21	
Subtotal	996	0	6	991	570	26
Total	1002			1587		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		13
12. Reactor I&C Systems		6
13. Reactor Auxiliary Systems		9
14. Safety Systems		33
15. Reactor Cooling Systems		225
16. Steam generation systems		93
31. Turbine and auxiliaries		16
32. Feedwater and Main Steam System		17
33. Circulating Water System		2
35. All other I&C Systems		3
41. Main Generator Systems		2
42. Electrical Power Supply Systems		26
XX. Miscellaneous Systems		6
Total	0	451

FR-60 CATTENOM-3

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1300.0 MW(e)
 Design Net Capacity: 1300.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9500.6 GW(e).h
 Energy Availability Factor: 98.5%
 Load Factor: 83.4%
 Operating Factor: 97.7%
 Energy Unavailability Factor: 1.5%
 Total Off-line Time: 201 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	869.2	751.5	823.3	790.8	671.8	630.3	765.0	720.5	843.1	886.9	840.3	907.8	9500.6
EAF (%)	98.4	99.1	99.1	99.3	95.7	97.6	99.1	99.4	98.7	99.3	96.0	99.7	98.5
UCF (%)	99.3	99.3	99.2	99.9	96.3	98.1	99.6	100.0	99.7	100.0	100.0	100.0	99.3
LF (%)	89.9	86.0	85.1	84.6	69.5	67.3	79.1	74.5	90.1	91.6	89.8	93.9	83.4
OF (%)	100.0	100.0	99.9	100.1	92.7	91.8	96.2	91.9	100.0	100.0	100.0	100.0	97.7
EUF (%)	1.6	0.9	0.9	0.7	4.3	2.4	0.9	0.6	1.3	0.7	4.0	0.3	1.5
PUF (%)	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
UCLF (%)	0.7	0.6	0.1	0.1	3.7	1.9	0.4	0.0	0.3	0.1	0.0	0.1	0.7
XUF (%)	0.8	0.2	0.1	0.6	0.5	0.5	0.5	0.6	1.0	0.7	3.9	0.2	0.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 15 Jun 1982 Lifetime Generation: 146451.2 GW(e).h
 Date of First Criticality: 16 Feb 1990 Cumulative Energy Availability Factor: 80.8%
 Date of Grid Connection: 06 Jul 1990 Cumulative Load Factor: 74.9%
 Date of Commercial Operation: 01 Feb 1991 Cumulative Unit Capability Factor: 82.9%
 Cumulative Energy Unavailability Factor: 19.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1991	8931.1	1300.0	89.6	89.6	88.2	88.2	85.7	85.7	7255	90.5
1992	7145.0	1300.0	67.0	77.8	65.6	76.4	62.6	73.6	5903	67.2
1993	8035.1	1300.0	81.2	78.9	75.9	76.2	70.6	72.6	6858	78.3
1994	8613.3	1300.0	85.7	80.7	84.4	78.3	75.6	73.3	7464	85.2
1995	8344.3	1300.0	82.2	81.0	78.9	78.4	73.3	73.3	7269	83.0
1996	8264.7	1300.0	80.6	80.9	77.3	78.2	72.4	73.2	7184	81.8
1997	9504.1	1300.0	94.5	82.9	93.2	80.4	83.5	74.7	8097	92.4
1998	8054.9	1300.0	83.5	83.0	80.2	80.4	70.7	74.2	7175	81.9
1999	8237.0	1300.0	83.5	83.0	79.7	80.3	72.3	74.0	7169	81.8
2000	8933.5	1300.0	99.1	84.6	98.7	82.2	78.2	74.4	7984	90.9
2001	3171.5	1300.0	29.8	79.6	29.7	77.4	27.8	70.1	2739	31.3
2002	9402.5	1300.0	83.6	80.0	82.5	77.8	82.6	71.2	7443	85.0
2003	11254.0	1300.0	99.3	81.5	98.4	79.4	98.8	73.3	8715	99.5
2004	9162.7	1300.0	81.4	81.5	80.3	79.5	80.2	73.8	7274	82.8
2005	9757.0	1300.0	89.2	82.0	86.7	79.9	85.7	74.6	7944	90.7
2006	8045.3	1300.0	79.9	81.8	76.5	79.7	70.6	74.4	7088	80.9
2007	9500.6	1300.0	99.3	82.9	98.5	80.8	83.4	74.9	8559	97.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		12			207	3
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling				821	19	
D. Inspection, maintenance or repair without refuelling				66		
E. Testing of plant systems or components				16		
H. Nuclear regulatory requirements					115	
J. Grid failure or grid unavailability			60			
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			117		38	3
L. Human factor related		26			4	
Z. Others					1	
Subtotal	0	38	177	903	384	6
Total		215			1293	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		35
13. Reactor Auxiliary Systems		56
14. Safety Systems		16
15. Reactor Cooling Systems		12
16. Steam generation systems		12
21. Fuel Handling and Storage Facilities		9
31. Turbine and auxiliaries		24
32. Feedwater and Main Steam System		5
41. Main Generator Systems		10
42. Electrical Power Supply Systems	12	6
XX. Miscellaneous Systems		3
Total	12	188

FR-65 CATTENOM-4

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1300.0 MW(e)
 Design Net Capacity: 1300.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8562.2 GW(e).h
 Energy Availability Factor: 77.1%
 Load Factor: 75.2%
 Operating Factor: 79.9%
 Energy Unavailability Factor: 22.9%
 Total Off-line Time: 1761 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	932.8	860.6	951.5	759.7	287.0	0.0	198.1	918.1	896.7	938.0	890.0	929.8	8562.2
EAF (%)	98.8	99.5	99.4	81.4	30.3	0.0	22.4	98.5	99.0	98.8	99.0	99.6	77.1
UCF (%)	99.1	99.5	99.5	87.6	34.8	0.0	22.7	99.9	99.7	100.0	99.7	99.7	78.4
LF (%)	96.4	98.5	98.4	81.3	29.7	0.0	20.5	94.9	95.8	96.8	95.1	96.1	75.2
OF (%)	100.0	100.0	99.9	93.7	35.8	0.0	30.5	100.0	100.0	100.0	100.0	100.0	79.9
EUF (%)	1.2	0.5	0.6	18.6	69.7	100.0	77.6	1.5	1.0	1.2	1.0	0.4	22.9
PUF (%)	0.0	0.0	0.1	0.0	64.6	92.3	7.8	0.0	0.0	0.0	0.0	0.3	13.8
UCLF (%)	0.8	0.5	0.5	12.4	0.5	7.8	69.5	0.1	0.2	0.0	0.2	0.0	7.8
XUF (%)	0.3	0.0	0.1	6.2	4.5	0.0	0.3	1.4	0.7	1.2	0.7	0.1	1.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 28 Sep 1983 Lifetime Generation: 144189.6 GW(e).h
 Date of First Criticality: 04 May 1991 Cumulative Energy Availability Factor: 83.6%
 Date of Grid Connection: 27 May 1991 Cumulative Load Factor: 78.0%
 Date of Commercial Operation: 01 Jan 1992 Cumulative Unit Capability Factor: 85.3%
 Cumulative Energy Unavailability Factor: 16.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1992	9356.0	1300.0	88.0	88.0	85.8	85.8	81.9	81.9	7649	87.1
1993	7736.4	1300.0	79.1	83.6	78.0	81.9	67.9	74.9	6251	71.4
1994	7828.8	1300.0	81.9	83.0	80.4	81.4	68.7	72.9	6866	78.4
1995	8942.4	1300.0	85.5	83.6	82.8	81.8	78.5	74.3	7563	86.3
1996	8897.6	1300.0	82.6	83.4	81.3	81.7	77.9	75.0	7399	84.2
1997	8690.5	1300.0	82.6	83.3	79.3	81.3	76.3	75.2	7382	84.3
1998	10000.1	1300.0	96.1	85.1	94.5	83.2	87.8	77.0	8476	96.8
1999	8131.9	1300.0	82.9	84.8	80.8	82.9	71.4	76.3	7164	81.8
2000	9139.0	1300.0	86.6	85.0	85.1	83.1	80.0	76.7	7692	87.6
2001	8593.2	1300.0	86.6	85.2	84.8	83.3	75.5	76.6	7375	84.2
2002	10598.8	1300.0	95.3	86.1	95.1	84.4	93.1	78.1	8467	96.7
2003	7708.3	1300.0	72.1	84.9	69.8	83.1	67.7	77.2	6406	73.1
2004	9311.8	1300.0	85.0	84.9	84.5	83.2	81.5	77.6	7560	86.1
2005	9913.9	1300.0	98.3	85.9	97.8	84.3	87.1	78.2	8520	97.3
2006	8719.6	1300.0	83.5	85.7	80.6	84.0	76.6	78.1	7440	84.9
2007	8562.2	1300.0	78.4	85.3	77.1	83.6	75.2	78.0	6999	79.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1991 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		345			155	2
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	1142			822	38	
D. Inspection, maintenance or repair without refuelling				67		
E. Testing of plant systems or components	11			66		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					3	38
L. Human factor related		274			1	15
Subtotal	1153	619	0	955	198	55
Total		1772			1208	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1991 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	77	
12. Reactor I&C Systems		14
13. Reactor Auxiliary Systems	54	3
14. Safety Systems		40
16. Steam generation systems		4
17. Safety I&C Systems (excluding reactor I&C)		2
21. Fuel Handling and Storage Facilities		5
31. Turbine and auxiliaries	46	22
32. Feedwater and Main Steam System		15
33. Circulating Water System		1
41. Main Generator Systems		20
42. Electrical Power Supply Systems	168	8
Total	345	134

FR-40 CHINON-B-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 905.0 MW(e)
 Design Net Capacity: 870.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4538.8 GW(e).h
 Energy Availability Factor: 57.7%
 Load Factor: 57.3%
 Operating Factor: 63.5%
 Energy Unavailability Factor: 42.3%
 Total Off-line Time: 3201 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	651.7	588.2	641.4	557.5	286.7	0.0	0.0	108.4	617.4	354.3	98.4	634.7	4538.8
EAF (%)	96.8	96.7	95.4	85.6	43.0	0.0	0.0	17.7	94.7	53.8	16.8	94.1	57.7
UCF (%)	98.9	98.7	99.0	99.1	57.4	0.0	0.0	17.7	95.9	54.8	17.0	96.7	61.0
LF (%)	96.8	96.7	95.3	85.6	42.6	0.0	0.0	16.1	94.7	52.6	15.1	94.3	57.3
OF (%)	100.0	100.0	99.7	100.0	58.3	0.0	0.0	35.8	100.0	55.2	17.6	97.2	63.5
EUF (%)	3.2	3.3	4.6	14.4	57.0	100.0	100.0	82.3	5.3	46.2	83.2	5.9	42.3
PUF (%)	0.1	0.2	0.1	0.0	42.1	100.0	100.0	64.7	3.7	0.0	0.0	0.1	26.1
UCLF (%)	1.0	1.1	1.0	0.9	0.5	0.0	0.0	17.6	0.5	45.2	83.0	3.2	12.8
XUF (%)	2.1	2.0	3.6	13.5	14.3	0.0	0.0	0.0	1.1	1.1	0.2	2.5	3.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BASE LOAD OPERATION, STEAM GENERATOR PRESSURE LOSS

5. Historical Summary

Date of Construction Start: 01 Mar 1977 Lifetime Generation: 142603.2 GW(e).h
 Date of First Criticality: 28 Oct 1982 Cumulative Energy Availability Factor: 78.3%
 Date of Grid Connection: 30 Nov 1982 Cumulative Load Factor: 73.6%
 Date of Commercial Operation: 01 Feb 1984 Cumulative Unit Capability Factor: 79.5%
 Cumulative Energy Unavailability Factor: 21.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	3925.0	870.0	57.6	57.6	57.6	57.6	56.1	56.1	4835	60.1
1985	5978.2	870.0	84.5	71.6	82.1	70.4	78.4	67.8	7402	84.5
1986	6322.2	870.0	86.1	76.6	86.1	75.7	83.0	73.0	7609	86.9
1987	4914.1	870.0	73.7	75.8	72.9	75.0	64.5	70.8	6438	73.5
1988	5271.0	870.0	97.4	80.2	96.2	79.3	69.0	70.4	7195	81.9
1989	4734.3	870.0	64.4	77.5	63.6	76.7	62.1	69.0	5724	65.3
1990	5913.0	870.0	79.3	77.8	79.1	77.0	77.6	70.3	7043	80.4
1991	5339.2	905.0	68.0	76.5	67.7	75.8	67.3	69.9	6033	68.9
1992	5972.0	905.0	80.9	77.0	80.6	76.4	75.1	70.5	7133	81.2
1993	5651.7	905.0	77.7	77.1	73.3	76.0	71.3	70.6	6914	78.9
1994	5366.3	905.0	71.9	76.6	71.4	75.6	67.7	70.3	6347	72.5
1995	6333.9	905.0	85.6	77.4	84.4	76.4	79.9	71.1	7573	86.4
1996	6295.2	905.0	83.6	77.9	83.4	76.9	79.2	71.8	7476	85.1
1997	6093.3	905.0	81.9	78.2	81.8	77.3	76.9	72.1	7268	83.0
1998	6631.3	905.0	87.1	78.8	85.7	77.8	83.6	72.9	7759	88.6
1999	6214.0	905.0	84.3	79.1	82.1	78.1	78.4	73.3	7483	85.4
2000	6166.8	905.0	83.6	79.4	82.7	78.4	77.6	73.5	7416	84.4
2001	5769.0	905.0	82.6	79.6	81.2	78.5	72.8	73.5	7260	82.9
2002	6229.3	920.0	88.8	80.1	85.6	78.9	77.3	73.7	7671	87.6
2003	5181.7	905.0	71.0	79.6	68.4	78.4	65.4	73.3	6357	72.6
2004	6252.6	905.0	83.7	79.8	83.7	78.6	78.7	73.5	7536	85.8
2005	6465.8	905.0	84.5	80.0	83.9	78.9	81.5	73.9	7611	86.9
2006	6637.8	905.0	87.3	80.4	86.7	79.2	83.7	74.3	7873	89.9
2007	4538.8	905.0	61.0	79.5	57.7	78.3	57.3	73.6	5559	63.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		909			341	
B. Refuelling without a maintenance				10	4	
C. Inspection, maintenance or repair combined with refuelling	2121			1013	66	
E. Testing of plant systems or components				7	1	
H. Nuclear regulatory requirements					4	
J. Grid failure or grid unavailability						5
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					52	
L. Human factor related		173			1	
Z. Others					1	
Subtotal	2121	1082	0	1030	470	5
Total		3203			1505	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		5
12. Reactor I&C Systems		6
13. Reactor Auxiliary Systems		28
14. Safety Systems		18
15. Reactor Cooling Systems		13
16. Steam generation systems		12
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries	2	140
32. Feedwater and Main Steam System		13
41. Main Generator Systems	907	32
42. Electrical Power Supply Systems		30
XX. Miscellaneous Systems		5
Total	909	303

FR-41 CHINON-B-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 905.0 MW(e)
 Design Net Capacity: 870.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5965.9 GW(e).h
 Energy Availability Factor: 76.6%
 Load Factor: 75.3%
 Operating Factor: 80.2%
 Energy Unavailability Factor: 23.4%
 Total Off-line Time: 1737 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	538.5	585.6	637.1	617.8	641.6	608.6	595.5	633.5	403.6	0.0	48.3	655.8	5965.9
EAF (%)	81.1	97.4	96.3	97.1	96.6	97.2	90.0	95.4	62.6	-0.1	9.4	96.8	76.6
UCF (%)	83.0	98.6	96.8	98.3	98.1	98.7	92.5	98.3	64.6	-0.1	9.4	96.9	77.9
LF (%)	80.0	96.3	94.6	94.8	95.3	93.4	88.4	94.1	61.9	0.0	7.4	97.4	75.3
OF (%)	83.6	100.0	99.6	100.0	100.0	100.0	96.2	100.0	66.5	0.0	16.8	100.0	80.2
EUF (%)	18.9	2.6	3.7	2.9	3.4	2.8	10.0	4.6	37.4	100.1	90.6	3.2	23.4
PUF (%)	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	30.1	100.1	26.0	2.8	13.4
UCLF (%)	17.0	1.4	3.1	1.7	1.8	1.2	7.3	1.7	5.3	0.0	64.7	0.3	8.7
XUF (%)	1.8	1.2	0.5	1.2	1.5	1.5	2.5	2.9	2.0	0.0	0.0	0.1	1.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

STEAM GENERATOR PRESSURE LOSS

5. Historical Summary

Date of Construction Start: 01 Mar 1977 Lifetime Generation: 137330.2 GW(e).h
 Date of First Criticality: 23 Sep 1983 Cumulative Energy Availability Factor: 78.8%
 Date of Grid Connection: 29 Nov 1983 Cumulative Load Factor: 73.5%
 Date of Commercial Operation: 01 Aug 1984 Cumulative Unit Capability Factor: 80.0%
 Cumulative Energy Unavailability Factor: 21.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	2423.0	870.0	91.7	91.7	91.7	91.7	75.8	75.8	2985	81.3
1985	5037.4	870.0	69.3	75.9	67.9	74.9	66.1	69.0	6201	70.8
1986	6215.1	870.0	86.4	80.3	86.0	79.5	81.6	74.2	7639	87.2
1987	5618.8	870.0	81.1	80.5	80.7	79.9	73.7	74.0	7171	81.9
1988	4425.0	870.0	68.4	77.8	67.3	77.0	57.9	70.4	5731	65.2
1989	6043.4	870.0	94.4	80.8	91.2	79.6	79.3	72.0	7873	89.9
1990	5217.0	870.0	84.4	81.4	84.1	80.3	68.5	71.5	6714	76.6
1991	3142.2	870.0	55.8	77.9	53.2	76.7	41.2	67.4	3921	44.8
1992	6295.4	870.0	82.0	78.4	80.8	77.2	82.4	69.2	7321	83.3
1993	5491.6	870.0	81.4	78.7	76.2	77.1	72.1	69.5	6867	78.4
1994	6174.6	905.0	84.7	79.3	83.9	77.7	77.9	70.3	7407	84.6
1995	6356.3	905.0	86.1	79.9	86.0	78.5	80.2	71.2	7741	88.4
1996	5287.6	905.0	69.6	79.1	69.4	77.7	66.5	70.8	6206	70.7
1997	6637.9	905.0	86.5	79.7	85.2	78.3	83.7	71.8	7622	87.0
1998	6186.4	905.0	80.4	79.7	79.9	78.4	78.0	72.3	7136	81.5
1999	5900.9	905.0	79.1	79.7	79.0	78.5	74.4	72.4	7075	80.8
2000	6177.0	905.0	81.2	79.8	80.8	78.6	77.7	72.7	7260	82.7
2001	6646.2	905.0	88.5	80.3	87.5	79.1	83.8	73.4	7846	89.6
2002	6155.6	920.0	86.4	80.6	85.6	79.5	76.4	73.5	7404	84.5
2003	5746.2	905.0	81.3	80.7	78.7	79.4	72.5	73.5	7163	81.8
2004	6133.4	905.0	80.9	80.7	80.6	79.5	77.2	73.7	7252	82.6
2005	6659.6	905.0	88.0	81.0	86.5	79.8	84.0	74.2	7882	90.0
2006	4548.8	905.0	61.4	80.1	60.1	78.9	57.4	73.4	5503	62.8
2007	5965.9	905.0	77.9	80.0	76.6	78.8	75.3	73.5	7023	80.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		268			429	
B. Refuelling without a maintenance	1092			28	7	
C. Inspection, maintenance or repair combined with refuelling				996	11	
D. Inspection, maintenance or repair without refuelling				3		
E. Testing of plant systems or components	0			18	1	
H. Nuclear regulatory requirements					18	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					11	51
L. Human factor related		377			1	
Z. Others					5	
Subtotal	1092	645	0	1045	483	51
Total		1737			1579	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		16
12. Reactor I&C Systems	27	13
13. Reactor Auxiliary Systems	122	25
14. Safety Systems		31
15. Reactor Cooling Systems		66
16. Steam generation systems		5
21. Fuel Handling and Storage Facilities		4
31. Turbine and auxiliaries	31	68
32. Feedwater and Main Steam System	88	17
33. Circulating Water System		3
35. All other I&C Systems		1
41. Main Generator Systems		31
42. Electrical Power Supply Systems		59
XX. Miscellaneous Systems		3
Total	268	342

FR-56 CHINON-B-3

Operator: EDF (ELECTRICITE DE FRANCE)
Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 905.0 MW(e)
Design Net Capacity: 905.0 MW(e)
Design Discharge Burnup: 33735 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6061.3 GW(e).h
Energy Availability Factor: 77.9%
Load Factor: 76.5%
Operating Factor: 83.4%
Energy Unavailability Factor: 22.1%
Total Off-line Time: 1450 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	598.5	563.3	587.7	593.0	591.9	619.3	593.3	172.9	0.0	469.7	629.0	642.8	6061.3
EAF (%)	94.7	96.5	90.5	92.1	88.2	95.0	88.1	26.2	0.0	70.4	97.0	96.8	77.9
UCF (%)	96.7	96.9	91.4	93.2	89.3	98.7	99.9	32.0	0.0	70.6	97.3	97.0	80.2
LF (%)	88.9	92.6	87.3	91.0	87.9	95.0	88.1	25.7	0.0	69.8	96.5	95.5	76.5
OF (%)	100.0	98.4	97.7	100.0	93.5	100.0	100.0	32.4	0.0	79.7	100.0	100.0	83.4
EUUF (%)	5.3	3.5	9.5	7.9	11.8	5.0	11.9	73.8	100.0	29.6	3.0	3.2	22.1
PUF (%)	0.0	0.1	0.1	0.1	0.0	0.1	0.1	68.0	70.3	7.6	0.1	0.1	12.3
UCLF (%)	3.3	3.1	8.5	6.7	10.6	1.3	0.0	0.0	29.7	21.8	2.7	2.9	7.6
XUF (%)	2.0	0.4	0.9	1.0	1.1	3.6	11.8	5.7	0.0	0.2	0.2	0.3	2.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

STEAM GENERATOR PRESSURE LOSS

5. Historical Summary

Date of Construction Start: 01 Oct 1980 **Lifetime Generation:** 122286.0 GW(e).h
Date of First Criticality: 18 Sep 1986 **Cumulative Energy Availability Factor:** 79.2%
Date of Grid Connection: 20 Oct 1986 **Cumulative Load Factor:** 73.3%
Date of Commercial Operation: 04 Mar 1987 **Cumulative Unit Capability Factor:** 81.0%
Cumulative Energy Unavailability Factor: 20.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	3322.3	870.0	67.6	67.6	67.6	67.6	52.0	52.0	4383	59.7
1988	4413.0	905.0	61.5	64.2	58.9	62.8	55.5	53.9	5354	61.0
1989	5028.6	905.0	81.2	70.3	77.8	68.1	63.4	57.3	6125	69.9
1990	5417.6	905.0	69.2	70.0	69.1	68.4	68.3	60.2	6274	71.6
1991	7026.4	905.0	92.9	74.7	90.7	73.0	88.6	66.1	8204	93.7
1992	6091.5	905.0	87.5	76.9	85.6	75.2	76.6	67.9	7468	85.0
1993	5600.7	905.0	78.3	77.1	72.6	74.8	70.6	68.3	6827	77.9
1994	5064.0	905.0	76.2	77.0	75.5	74.9	63.9	67.8	6325	72.2
1995	6005.6	905.0	83.3	77.7	82.5	75.8	75.8	68.7	7177	81.9
1996	6278.0	905.0	87.2	78.7	86.9	76.9	79.0	69.7	7761	88.4
1997	5816.8	905.0	85.1	79.3	85.1	77.7	73.4	70.1	7249	82.8
1998	6345.6	905.0	84.1	79.7	81.3	78.0	80.0	70.9	7472	85.3
1999	5602.0	905.0	74.8	79.3	72.2	77.5	70.7	70.9	6656	76.0
2000	6330.1	905.0	83.1	79.6	82.5	77.9	79.6	71.5	7386	84.1
2001	6318.0	905.0	87.0	80.1	84.8	78.3	79.7	72.1	7665	87.5
2002	6720.4	920.0	90.1	80.7	87.6	78.9	83.4	72.8	7971	91.0
2003	5807.7	905.0	77.7	80.6	77.6	78.9	73.3	72.8	6954	79.4
2004	5784.4	905.0	82.5	80.7	82.3	79.1	72.8	72.8	7444	84.7
2005	5595.4	905.0	79.1	80.6	76.5	78.9	70.6	72.7	7287	83.2
2006	6369.7	905.0	89.0	81.0	86.3	79.3	80.3	73.1	7930	90.5
2007	6061.3	905.0	80.2	81.0	77.9	79.2	76.5	73.3	7310	83.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		293			325	
B. Refuelling without a maintenance				30	3	
C. Inspection, maintenance or repair combined with refuelling	1009			881	34	
D. Inspection, maintenance or repair without refuelling				41		
E. Testing of plant systems or components				37	2	
H. Nuclear regulatory requirements					12	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					19	
L. Human factor related		150			4	
Z. Others					4	
Subtotal	1009	443	0	989	403	0
Total		1452			1392	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	200	25
12. Reactor I&C Systems		5
13. Reactor Auxiliary Systems	16	39
14. Safety Systems		2
15. Reactor Cooling Systems		33
16. Steam generation systems		0
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries	29	79
32. Feedwater and Main Steam System	48	31
33. Circulating Water System		4
41. Main Generator Systems		34
42. Electrical Power Supply Systems		6
XX. Miscellaneous Systems		0
Total	293	259

FR-57 CHINON-B-4

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 905.0 MW(e)
 Design Net Capacity: 905.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6485.7 GW(e).h
 Energy Availability Factor: 84.8%
 Load Factor: 81.8%
 Operating Factor: 87.8%
 Energy Unavailability Factor: 15.2%
 Total Off-line Time: 1069 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	641.1	599.3	665.8	407.4	0.0	564.2	643.0	598.1	583.3	614.3	580.6	588.7	6485.7
EAF (%)	99.5	99.6	99.7	62.9	0.0	87.3	98.8	97.9	98.8	96.7	90.0	88.1	84.8
UCF (%)	100.0	99.7	99.8	66.5	0.0	88.6	99.9	98.9	99.9	99.8	93.5	88.3	86.1
LF (%)	95.2	98.5	98.9	62.6	0.0	86.6	95.5	88.8	89.5	91.1	89.1	87.4	81.8
OF (%)	100.0	100.0	99.9	67.3	0.0	98.8	100.0	99.5	100.0	100.0	100.0	89.8	87.8
EUF (%)	0.5	0.4	0.3	37.1	100.0	12.7	1.2	2.1	1.2	3.3	10.0	11.9	15.2
PUF (%)	0.0	0.1	0.2	33.5	51.9	6.5	0.1	0.1	0.1	0.0	0.1	0.1	7.7
UCLF (%)	0.0	0.3	0.0	0.0	48.1	5.0	0.0	1.1	0.0	0.2	6.5	11.7	6.1
XUF (%)	0.5	0.1	0.1	3.7	0.0	1.3	1.1	1.0	1.1	3.1	3.4	0.2	1.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Feb 1981 Lifetime Generation: 118161.9 GW(e).h
 Date of First Criticality: 13 Oct 1987 Cumulative Energy Availability Factor: 80.5%
 Date of Grid Connection: 14 Nov 1987 Cumulative Load Factor: 74.7%
 Date of Commercial Operation: 01 Apr 1988 Cumulative Unit Capability Factor: 82.2%
 Cumulative Energy Unavailability Factor: 19.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	3367.0	905.0	89.0	89.0	86.2	86.2	56.4	56.4	4475	67.8
1989	4688.1	905.0	63.6	74.5	60.4	71.5	59.1	57.9	5664	64.7
1990	6098.0	905.0	77.2	75.5	77.0	73.5	76.9	64.8	7003	79.9
1991	6340.0	905.0	80.0	76.7	79.2	75.0	80.0	68.9	7204	82.2
1992	6388.0	905.0	85.0	78.4	82.8	76.7	80.4	71.3	7544	85.9
1993	6016.9	905.0	85.8	79.7	80.1	77.3	75.9	72.1	7359	84.0
1994	5935.1	905.0	82.4	80.1	81.2	77.8	74.9	72.5	7196	82.1
1995	6566.0	905.0	88.2	81.2	87.9	79.1	82.8	73.8	7805	89.1
1996	6574.2	905.0	87.6	81.9	87.0	80.0	82.7	74.8	7764	88.4
1997	6345.4	905.0	88.7	82.6	85.6	80.6	80.0	75.4	7795	89.0
1998	5940.1	905.0	83.1	82.7	80.2	80.6	74.9	75.3	7326	83.6
1999	5596.3	905.0	89.9	83.3	88.2	81.2	70.6	74.9	7059	80.6
2000	5110.7	905.0	74.1	82.5	72.9	80.6	64.3	74.1	6445	73.4
2001	5765.0	905.0	81.3	82.5	79.9	80.5	72.7	74.0	7078	80.8
2002	6321.3	920.0	85.8	82.7	84.3	80.8	78.4	74.3	7584	86.6
2003	6431.8	905.0	87.7	83.0	86.6	81.2	81.1	74.7	7811	89.2
2004	5513.2	905.0	75.1	82.5	74.9	80.8	69.4	74.4	6883	78.4
2005	5356.4	905.0	71.1	81.9	69.7	80.2	67.6	74.0	7030	80.3
2006	6369.0	905.0	84.4	82.0	83.3	80.3	80.3	74.4	7558	86.3
2007	6485.7	905.0	86.1	82.2	84.8	80.5	81.8	74.7	7691	87.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		412			292	
B. Refuelling without a maintenance				43	0	
C. Inspection, maintenance or repair combined with refuelling	622			766	100	
E. Testing of plant systems or components	1			31		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	22	27
L. Human factor related		35			1	
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)					6	
Z. Others					14	
Subtotal	623	447	0	840	435	27
Total		1070			1302	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	236	15
12. Reactor I&C Systems		17
13. Reactor Auxiliary Systems	22	36
14. Safety Systems		6
15. Reactor Cooling Systems	16	59
16. Steam generation systems		1
21. Fuel Handling and Storage Facilities	12	
31. Turbine and auxiliaries	13	29
32. Feedwater and Main Steam System		15
33. Circulating Water System		7
35. All other I&C Systems	26	
41. Main Generator Systems	67	52
42. Electrical Power Supply Systems		19
XX. Miscellaneous Systems		1
Total	392	257

FR-62 CHOOZ-B-1

Operator: EDF (ELECTRICITE DE FRANCE)
Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1500.0 MW(e)
Design Net Capacity: 1455.0 MW(e)
Design Discharge Burnup: 39000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10402.3 GW(e).h
Energy Availability Factor: 79.6%
Load Factor: 79.2%
Operating Factor: 81.7%
Energy Unavailability Factor: 20.4%
Total Off-line Time: 1606 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	409.2	1000.0	1104.3	1063.5	1095.4	1039.6	1113.1	1110.5	1069.2	833.6	0.0	563.9	10402.3
EAF (%)	36.8	99.3	99.5	99.0	98.7	96.8	99.7	99.7	99.1	75.9	0.0	51.8	79.6
UCF (%)	36.9	100.0	100.0	100.0	100.0	97.1	100.0	99.9	100.0	83.7	0.0	51.8	80.7
LF (%)	36.7	99.2	98.9	98.6	98.2	96.3	99.7	99.5	99.0	74.6	0.0	50.5	79.2
OF (%)	41.5	100.0	99.9	100.1	100.0	97.4	100.0	100.0	100.0	83.8	0.0	58.2	81.7
EUF (%)	63.2	0.7	0.5	1.0	1.3	3.2	0.3	0.3	0.9	24.1	100.0	48.2	20.4
PUF (%)	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	16.3	83.3	6.0	9.2
UCLF (%)	58.1	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	16.7	42.1	10.1
XUF (%)	0.1	0.7	0.5	1.0	1.3	0.3	0.3	0.2	0.9	7.8	0.0	0.0	1.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Jan 1984 **Lifetime Generation:** 89346.4 GW(e).h
Date of First Criticality: 25 Jul 1996 **Cumulative Energy Availability Factor:** 80.2%
Date of Grid Connection: 30 Aug 1996 **Cumulative Load Factor:** 77.6%
Date of Commercial Operation: 15 May 2000 **Cumulative Unit Capability Factor:** 82.1%
Cumulative Energy Unavailability Factor: 19.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2000	8420.9	1455.0	96.9	96.9	96.9	96.9	98.4	98.4	5711	97.1
2001	9524.4	1455.0	78.0	85.6	75.0	83.8	74.7	84.2	6800	77.6
2002	9515.1	1455.0	82.4	84.4	81.0	82.7	74.7	80.7	6807	77.7
2003	10021.9	1500.0	89.4	85.8	85.6	83.5	76.3	79.4	7219	82.4
2004	10671.1	1500.0	86.7	86.0	83.6	83.6	81.0	79.8	7657	87.2
2005	9047.7	1500.0	70.5	83.2	69.6	81.1	68.8	77.8	6285	71.7
2006	9845.7	1500.0	77.6	82.4	75.6	80.2	74.9	77.4	6885	78.6
2007	10402.3	1500.0	80.7	82.1	79.6	80.2	79.2	77.6	7154	81.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1997 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		19			992	
B. Refuelling without a maintenance	721			58		
C. Inspection, maintenance or repair combined with refuelling				482		
E. Testing of plant systems or components	7			158		
H. Nuclear regulatory requirements					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						8
L. Human factor related		863			21	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						16
Z. Others					30	
Subtotal	728	882	0	698	1044	24
Total		1610			1766	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1997 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		4
12. Reactor I&C Systems		80
13. Reactor Auxiliary Systems		26
15. Reactor Cooling Systems		80
16. Steam generation systems		13
31. Turbine and auxiliaries		644
32. Feedwater and Main Steam System		1
41. Main Generator Systems		0
42. Electrical Power Supply Systems		87
XX. Miscellaneous Systems	19	4
Total	19	939

FR-70 CHOOZ-B-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 1500.0 MW(e)
 Design Net Capacity: 1455.0 MW(e)
 Design Discharge Burnup: 39000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 11016.5 GW(e).h
 Energy Availability Factor: 85.2%
 Load Factor: 83.8%
 Operating Factor: 88.2%
 Energy Unavailability Factor: 14.8%
 Total Off-line Time: 1035 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	1090.4	811.8	892.5	0.0	799.5	1058.8	1069.7	1075.6	1049.4	1021.0	1077.1	1070.6	11016.5
EAF (%)	99.8	81.2	80.3	-0.1	73.2	99.5	98.0	99.8	99.9	93.3	99.9	96.1	85.2
UCF (%)	99.9	83.6	93.3	-0.1	73.8	100.0	98.3	100.0	100.0	93.5	100.0	97.3	86.8
LF (%)	97.7	80.5	80.0	0.0	71.6	98.0	95.9	96.4	97.2	91.4	99.7	95.9	83.8
OF (%)	100.0	88.5	95.7	0.0	79.4	100.0	100.0	100.0	100.0	94.6	100.0	98.1	88.2
EUF (%)	0.2	18.8	19.7	100.1	26.8	0.5	2.0	0.2	0.1	6.7	0.1	3.9	14.8
PUF (%)	0.1	0.0	3.1	93.5	5.5	0.0	0.9	0.0	0.0	0.1	0.0	0.0	8.5
UCLF (%)	0.0	16.4	3.6	6.7	20.7	0.0	0.8	0.0	0.0	6.4	0.0	2.7	4.7
XUF (%)	0.1	2.4	13.0	0.0	0.5	0.5	0.4	0.2	0.1	0.2	0.1	1.1	1.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 31 Dec 1985 Lifetime Generation: 88535.9 GW(e).h
 Date of First Criticality: 10 Mar 1997 Cumulative Energy Availability Factor: 81.5%
 Date of Grid Connection: 10 Apr 1997 Cumulative Load Factor: 78.2%
 Date of Commercial Operation: 29 Sep 2000 Cumulative Unit Capability Factor: 84.6%
 Cumulative Energy Unavailability Factor: 18.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2000	3353.3	1455.0	77.6	77.6	77.6	77.6	78.7	78.7	2473	84.5
2001	10159.5	1455.0	83.4	82.0	80.4	79.7	79.7	79.5	7221	82.4
2002	9814.8	1455.0	83.0	82.4	81.5	80.5	77.0	78.4	7240	82.6
2003	10472.8	1500.0	87.6	84.0	83.3	81.3	79.7	78.8	7457	85.1
2004	10063.9	1500.0	88.0	85.0	80.1	81.0	76.4	78.2	7061	80.4
2005	10321.5	1500.0	84.1	84.8	81.6	81.2	78.6	78.3	7343	83.8
2006	9460.5	1500.0	81.6	84.3	79.6	80.9	72.0	77.3	6845	78.1
2007	11016.5	1500.0	86.8	84.6	85.2	81.5	83.8	78.2	7725	88.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1997 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		181			938	
B. Refuelling without a maintenance	693			473		
C. Inspection, maintenance or repair combined with refuelling						
E. Testing of plant systems or components	3			133		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						81
L. Human factor related		162			10	
Z. Others					27	
Subtotal	696	343	0	606	975	81
Total		1039			1662	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1997 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	41	100
13. Reactor Auxiliary Systems		60
15. Reactor Cooling Systems		11
31. Turbine and auxiliaries	87	636
32. Feedwater and Main Steam System		0
33. Circulating Water System		54
41. Main Generator Systems		11
42. Electrical Power Supply Systems	39	20
XX. Miscellaneous Systems	14	22
Total	181	914

FR-72 CIVAUX-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1495.0 MW(e)
Design Net Capacity: 1450.0 MW(e)
Design Discharge Burnup: 35000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9031.5 GW(e).h
Energy Availability Factor: 69.4%
Load Factor: 69.0%
Operating Factor: 71.2%
Energy Unavailability Factor: 30.6%
Total Off-line Time: 2519 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	1112.4	1000.3	303.2	0.0	168.9	615.7	433.8	1051.4	1042.3	1106.9	1080.1	1116.6	9031.5
EAF (%)	99.9	99.5	27.9	0.0	18.0	58.1	39.9	95.2	97.0	99.5	100.0	99.8	69.4
UCF (%)	100.0	99.7	29.0	0.0	18.0	58.3	40.3	95.6	97.3	99.7	100.0	100.0	69.6
LF (%)	100.0	99.6	27.3	0.0	15.2	57.2	39.0	94.5	96.8	99.4	100.3	100.4	69.0
OF (%)	100.0	100.0	29.3	0.0	27.8	60.6	41.9	98.8	98.5	100.0	100.0	100.0	71.2
EUF (%)	0.1	0.5	72.1	100.0	82.0	41.9	60.1	4.8	3.0	0.5	0.0	0.2	30.6
PUF (%)	0.0	0.1	71.0	100.0	11.1	0.2	0.0	0.0	0.3	0.0	0.0	0.0	15.2
UCLF (%)	0.0	0.2	0.0	0.0	70.9	41.5	59.7	4.4	2.5	0.3	0.1	0.0	15.1
XUF (%)	0.1	0.2	1.1	0.0	0.0	0.2	0.3	0.4	0.3	0.2	0.0	0.2	0.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 15 Oct 1988
Date of First Criticality: 29 Nov 1997
Date of Grid Connection: 24 Dec 1997
Date of Commercial Operation: 29 Jan 2002

Lifetime Generation: 75313.6 GW(e).h
Cumulative Energy Availability Factor: 78.7%
Cumulative Load Factor: 77.7%
Cumulative Unit Capability Factor: 80.0%
Cumulative Energy Unavailability Factor: 21.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2002	9544.1	1450.0	81.0	81.0	79.8	79.8	75.1	75.1	7331	83.7
2003	10932.1	1495.0	84.1	82.6	83.1	81.4	83.5	79.4	7438	84.9
2004	11276.5	1495.0	88.0	84.4	86.9	83.3	85.9	81.6	7816	89.0
2005	9672.3	1495.0	76.3	82.3	73.8	80.9	73.8	79.6	6855	78.2
2006	10318.2	1495.0	80.9	82.1	79.3	80.6	78.8	79.5	7189	82.1
2007	9031.5	1495.0	69.6	80.0	69.4	78.7	69.0	77.7	6242	71.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2002 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1116			177	
B. Refuelling without a maintenance				102		
C. Inspection, maintenance or repair combined with refuelling	1259			571		
E. Testing of plant systems or components	25			30		
L. Human factor related		24			43	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						8
Z. Others		96			97	
Subtotal	1284	1236	0	703	317	8
Total		2520			1028	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2002 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		16
13. Reactor Auxiliary Systems	24	5
14. Safety Systems		4
15. Reactor Cooling Systems		52
31. Turbine and auxiliaries	57	
32. Feedwater and Main Steam System	67	
41. Main Generator Systems	284	
42. Electrical Power Supply Systems	665	98
XX. Miscellaneous Systems	19	
Total	1116	175

FR-73 CIVAUX-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1495.0 MW(e)
 Design Net Capacity: 1450.0 MW(e)
 Design Discharge Burnup: 35000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9973.8 GW(e).h
 Energy Availability Factor: 80.2%
 Load Factor: 76.1%
 Operating Factor: 81.5%
 Energy Unavailability Factor: 19.8%
 Total Off-line Time: 1620 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	985.9	852.7	1081.2	1002.8	957.7	217.8	0.0	829.5	953.0	1069.6	996.3	1027.3	9973.8
EAF (%)	98.5	99.8	98.6	93.4	86.1	20.7	0.0	77.8	94.8	99.8	99.7	95.1	80.2
UCF (%)	100.0	99.9	98.6	95.8	100.0	26.4	0.0	77.9	94.9	99.9	99.7	95.1	82.3
LF (%)	88.6	84.9	97.2	93.2	86.1	20.2	0.0	74.6	88.5	96.0	92.6	92.4	76.1
OF (%)	92.9	89.3	99.9	97.1	100.0	26.9	0.0	84.5	95.8	100.0	96.5	95.6	81.5
EUF (%)	1.5	0.2	1.4	6.6	13.9	79.3	100.0	22.2	5.2	0.2	0.3	4.9	19.8
PUF (%)	0.0	0.0	0.0	0.2	0.0	73.6	100.0	9.8	0.0	0.0	0.0	0.0	15.4
UCLF (%)	0.0	0.1	1.4	4.0	0.0	0.0	0.0	12.3	5.1	0.1	0.3	4.9	2.4
XUF (%)	1.5	0.1	0.0	2.4	13.9	5.7	0.0	0.1	0.2	0.1	0.0	0.0	2.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Apr 1991 Lifetime Generation: 74086.0 GW(e).h
 Date of First Criticality: 27 Nov 1999 Cumulative Energy Availability Factor: 82.1%
 Date of Grid Connection: 24 Dec 1999 Cumulative Load Factor: 78.2%
 Date of Commercial Operation: 23 Apr 2002 Cumulative Unit Capability Factor: 83.7%
 Cumulative Energy Unavailability Factor: 17.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2002	7199.1	1450.0	94.6	94.6	92.0	92.0	75.2	75.2	5751	87.1
2003	9084.8	1495.0	70.5	80.7	70.4	79.5	69.4	71.8	6542	74.7
2004	11698.6	1495.0	90.0	84.1	89.6	83.2	89.1	78.2	8042	91.6
2005	9621.4	1495.0	75.9	81.9	73.5	80.6	73.5	76.9	6748	77.0
2006	11140.1	1495.0	91.6	84.0	89.8	82.5	85.1	78.6	7811	89.2
2007	9973.8	1495.0	82.3	83.7	80.2	82.1	76.1	78.2	7141	81.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2002 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		51			180	
B. Refuelling without a maintenance				104	4	
C. Inspection, maintenance or repair combined with refuelling	1284			599		
E. Testing of plant systems or components	10			30		
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			144			
L. Human factor related		124			7	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			10			
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)						0
Z. Others					36	
Subtotal	1294	175	154	733	227	1
Total		1623			961	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2002 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		57
12. Reactor I&C Systems	30	
13. Reactor Auxiliary Systems		49
15. Reactor Cooling Systems		41
31. Turbine and auxiliaries		11
32. Feedwater and Main Steam System	21	7
33. Circulating Water System		3
42. Electrical Power Supply Systems		9
Total	51	177

FR-42 CRUAS-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 915.0 MW(e)
 Design Net Capacity: 880.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4468.5 GW(e).h
 Energy Availability Factor: 55.9%
 Load Factor: 55.7%
 Operating Factor: 62.9%
 Energy Unavailability Factor: 44.1%
 Total Off-line Time: 3254 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	637.4	595.8	536.6	405.6	0.0	0.0	0.0	0.0	295.4	667.0	652.2	678.5	4468.5
EAF (%)	93.8	96.9	79.2	61.8	0.0	0.0	0.0	0.0	45.8	97.8	99.0	99.6	55.9
UCF (%)	94.1	97.1	84.6	86.1	0.0	0.0	0.0	0.0	45.8	97.8	99.2	99.9	58.4
LF (%)	93.6	96.9	78.8	61.7	0.0	0.0	0.0	0.0	44.8	97.8	99.0	99.7	55.7
OF (%)	97.0	100.0	99.9	90.3	0.0	0.0	0.0	0.0	71.0	100.0	100.0	100.0	62.9
EUF (%)	6.2	3.1	20.8	38.2	100.0	100.0	100.0	100.0	54.2	2.2	1.0	0.4	44.1
PUF (%)	0.1	0.3	0.8	11.0	100.0	100.0	41.9	0.0	17.7	2.2	0.7	0.1	23.0
UCLF (%)	5.8	2.6	14.6	2.9	0.0	0.0	58.1	100.0	36.6	0.0	0.1	0.0	18.6
XUF (%)	0.4	0.2	5.5	24.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	2.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

STEAM GENERATOR PRESSURE LOSS

5. Historical Summary

Date of Construction Start: 01 Aug 1978 Lifetime Generation: 134364.5 GW(e).h
 Date of First Criticality: 02 Apr 1983 Cumulative Energy Availability Factor: 79.3%
 Date of Grid Connection: 29 Apr 1983 Cumulative Load Factor: 71.2%
 Date of Commercial Operation: 02 Apr 1984 Cumulative Unit Capability Factor: 81.0%
 Cumulative Energy Unavailability Factor: 20.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	4800.0	880.0	82.6	82.6	82.6	82.6	82.6	82.6	6130	92.9
1985	5185.2	880.0	77.2	79.5	72.0	76.5	67.3	73.9	6615	75.5
1986	5888.0	880.0	87.6	82.5	86.0	80.0	76.4	74.8	7377	84.2
1987	5359.5	880.0	83.7	82.8	81.8	80.5	69.5	73.4	6860	78.3
1988	4025.0	880.0	98.0	86.0	96.7	83.9	52.1	68.9	5562	63.3
1989	5648.9	880.0	86.1	86.0	83.6	83.9	73.3	69.7	7239	82.6
1990	4983.5	880.0	84.8	85.8	82.6	83.7	64.6	68.9	6809	77.7
1991	4477.8	880.0	68.2	83.6	65.3	81.3	58.1	67.5	5762	65.8
1992	5739.4	880.0	81.0	83.3	77.8	80.9	74.2	68.3	7183	81.8
1993	6156.6	880.0	87.2	83.7	84.6	81.3	79.9	69.5	7353	83.9
1994	6181.2	915.0	84.5	83.7	84.3	81.6	77.1	70.2	7498	85.6
1995	4630.4	915.0	63.3	81.9	62.5	79.9	57.8	69.1	5624	64.2
1996	6258.5	915.0	83.9	82.1	83.0	80.1	77.9	69.8	7478	85.1
1997	5271.2	915.0	77.9	81.8	74.1	79.7	65.8	69.5	6784	77.4
1998	6387.3	915.0	90.8	82.4	89.5	80.4	79.7	70.2	7864	89.8
1999	5890.7	915.0	85.5	82.6	83.8	80.6	73.5	70.4	7367	84.1
2000	6320.5	915.0	87.6	82.9	86.0	80.9	78.6	70.9	7742	88.1
2001	5918.3	915.0	81.7	82.8	81.1	80.9	73.8	71.1	7264	82.9
2002	6069.8	915.0	80.6	82.7	80.5	80.9	75.7	71.4	7349	83.9
2003	6120.5	915.0	82.5	82.7	81.1	80.9	76.4	71.6	7403	84.5
2004	5866.1	915.0	77.0	82.4	76.1	80.7	73.0	71.7	6907	78.6
2005	5345.4	915.0	71.1	81.9	70.6	80.2	66.7	71.5	6311	72.0
2006	6491.0	915.0	84.8	82.0	83.7	80.4	81.0	71.9	7716	88.1
2007	4468.5	915.0	58.4	81.0	55.9	79.3	55.7	71.2	5506	62.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		21			422	
B. Refuelling without a maintenance				27	2	
C. Inspection, maintenance or repair combined with refuelling	1847			873	20	
D. Inspection, maintenance or repair without refuelling				25		
E. Testing of plant systems or components	29			18		
G. Major back-fitting, refurbishment or upgrading activities without refuelling						1
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					37	20
L. Human factor related		1385			10	
Z. Others					9	
Subtotal	1876	1406	0	943	500	23
Total		3282			1466	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		21
12. Reactor I&C Systems	21	14
13. Reactor Auxiliary Systems		8
14. Safety Systems		12
15. Reactor Cooling Systems		20
16. Steam generation systems		27
31. Turbine and auxiliaries		31
32. Feedwater and Main Steam System		9
33. Circulating Water System		3
41. Main Generator Systems		243
42. Electrical Power Supply Systems		6
XX. Miscellaneous Systems		1
Total	21	395

FR-43 CRUAS-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 915.0 MW(e)
 Design Net Capacity: 915.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4617.9 GW(e).h
 Energy Availability Factor: 58.0%
 Load Factor: 57.6%
 Operating Factor: 63.9%
 Energy Unavailability Factor: 42.0%
 Total Off-line Time: 3158 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	646.6	595.2	655.9	599.8	628.0	531.1	201.2	0.0	0.0	0.0	96.4	663.7	4617.9
EAF (%)	96.1	97.0	96.8	91.7	92.2	80.6	30.2	0.0	0.0	-0.1	16.8	97.5	58.0
UCF (%)	97.4	97.4	97.1	93.8	99.0	99.6	43.4	0.0	0.0	-0.1	16.8	97.5	61.6
LF (%)	95.0	96.8	96.4	91.0	92.2	80.6	29.6	0.0	0.0	0.0	14.6	97.5	57.6
OF (%)	100.0	100.0	99.9	100.0	100.0	100.0	43.5	0.0	0.0	0.0	26.5	100.0	63.9
EUUF (%)	3.9	3.0	3.2	8.3	7.8	19.4	69.8	100.0	100.0	100.1	83.2	2.5	42.0
PUF (%)	0.2	0.2	0.1	0.3	0.1	0.4	56.6	100.0	100.0	80.6	9.7	2.4	29.5
UCLF (%)	2.5	2.5	2.8	6.0	0.9	0.0	0.0	0.0	0.0	19.5	73.5	0.1	8.9
XUF (%)	1.3	0.4	0.3	2.1	6.7	19.0	13.2	0.0	0.0	0.0	0.0	0.0	3.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

STEAM GENERATOR PRESSURE LOSS

5. Historical Summary

Date of Construction Start: 15 Nov 1978 Lifetime Generation: 133999.2 GW(e).h
 Date of First Criticality: 01 Aug 1984 Cumulative Energy Availability Factor: 78.9%
 Date of Grid Connection: 06 Sep 1984 Cumulative Load Factor: 73.0%
 Date of Commercial Operation: 01 Apr 1985 Cumulative Unit Capability Factor: 81.2%
 Cumulative Energy Unavailability Factor: 21.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	4844.4	880.0	98.3	98.3	96.0	96.0	83.4	83.4	6425	97.3
1986	4955.0	880.0	70.4	82.4	70.1	81.2	64.3	72.5	6258	71.4
1987	5559.9	900.0	79.8	81.4	79.1	80.4	70.5	71.8	6761	77.2
1988	5698.0	915.0	85.0	82.4	80.6	80.5	70.9	71.5	7176	81.7
1989	6298.5	915.0	86.2	83.2	83.3	81.1	78.6	73.0	7697	87.9
1990	6001.8	915.0	79.8	82.6	77.7	80.5	74.9	73.4	7114	81.2
1991	4099.9	915.0	55.3	78.5	53.7	76.5	51.2	70.0	4838	55.2
1992	5946.9	915.0	77.0	78.3	77.0	76.5	74.0	70.6	6910	78.7
1993	5441.0	915.0	78.1	78.3	73.5	76.2	67.9	70.2	6463	73.8
1994	5566.1	915.0	96.8	80.2	94.1	78.0	69.4	70.2	6765	77.2
1995	5366.8	915.0	76.3	79.8	72.4	77.5	67.0	69.9	6581	75.1
1996	6521.9	915.0	88.8	80.6	87.1	78.3	81.1	70.8	7870	89.6
1997	5176.1	915.0	80.9	80.6	76.5	78.2	64.6	70.3	6596	75.3
1998	6003.6	915.0	82.8	80.8	79.0	78.3	74.9	70.7	7396	84.4
1999	6393.8	915.0	88.1	81.3	85.3	78.7	79.8	71.3	7787	88.9
2000	6420.9	915.0	87.0	81.7	85.6	79.2	79.9	71.8	7755	88.3
2001	5914.4	915.0	79.7	81.5	76.5	79.0	73.8	72.0	7053	80.5
2002	6547.4	915.0	86.5	81.8	86.0	79.4	81.7	72.5	7776	88.8
2003	5727.9	915.0	75.8	81.5	75.6	79.2	71.5	72.5	6927	79.1
2004	6613.0	915.0	86.0	81.7	84.9	79.5	82.3	73.0	7661	87.2
2005	6504.1	915.0	85.8	81.9	83.0	79.7	81.1	73.3	7684	87.7
2006	6509.5	915.0	85.6	82.1	84.3	79.9	81.2	73.7	7736	88.3
2007	4617.9	915.0	61.6	81.2	58.0	78.9	57.6	73.0	5602	63.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1			298	
B. Refuelling without a maintenance				27	3	
C. Inspection, maintenance or repair combined with refuelling	2436			823	10	
E. Testing of plant systems or components	6			9	0	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					44	
L. Human factor related		674			8	
Z. Others					24	
Subtotal	2442	675	0	859	387	0
Total		3117			1246	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		24
12. Reactor I&C Systems		5
13. Reactor Auxiliary Systems		1
15. Reactor Cooling Systems		9
16. Steam generation systems		17
31. Turbine and auxiliaries		96
32. Feedwater and Main Steam System		8
33. Circulating Water System		1
35. All other I&C Systems		1
41. Main Generator Systems	1	124
XX. Miscellaneous Systems		1
Total	1	287

FR-44 CRUAS-3

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 915.0 MW(e)
 Design Net Capacity: 880.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5435.8 GW(e).h
 Energy Availability Factor: 68.1%
 Load Factor: 67.8%
 Operating Factor: 73.7%
 Energy Unavailability Factor: 31.9%
 Total Off-line Time: 2304 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	657.9	596.3	657.8	611.5	567.6	236.2	0.0	0.0	208.1	615.7	647.6	637.2	5435.8
EAF (%)	96.8	97.0	96.8	92.8	83.4	36.3	0.0	0.0	33.5	90.7	98.5	93.6	68.1
UCF (%)	97.5	97.4	97.4	98.8	99.6	49.3	0.0	0.0	33.5	93.7	98.5	93.6	71.4
LF (%)	96.6	97.0	96.6	92.9	83.4	35.8	0.0	0.0	31.6	90.3	98.3	93.6	67.8
OF (%)	100.0	100.0	99.9	100.1	100.0	50.3	0.0	0.0	43.3	93.3	100.0	100.0	73.7
EUF (%)	3.2	3.0	3.2	7.2	16.6	63.7	100.0	100.0	66.5	9.3	1.5	6.4	31.9
PUF (%)	0.2	0.4	0.3	0.2	0.4	50.7	100.0	0.0	9.4	0.5	0.1	0.1	13.6
UCLF (%)	2.4	2.2	2.3	1.1	0.0	0.0	0.0	100.0	57.2	5.8	1.4	6.3	15.0
XUF (%)	0.7	0.4	0.6	5.9	16.2	12.9	0.0	0.0	0.0	3.0	0.0	0.0	3.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 15 Apr 1979 Lifetime Generation: 134492.4 GW(e).h
 Date of First Criticality: 09 Apr 1984 Cumulative Energy Availability Factor: 80.3%
 Date of Grid Connection: 14 May 1984 Cumulative Load Factor: 72.0%
 Date of Commercial Operation: 10 Sep 1984 Cumulative Unit Capability Factor: 83.0%
 Cumulative Energy Unavailability Factor: 19.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	2311.0	880.0	91.9	91.9	91.9	91.9	89.7	89.7	2716	92.7
1985	5247.4	880.0	74.6	78.9	72.5	77.4	68.1	73.5	6557	74.9
1986	5967.1	880.0	89.5	83.5	89.2	82.5	77.4	75.2	7456	85.1
1987	4721.4	880.0	75.7	81.1	75.1	80.3	61.2	71.0	6013	68.6
1988	4773.0	880.0	99.9	85.5	98.6	84.5	61.7	68.9	6679	76.0
1989	5577.9	880.0	74.2	83.4	72.8	82.3	72.4	69.5	6571	75.0
1990	6129.2	915.0	87.5	84.0	85.2	82.8	76.5	70.6	7499	85.6
1991	6003.2	915.0	85.2	84.2	84.7	83.1	74.9	71.2	7374	84.2
1992	5174.6	915.0	73.2	82.8	71.0	81.6	64.4	70.4	6323	72.0
1993	5715.3	915.0	85.7	83.1	73.9	80.7	71.3	70.5	7232	82.6
1994	5014.0	915.0	78.9	82.7	78.1	80.5	62.6	69.7	6428	73.4
1995	6032.7	915.0	89.6	83.3	84.3	80.8	75.3	70.2	7525	85.9
1996	5882.2	915.0	99.7	84.7	91.9	81.7	73.2	70.5	7724	87.9
1997	5347.8	915.0	86.1	84.8	80.2	81.6	66.7	70.2	6961	79.5
1998	6281.4	915.0	81.7	84.6	78.7	81.4	78.4	70.8	7758	88.6
1999	6316.7	915.0	89.8	84.9	87.8	81.8	78.8	71.3	7654	87.4
2000	5494.0	915.0	81.4	84.7	79.0	81.7	68.4	71.1	6914	78.7
2001	5867.9	915.0	82.1	84.5	79.6	81.5	73.2	71.2	7254	82.8
2002	6052.0	915.0	82.1	84.4	80.9	81.5	75.5	71.5	7307	83.4
2003	5779.4	915.0	79.2	84.1	76.8	81.3	72.1	71.5	7146	81.6
2004	5081.3	915.0	65.9	83.2	64.1	80.4	63.2	71.1	6074	69.1
2005	6941.6	915.0	88.3	83.5	87.8	80.7	86.6	71.8	7863	89.8
2006	6487.5	915.0	83.5	83.5	83.1	80.9	80.9	72.2	7520	85.8
2007	5435.8	915.0	71.4	83.0	68.1	80.3	67.8	72.0	6456	73.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		199			150	
B. Refuelling without a maintenance				25	1	
C. Inspection, maintenance or repair combined with refuelling	1078			900	35	
D. Inspection, maintenance or repair without refuelling					6	
E. Testing of plant systems or components	2			8		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					21	21
L. Human factor related		982			11	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						2
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)			21			
Z. Others					30	
Subtotal	1080	1181	21	933	254	23
Total		2282			1210	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		11
13. Reactor Auxiliary Systems		1
14. Safety Systems	170	2
15. Reactor Cooling Systems		55
16. Steam generation systems		13
31. Turbine and auxiliaries	29	33
32. Feedwater and Main Steam System		6
41. Main Generator Systems		2
42. Electrical Power Supply Systems		9
XX. Miscellaneous Systems		0
Total	199	132

FR-45 CRUAS-4

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 915.0 MW(e)
 Design Net Capacity: 880.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4947.3 GW(e).h
 Energy Availability Factor: 61.7%
 Load Factor: 61.7%
 Operating Factor: 66.7%
 Energy Unavailability Factor: 38.3%
 Total Off-line Time: 2921 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	411.3	607.3	472.2	0.0	0.0	0.0	126.8	656.4	652.5	675.9	657.6	687.3	4947.3
EAF (%)	60.9	98.6	70.0	-0.1	0.0	0.0	20.2	96.4	98.9	98.8	99.2	99.8	61.7
UCF (%)	60.9	99.3	70.0	-0.1	0.0	0.0	20.2	97.0	99.4	99.9	99.2	99.9	62.0
LF (%)	60.4	98.8	69.4	0.0	0.0	0.0	18.6	96.4	99.0	99.2	99.8	101.0	61.7
OF (%)	80.9	100.0	86.8	0.0	0.0	0.0	33.1	100.0	100.0	100.0	100.0	100.0	66.7
EUF (%)	39.1	1.4	30.0	100.1	100.0	100.0	79.8	3.6	1.1	1.2	0.8	0.2	38.3
PUF (%)	16.0	0.2	13.0	100.1	100.0	100.0	63.0	1.7	0.2	0.2	0.8	0.1	33.0
UCLF (%)	23.1	0.6	17.0	0.0	0.0	0.0	16.9	1.4	0.4	0.0	0.0	0.0	5.0
XUF (%)	0.0	0.7	0.1	0.0	0.0	0.0	0.0	0.6	0.6	1.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BASE LOAD OPERATION, STEAM GENERATOR PRESSURE LOSS

5. Historical Summary

Date of Construction Start: 01 Oct 1979 Lifetime Generation: 130406.7 GW(e).h
 Date of First Criticality: 01 Oct 1984 Cumulative Energy Availability Factor: 78.1%
 Date of Grid Connection: 27 Oct 1984 Cumulative Load Factor: 71.4%
 Date of Commercial Operation: 11 Feb 1985 Cumulative Unit Capability Factor: 80.3%
 Cumulative Energy Unavailability Factor: 21.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	5187.0	880.0	87.1	87.1	85.7	85.7	73.5	73.5	6759	84.3
1986	5452.6	880.0	80.3	83.6	76.7	81.0	70.7	72.1	6816	77.8
1987	5313.4	880.0	85.1	84.1	84.2	82.1	68.9	71.0	6888	78.6
1988	3247.0	880.0	76.0	82.0	74.2	80.1	42.0	63.6	4271	48.6
1989	4852.2	880.0	71.4	79.9	71.3	78.3	62.9	63.4	6025	68.8
1990	6215.3	880.0	86.4	81.0	86.0	79.6	80.6	66.3	7607	86.8
1991	6005.4	880.0	83.9	81.4	81.1	79.8	77.9	68.0	7259	82.9
1992	4953.6	880.0	66.0	79.5	65.0	77.9	64.1	67.5	5862	66.7
1993	5280.0	880.0	84.9	80.1	77.1	77.8	68.5	67.6	6653	75.9
1994	5552.1	915.0	86.8	80.8	83.8	78.5	69.3	67.8	6856	78.3
1995	6280.3	915.0	86.0	81.3	82.1	78.8	78.4	68.8	7375	84.2
1996	5886.5	915.0	80.7	81.2	79.4	78.9	73.2	69.2	7180	81.7
1997	5976.6	915.0	84.1	81.4	80.2	79.0	74.6	69.6	7334	83.7
1998	6629.2	915.0	88.7	82.0	85.5	79.5	82.7	70.6	7885	90.0
1999	5829.8	915.0	85.4	82.2	81.9	79.6	72.7	70.7	7159	81.7
2000	6630.7	915.0	89.7	82.7	88.4	80.2	82.5	71.5	7915	90.1
2001	5915.8	915.0	83.3	82.7	80.6	80.2	73.8	71.6	7172	81.9
2002	6399.6	915.0	83.4	82.8	82.9	80.4	79.8	72.1	7474	85.3
2003	6296.7	915.0	82.9	82.8	81.6	80.4	78.6	72.4	7371	84.1
2004	6377.4	915.0	83.4	82.8	80.6	80.4	79.3	72.8	7443	84.7
2005	6255.1	915.0	81.6	82.7	79.6	80.4	78.0	73.0	7360	84.0
2006	3752.7	915.0	47.6	81.1	47.6	78.9	46.8	71.8	4259	48.6
2007	4947.3	915.0	62.0	80.3	61.7	78.1	61.7	71.4	5839	66.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		168			315	
B. Refuelling without a maintenance				64	2	
C. Inspection, maintenance or repair combined with refuelling				809	57	
D. Inspection, maintenance or repair without refuelling				10		
E. Testing of plant systems or components				13		3
G. Major back-fitting, refurbishment or upgrading activities without refuelling	2662					
H. Nuclear regulatory requirements		66			0	
J. Grid failure or grid unavailability					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					12	48
Z. Others					9	
Subtotal	2662	234	0	896	396	51
Total		2896			1343	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		7
13. Reactor Auxiliary Systems		20
14. Safety Systems		3
15. Reactor Cooling Systems		23
16. Steam generation systems	94	128
17. Safety I&C Systems (excluding reactor I&C)		0
21. Fuel Handling and Storage Facilities		4
31. Turbine and auxiliaries	60	26
32. Feedwater and Main Steam System		14
41. Main Generator Systems		36
42. Electrical Power Supply Systems	12	10
XX. Miscellaneous Systems		1
Total	166	272

FR-22 DAMPIERRE-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 890.0 MW(e)
 Design Net Capacity: 890.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6050.0 GW(e).h
 Energy Availability Factor: 80.7%
 Load Factor: 77.6%
 Operating Factor: 83.7%
 Energy Unavailability Factor: 19.3%
 Total Off-line Time: 1431 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	636.7	583.6	582.2	95.7	0.0	499.4	608.0	599.7	573.4	607.6	615.6	648.2	6050.0
EAF (%)	99.5	97.4	88.1	16.2	0.0	78.8	98.1	98.2	95.8	97.8	99.6	99.0	80.7
UCF (%)	99.6	100.0	100.0	20.0	0.0	80.0	99.1	99.1	96.1	98.8	99.6	99.0	82.6
LF (%)	96.2	97.6	87.9	15.0	0.0	77.9	91.8	90.6	89.5	91.6	96.1	97.9	77.6
OF (%)	100.0	100.0	99.9	20.2	0.0	87.8	100.0	100.0	97.1	99.6	100.0	100.0	83.7
EUF (%)	0.5	2.6	11.9	83.8	100.0	21.2	1.9	1.8	4.2	2.2	0.4	1.0	19.3
PUF (%)	0.0	0.0	0.0	57.1	77.1	6.5	0.0	0.1	0.2	0.0	0.0	0.6	11.8
UCLF (%)	0.3	0.0	0.0	23.0	22.9	13.5	0.9	0.8	3.8	1.2	0.4	0.4	5.6
XUF (%)	0.1	2.6	11.9	3.8	0.0	1.2	1.0	0.9	0.2	1.0	0.0	0.0	1.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Feb 1975	Lifetime Generation:	152226.2 GW(e).h
Date of First Criticality:	15 Mar 1980	Cumulative Energy Availability Factor:	75.8%
Date of Grid Connection:	23 Mar 1980	Cumulative Load Factor:	71.0%
Date of Commercial Operation:	10 Sep 1980	Cumulative Unit Capability Factor:	76.8%
		Cumulative Energy Unavailability Factor:	24.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	1822.0	898.0	61.9	61.9	61.9	61.9	69.1	69.1	2141	73.1
1981	4322.1	900.0	55.9	57.4	55.9	57.4	54.8	58.4	5270	60.2
1982	5043.9	890.0	65.6	60.9	65.6	60.9	64.7	61.1	5994	68.4
1983	6263.0	890.0	85.9	68.3	85.9	68.3	80.3	66.8	7847	89.6
1984	5391.0	890.0	73.6	69.6	73.6	69.6	69.0	67.3	6777	77.2
1985	5738.5	890.0	80.9	71.7	80.6	71.6	73.6	68.5	7223	82.5
1986	5157.4	890.0	75.9	72.3	75.7	72.3	66.2	68.1	6673	76.2
1987	4780.2	890.0	67.9	71.7	65.9	71.4	61.3	67.2	6245	71.3
1988	3920.0	890.0	61.2	70.5	59.6	70.0	50.1	65.2	5239	59.6
1989	6467.6	890.0	98.6	73.5	97.9	73.0	83.0	67.1	8207	93.7
1990	2187.1	890.0	36.3	69.9	34.0	69.2	28.1	63.3	3110	35.5
1991	6390.9	890.0	82.2	71.0	81.8	70.3	82.0	64.9	7305	83.4
1992	6305.1	890.0	81.7	71.9	80.7	71.2	80.7	66.2	7293	83.0
1993	6702.8	890.0	86.6	73.0	86.4	72.3	86.0	67.7	7676	87.6
1994	5299.2	890.0	69.7	72.7	68.9	72.1	68.0	67.7	6185	70.6
1995	6194.0	890.0	84.4	73.5	82.9	72.8	79.4	68.5	7413	84.6
1996	5895.5	890.0	83.1	74.1	82.2	73.3	75.4	68.9	7378	84.0
1997	5172.1	890.0	72.3	74.0	71.9	73.3	66.3	68.8	6465	73.8
1998	6042.7	890.0	81.9	74.4	80.5	73.7	77.5	69.2	7294	83.3
1999	5492.4	890.0	76.8	74.5	75.3	73.7	70.4	69.3	6815	77.8
2000	6153.8	890.0	87.0	75.1	85.4	74.3	78.7	69.8	7676	87.4
2001	4125.1	890.0	56.8	74.3	56.7	73.5	52.9	69.0	5152	58.8
2002	6249.6	890.0	87.6	74.9	86.8	74.1	80.2	69.5	7586	86.6
2003	5733.3	890.0	78.3	75.0	76.8	74.2	73.5	69.6	6964	79.5
2004	6091.2	890.0	89.7	75.6	89.3	74.8	77.9	70.0	7840	89.3
2005	5838.8	890.0	85.2	76.0	82.8	75.1	74.9	70.2	7554	86.2
2006	6615.1	890.0	91.2	76.6	88.6	75.7	84.8	70.7	8077	92.2
2007	6050.0	890.0	82.6	76.8	80.7	75.8	77.6	71.0	7329	83.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		69			289	
B. Refuelling without a maintenance				23	6	
C. Inspection, maintenance or repair combined with refuelling	983			1096	37	
D. Inspection, maintenance or repair without refuelling				67	0	
E. Testing of plant systems or components	4			2	1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					159	42
L. Human factor related		378			12	
Z. Others					17	
Subtotal	987	447	0	1188	521	42
Total		1434			1751	

7. Equipment Related Full Outages, Analysis by System

System	2007	1980 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		3
12. Reactor I&C Systems	28	39
13. Reactor Auxiliary Systems		12
14. Safety Systems	4	8
15. Reactor Cooling Systems		46
16. Steam generation systems		54
17. Safety I&C Systems (excluding reactor I&C)		0
21. Fuel Handling and Storage Facilities		0
31. Turbine and auxiliaries		11
32. Feedwater and Main Steam System	6	21
33. Circulating Water System		0
41. Main Generator Systems		59
42. Electrical Power Supply Systems	7	8
XX. Miscellaneous Systems	24	
Total	69	261

FR-29 DAMPIERRE-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 890.0 MW(e)
Design Net Capacity: 890.0 MW(e)
Design Discharge Burnup: 33735 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6582.7 GW(e).h
Energy Availability Factor: 88.9%
Load Factor: 84.4%
Operating Factor: 93.6%
Energy Unavailability Factor: 11.1%
Total Off-line Time: 559 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	608.9	397.2	218.2	562.5	582.2	538.1	583.9	606.5	600.2	640.1	625.5	619.4	6582.7
EAF (%)	92.0	66.8	34.0	92.3	97.1	98.7	96.7	98.5	99.1	98.8	98.6	93.6	88.9
UCF (%)	99.0	82.4	34.0	99.0	97.5	99.3	97.2	98.8	99.3	99.0	98.6	96.4	91.7
LF (%)	92.0	66.4	33.0	87.9	87.9	84.0	88.2	91.6	93.7	96.5	97.6	93.5	84.4
OF (%)	100.0	82.4	41.7	100.1	98.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.6
EUF (%)	8.0	33.2	66.0	7.7	2.9	1.3	3.3	1.5	0.9	1.2	1.4	6.4	11.1
PUF (%)	0.0	17.6	65.9	0.1	0.0	0.2	0.1	0.2	0.0	0.2	0.3	0.4	7.1
UCLF (%)	1.0	0.0	0.1	0.9	2.5	0.6	2.8	0.9	0.7	0.9	1.1	3.1	1.2
XUF (%)	7.1	15.5	0.0	6.7	0.4	0.6	0.4	0.4	0.1	0.1	0.0	2.8	2.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Apr 1975	Lifetime Generation:	144967.8 GW(e).h
Date of First Criticality:	05 Dec 1980	Cumulative Energy Availability Factor:	76.9%
Date of Grid Connection:	10 Dec 1980	Cumulative Load Factor:	68.9%
Date of Commercial Operation:	16 Feb 1981	Cumulative Unit Capability Factor:	78.6%
		Cumulative Energy Unavailability Factor:	23.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	5465.3	900.0	77.3	77.3	77.3	77.3	75.8	75.8	6670	83.2
1982	4110.8	890.0	53.0	64.7	53.0	64.7	52.7	63.8	4848	55.3
1983	5191.0	890.0	67.7	65.7	67.7	65.7	66.6	64.7	6139	70.1
1984	5781.0	890.0	76.1	68.4	76.1	68.4	73.9	67.1	6884	78.4
1985	6056.9	890.0	84.5	71.6	84.3	71.6	77.7	69.2	7400	84.5
1986	5658.5	890.0	82.2	73.4	82.0	73.3	72.6	69.8	6983	79.7
1987	4856.0	890.0	78.8	74.2	76.4	73.8	62.3	68.7	5715	65.2
1988	4583.0	890.0	95.1	76.8	92.4	76.1	58.6	67.4	6153	70.0
1989	5485.3	890.0	79.7	77.2	77.0	76.2	70.4	67.8	6927	79.1
1990	4869.5	890.0	69.9	76.4	67.8	75.4	62.5	67.2	6292	71.8
1991	4201.9	890.0	67.6	75.6	63.3	74.3	53.9	66.0	5407	61.7
1992	5049.8	890.0	75.9	75.6	74.7	74.3	64.6	65.9	6429	73.2
1993	5976.6	890.0	87.4	76.6	79.6	74.7	76.7	66.7	7625	87.0
1994	4445.0	890.0	84.8	77.1	84.8	75.4	57.0	66.0	5328	60.8
1995	5562.0	890.0	95.5	78.4	95.0	76.8	71.3	66.4	6952	79.4
1996	5761.0	890.0	84.2	78.7	81.5	77.0	73.7	66.8	7437	84.7
1997	4966.6	890.0	69.3	78.2	67.5	76.5	63.7	66.7	6204	70.8
1998	5855.9	890.0	80.3	78.3	78.3	76.6	75.1	67.1	7192	82.1
1999	5312.9	890.0	72.6	78.0	69.2	76.2	68.1	67.2	6688	76.3
2000	5866.1	890.0	77.6	78.0	76.0	76.2	75.0	67.6	7121	81.1
2001	5355.9	890.0	75.1	77.8	72.4	76.0	68.7	67.6	6593	75.3
2002	4307.5	890.0	56.3	76.9	56.0	75.1	55.3	67.1	5196	59.3
2003	6268.3	890.0	81.4	77.1	81.3	75.4	80.4	67.7	7631	87.1
2004	5983.9	890.0	95.7	77.8	93.7	76.1	76.5	68.0	7286	82.9
2005	5255.3	890.0	76.3	77.8	75.8	76.1	67.4	68.0	6719	76.7
2006	5880.5	890.0	85.5	78.1	83.2	76.4	75.4	68.3	7371	84.1
2007	6582.7	890.0	91.7	78.6	88.9	76.9	84.4	68.9	8201	93.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		8			326	
B. Refuelling without a maintenance				29	4	
C. Inspection, maintenance or repair combined with refuelling	563			1063	17	
D. Inspection, maintenance or repair without refuelling				83		
E. Testing of plant systems or components	11			3	0	
H. Nuclear regulatory requirements					5	
J. Grid failure or grid unavailability					1	1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					96	23
L. Human factor related					9	
Z. Others					9	
Subtotal	574	8	0	1178	467	24
Total		582			1669	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		12
13. Reactor Auxiliary Systems		15
14. Safety Systems		25
15. Reactor Cooling Systems		48
16. Steam generation systems		31
21. Fuel Handling and Storage Facilities		0
31. Turbine and auxiliaries		66
32. Feedwater and Main Steam System		13
41. Main Generator Systems		41
42. Electrical Power Supply Systems	8	28
XX. Miscellaneous Systems		0
Total	8	279

FR-30 DAMPIERRE-3

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 890.0 MW(e)
Design Net Capacity: 890.0 MW(e)
Design Discharge Burnup: 33735 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5614.1 GW(e).h
Energy Availability Factor: 76.0%
Load Factor: 72.0%
Operating Factor: 79.1%
Energy Unavailability Factor: 24.0%
Total Off-line Time: 1832 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	530.1	536.0	606.0	210.2	647.5	565.9	560.1	161.4	0.0	571.0	592.7	633.2	5614.1
EAF (%)	99.8	99.6	97.3	33.8	97.8	88.6	84.7	24.9	0.0	86.7	99.2	99.7	76.0
UCF (%)	99.8	99.6	97.3	39.4	98.6	92.2	98.7	32.3	0.0	87.4	99.2	99.7	78.7
LF (%)	80.1	89.6	91.5	32.8	97.8	88.3	84.6	24.4	0.0	86.2	92.5	95.6	72.0
OF (%)	94.2	100.0	95.6	40.0	100.0	93.1	99.2	32.4	0.0	94.0	100.0	100.0	79.1
EUF (%)	0.2	0.4	2.7	66.2	2.2	11.4	15.3	75.1	100.0	13.3	0.8	0.3	24.0
PUF (%)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	67.7	90.1	6.0	0.0	0.2	13.7
UCLF (%)	0.2	0.4	2.8	60.6	1.3	7.8	1.3	0.0	9.9	6.7	0.8	0.1	7.6
XUF (%)	0.0	0.0	0.0	5.6	0.8	3.6	13.9	7.4	0.0	0.7	0.0	0.0	2.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Sep 1975
Date of First Criticality: 25 Jan 1981
Date of Grid Connection: 30 Jan 1981
Date of Commercial Operation: 27 May 1981

Lifetime Generation: 151426.8 GW(e).h
Cumulative Energy Availability Factor: 77.2%
Cumulative Load Factor: 72.3%
Cumulative Unit Capability Factor: 78.7%
Cumulative Energy Unavailability Factor: 22.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	4043.7	900.0	78.0	78.0	78.0	78.0	76.4	76.4	4789	81.4
1982	3767.6	890.0	48.7	60.6	48.7	60.6	48.3	59.7	4632	52.9
1983	5517.0	890.0	72.7	65.1	72.7	65.1	70.8	63.8	6638	75.8
1984	6206.0	890.0	79.7	69.1	79.7	69.1	79.4	68.1	7121	81.1
1985	6364.4	890.0	85.1	72.5	84.9	72.4	81.6	71.0	7523	85.9
1986	6717.2	890.0	99.9	77.3	99.5	77.2	86.2	73.6	8330	95.1
1987	5019.5	890.0	82.4	78.1	79.3	77.5	64.4	72.2	6269	71.6
1988	4964.0	890.0	72.9	77.4	68.5	76.4	63.5	71.1	6435	73.3
1989	5912.9	890.0	82.2	77.9	78.4	76.6	75.8	71.7	7242	82.7
1990	5996.5	890.0	82.5	78.4	79.8	76.9	76.9	72.2	7348	83.9
1991	5124.1	890.0	70.0	77.6	69.6	76.2	65.7	71.6	6244	71.3
1992	4875.1	890.0	65.5	76.6	65.5	75.3	62.4	70.8	5814	66.2
1993	6148.8	890.0	82.8	77.1	82.8	75.9	78.9	71.4	7333	83.7
1994	5537.6	890.0	86.2	77.7	82.7	76.4	71.0	71.4	7013	80.1
1995	4773.5	890.0	83.4	78.1	80.2	76.7	61.2	70.7	6343	72.4
1996	5575.1	890.0	77.6	78.1	77.1	76.7	71.3	70.7	6940	79.0
1997	5720.9	890.0	81.0	78.3	78.3	76.8	73.4	70.9	7211	82.3
1998	5905.8	890.0	82.7	78.5	81.4	77.0	75.8	71.2	7210	82.3
1999	5779.4	890.0	80.9	78.7	78.2	77.1	74.1	71.3	7186	82.0
2000	4308.3	890.0	59.8	77.7	57.6	76.1	55.1	70.5	5378	61.2
2001	5993.0	890.0	77.8	77.7	77.4	76.2	76.9	70.8	7060	80.6
2002	5929.8	890.0	77.4	77.7	76.8	76.2	76.1	71.1	6877	78.5
2003	5346.9	890.0	69.0	77.3	68.9	75.9	68.6	71.0	6152	70.2
2004	6867.2	890.0	89.3	77.8	88.0	76.4	87.8	71.7	7920	90.2
2005	6242.4	890.0	86.5	78.2	84.1	76.7	80.1	72.0	7627	87.1
2006	6228.5	890.0	92.3	78.7	89.3	77.2	79.9	72.3	7991	91.2
2007	5614.1	890.0	78.7	78.7	76.0	77.2	72.0	72.3	6928	79.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		505			280	
B. Refuelling without a maintenance				22	14	
C. Inspection, maintenance or repair combined with refuelling	1152			1166	10	
D. Inspection, maintenance or repair without refuelling				31	1	
E. Testing of plant systems or components	3			5	0	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			58		76	
L. Human factor related		118			0	
Z. Others					7	
Subtotal	1155	623	58	1224	388	0
Total		1836			1612	

7. Equipment Related Full Outages, Analysis by System

System	2007	1981 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		1
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems	13	9
14. Safety Systems		43
15. Reactor Cooling Systems	4	70
16. Steam generation systems		50
31. Turbine and auxiliaries		30
32. Feedwater and Main Steam System	56	8
33. Circulating Water System		1
41. Main Generator Systems		31
42. Electrical Power Supply Systems	432	6
Total	505	253

FR-31 DAMPIERRE-4

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 890.0 MW(e)
 Design Net Capacity: 890.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5763.5 GW(e).h
 Energy Availability Factor: 83.5%
 Load Factor: 73.9%
 Operating Factor: 84.3%
 Energy Unavailability Factor: 16.5%
 Total Off-line Time: 1376 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	538.4	570.7	638.5	501.8	295.6	217.6	469.1	380.8	572.7	574.6	473.5	530.2	5763.5
EAF (%)	88.4	99.2	98.1	78.5	45.2	35.1	94.6	67.4	98.7	99.0	99.5	99.2	83.5
UCF (%)	88.5	99.2	99.6	86.2	57.9	35.2	95.5	98.5	98.7	99.1	99.7	99.2	88.1
LF (%)	81.3	95.4	96.4	78.3	44.6	34.0	70.8	57.5	89.4	86.8	73.9	80.1	73.9
OF (%)	86.8	100.0	99.9	100.0	58.1	50.4	89.5	71.2	96.7	93.5	80.3	86.3	84.3
EUF (%)	11.6	0.8	1.9	21.5	54.8	64.9	5.4	32.6	1.3	1.0	0.5	0.8	16.5
PUF (%)	0.1	0.4	0.0	0.0	42.1	59.3	0.0	0.2	0.4	0.1	0.2	0.3	8.6
UCLF (%)	11.3	0.4	0.3	13.8	0.0	5.5	4.5	1.3	0.9	0.9	0.1	0.5	3.3
XUF (%)	0.2	0.0	1.5	7.6	12.7	0.1	1.0	31.1	0.0	0.1	0.2	0.0	4.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Dec 1975	Lifetime Generation:	144733.7 GW(e).h
Date of First Criticality:	05 Aug 1981	Cumulative Energy Availability Factor:	76.7%
Date of Grid Connection:	18 Aug 1981	Cumulative Load Factor:	70.8%
Date of Commercial Operation:	20 Nov 1981	Cumulative Unit Capability Factor:	78.5%
		Cumulative Energy Unavailability Factor:	23.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	1093.0	894.0	83.0	83.0	83.0	83.0	83.0	83.0	1300	88.8
1982	5745.6	890.0	81.8	82.0	81.8	82.0	73.7	75.0	7413	84.6
1983	4156.0	890.0	57.6	70.7	57.6	70.7	53.3	65.0	5207	59.4
1984	6276.0	890.0	85.1	75.3	85.1	75.3	80.3	69.8	7765	88.4
1985	5859.9	890.0	83.5	77.2	78.9	76.2	75.2	71.1	7387	84.3
1986	6664.9	890.0	88.8	79.5	88.5	78.5	85.5	73.9	7862	89.7
1987	5447.8	890.0	78.4	79.3	78.1	78.5	69.9	73.2	6795	77.6
1988	5086.0	890.0	82.9	79.8	79.9	78.7	65.1	72.1	6645	75.6
1989	5392.4	890.0	73.7	79.1	72.9	78.0	69.2	71.7	6621	75.6
1990	5153.0	890.0	91.2	80.4	87.3	79.0	66.1	71.1	6792	77.5
1991	6062.8	890.0	88.3	81.2	86.7	79.7	77.8	71.8	7612	86.9
1992	5331.5	890.0	76.7	80.8	74.5	79.3	68.2	71.5	6832	77.8
1993	4827.7	890.0	69.2	79.8	63.4	78.0	61.9	70.7	6103	69.7
1994	5264.0	890.0	80.7	79.9	79.5	78.1	67.5	70.4	7103	81.1
1995	5488.0	890.0	78.8	79.8	75.4	77.9	70.4	70.4	6997	79.9
1996	6118.5	890.0	83.7	80.1	82.9	78.2	78.3	70.9	7596	86.5
1997	5918.6	890.0	80.9	80.1	80.5	78.4	75.9	71.3	7178	81.9
1998	4506.5	890.0	60.6	79.0	59.0	77.2	57.8	70.5	5435	62.0
1999	4642.5	890.0	64.8	78.2	64.1	76.5	59.5	69.9	5770	65.9
2000	5598.7	890.0	76.0	78.1	75.2	76.4	71.6	70.0	6752	76.9
2001	5361.8	890.0	70.9	77.7	70.1	76.1	68.8	69.9	6422	73.3
2002	6134.5	890.0	85.3	78.1	83.8	76.5	78.7	70.3	7576	86.5
2003	5547.4	890.0	77.4	78.1	73.4	76.3	71.2	70.4	6759	77.2
2004	4531.8	890.0	61.3	77.3	59.4	75.6	58.0	69.8	5551	63.2
2005	6566.9	890.0	88.7	77.8	87.6	76.1	84.2	70.4	7956	90.8
2006	5905.4	890.0	85.8	78.1	83.6	76.4	75.7	70.6	7428	84.8
2007	5763.5	890.0	88.1	78.5	83.5	76.7	73.9	70.8	7384	84.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		41			477	
B. Refuelling without a maintenance				25	1	
C. Inspection, maintenance or repair combined with refuelling	636			1005	31	
D. Inspection, maintenance or repair without refuelling				5		
E. Testing of plant systems or components	3			5	1	
H. Nuclear regulatory requirements					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			423		80	11
L. Human factor related		67			1	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			215			
Z. Others					15	
Subtotal	639	108	638	1040	607	11
Total		1385			1658	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		56
12. Reactor I&C Systems		5
13. Reactor Auxiliary Systems		58
14. Safety Systems		6
15. Reactor Cooling Systems		9
16. Steam generation systems		115
31. Turbine and auxiliaries	41	29
32. Feedwater and Main Steam System		31
33. Circulating Water System		1
41. Main Generator Systems		98
42. Electrical Power Supply Systems		5
Total	41	413

FR-11 FESSENHEIM-1**Operator:** EDF (ELECTRICITE DE FRANCE)**Contractor:** FRAM (FRAMATOME)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 880.0 MW(e)
Design Net Capacity: 880.0 MW(e)
Design Discharge Burnup: 44000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4667.0 GW(e).h
Energy Availability Factor: 61.1%
Load Factor: 60.5%
Operating Factor: 65.2%
Energy Unavailability Factor: 38.9%
Total Off-line Time: 3045 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	632.6	573.0	587.9	537.2	61.8	0.0	0.0	306.7	600.3	331.5	391.6	644.3	4667.0
EAF (%)	97.8	97.4	90.3	85.3	10.1	0.0	0.0	48.0	95.0	52.0	62.6	98.4	61.1
UCF (%)	98.1	98.2	93.2	100.0	12.9	0.0	0.0	48.7	96.6	52.8	63.0	99.1	63.2
LF (%)	96.6	96.9	89.8	84.9	9.4	0.0	0.0	46.8	94.7	50.6	61.8	98.4	60.5
OF (%)	100.0	100.0	94.2	100.1	13.0	0.0	0.0	58.1	96.9	53.3	70.8	100.0	65.2
EUF (%)	2.2	2.6	9.7	14.7	89.9	100.0	100.0	52.0	5.0	48.0	37.4	1.6	38.9
PUF (%)	0.0	0.1	0.0	0.0	87.1	10.1	0.0	15.2	0.0	0.0	0.0	0.0	9.5
UCLF (%)	1.9	1.6	6.8	0.0	0.0	89.9	100.0	36.1	3.4	47.2	37.0	0.9	27.2
XUF (%)	0.3	0.8	3.0	14.7	2.8	0.0	0.0	0.7	1.6	0.8	0.4	0.7	2.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Sep 1971	Lifetime Generation:	156688.3 GW(e).h
Date of First Criticality:	07 Mar 1977	Cumulative Energy Availability Factor:	70.8%
Date of Grid Connection:	06 Apr 1977	Cumulative Load Factor:	67.3%
Date of Commercial Operation:	01 Jan 1978	Cumulative Unit Capability Factor:	72.1%
		Cumulative Energy Unavailability Factor:	29.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	6079.2	890.0	78.2	78.2	78.2	78.2	78.0	78.0	7302	83.4
1979	4542.0	890.0	58.8	68.5	58.8	68.5	58.3	68.1	5338	60.9
1980	5510.0	890.0	70.7	69.2	70.7	69.2	70.5	68.9	6350	72.3
1981	5065.3	890.0	65.3	68.2	65.3	68.2	65.0	67.9	5844	66.7
1982	1848.2	880.0	24.0	59.5	24.0	59.5	24.0	59.2	2138	24.4
1983	5690.0	880.0	75.3	62.1	75.3	62.1	73.8	61.6	6701	76.5
1984	6503.0	880.0	85.2	65.4	85.2	65.4	84.1	64.8	7731	88.0
1985	6044.6	880.0	80.4	67.2	79.8	67.2	78.4	66.5	7105	81.1
1986	5661.3	880.0	75.1	68.1	74.7	68.0	73.4	67.3	6702	76.5
1987	5029.6	880.0	74.1	68.7	73.6	68.6	65.2	67.1	6147	70.2
1988	5399.0	880.0	86.5	70.3	77.9	69.4	69.8	67.3	7069	80.5
1989	3253.3	880.0	46.1	68.3	43.4	67.3	42.2	65.2	4108	46.9
1990	5036.7	880.0	79.6	69.2	74.6	67.8	65.3	65.3	6481	74.0
1991	4053.5	880.0	55.7	68.2	55.5	66.9	52.6	64.4	4900	55.9
1992	4867.1	880.0	67.1	68.1	66.8	66.9	63.1	64.3	6079	69.4
1993	5548.7	880.0	81.0	68.9	74.6	67.4	72.0	64.8	7161	81.7
1994	6186.1	880.0	87.4	70.0	86.5	68.5	80.2	65.7	7508	85.7
1995	5856.1	880.0	85.5	70.9	84.7	69.4	76.0	66.2	6990	79.8
1996	6165.0	880.0	85.3	71.6	85.2	70.3	79.8	66.9	7544	85.9
1997	5826.8	880.0	81.6	72.1	81.5	70.8	75.6	67.4	7209	82.3
1998	4617.1	880.0	64.3	71.8	61.7	70.4	59.9	67.0	5727	65.4
1999	5228.8	880.0	71.2	71.7	70.8	70.4	67.8	67.1	6283	71.7
2000	5782.6	880.0	81.1	72.1	80.8	70.9	74.8	67.4	7145	81.3
2001	5507.5	880.0	79.6	72.5	78.4	71.2	71.4	67.6	7095	81.0
2002	2989.7	880.0	42.9	71.3	41.1	70.0	38.8	66.4	3832	43.7
2003	6985.2	880.0	98.2	72.3	96.5	71.0	90.6	67.3	8518	97.2
2004	3726.5	880.0	50.2	71.5	49.6	70.2	48.2	66.6	4500	51.2
2005	5448.4	880.0	75.4	71.6	75.3	70.4	70.7	66.8	6673	76.2
2006	6875.7	880.0	94.1	72.4	93.5	71.2	89.2	67.5	8338	95.2
2007	4667.0	880.0	63.2	72.1	61.1	70.8	60.5	67.3	5715	65.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		2080			672	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	720			1215	13	
D. Inspection, maintenance or repair without refuelling				54	10	
E. Testing of plant systems or components	44			8	0	
H. Nuclear regulatory requirements					55	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					7	5
L. Human factor related		131			99	
Z. Others		71				
Subtotal	764	2282	0	1277	859	5
Total		3046			2141	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	144	297
12. Reactor I&C Systems	76	29
13. Reactor Auxiliary Systems		5
14. Safety Systems	1050	16
15. Reactor Cooling Systems	106	50
16. Steam generation systems		31
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries	589	83
32. Feedwater and Main Steam System		28
33. Circulating Water System		0
35. All other I&C Systems	25	0
41. Main Generator Systems	48	85
42. Electrical Power Supply Systems	42	7
XX. Miscellaneous Systems		2
Total	2080	634

FR-12 FESSENHEIM-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 880.0 MW(e)
Design Net Capacity: 880.0 MW(e)
Design Discharge Burnup: 44000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4816.7 GW(e).h
Energy Availability Factor: 62.9%
Load Factor: 62.5%
Operating Factor: 66.0%
Energy Unavailability Factor: 37.1%
Total Off-line Time: 2979 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	631.1	378.9	595.3	611.4	359.4	306.0	622.6	602.8	603.5	97.5	0.0	8.3	4816.7
EAF (%)	96.8	65.0	91.2	97.1	55.6	49.4	95.3	92.5	95.4	15.3	0.0	1.3	62.9
UCF (%)	99.1	66.1	92.9	99.1	57.1	50.8	98.6	95.6	97.9	15.7	0.0	1.3	64.5
LF (%)	96.4	64.1	90.9	96.6	54.9	48.3	95.1	92.1	95.2	14.9	0.0	1.3	62.5
OF (%)	99.7	67.6	94.0	100.1	57.7	53.2	100.0	99.1	100.0	16.2	0.0	4.3	66.0
EUF (%)	3.2	35.0	8.8	2.9	44.4	50.6	4.7	7.5	4.6	84.7	100.0	98.7	37.1
PUF (%)	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	83.9	56.7	5.2	12.3
UCLF (%)	0.9	33.9	6.9	0.9	42.9	49.2	1.4	4.4	2.0	0.4	43.3	93.6	23.2
XUF (%)	2.3	1.0	1.7	2.0	1.4	1.4	3.3	3.2	2.5	0.4	0.0	0.0	1.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Feb 1972	Lifetime Generation:	162606.7 GW(e).h
Date of First Criticality:	27 Jun 1977	Cumulative Energy Availability Factor:	74.8%
Date of Grid Connection:	07 Oct 1977	Cumulative Load Factor:	70.3%
Date of Commercial Operation:	01 Apr 1978	Cumulative Unit Capability Factor:	75.7%
		Cumulative Energy Unavailability Factor:	25.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	4785.8	890.0	82.7	82.7	81.8	81.8	81.5	81.5	5648	85.6
1979	4521.0	890.0	58.7	69.0	58.7	68.6	58.0	68.1	5684	64.9
1980	5601.0	890.0	72.2	70.2	72.2	69.9	71.6	69.4	6603	75.2
1981	6055.0	890.0	79.4	72.6	79.4	72.5	77.7	71.6	7117	81.2
1982	6047.9	880.0	93.1	76.9	93.1	76.8	78.5	73.0	8247	94.1
1983	4315.0	880.0	58.2	73.7	58.2	73.6	56.0	70.1	5206	59.4
1984	6459.0	880.0	88.4	75.9	88.4	75.8	83.6	72.1	7860	89.5
1985	5917.2	880.0	80.0	76.4	78.6	76.1	76.8	72.7	7248	82.7
1986	5522.5	880.0	73.4	76.1	73.2	75.8	71.6	72.5	6573	75.0
1987	6150.1	880.0	83.6	76.8	82.6	76.5	79.8	73.3	7335	83.7
1988	4830.0	880.0	72.4	76.4	69.8	75.9	62.5	72.3	6158	70.1
1989	5643.4	880.0	97.0	78.2	96.2	77.6	73.2	72.4	6944	79.3
1990	3552.4	880.0	52.0	76.1	49.6	75.4	46.1	70.3	4612	52.6
1991	5308.4	880.0	73.3	75.9	72.8	75.2	68.9	70.2	6537	74.6
1992	2202.0	880.0	29.7	72.8	29.7	72.1	28.6	67.4	2699	30.8
1993	5775.1	880.0	81.0	73.3	77.6	72.5	74.9	67.9	7167	81.8
1994	5294.9	880.0	98.5	74.8	98.2	74.0	68.7	67.9	6807	77.7
1995	5098.3	880.0	71.5	74.6	70.5	73.8	66.1	67.8	6305	72.0
1996	6192.1	880.0	84.9	75.2	84.4	74.4	80.1	68.5	7515	85.6
1997	5808.6	880.0	80.6	75.5	80.0	74.7	75.3	68.8	6982	79.7
1998	5597.0	880.0	75.9	75.5	73.7	74.6	72.6	69.0	6797	77.6
1999	6392.6	880.0	87.1	76.0	86.4	75.2	82.9	69.6	7708	88.0
2000	3730.4	880.0	51.4	74.9	51.1	74.1	48.3	68.7	4514	51.4
2001	6699.9	880.0	88.6	75.5	87.3	74.7	86.9	69.5	7876	89.9
2002	6562.6	880.0	87.1	76.0	85.6	75.1	85.1	70.1	7729	88.2
2003	4589.5	880.0	60.7	75.4	60.7	74.5	59.5	69.7	5434	62.0
2004	6913.7	880.0	94.5	76.1	93.6	75.2	89.4	70.4	8435	96.0
2005	6381.2	880.0	87.6	76.5	85.1	75.6	82.8	70.9	7813	89.2
2006	4803.1	880.0	64.7	76.1	64.7	75.2	62.3	70.6	5844	66.7
2007	4816.7	880.0	64.5	75.7	62.9	74.8	62.5	70.3	5781	66.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1353			486	3
B. Refuelling without a maintenance				23	1	
C. Inspection, maintenance or repair combined with refuelling	1032			1153	7	
D. Inspection, maintenance or repair without refuelling				56		
E. Testing of plant systems or components	17			16	1	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				1		
H. Nuclear regulatory requirements		411			5	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					6	29
L. Human factor related		24			12	0
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)			0			
Z. Others		144			6	
Subtotal	1049	1932	0	1249	524	32
Total		2981			1805	

7. Equipment Related Full Outages, Analysis by System

System	2007	1977 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories	96	51
12. Reactor I&C Systems	144	16
13. Reactor Auxiliary Systems	312	16
14. Safety Systems	356	16
15. Reactor Cooling Systems	48	29
16. Steam generation systems		116
21. Fuel Handling and Storage Facilities		4
31. Turbine and auxiliaries	386	47
32. Feedwater and Main Steam System	2	40
33. Circulating Water System		4
41. Main Generator Systems		66
42. Electrical Power Supply Systems	2	6
XX. Miscellaneous Systems		2
Total	1346	413

FR-46 FLAMANVILLE-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1330.0 MW(e)
 Design Net Capacity: 1330.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9595.6 GW(e).h
 Energy Availability Factor: 89.0%
 Load Factor: 82.4%
 Operating Factor: 91.8%
 Energy Unavailability Factor: 11.0%
 Total Off-line Time: 719 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	847.2	741.1	565.9	301.1	927.6	866.1	930.0	871.6	817.5	900.4	899.4	927.7	9595.6
EAF (%)	99.0	90.7	66.8	35.4	98.1	96.8	97.8	99.2	93.9	97.7	96.9	94.6	89.0
UCF (%)	99.3	91.0	67.3	37.8	99.4	99.5	98.9	99.8	94.4	99.0	99.5	98.9	90.5
LF (%)	85.6	82.9	57.2	31.5	93.7	90.4	94.0	88.1	85.4	90.9	93.9	93.8	82.4
OF (%)	100.0	92.4	69.1	39.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.8
EUF (%)	1.0	9.3	33.2	64.6	1.9	3.2	2.2	0.8	6.1	2.3	3.1	5.4	11.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.6	9.0	32.6	62.2	0.6	0.5	1.1	0.1	5.6	1.0	0.5	1.1	9.5
XUF (%)	0.4	0.3	0.6	2.4	1.4	2.6	1.2	0.6	0.5	1.3	2.6	4.3	1.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Dec 1979 Lifetime Generation: 175504.6 GW(e).h
 Date of First Criticality: 29 Sep 1985 Cumulative Energy Availability Factor: 75.0%
 Date of Grid Connection: 04 Dec 1985 Cumulative Load Factor: 69.9%
 Date of Commercial Operation: 01 Dec 1986 Cumulative Unit Capability Factor: 77.6%
 Cumulative Energy Unavailability Factor: 25.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	965.9	1290.0	97.3	97.3	97.3	97.3	100.6	100.6	726	97.6
1987	7150.8	1290.0	63.2	65.9	62.2	64.9	63.3	66.2	5656	64.6
1988	7175.0	1330.0	67.4	66.6	66.0	65.5	61.4	63.9	5757	65.5
1989	8775.2	1330.0	81.0	71.3	80.6	70.4	75.3	67.6	7146	81.6
1990	7090.0	1330.0	67.0	70.3	65.7	69.2	60.9	65.9	6360	72.6
1991	5882.9	1330.0	68.4	69.9	59.4	67.3	50.5	62.9	5481	62.6
1992	7606.8	1330.0	66.2	69.3	66.2	67.1	65.1	63.3	5901	67.2
1993	9301.8	1330.0	96.8	73.2	87.2	70.0	79.8	65.6	7936	90.6
1994	7145.8	1330.0	80.1	74.0	75.3	70.6	61.3	65.1	6515	74.4
1995	7665.1	1330.0	77.4	74.4	73.2	70.9	65.8	65.2	6654	76.0
1996	8598.3	1330.0	84.6	75.4	77.8	71.6	73.6	66.0	7050	80.3
1997	6853.9	1330.0	63.9	74.4	62.3	70.8	58.8	65.3	5529	63.1
1998	9469.4	1330.0	86.7	75.4	86.7	72.1	81.3	66.7	7855	89.7
1999	6979.4	1330.0	66.1	74.7	64.4	71.5	59.9	66.2	5906	67.4
2000	8035.3	1330.0	75.6	74.8	74.5	71.7	68.8	66.3	6607	75.2
2001	10038.5	1330.0	92.6	75.9	92.5	73.1	86.2	67.7	8126	92.8
2002	8141.8	1330.0	75.5	75.9	73.1	73.1	69.9	67.8	6736	76.9
2003	7510.8	1330.0	68.2	75.5	67.8	72.8	64.5	67.6	6090	69.5
2004	10630.0	1330.0	98.2	76.7	96.8	74.1	91.0	68.9	8668	98.7
2005	9099.9	1330.0	85.6	77.2	83.3	74.6	78.1	69.4	7627	87.1
2006	7790.9	1330.0	72.5	77.0	69.1	74.3	66.9	69.3	6675	76.2
2007	9595.6	1330.0	90.5	77.6	89.0	75.0	82.4	69.9	8041	91.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		496			743	
B. Refuelling without a maintenance				39	2	
C. Inspection, maintenance or repair combined with refuelling				895		
D. Inspection, maintenance or repair without refuelling				34		
E. Testing of plant systems or components	0			13	1	
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					21	34
L. Human factor related		223				
Z. Others					4	
Subtotal	0	719	0	981	771	36
Total		719			1788	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		135
12. Reactor I&C Systems		39
13. Reactor Auxiliary Systems		24
14. Safety Systems		13
15. Reactor Cooling Systems		26
16. Steam generation systems		5
31. Turbine and auxiliaries		163
32. Feedwater and Main Steam System	419	53
33. Circulating Water System		3
35. All other I&C Systems	34	
41. Main Generator Systems		143
42. Electrical Power Supply Systems		44
XX. Miscellaneous Systems	43	30
Total	496	678

FR-47 FLAMANVILLE-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 1330.0 MW(e)
 Design Net Capacity: 1330.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8063.0 GW(e).h
 Energy Availability Factor: 76.5%
 Load Factor: 69.2%
 Operating Factor: 80.1%
 Energy Unavailability Factor: 23.5%
 Total Off-line Time: 1739 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	867.0	12.6	0.0	431.3	873.7	738.9	778.8	840.6	857.1	884.7	860.9	917.4	8063.0
EAF (%)	87.6	2.2	0.1	46.8	99.9	92.9	90.0	99.7	99.4	98.4	96.2	98.6	76.5
UCF (%)	100.0	2.8	0.1	46.9	100.0	94.4	90.4	100.0	100.0	100.0	100.0	98.8	78.3
LF (%)	87.6	1.4	0.0	45.1	88.3	77.2	78.7	85.0	89.5	89.3	89.9	92.7	69.2
OF (%)	100.0	2.8	0.0	60.4	100.0	95.8	96.4	100.0	100.0	100.0	100.0	100.0	80.1
EUF (%)	12.4	97.8	99.9	53.2	0.1	7.1	10.0	0.3	0.6	1.6	3.8	1.4	23.5
PUF (%)	0.0	97.2	99.9	15.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	17.3
UCLF (%)	0.0	0.0	0.0	37.3	0.0	5.6	9.5	0.0	0.0	0.0	0.0	1.2	4.4
XUF (%)	12.4	0.5	0.0	0.1	0.1	1.5	0.4	0.2	0.5	1.6	3.8	0.1	1.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 May 1980 Lifetime Generation: 173961.9 GW(e).h
 Date of First Criticality: 12 Jun 1986 Cumulative Energy Availability Factor: 77.2%
 Date of Grid Connection: 18 Jul 1986 Cumulative Load Factor: 70.4%
 Date of Commercial Operation: 09 Mar 1987 Cumulative Unit Capability Factor: 78.3%
 Cumulative Energy Unavailability Factor: 22.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	5578.8	1290.0	88.9	88.9	88.7	88.7	58.9	58.9	5094	69.4
1988	7106.0	1330.0	67.4	77.1	65.4	75.8	60.8	60.0	5674	64.6
1989	4824.5	1330.0	50.6	67.7	48.7	66.2	41.4	53.4	3836	43.8
1990	7819.6	1330.0	76.6	70.0	75.7	68.7	67.1	57.0	6392	73.0
1991	7965.7	1330.0	72.3	70.5	70.6	69.1	68.4	59.3	6432	73.4
1992	8842.4	1330.0	78.2	71.8	78.0	70.6	75.7	62.2	6962	79.3
1993	7985.2	1330.0	71.4	71.8	69.1	70.4	68.5	63.1	6338	72.4
1994	8384.3	1330.0	75.4	72.2	75.3	71.0	72.0	64.2	6711	76.6
1995	8962.4	1330.0	82.1	73.3	81.4	72.2	76.9	65.7	7264	82.9
1996	9387.5	1330.0	87.5	74.8	86.6	73.7	80.4	67.2	7685	87.5
1997	8546.0	1330.0	95.4	76.7	95.3	75.7	73.4	67.7	7351	83.9
1998	5656.6	1330.0	55.4	74.9	55.4	74.0	48.6	66.1	4880	55.7
1999	7248.9	1330.0	67.4	74.3	65.2	73.3	62.2	65.8	6034	68.9
2000	9907.9	1330.0	94.2	75.8	93.7	74.8	84.8	67.2	8122	92.5
2001	8565.1	1330.0	77.9	75.9	76.2	74.9	73.5	67.6	6863	78.3
2002	8502.3	1330.0	78.1	76.0	77.9	75.1	73.0	68.0	6839	78.1
2003	10065.3	1330.0	93.6	77.1	93.4	76.1	86.4	69.1	8365	95.5
2004	7499.8	1330.0	68.3	76.6	66.8	75.6	64.2	68.8	6125	69.7
2005	9779.1	1330.0	89.1	77.3	86.7	76.2	83.9	69.6	7894	90.1
2006	10125.8	1330.0	98.0	78.3	97.5	77.3	86.9	70.5	8438	96.3
2007	8063.0	1330.0	78.3	78.3	76.5	77.2	69.2	70.4	7021	80.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		322			599	
B. Refuelling without a maintenance				33	3	
C. Inspection, maintenance or repair combined with refuelling	1397			820	34	
D. Inspection, maintenance or repair without refuelling				100		
E. Testing of plant systems or components	20			23	1	0
G. Major back-fitting, refurbishment or upgrading activities without refuelling				1		
H. Nuclear regulatory requirements					15	
J. Grid failure or grid unavailability						3
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					20	2
L. Human factor related					1	
Z. Others					0	
Subtotal	1417	322	0	977	673	5
Total		1739			1655	

7. Equipment Related Full Outages, Analysis by System

System	2007	1985 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		11
12. Reactor I&C Systems	50	19
13. Reactor Auxiliary Systems	219	43
14. Safety Systems		21
15. Reactor Cooling Systems		199
16. Steam generation systems		39
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		89
32. Feedwater and Main Steam System	53	35
41. Main Generator Systems		56
42. Electrical Power Supply Systems		55
XX. Miscellaneous Systems		5
Total	322	572

FR-61 GOLFECH-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1310.0 MW(e)
 Design Net Capacity: 1310.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9517.6 GW(e).h
 Energy Availability Factor: 97.7%
 Load Factor: 82.9%
 Operating Factor: 97.6%
 Energy Unavailability Factor: 2.3%
 Total Off-line Time: 206 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	852.2	776.8	881.0	753.2	754.9	704.3	771.3	643.5	681.0	842.0	899.5	958.0	9517.6
EAF (%)	99.9	98.1	99.9	91.3	99.8	99.4	99.7	94.9	92.5	98.8	98.9	99.5	97.7
UCF (%)	100.0	98.2	100.0	91.7	100.0	99.8	100.0	95.2	92.8	100.0	100.0	100.0	98.2
LF (%)	87.4	88.2	90.4	80.0	77.5	74.7	79.1	66.0	72.2	86.3	95.4	98.3	82.9
OF (%)	100.0	98.4	99.9	92.1	100.0	96.0	100.0	91.5	93.8	100.0	100.0	100.0	97.6
EUF (%)	0.1	1.9	0.1	8.7	0.2	0.6	0.3	5.1	7.5	1.2	1.1	0.5	2.3
PUF (%)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	1.7	0.0	8.2	0.0	0.2	0.0	4.7	7.3	0.0	0.0	0.0	1.8
XUF (%)	0.1	0.2	0.1	0.5	0.2	0.4	0.3	0.3	0.3	1.1	1.1	0.5	0.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 17 Nov 1982 Lifetime Generation: 148890.1 GW(e).h
 Date of First Criticality: 24 Apr 1990 Cumulative Energy Availability Factor: 82.7%
 Date of Grid Connection: 07 Jun 1990 Cumulative Load Factor: 75.5%
 Date of Commercial Operation: 01 Feb 1991 Cumulative Unit Capability Factor: 85.6%
 Cumulative Energy Unavailability Factor: 17.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1991	8871.6	1310.0	97.8	97.8	96.1	96.1	84.5	84.5	7608	94.9
1992	7065.9	1310.0	67.9	82.1	64.3	79.5	61.4	72.4	6128	69.8
1993	7925.6	1310.0	82.6	82.3	72.7	77.1	69.1	71.3	7143	81.5
1994	7756.1	1310.0	81.3	82.0	77.8	77.3	67.6	70.3	7215	82.4
1995	7897.8	1310.0	83.5	82.3	75.6	77.0	68.8	70.0	7005	80.0
1996	8862.4	1310.0	84.8	82.8	83.2	78.0	77.0	71.2	7598	86.5
1997	9151.6	1310.0	94.6	84.5	94.5	80.4	79.7	72.4	8000	91.3
1998	8576.6	1310.0	84.7	84.5	81.1	80.5	74.7	72.7	7472	85.3
1999	7926.3	1310.0	80.8	84.1	77.2	80.1	69.1	72.3	6837	78.0
2000	8766.3	1310.0	94.1	85.1	93.9	81.5	76.2	72.7	7901	89.9
2001	7511.9	1310.0	69.1	83.6	68.4	80.3	65.5	72.0	6147	70.2
2002	9242.4	1310.0	82.5	83.5	81.4	80.4	80.5	72.8	7301	83.3
2003	10342.7	1310.0	99.2	84.8	93.9	81.5	90.1	74.1	8252	94.2
2004	9051.1	1310.0	87.6	85.0	84.7	81.7	78.7	74.4	7721	87.9
2005	8653.5	1310.0	78.7	84.5	78.7	81.5	75.4	74.5	7014	80.1
2006	9475.1	1310.0	88.7	84.8	85.7	81.8	82.6	75.0	7848	89.6
2007	9517.6	1310.0	98.2	85.6	97.7	82.7	82.9	75.5	8554	97.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1990 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		148			182	
B. Refuelling without a maintenance				37	3	
C. Inspection, maintenance or repair combined with refuelling				839	2	
D. Inspection, maintenance or repair without refuelling				63		
E. Testing of plant systems or components				66		
H. Nuclear regulatory requirements					2	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			30		10	
L. Human factor related					9	2
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						22
Z. Others					5	
Subtotal	0	148	30	1005	213	24
Total		178			1242	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1990 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		6
12. Reactor I&C Systems	11	5
13. Reactor Auxiliary Systems		8
14. Safety Systems		12
15. Reactor Cooling Systems		30
16. Steam generation systems		7
21. Fuel Handling and Storage Facilities		20
31. Turbine and auxiliaries		8
32. Feedwater and Main Steam System	34	6
33. Circulating Water System		6
35. All other I&C Systems	45	0
41. Main Generator Systems	58	43
42. Electrical Power Supply Systems		2
Total	148	153

FR-68 GOLFECH-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1310.0 MW(e)
 Design Net Capacity: 1310.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9922.0 GW(e).h
 Energy Availability Factor: 90.2%
 Load Factor: 86.5%
 Operating Factor: 91.6%
 Energy Unavailability Factor: 9.8%
 Total Off-line Time: 734 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	958.0	870.9	943.7	920.7	112.1	750.8	876.5	879.2	870.5	916.0	896.6	927.1	9922.0
EAF (%)	99.3	99.4	98.2	98.5	12.5	82.5	97.8	99.3	99.2	99.0	98.8	98.9	90.2
UCF (%)	100.0	100.0	98.5	99.4	13.2	84.1	98.4	99.9	100.0	99.6	99.3	99.4	90.9
LF (%)	98.3	98.9	96.8	97.7	11.5	79.6	89.9	90.2	92.3	93.9	95.1	95.1	86.5
OF (%)	100.0	100.0	99.2	100.1	13.3	89.7	98.7	100.0	100.0	100.0	100.0	100.0	91.6
EUF (%)	0.7	0.6	1.8	1.5	87.5	17.5	2.2	0.7	0.8	1.0	1.2	1.1	9.8
PUF (%)	0.0	0.0	0.0	0.0	86.8	15.5	0.0	0.0	0.0	0.1	0.1	0.0	8.7
UCLF (%)	0.0	0.0	1.5	0.6	0.0	0.4	1.6	0.1	0.1	0.3	0.6	0.6	0.5
XUF (%)	0.6	0.6	0.3	0.9	0.8	1.6	0.7	0.6	0.8	0.6	0.5	0.6	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Oct 1984 Lifetime Generation: 122683.8 GW(e).h
 Date of First Criticality: 21 May 1993 Cumulative Energy Availability Factor: 84.0%
 Date of Grid Connection: 18 Jun 1993 Cumulative Load Factor: 75.4%
 Date of Commercial Operation: 04 Mar 1994 Cumulative Unit Capability Factor: 85.8%
 Cumulative Energy Unavailability Factor: 16.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1994	6507.6	1310.0	99.7	99.7	99.4	99.4	67.6	67.6	5912	80.5
1995	7030.1	1310.0	66.7	81.7	62.9	79.6	61.3	64.2	6002	68.5
1996	9016.4	1310.0	84.7	82.8	83.6	81.0	78.4	69.2	7549	85.9
1997	8649.9	1310.0	83.7	83.0	80.2	80.8	75.4	70.8	7414	84.6
1998	8359.6	1310.0	85.1	83.4	82.9	81.2	72.8	71.2	7222	82.4
1999	9516.9	1310.0	98.0	85.9	97.7	84.0	82.9	73.2	8407	96.0
2000	8877.6	1310.0	84.5	85.7	81.8	83.7	77.1	73.8	7535	85.8
2001	8958.3	1310.0	85.3	85.7	84.3	83.8	78.1	74.3	7586	86.6
2002	9847.1	1310.0	97.3	87.0	97.3	85.3	85.8	75.6	8553	97.6
2003	7614.9	1310.0	77.7	86.0	75.2	84.3	66.4	74.7	7115	81.2
2004	7093.7	1310.0	65.7	84.2	65.7	82.6	61.6	73.5	6129	69.8
2005	9936.3	1310.0	99.2	85.4	98.9	84.0	86.6	74.6	8715	99.5
2006	8516.6	1310.0	84.8	85.4	78.2	83.5	74.2	74.6	7150	81.6
2007	9922.0	1310.0	90.9	85.8	90.2	84.0	86.5	75.4	8026	91.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1993 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		5			283	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	717			761	2	
E. Testing of plant systems or components	3			54		
H. Nuclear regulatory requirements		10			0	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					50	
L. Human factor related		2			2	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						14
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant, spare part delivery problems etc.)						0
S. Fuel management limitation (including high flux tilt, stretch out or coast-down operation)					5	
Subtotal	720	17	0	815	342	14
Total		737			1171	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1993 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		1
12. Reactor I&C Systems		42
13. Reactor Auxiliary Systems		5
15. Reactor Cooling Systems		11
16. Steam generation systems		3
31. Turbine and auxiliaries	5	11
32. Feedwater and Main Steam System		1
33. Circulating Water System		3
41. Main Generator Systems		167
42. Electrical Power Supply Systems		14
XX. Miscellaneous Systems		0
Total	5	258

FR-20 GRAVELINES-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 910.0 MW(e)
Design Net Capacity: 910.0 MW(e)
Design Discharge Burnup: 33735 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6168.2 GW(e).h
Energy Availability Factor: 80.1%
Load Factor: 77.4%
Operating Factor: 83.5%
Energy Unavailability Factor: 19.9%
Total Off-line Time: 1448 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	638.1	581.5	605.9	633.6	633.9	614.8	614.9	52.2	0.0	595.2	589.8	608.4	6168.2
EAF (%)	99.4	97.2	91.9	97.4	98.6	96.5	90.8	8.2	0.3	88.0	96.1	97.5	80.1
UCF (%)	99.8	97.3	98.2	99.0	99.5	99.5	100.0	9.8	0.3	88.6	97.6	99.4	82.4
LF (%)	94.3	95.1	89.5	96.7	93.6	93.8	90.8	7.7	0.0	87.9	90.0	89.9	77.4
OF (%)	100.0	100.0	93.5	100.0	100.0	100.0	100.0	10.1	1.7	98.0	98.9	100.0	83.5
EUF (%)	0.6	2.8	8.1	2.6	1.4	3.5	9.2	91.8	99.7	12.0	3.9	2.5	19.9
PUF (%)	0.0	0.1	0.0	0.1	0.0	0.1	0.0	90.2	65.0	7.0	0.0	0.0	13.6
UCLF (%)	0.2	2.6	1.8	1.0	0.6	0.4	0.0	0.0	34.7	4.4	2.4	0.6	4.0
XUF (%)	0.3	0.1	6.3	1.5	0.8	3.0	9.2	1.6	0.0	0.6	1.6	1.9	2.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Feb 1975
Date of First Criticality: 21 Feb 1980
Date of Grid Connection: 13 Mar 1980
Date of Commercial Operation: 25 Nov 1980

Lifetime Generation: 152932.2 GW(e).h
Cumulative Energy Availability Factor: 75.9%
Cumulative Load Factor: 70.1%
Cumulative Unit Capability Factor: 77.6%
Cumulative Energy Unavailability Factor: 24.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	920.0	918.0	68.4	68.4	68.4	68.4	68.3	68.3	1037	70.8
1981	5001.8	920.0	63.2	64.0	63.2	64.0	62.1	63.0	5785	66.0
1982	2987.5	910.0	38.2	52.2	38.2	52.2	37.5	51.3	3602	41.1
1983	5537.0	910.0	69.9	57.8	69.9	57.8	69.5	57.0	6237	71.2
1984	6617.0	910.0	86.2	64.6	86.2	64.6	82.8	63.2	7654	87.1
1985	6211.7	910.0	81.3	67.8	80.3	67.6	77.9	66.0	7218	82.4
1986	5725.5	910.0	74.8	68.9	73.4	68.6	71.8	67.0	6508	74.3
1987	4650.1	910.0	89.3	71.8	89.0	71.4	58.3	65.8	5895	67.3
1988	4289.0	910.0	57.6	70.0	57.0	69.6	53.7	64.3	5306	60.4
1989	5109.6	910.0	67.7	69.8	67.7	69.4	64.1	64.3	6224	71.1
1990	4463.6	910.0	61.3	68.9	59.2	68.4	56.0	63.4	5425	61.9
1991	5675.0	910.0	74.0	69.4	73.4	68.9	71.2	64.1	6619	75.6
1992	5834.7	910.0	84.0	70.6	80.7	69.8	73.0	64.9	7250	82.5
1993	5866.9	910.0	93.8	72.4	80.5	70.6	73.6	65.5	7794	89.0
1994	4657.7	910.0	68.6	72.1	67.7	70.4	58.4	65.0	5729	65.4
1995	6123.1	910.0	83.8	72.9	82.8	71.2	76.8	65.8	7461	85.2
1996	6089.2	910.0	83.5	73.5	80.3	71.8	76.2	66.4	7357	83.8
1997	5860.4	910.0	82.9	74.1	81.7	72.4	73.5	66.9	7236	82.6
1998	6321.4	910.0	87.1	74.8	83.7	73.0	79.3	67.5	7622	87.0
1999	5841.3	910.0	80.3	75.1	78.6	73.3	73.3	67.8	7116	81.2
2000	6531.9	910.0	88.2	75.7	88.1	74.0	81.7	68.5	7705	87.7
2001	5289.4	910.0	67.6	75.3	66.7	73.7	66.4	68.4	6034	68.9
2002	5769.3	915.0	88.7	75.9	86.4	74.3	72.0	68.6	7057	80.6
2003	5919.5	910.0	85.7	76.4	85.1	74.7	74.3	68.8	7420	84.7
2004	6213.9	910.0	86.4	76.8	86.2	75.2	77.7	69.2	7664	87.2
2005	6188.7	910.0	84.6	77.1	82.5	75.5	77.6	69.5	7400	84.5
2006	6244.4	910.0	84.9	77.4	82.8	75.8	78.3	69.9	7567	86.4
2007	6168.2	910.0	82.4	77.6	80.1	75.9	77.4	70.1	7312	83.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		130			490	
B. Refuelling without a maintenance				21	1	
C. Inspection, maintenance or repair combined with refuelling	1127			1103	17	
D. Inspection, maintenance or repair without refuelling				11	4	
E. Testing of plant systems or components				13	5	
H. Nuclear regulatory requirements		6			5	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					31	20
L. Human factor related		144			9	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			41			
Z. Others					12	
Subtotal	1127	280	41	1148	574	20
Total		1448			1742	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		158
12. Reactor I&C Systems		8
13. Reactor Auxiliary Systems		17
14. Safety Systems		8
15. Reactor Cooling Systems		106
16. Steam generation systems		100
31. Turbine and auxiliaries	24	21
32. Feedwater and Main Steam System		20
33. Circulating Water System		1
41. Main Generator Systems	106	10
42. Electrical Power Supply Systems		33
Total	130	482

FR-21 GRAVELINES-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 910.0 MW(e)
 Design Net Capacity: 910.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6522.6 GW(e).h
 Energy Availability Factor: 86.4%
 Load Factor: 81.8%
 Operating Factor: 89.0%
 Energy Unavailability Factor: 13.6%
 Total Off-line Time: 964 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	540.8	587.4	627.5	262.7	249.7	589.9	619.0	578.0	579.3	620.9	615.7	651.8	6522.6
EAF (%)	83.4	99.4	94.1	40.4	38.1	95.6	97.7	96.3	98.3	99.2	98.5	97.1	86.4
UCF (%)	83.4	99.5	99.6	43.1	38.1	98.0	99.4	99.1	99.3	99.3	98.6	99.1	88.0
LF (%)	79.9	96.1	92.7	40.1	36.9	90.0	91.4	85.4	88.4	91.6	94.0	96.3	81.8
OF (%)	84.7	100.0	95.8	43.4	44.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.0
EUF (%)	16.6	0.6	5.9	59.6	61.9	4.4	2.3	3.7	1.7	0.8	1.5	2.9	13.6
PUF (%)	0.1	0.0	0.1	56.9	35.6	1.1	0.0	0.0	0.0	0.0	0.1	0.0	7.8
UCLF (%)	16.5	0.5	0.4	0.0	26.3	1.0	0.6	0.8	0.7	0.7	1.3	1.0	4.2
XUF (%)	0.0	0.1	5.4	2.6	0.0	2.4	1.7	2.9	1.0	0.1	0.1	1.9	1.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Mar 1975	Lifetime Generation:	159587.4 GW(e).h
Date of First Criticality:	02 Aug 1980	Cumulative Energy Availability Factor:	79.3%
Date of Grid Connection:	26 Aug 1980	Cumulative Load Factor:	73.5%
Date of Commercial Operation:	01 Dec 1980	Cumulative Unit Capability Factor:	80.6%
		Cumulative Energy Unavailability Factor:	20.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	515.0	914.0	74.7	74.7	74.7	74.7	75.2	75.2	571	76.7
1981	5949.2	920.0	81.2	80.7	81.2	80.7	73.8	73.9	7276	83.1
1982	2118.5	910.0	29.2	56.1	29.2	56.1	26.6	51.3	2732	31.2
1983	6130.0	910.0	77.9	63.2	77.9	63.2	76.9	59.6	6917	79.0
1984	5749.0	910.0	82.0	67.8	82.0	67.8	71.9	62.6	6751	76.9
1985	6829.7	910.0	90.2	72.2	89.7	72.1	85.7	67.1	7950	90.8
1986	6422.0	910.0	96.6	76.2	96.4	76.1	80.6	69.3	7956	90.8
1987	5357.9	910.0	77.4	76.4	75.2	75.9	67.2	69.0	6807	77.7
1988	5577.0	910.0	81.3	77.0	77.2	76.1	69.8	69.1	7227	82.3
1989	6412.9	910.0	84.6	77.8	83.6	76.9	80.4	70.4	7460	85.2
1990	6143.1	910.0	80.6	78.1	79.6	77.2	77.1	71.0	7164	81.8
1991	4915.9	910.0	63.6	76.8	63.0	75.9	61.7	70.2	5648	64.5
1992	6124.2	910.0	80.6	77.1	78.2	76.1	76.6	70.7	7149	81.4
1993	6219.9	910.0	82.3	77.5	79.3	76.3	78.0	71.3	7297	83.3
1994	6293.7	910.0	86.2	78.1	82.7	76.8	79.0	71.8	7638	87.2
1995	5599.7	910.0	75.6	77.9	74.6	76.6	70.2	71.7	6735	76.9
1996	5235.9	910.0	70.7	77.5	69.7	76.2	65.5	71.3	6361	72.4
1997	6641.2	910.0	98.0	78.7	97.8	77.5	83.3	72.0	8006	91.4
1998	5531.4	910.0	82.2	78.9	82.1	77.7	69.4	71.9	6896	78.7
1999	6394.4	910.0	87.8	79.3	85.3	78.1	80.2	72.3	7705	88.0
2000	5582.7	910.0	80.5	79.4	77.3	78.1	69.8	72.2	6952	79.1
2001	5984.5	910.0	85.5	79.7	85.0	78.4	75.1	72.3	7601	86.8
2002	5254.3	915.0	74.4	79.5	72.4	78.1	65.6	72.0	6658	76.0
2003	6553.9	910.0	89.6	79.9	89.2	78.6	82.2	72.5	7986	91.2
2004	6009.0	910.0	81.8	80.0	80.4	78.7	75.2	72.6	7262	82.7
2005	6622.6	910.0	88.2	80.3	86.6	79.0	83.1	73.0	7880	89.9
2006	6222.4	910.0	81.7	80.4	79.6	79.0	78.1	73.2	7369	84.1
2007	6522.6	910.0	88.0	80.6	86.4	79.3	81.8	73.5	7796	89.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		250			153	
B. Refuelling without a maintenance	624			23		
C. Inspection, maintenance or repair combined with refuelling				1040	45	
D. Inspection, maintenance or repair without refuelling				69		
E. Testing of plant systems or components	0			27		
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				21	48	58
L. Human factor related		60			3	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			30			
Z. Others					5	
Subtotal	624	310	30	1180	254	60
Total		964			1494	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		8
12. Reactor I&C Systems	43	7
13. Reactor Auxiliary Systems	114	9
14. Safety Systems		6
15. Reactor Cooling Systems	9	25
16. Steam generation systems		23
21. Fuel Handling and Storage Facilities		0
31. Turbine and auxiliaries		12
32. Feedwater and Main Steam System	17	13
41. Main Generator Systems		25
42. Electrical Power Supply Systems		11
Total	183	139

FR-27 GRAVELINES-3

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 910.0 MW(e)
 Design Net Capacity: 910.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6265.6 GW(e).h
 Energy Availability Factor: 79.6%
 Load Factor: 78.6%
 Operating Factor: 82.9%
 Energy Unavailability Factor: 20.4%
 Total Off-line Time: 1494 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	662.7	564.3	33.0	0.0	540.7	626.3	622.8	626.8	628.5	656.5	640.2	663.8	6265.6
EAF (%)	98.3	92.3	5.6	0.0	80.2	96.0	94.6	96.1	97.6	98.0	98.5	98.2	79.6
UCF (%)	99.2	100.0	6.4	0.0	80.9	99.5	96.8	99.4	99.0	98.8	99.2	98.3	81.4
LF (%)	97.9	92.3	4.9	0.0	79.9	95.6	92.0	92.6	95.9	96.8	97.7	98.0	78.6
OF (%)	100.0	100.0	6.5	0.0	91.5	100.0	98.0	100.0	100.0	100.0	100.0	100.0	82.9
EUF (%)	1.7	7.7	94.4	100.0	19.8	4.0	5.4	3.9	2.4	2.0	1.5	1.8	20.4
PUF (%)	0.0	0.0	93.6	66.7	10.6	0.0	0.2	0.0	0.0	0.2	0.0	0.1	14.4
UCLF (%)	0.8	0.0	0.0	33.3	8.5	0.5	3.1	0.7	1.0	1.1	0.8	1.7	4.3
XUF (%)	0.9	7.7	0.8	0.0	0.8	3.4	2.2	3.2	1.4	0.8	0.7	0.1	1.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Dec 1975	Lifetime Generation:	159125.1 GW(e).h
Date of First Criticality:	30 Nov 1980	Cumulative Energy Availability Factor:	79.6%
Date of Grid Connection:	12 Dec 1980	Cumulative Load Factor:	74.3%
Date of Commercial Operation:	01 Jun 1981	Cumulative Unit Capability Factor:	80.9%
		Cumulative Energy Unavailability Factor:	20.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	3699.8	920.0	84.4	84.4	84.4	84.4	78.3	78.3	4462	86.9
1982	3445.0	910.0	47.6	61.3	47.6	61.3	43.2	56.3	4260	48.6
1983	6006.0	910.0	78.6	68.0	78.5	67.9	75.3	63.6	7194	82.1
1984	6746.0	910.0	83.9	72.4	83.9	72.4	84.4	69.4	7505	85.4
1985	6294.4	910.0	80.1	74.1	80.1	74.1	79.0	71.5	7151	81.6
1986	6504.5	910.0	81.7	75.5	81.7	75.4	81.6	73.3	7335	83.7
1987	5382.9	910.0	75.5	75.5	74.3	75.3	67.5	72.4	6188	70.6
1988	4819.0	910.0	96.2	78.2	95.4	77.9	60.3	70.8	6724	76.5
1989	6307.7	910.0	82.3	78.7	79.5	78.1	79.1	71.8	7320	83.6
1990	6121.5	910.0	80.6	78.9	77.6	78.1	76.8	72.3	7114	81.2
1991	6306.3	910.0	81.3	79.1	80.5	78.3	79.1	73.0	7086	80.9
1992	4772.4	910.0	60.4	77.5	60.0	76.7	59.7	71.8	5388	61.3
1993	6588.1	910.0	85.2	78.1	82.9	77.2	82.6	72.7	7567	86.4
1994	6308.9	910.0	83.8	78.5	83.0	77.6	79.1	73.1	7116	81.2
1995	6221.7	910.0	84.3	78.9	83.0	78.0	78.0	73.5	7326	83.6
1996	5937.2	910.0	85.9	79.4	83.0	78.3	74.3	73.5	7377	84.0
1997	5752.7	910.0	81.1	79.5	78.9	78.3	72.2	73.4	6938	79.2
1998	6152.4	910.0	83.9	79.7	83.0	78.6	77.2	73.7	7330	83.7
1999	5412.9	910.0	79.1	79.7	76.9	78.5	67.9	73.4	6709	76.6
2000	6112.4	910.0	84.6	79.9	82.9	78.7	76.5	73.5	7396	84.2
2001	6198.0	910.0	92.6	80.6	83.9	79.0	77.8	73.7	7597	86.7
2002	5282.5	915.0	76.8	80.4	76.8	78.9	65.9	73.4	6401	73.1
2003	6045.5	910.0	85.8	80.6	85.8	79.2	75.8	73.5	7482	85.4
2004	6393.1	910.0	83.9	80.8	83.8	79.4	80.0	73.7	7499	85.4
2005	6075.9	910.0	78.9	80.7	77.2	79.3	76.2	73.8	7126	81.3
2006	6501.2	910.0	86.7	80.9	85.7	79.5	81.6	74.1	7834	89.4
2007	6265.6	910.0	81.4	80.9	79.6	79.6	78.6	74.3	7267	82.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		130			286	
B. Refuelling without a maintenance				27	1	
C. Inspection, maintenance or repair combined with refuelling	1176			988	28	
D. Inspection, maintenance or repair without refuelling				1		
E. Testing of plant systems or components	1			9	1	2
H. Nuclear regulatory requirements						1
J. Grid failure or grid unavailability						8
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					26	65
L. Human factor related		189			3	1
Z. Others					25	
Subtotal	1177	319	0	1025	370	77
Total		1496			1472	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		12
12. Reactor I&C Systems	9	9
13. Reactor Auxiliary Systems	36	21
14. Safety Systems		4
15. Reactor Cooling Systems		30
16. Steam generation systems		45
21. Fuel Handling and Storage Facilities	38	0
31. Turbine and auxiliaries		23
32. Feedwater and Main Steam System		12
41. Main Generator Systems		76
42. Electrical Power Supply Systems	12	17
XX. Miscellaneous Systems	3	6
Total	98	255

FR-28 GRAVELINES-4

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 910.0 MW(e)
Design Net Capacity: 910.0 MW(e)
Design Discharge Burnup: 33735 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6341.0 GW(e).h
Energy Availability Factor: 79.8%
Load Factor: 79.5%
Operating Factor: 81.8%
Energy Unavailability Factor: 20.2%
Total Off-line Time: 1597 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	671.5	603.0	667.5	647.4	488.6	452.8	0.0	269.8	629.3	658.5	573.9	678.9	6341.0
EAF (%)	99.2	98.6	98.7	98.8	73.0	69.5	0.0	41.7	96.1	97.1	87.8	99.9	79.8
UCF (%)	100.0	99.9	100.0	99.9	74.1	73.5	0.0	41.7	99.4	98.6	88.8	99.9	81.1
LF (%)	99.2	98.6	98.6	98.8	72.2	69.1	0.0	39.9	96.0	97.1	87.6	100.3	79.5
OF (%)	100.0	100.0	99.9	100.0	74.7	73.8	0.0	46.6	99.9	100.0	89.3	100.0	81.8
EUF (%)	0.8	1.4	1.3	1.2	27.0	30.5	100.0	58.3	3.9	2.9	12.2	0.1	20.2
PUF (%)	0.0	0.1	0.0	0.1	0.0	26.5	100.0	12.1	0.2	0.0	0.0	0.1	11.7
UCLF (%)	0.0	0.0	0.0	0.0	25.9	0.0	0.0	46.3	0.4	1.4	11.2	0.0	7.2
XUF (%)	0.8	1.3	1.2	1.1	1.1	4.0	0.0	0.0	3.3	1.5	1.0	0.0	1.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BASE LOAD OPERATION

5. Historical Summary

Date of Construction Start:	01 Apr 1976	Lifetime Generation:	156335.1 GW(e).h
Date of First Criticality:	31 May 1981	Cumulative Energy Availability Factor:	78.8%
Date of Grid Connection:	14 Jun 1981	Cumulative Load Factor:	74.3%
Date of Commercial Operation:	01 Oct 1981	Cumulative Unit Capability Factor:	80.2%
		Cumulative Energy Unavailability Factor:	21.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	1722.2	915.0	85.4	85.4	85.4	85.4	84.8	84.8	2031	92.0
1982	5498.2	910.0	80.8	81.7	80.8	81.7	69.0	72.2	7193	82.1
1983	4062.0	910.0	54.5	69.6	54.5	69.6	51.0	62.8	4986	56.9
1984	6006.0	910.0	82.8	73.7	82.8	73.7	75.1	66.6	7173	81.7
1985	6178.8	910.0	83.6	76.0	80.9	75.4	77.5	69.1	7387	84.3
1986	6556.6	910.0	88.7	78.4	88.6	77.9	82.2	71.6	7862	89.7
1987	5472.8	910.0	77.2	78.2	75.8	77.6	68.7	71.2	6787	77.5
1988	6221.0	910.0	87.9	79.6	85.9	78.7	77.8	72.1	7789	88.7
1989	4982.3	910.0	67.4	78.1	66.9	77.3	62.5	70.9	6025	68.8
1990	6151.7	910.0	79.4	78.2	77.2	77.3	77.2	71.6	7058	80.6
1991	6262.0	910.0	81.8	78.6	80.5	77.6	78.6	72.3	7067	80.7
1992	6419.8	910.0	81.0	78.8	80.2	77.8	80.3	73.0	7137	81.3
1993	4680.6	910.0	76.5	78.6	75.3	77.6	58.7	71.8	6112	69.8
1994	6039.3	910.0	83.3	79.0	82.5	78.0	75.8	72.1	6824	77.9
1995	6289.5	910.0	86.4	79.5	85.4	78.5	78.9	72.6	7313	83.5
1996	6288.4	910.0	85.5	79.9	83.2	78.8	78.7	73.0	7552	86.0
1997	5986.7	910.0	81.3	80.0	80.5	78.9	75.1	73.1	7206	82.3
1998	6519.3	910.0	85.4	80.3	84.1	79.2	81.8	73.6	7570	86.4
1999	5550.9	910.0	76.4	80.1	74.3	78.9	69.6	73.4	6734	76.9
2000	4563.6	910.0	69.5	79.5	57.7	77.8	57.1	72.6	5453	62.1
2001	5990.7	910.0	79.8	79.5	78.3	77.9	75.2	72.7	7094	81.0
2002	6028.1	915.0	81.2	79.6	80.1	78.0	75.2	72.8	7219	82.4
2003	5701.9	910.0	74.2	79.4	74.2	77.8	71.5	72.7	6589	75.2
2004	6544.6	910.0	85.4	79.6	85.4	78.1	81.9	73.1	7693	87.6
2005	6437.1	910.0	82.2	79.7	81.7	78.3	80.7	73.5	7354	83.9
2006	7123.1	910.0	91.5	80.2	89.9	78.7	89.4	74.1	8079	92.2
2007	6341.0	910.0	81.1	80.2	79.8	78.8	79.5	74.3	7164	81.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		593			369	
B. Refuelling without a maintenance				23		
C. Inspection, maintenance or repair combined with refuelling	985			1049	10	
D. Inspection, maintenance or repair without refuelling				7	13	
E. Testing of plant systems or components				5	1	1
H. Nuclear regulatory requirements					10	
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					12	35
L. Human factor related		17			2	
Z. Others					6	
Subtotal	985	610	0	1084	423	37
Total		1595			1544	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		21
12. Reactor I&C Systems	10	56
13. Reactor Auxiliary Systems		4
14. Safety Systems		16
15. Reactor Cooling Systems	5	36
16. Steam generation systems	7	67
21. Fuel Handling and Storage Facilities	36	2
31. Turbine and auxiliaries	1	31
32. Feedwater and Main Steam System		26
33. Circulating Water System		0
41. Main Generator Systems	534	35
42. Electrical Power Supply Systems		61
Total	593	355

FR-51 GRAVELINES-5

Operator: EDF (ELECTRICITE DE FRANCE)
Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 910.0 MW(e)
Design Net Capacity: 910.0 MW(e)
Design Discharge Burnup: 47000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6510.2 GW(e).h
Energy Availability Factor: 83.5%
Load Factor: 81.7%
Operating Factor: 86.7%
Energy Unavailability Factor: 16.5%
Total Off-line Time: 1169 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	582.6	584.7	651.9	634.1	582.8	9.4	301.2	571.0	631.8	653.9	641.4	665.4	6510.2
EAF (%)	90.9	99.6	98.9	96.9	86.1	2.5	46.0	84.8	98.2	98.6	99.5	99.9	83.5
UCF (%)	91.5	99.7	99.0	99.4	100.0	3.1	46.1	87.0	99.7	99.2	99.7	100.0	85.4
LF (%)	86.0	95.6	96.3	96.8	86.1	1.4	44.5	84.3	96.4	96.5	97.9	98.3	81.7
OF (%)	92.6	100.0	99.9	100.0	100.0	3.5	53.9	89.9	100.0	100.0	100.0	100.0	86.7
EUf (%)	9.1	0.4	1.1	3.1	13.9	97.5	54.0	15.2	1.8	1.4	0.5	0.1	16.5
PUF (%)	0.0	0.0	0.1	0.0	0.0	80.3	7.2	0.2	0.0	0.0	0.1	0.0	7.2
UCLF (%)	8.5	0.3	0.9	0.6	0.0	16.6	46.7	12.7	0.3	0.8	0.3	0.1	7.4
XUF (%)	0.6	0.0	0.1	2.6	13.9	0.7	0.1	2.2	1.5	0.6	0.2	0.0	1.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Oct 1979 **Lifetime Generation:** 138102.0 GW(e).h
Date of First Criticality: 05 Aug 1984 **Cumulative Energy Availability Factor:** 80.4%
Date of Grid Connection: 28 Aug 1984 **Cumulative Load Factor:** 74.8%
Date of Commercial Operation: 15 Jan 1985 **Cumulative Unit Capability Factor:** 82.2%
Cumulative Energy Unavailability Factor: 19.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	6768.4	910.0	90.1	90.1	90.0	90.0	84.9	84.9	7785	88.9
1986	5152.6	910.0	77.1	83.6	75.2	82.6	64.6	74.8	6673	76.2
1987	5236.5	910.0	81.5	82.9	80.6	82.0	65.7	71.7	6818	77.8
1988	4964.0	910.0	75.3	81.0	71.8	79.4	62.1	69.3	6306	71.8
1989	6020.6	910.0	81.0	81.0	80.6	79.7	75.5	70.6	7198	82.2
1990	5992.8	910.0	83.2	81.4	80.7	79.8	75.2	71.3	7367	84.1
1991	5276.2	910.0	72.2	80.0	69.6	78.4	66.2	70.6	6352	72.5
1992	6308.0	910.0	82.6	80.4	82.6	78.9	78.9	71.6	7361	83.8
1993	6180.5	910.0	82.7	80.6	78.6	78.9	77.5	72.3	7290	83.2
1994	5793.2	910.0	84.4	81.0	83.2	79.3	72.7	72.3	7147	81.6
1995	6181.0	910.0	87.6	81.6	86.0	79.9	77.5	72.8	7704	87.9
1996	5495.2	910.0	75.3	81.1	72.1	79.3	68.7	72.5	6652	75.7
1997	6429.9	910.0	87.6	81.6	86.1	79.8	80.7	73.1	7586	86.6
1998	6884.3	910.0	97.3	82.7	95.8	80.9	86.4	74.0	8286	94.6
1999	5124.3	910.0	68.1	81.7	67.0	80.0	64.3	73.4	6127	69.9
2000	5985.5	910.0	84.4	81.9	81.4	80.1	74.9	73.5	7444	84.7
2001	5762.6	910.0	80.2	81.8	78.2	80.0	72.3	73.4	6990	79.8
2002	6423.4	915.0	85.9	82.0	84.8	80.2	80.1	73.8	7662	87.5
2003	6473.4	910.0	85.1	82.2	84.3	80.5	81.2	74.2	7518	85.8
2004	6613.5	910.0	88.8	82.5	86.2	80.8	82.7	74.6	7836	89.2
2005	6410.0	910.0	84.0	82.6	81.7	80.8	80.4	74.9	7524	85.9
2006	5313.2	910.0	69.8	82.0	68.8	80.3	66.7	74.5	6313	72.1
2007	6510.2	910.0	85.4	82.2	83.5	80.4	81.7	74.8	7592	86.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		420			309	
B. Refuelling without a maintenance	577					
C. Inspection, maintenance or repair combined with refuelling				972	26	
D. Inspection, maintenance or repair without refuelling				3		
E. Testing of plant systems or components				3	0	
H. Nuclear regulatory requirements					2	
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					10	0
L. Human factor related		172			8	
Z. Others					1	
Subtotal	577	592	0	978	356	1
Total		1169			1335	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	26	18
12. Reactor I&C Systems		13
13. Reactor Auxiliary Systems	41	31
14. Safety Systems		0
15. Reactor Cooling Systems		93
16. Steam generation systems		8
21. Fuel Handling and Storage Facilities	24	1
31. Turbine and auxiliaries		15
32. Feedwater and Main Steam System	130	11
33. Circulating Water System		1
35. All other I&C Systems	11	
41. Main Generator Systems		42
42. Electrical Power Supply Systems	188	42
Total	420	275

FR-52 GRAVELINES-6

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 910.0 MW(e)
 Design Net Capacity: 910.0 MW(e)
 Design Discharge Burnup: 47000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5455.7 GW(e).h
 Energy Availability Factor: 68.4%
 Load Factor: 68.4%
 Operating Factor: 69.5%
 Energy Unavailability Factor: 31.6%
 Total Off-line Time: 2673 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	639.2	621.4	679.1	653.4	648.2	645.6	682.0	609.7	0.0	0.0	0.0	277.0	5455.7
EAF (%)	94.3	99.9	100.0	100.0	96.3	100.0	99.9	90.0	0.0	-0.1	0.0	41.6	68.4
UCF (%)	100.0	99.9	100.0	100.0	96.3	100.0	99.9	92.2	0.0	-0.1	0.0	41.6	69.1
LF (%)	94.4	101.6	100.3	99.7	95.7	98.5	100.7	90.1	0.0	0.0	0.0	40.9	68.4
OF (%)	95.8	100.0	99.9	100.0	97.2	100.0	100.0	93.5	0.0	0.0	0.0	47.8	69.5
EUUF (%)	5.7	0.1	0.0	0.0	3.7	0.0	0.1	10.0	100.0	100.1	100.0	58.4	31.6
PUF (%)	0.0	0.1	0.0	0.0	0.1	0.0	0.1	1.1	100.0	100.1	75.3	4.9	23.4
UCLF (%)	0.0	0.0	0.0	0.0	3.6	0.0	0.0	6.8	0.0	0.0	24.7	53.5	7.5
XUF (%)	5.7	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Oct 1979 Lifetime Generation: 136080.8 GW(e).h
 Date of First Criticality: 21 Jul 1985 Cumulative Energy Availability Factor: 80.2%
 Date of Grid Connection: 01 Aug 1985 Cumulative Load Factor: 76.4%
 Date of Commercial Operation: 25 Oct 1985 Cumulative Unit Capability Factor: 81.7%
 Cumulative Energy Unavailability Factor: 19.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	1740.9	910.0	88.7	88.7	88.6	88.6	86.6	86.6	2003	90.7
1986	5540.4	910.0	76.3	78.8	75.9	78.4	69.5	73.0	6677	76.2
1987	5583.9	910.0	80.6	79.6	80.1	79.2	70.0	71.7	7031	80.3
1988	6490.0	910.0	83.8	80.9	81.4	79.9	81.2	74.6	7453	84.8
1989	5177.3	910.0	71.2	78.6	71.1	77.8	64.9	72.3	6274	71.6
1990	6120.3	910.0	87.6	80.3	87.1	79.6	76.8	73.2	7553	86.2
1991	5888.2	910.0	78.5	80.0	77.5	79.2	73.9	73.3	6953	79.4
1992	5085.1	910.0	70.3	78.7	69.0	77.8	63.6	71.9	6246	71.1
1993	5293.6	910.0	82.0	79.1	73.4	77.3	66.4	71.3	6751	77.1
1994	6053.7	910.0	86.0	79.8	83.9	78.0	75.9	71.8	7487	85.5
1995	6769.4	910.0	89.8	80.8	88.8	79.1	84.9	73.1	7922	90.4
1996	6609.5	910.0	86.8	81.3	86.4	79.7	82.7	73.9	7755	88.3
1997	4545.4	910.0	60.6	79.6	59.5	78.1	57.0	72.5	5437	62.1
1998	6531.8	910.0	88.5	80.3	86.1	78.7	81.9	73.3	7746	88.4
1999	6141.4	910.0	80.9	80.4	80.3	78.8	77.0	73.5	7222	82.4
2000	6720.9	910.0	88.7	80.9	87.0	79.3	84.1	74.2	7887	89.8
2001	6148.7	910.0	82.2	81.0	80.2	79.4	77.1	74.4	7265	82.9
2002	6690.9	915.0	87.5	81.4	86.0	79.8	83.5	74.9	7784	88.9
2003	6462.6	910.0	83.3	81.5	82.5	79.9	81.1	75.3	7410	84.6
2004	6936.1	910.0	88.3	81.8	86.9	80.3	86.8	75.9	7850	89.4
2005	6536.5	910.0	84.3	81.9	82.4	80.4	82.0	76.2	7511	85.7
2006	7058.4	910.0	89.3	82.3	88.3	80.8	88.5	76.7	7907	90.3
2007	5455.7	910.0	69.1	81.7	68.4	80.2	68.4	76.4	6087	69.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		528			296	3
B. Refuelling without a maintenance				29	3	
C. Inspection, maintenance or repair combined with refuelling	2012			868	32	
D. Inspection, maintenance or repair without refuelling					23	
E. Testing of plant systems or components				11		
H. Nuclear regulatory requirements					5	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					37	2
L. Human factor related		60			1	1
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)			32			
Z. Others		42			7	
Subtotal	2012	630	32	908	404	6
Total		2674			1318	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		18
13. Reactor Auxiliary Systems	478	14
14. Safety Systems		17
15. Reactor Cooling Systems		36
16. Steam generation systems		6
21. Fuel Handling and Storage Facilities		0
31. Turbine and auxiliaries	29	84
32. Feedwater and Main Steam System	21	17
33. Circulating Water System		0
41. Main Generator Systems		22
42. Electrical Power Supply Systems		46
XX. Miscellaneous Systems		0
Total	528	262

FR-58 NOGENT-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1310.0 MW(e)
 Design Net Capacity: 1310.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10831.8 GW(e).h
 Energy Availability Factor: 94.5%
 Load Factor: 94.4%
 Operating Factor: 96.8%
 Energy Unavailability Factor: 5.5%
 Total Off-line Time: 276 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	963.0	864.4	640.2	912.5	943.2	909.0	942.4	940.3	921.8	957.5	867.4	970.0	10831.8
EAF (%)	98.7	98.4	66.8	96.7	96.8	96.4	96.7	96.5	97.7	98.1	92.1	99.4	94.5
UCF (%)	99.9	99.7	67.5	99.1	99.9	99.9	100.0	99.4	100.0	99.6	94.0	100.0	96.5
LF (%)	98.8	98.2	65.7	96.9	96.8	96.4	96.7	96.5	97.7	98.1	92.0	99.5	94.4
OF (%)	100.0	100.0	68.3	100.1	100.0	100.0	100.0	100.0	100.0	100.0	94.3	100.0	96.8
EUF (%)	1.3	1.6	33.2	3.3	3.2	3.6	3.3	3.5	2.3	1.9	7.9	0.6	5.5
PUF (%)	0.1	0.0	0.0	0.6	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1
UCLF (%)	0.0	0.2	32.4	0.3	0.0	0.0	0.0	0.6	0.0	0.3	6.0	0.0	3.4
XUF (%)	1.2	1.4	0.8	2.4	3.2	3.6	3.3	2.9	2.2	1.5	1.9	0.6	2.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BASE LOAD OPERATION

5. Historical Summary

Date of Construction Start: 26 May 1981 Lifetime Generation: 163260.3 GW(e).h
 Date of First Criticality: 12 Sep 1987 Cumulative Energy Availability Factor: 77.0%
 Date of Grid Connection: 21 Oct 1987 Cumulative Load Factor: 71.0%
 Date of Commercial Operation: 24 Feb 1988 Cumulative Unit Capability Factor: 78.5%
 Cumulative Energy Unavailability Factor: 23.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	7028.0	1310.0	88.5	88.5	87.6	87.6	66.7	66.7	6701	83.3
1989	3172.7	1310.0	30.2	58.1	28.3	56.7	27.6	46.3	2663	30.4
1990	6614.1	1310.0	67.7	61.4	67.5	60.4	57.6	50.2	5590	63.8
1991	6868.6	1310.0	64.2	62.1	62.9	61.0	59.9	52.7	5768	65.8
1992	7812.5	1310.0	71.5	64.0	70.4	62.9	67.9	55.8	6386	72.7
1993	7705.6	1310.0	72.2	65.4	68.5	63.9	67.1	57.7	6432	73.4
1994	8292.3	1310.0	83.2	68.0	80.1	66.2	72.3	59.8	7429	84.8
1995	7358.3	1310.0	84.3	70.0	83.9	68.5	64.1	60.3	6946	79.3
1996	8227.9	1310.0	81.1	71.3	79.6	69.7	71.5	61.6	7222	82.2
1997	8571.6	1310.0	83.7	72.5	81.1	70.9	74.7	62.9	7488	85.5
1998	6585.5	1310.0	59.2	71.3	57.2	69.6	57.4	62.4	5334	60.9
1999	9705.0	1310.0	92.5	73.1	91.8	71.5	84.6	64.3	8284	94.6
2000	9088.3	1310.0	85.2	74.0	83.0	72.4	79.0	65.4	7626	86.8
2001	9142.7	1310.0	84.7	74.8	83.8	73.2	79.7	66.4	7580	86.5
2002	9011.0	1310.0	87.3	75.6	87.1	74.1	78.5	67.2	7738	88.3
2003	9974.4	1310.0	98.3	77.0	98.0	75.6	86.9	68.5	8621	98.4
2004	8535.3	1310.0	81.0	77.3	77.8	75.7	74.2	68.8	7152	81.4
2005	8534.4	1310.0	76.5	77.2	75.1	75.7	74.4	69.1	6803	77.7
2006	9284.8	1310.0	82.9	77.5	82.9	76.1	80.9	69.8	7331	83.7
2007	10831.8	1310.0	96.5	78.5	94.5	77.0	94.4	71.0	8484	96.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		276			550	
B. Refuelling without a maintenance					11	
C. Inspection, maintenance or repair combined with refuelling				955	1	
D. Inspection, maintenance or repair without refuelling				83		
E. Testing of plant systems or components	3			72		2
H. Nuclear regulatory requirements					16	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					19	
L. Human factor related					9	1
Subtotal	3	276	0	1110	606	3
Total		279			1719	

7. Equipment Related Full Outages, Analysis by System

System	2007	1987 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		78
12. Reactor I&C Systems	19	64
13. Reactor Auxiliary Systems	22	0
14. Safety Systems		1
15. Reactor Cooling Systems		29
16. Steam generation systems		122
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries		58
32. Feedwater and Main Steam System		18
33. Circulating Water System		77
35. All other I&C Systems		0
41. Main Generator Systems	235	58
42. Electrical Power Supply Systems		4
Total	276	510

FR-59 NOGENT-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1310.0 MW(e)
 Design Net Capacity: 1310.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9885.9 GW(e).h
 Energy Availability Factor: 86.9%
 Load Factor: 86.1%
 Operating Factor: 90.4%
 Energy Unavailability Factor: 13.1%
 Total Off-line Time: 842 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	975.4	866.4	856.4	317.0	414.4	894.1	905.3	944.1	923.4	962.1	854.4	972.8	9885.9
EAF (%)	99.5	98.1	88.0	34.1	43.8	98.1	95.3	97.3	98.8	98.9	91.0	99.6	86.9
UCF (%)	100.0	100.0	100.0	42.6	44.0	100.0	97.0	99.7	99.9	100.0	91.4	100.0	89.5
LF (%)	100.1	98.4	87.9	33.7	42.5	94.8	92.9	96.9	97.9	98.6	90.6	99.8	86.1
OF (%)	100.0	100.0	99.9	43.1	52.3	100.0	97.2	100.0	100.0	100.0	92.2	100.0	90.4
EUF (%)	0.5	1.9	12.0	65.9	56.2	1.9	4.7	2.7	1.2	1.1	9.0	0.4	13.1
PUF (%)	0.0	0.0	0.0	57.5	41.8	0.1	0.0	0.0	0.1	0.0	0.0	0.0	8.3
UCLF (%)	0.0	0.0	0.0	0.0	14.2	0.0	3.0	0.3	0.0	0.0	8.5	0.0	2.2
XUF (%)	0.4	1.9	12.0	8.4	0.3	1.9	1.7	2.3	1.2	1.1	0.4	0.3	2.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Jan 1982 Lifetime Generation: 162148.0 GW(e).h
 Date of First Criticality: 04 Oct 1988 Cumulative Energy Availability Factor: 81.6%
 Date of Grid Connection: 14 Dec 1988 Cumulative Load Factor: 74.8%
 Date of Commercial Operation: 01 May 1989 Cumulative Unit Capability Factor: 83.7%
 Cumulative Energy Unavailability Factor: 18.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	5612.0	1310.0	78.9	78.9	78.9	78.9	72.8	72.8	4744	80.7
1990	7532.9	1310.0	69.4	73.2	68.3	72.6	65.6	68.5	6094	69.6
1991	8331.1	1310.0	78.8	75.3	73.5	72.9	72.6	70.1	7008	80.0
1992	8312.3	1310.0	77.4	75.9	74.1	73.2	72.2	70.7	6937	79.0
1993	9191.7	1310.0	85.9	78.0	80.8	74.8	80.1	72.7	7594	86.7
1994	6483.0	1310.0	98.0	81.5	94.8	78.4	56.5	69.8	6027	68.8
1995	7545.4	1310.0	78.4	81.1	75.9	78.0	65.8	69.2	6862	78.3
1996	8477.0	1310.0	80.5	81.0	77.0	77.9	73.7	69.8	7229	82.3
1997	8925.8	1310.0	86.0	81.6	82.0	78.3	77.8	70.7	7656	87.4
1998	8830.0	1310.0	98.0	83.3	97.8	80.3	76.9	71.4	7386	84.3
1999	7957.3	1310.0	76.2	82.6	74.7	79.8	69.3	71.2	6732	76.8
2000	9672.1	1310.0	85.9	82.9	84.6	80.2	84.1	72.3	7654	87.1
2001	9379.0	1310.0	85.1	83.1	83.4	80.5	81.7	73.0	7589	86.6
2002	8205.5	1310.0	84.2	83.2	84.2	80.7	71.5	72.9	7241	82.7
2003	9447.1	1310.0	91.5	83.7	91.5	81.5	82.3	73.6	7954	90.8
2004	8216.7	1310.0	78.6	83.4	75.1	81.1	71.4	73.4	7044	80.2
2005	8393.3	1310.0	77.2	83.0	76.1	80.8	73.1	73.4	6907	78.8
2006	10046.5	1310.0	89.5	83.4	89.5	81.3	87.5	74.2	7854	89.7
2007	9885.9	1310.0	89.5	83.7	86.9	81.6	86.1	74.8	7918	90.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		78			260	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	660			854		
E. Testing of plant systems or components				25		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					54	
L. Human factor related		106			0	
Z. Others					1	
Subtotal	660	184	0	879	316	0
Total		844			1195	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		10
12. Reactor I&C Systems	31	24
13. Reactor Auxiliary Systems	47	9
14. Safety Systems		37
15. Reactor Cooling Systems		22
16. Steam generation systems		40
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		23
32. Feedwater and Main Steam System		11
33. Circulating Water System		44
35. All other I&C Systems		7
41. Main Generator Systems		11
42. Electrical Power Supply Systems		6
XX. Miscellaneous Systems		1
Total	78	245

FR-36 PALUEL-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 1330.0 MW(e)
 Design Net Capacity: 1330.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8135.1 GW(e).h
 Energy Availability Factor: 73.3%
 Load Factor: 69.8%
 Operating Factor: 75.8%
 Energy Unavailability Factor: 26.7%
 Total Off-line Time: 2119 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	740.2	850.7	956.9	866.3	857.5	857.1	899.6	904.8	882.9	319.0	0.0	0.0	8135.1
EAF (%)	79.2	98.2	97.8	94.8	93.3	97.6	96.9	98.5	92.2	33.0	0.0	0.0	73.3
UCF (%)	80.0	99.0	97.8	95.8	94.2	99.7	98.5	100.0	100.0	38.6	0.0	0.0	75.1
LF (%)	74.8	95.2	96.7	90.6	86.7	89.5	90.9	91.4	92.2	32.2	0.0	0.0	69.8
OF (%)	82.3	99.9	99.6	97.2	94.6	100.0	99.5	100.0	100.0	38.9	0.0	0.0	75.8
EUUF (%)	20.8	1.8	2.2	5.2	6.7	2.4	3.1	1.5	7.8	67.0	100.0	100.0	26.7
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	61.4	100.0	19.4	15.1
UCLF (%)	20.1	1.0	2.1	4.2	5.9	0.2	1.2	0.0	0.0	0.0	0.0	80.7	9.8
XUF (%)	0.8	0.8	0.1	1.0	0.8	2.1	1.7	1.5	7.8	5.6	0.0	0.0	1.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 15 Aug 1977 Lifetime Generation: 184877.2 GW(e).h
 Date of First Criticality: 13 May 1984 Cumulative Energy Availability Factor: 75.8%
 Date of Grid Connection: 22 Jun 1984 Cumulative Load Factor: 69.9%
 Date of Commercial Operation: 01 Dec 1985 Cumulative Unit Capability Factor: 77.6%
 Cumulative Energy Unavailability Factor: 24.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	947.5	1290.0	94.9	94.9	94.9	94.9	98.7	98.7	731	98.3
1986	5169.7	1290.0	52.3	55.7	50.2	53.7	45.7	49.9	4455	50.9
1987	8184.8	1330.0	77.0	66.0	76.6	64.9	70.3	59.8	6527	74.5
1988	9291.0	1330.0	96.8	76.1	95.3	74.8	79.5	66.3	7332	83.5
1989	7902.8	1330.0	72.6	75.3	70.4	73.7	67.8	66.7	6567	75.0
1990	7323.9	1330.0	70.1	74.2	66.4	72.3	62.9	65.9	6288	71.8
1991	7159.9	1330.0	66.7	73.0	63.2	70.8	61.5	65.2	5987	68.3
1992	8640.4	1330.0	76.6	73.5	76.6	71.6	74.0	66.4	6858	78.1
1993	8068.1	1330.0	77.2	74.0	70.9	71.5	69.2	66.8	6906	78.8
1994	6549.9	1330.0	77.1	74.3	76.9	72.1	56.2	65.6	5790	66.1
1995	8768.2	1330.0	82.2	75.1	79.6	72.9	75.3	66.6	7292	83.2
1996	5483.2	1330.0	52.7	73.1	48.7	70.7	46.9	64.8	4763	54.2
1997	9019.7	1330.0	84.5	74.0	83.8	71.8	77.4	65.8	7537	86.0
1998	9718.1	1330.0	91.3	75.3	91.2	73.3	83.4	67.2	8132	92.8
1999	8181.9	1330.0	78.6	75.6	76.2	73.5	70.2	67.4	6938	79.2
2000	9089.0	1330.0	84.0	76.1	83.5	74.1	77.8	68.1	7533	85.8
2001	9752.2	1330.0	98.3	77.5	97.6	75.6	83.7	69.1	8382	95.7
2002	7153.9	1330.0	68.3	77.0	66.6	75.1	61.4	68.6	6081	69.4
2003	8526.2	1330.0	77.6	77.0	77.2	75.2	73.2	68.9	6882	78.6
2004	8596.3	1330.0	79.4	77.1	77.4	75.3	73.6	69.1	7103	80.9
2005	10565.5	1330.0	98.4	78.2	97.9	76.4	90.7	70.2	8654	98.8
2006	7437.7	1330.0	68.6	77.7	66.0	75.9	63.8	69.9	6133	70.0
2007	8135.1	1330.0	75.1	77.6	73.3	75.8	69.8	69.9	6641	75.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		200			414	3
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	1319			1036	58	
D. Inspection, maintenance or repair without refuelling				150		
E. Testing of plant systems or components				27	1	
H. Nuclear regulatory requirements					16	
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					52	0
L. Human factor related		600				
Z. Others					1	
Subtotal	1319	800	0	1213	544	4
Total		2119			1761	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		25
12. Reactor I&C Systems		54
13. Reactor Auxiliary Systems		34
14. Safety Systems		4
15. Reactor Cooling Systems		15
16. Steam generation systems		16
21. Fuel Handling and Storage Facilities		6
31. Turbine and auxiliaries	92	38
32. Feedwater and Main Steam System		38
33. Circulating Water System		21
41. Main Generator Systems	108	125
42. Electrical Power Supply Systems		15
XX. Miscellaneous Systems		1
Total	200	392

FR-37 PALUEL-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1330.0 MW(e)
 Design Net Capacity: 1330.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7558.0 GW(e).h
 Energy Availability Factor: 66.8%
 Load Factor: 64.9%
 Operating Factor: 68.7%
 Energy Unavailability Factor: 33.2%
 Total Off-line Time: 2739 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	233.0	941.4	894.4	943.2	839.3	911.8	927.6	902.2	965.0	7558.0
EAF (%)	0.0	0.0	0.1	26.4	98.4	98.3	98.0	87.6	97.6	96.2	95.8	98.1	66.8
UCF (%)	0.0	0.0	0.1	26.5	100.0	100.0	100.0	89.7	100.0	98.9	99.6	100.0	68.3
LF (%)	0.0	0.0	0.0	24.4	95.1	93.4	95.3	84.8	95.2	93.6	94.2	97.5	64.9
OF (%)	0.0	0.0	0.0	29.8	100.0	100.0	100.0	90.5	100.0	99.6	100.0	100.0	68.7
EUf (%)	100.0	100.0	99.9	73.6	1.6	1.7	2.0	12.4	2.4	3.8	4.2	1.9	33.2
PUF (%)	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
UCLF (%)	100.0	100.0	99.9	73.1	0.0	0.0	0.0	10.3	0.0	1.1	0.4	0.0	31.6
XUF (%)	0.0	0.0	0.0	0.0	1.5	1.7	2.0	2.0	2.3	2.6	3.8	1.8	1.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Jan 1978 Lifetime Generation: 179953.8 GW(e).h
 Date of First Criticality: 11 Aug 1984 Cumulative Energy Availability Factor: 73.3%
 Date of Grid Connection: 14 Sep 1984 Cumulative Load Factor: 67.9%
 Date of Commercial Operation: 01 Dec 1985 Cumulative Unit Capability Factor: 75.5%
 Cumulative Energy Unavailability Factor: 26.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	990.5	1290.0	99.6	99.6	99.6	99.6	103.2	103.2	744	100.0
1986	6040.9	1290.0	52.3	56.0	52.2	55.9	53.5	57.4	4804	54.8
1987	8859.6	1290.0	77.3	66.2	76.8	66.0	78.4	67.4	6837	78.0
1988	7725.0	1330.0	75.5	69.3	73.5	68.5	66.1	67.0	6017	68.5
1989	8956.4	1330.0	83.4	72.8	80.1	71.3	76.9	69.5	7358	84.0
1990	6496.3	1330.0	59.1	70.1	59.1	68.9	55.8	66.7	5328	60.8
1991	6140.3	1330.0	55.1	67.6	54.9	66.6	52.7	64.4	4996	57.0
1992	6906.9	1330.0	63.6	67.0	61.7	65.9	59.1	63.7	5618	64.0
1993	7954.4	1330.0	87.9	69.6	76.9	67.3	68.3	64.2	7217	82.4
1994	7115.2	1330.0	77.6	70.5	74.5	68.1	61.1	63.9	6671	76.2
1995	6934.5	1330.0	70.5	70.5	65.8	67.8	59.5	63.4	6252	71.4
1996	8407.4	1330.0	83.8	71.7	78.5	68.8	72.0	64.2	7195	81.9
1997	8139.8	1330.0	83.9	72.7	83.5	70.0	69.9	64.7	7182	82.0
1998	7300.4	1330.0	73.1	72.8	69.1	70.0	62.7	64.5	6583	75.1
1999	9243.8	1330.0	85.6	73.7	84.1	71.0	79.3	65.6	7705	88.0
2000	9849.9	1330.0	96.0	75.2	94.4	72.5	84.3	66.8	8271	94.2
2001	7843.1	1330.0	76.7	75.3	76.0	72.7	67.3	66.9	6861	78.3
2002	7984.4	1330.0	73.2	75.1	72.0	72.7	68.5	67.0	6569	75.0
2003	8814.9	1330.0	82.1	75.5	81.1	73.2	75.7	67.4	7490	85.5
2004	9562.7	1330.0	92.6	76.4	89.9	74.1	81.9	68.2	8039	91.5
2005	7246.4	1330.0	65.3	75.9	64.5	73.6	62.2	67.9	5823	66.5
2006	8143.5	1330.0	74.4	75.8	73.9	73.6	69.9	68.0	6673	76.2
2007	7558.0	1330.0	68.3	75.5	66.8	73.3	64.9	67.9	6021	68.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		2739			599	2
B. Refuelling without a maintenance				38	5	
C. Inspection, maintenance or repair combined with refuelling				977	120	
D. Inspection, maintenance or repair without refuelling				48		
E. Testing of plant systems or components				20	1	
H. Nuclear regulatory requirements					3	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					25	0
L. Human factor related					1	
M. Governmental requirements or court decisions					1	
Z. Others					0	
Subtotal	0	2739	0	1083	755	2
Total		2739			1840	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		20
12. Reactor I&C Systems	24	108
13. Reactor Auxiliary Systems		8
14. Safety Systems		22
15. Reactor Cooling Systems	110	80
16. Steam generation systems		35
17. Safety I&C Systems (excluding reactor I&C)		0
21. Fuel Handling and Storage Facilities		7
31. Turbine and auxiliaries		37
32. Feedwater and Main Steam System	26	7
33. Circulating Water System		77
41. Main Generator Systems	2555	136
42. Electrical Power Supply Systems	24	23
XX. Miscellaneous Systems		3
Total	2739	563

FR-38 PALUEL-3

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1330.0 MW(e)
 Design Net Capacity: 1330.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3908.8 GW(e).h
 Energy Availability Factor: 34.8%
 Load Factor: 33.5%
 Operating Factor: 38.8%
 Energy Unavailability Factor: 65.2%
 Total Off-line Time: 5358 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	912.0	795.2	610.9	0.0	0.0	0.0	0.0	0.0	0.0	231.6	482.9	876.1	3908.8
EAF (%)	92.4	89.1	62.2	-0.1	0.0	0.0	0.0	0.0	0.0	25.2	51.7	99.0	34.8
UCF (%)	93.3	95.1	73.4	-0.1	0.0	0.0	0.0	0.0	0.0	25.2	51.7	99.5	36.3
LF (%)	92.2	89.0	61.7	0.0	0.0	0.0	0.0	0.0	0.0	23.4	50.4	88.5	33.5
OF (%)	93.7	95.1	73.8	0.0	0.0	0.0	0.0	0.0	0.0	42.3	63.6	100.0	38.8
EUUF (%)	7.6	10.9	37.8	100.1	100.0	100.0	100.0	100.0	100.0	74.8	48.3	1.0	65.2
PUF (%)	0.2	0.0	25.6	100.1	100.0	80.3	0.0	0.0	0.0	3.6	3.5	0.5	26.1
UCLF (%)	6.5	4.9	1.0	0.0	0.0	19.7	100.0	100.0	100.0	71.2	44.8	0.0	37.6
XUF (%)	0.9	6.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Feb 1979 Lifetime Generation: 175201.3 GW(e).h
 Date of First Criticality: 07 Aug 1985 Cumulative Energy Availability Factor: 73.2%
 Date of Grid Connection: 30 Sep 1985 Cumulative Load Factor: 67.9%
 Date of Commercial Operation: 01 Feb 1986 Cumulative Unit Capability Factor: 74.9%
 Cumulative Energy Unavailability Factor: 26.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	7395.7	1290.0	72.1	72.1	72.1	72.1	71.5	71.5	5759	71.8
1987	7716.6	1290.0	78.4	75.4	78.3	75.3	68.3	69.8	6104	69.7
1988	6763.0	1330.0	68.7	73.0	59.2	69.7	57.9	65.6	5413	61.6
1989	8124.4	1330.0	70.7	72.4	70.2	69.8	69.7	66.7	6288	71.8
1990	7322.0	1330.0	67.2	71.4	66.2	69.1	62.8	65.9	6008	68.6
1991	9587.1	1330.0	86.5	73.9	86.3	72.0	82.3	68.7	7634	87.1
1992	6886.6	1330.0	63.2	72.4	63.0	70.7	58.9	67.3	5671	64.6
1993	8459.0	1330.0	77.5	73.0	73.4	71.0	72.6	68.0	6951	79.3
1994	6703.6	1330.0	63.4	71.9	61.8	70.0	57.5	66.8	5590	63.8
1995	8733.3	1330.0	85.6	73.3	84.1	71.4	75.0	67.6	7598	86.7
1996	8027.7	1330.0	84.9	74.4	84.6	72.6	68.7	67.7	7261	82.7
1997	7618.8	1330.0	73.2	74.3	72.8	72.6	65.4	67.5	6494	74.1
1998	8327.0	1330.0	77.6	74.5	76.1	72.9	71.5	67.8	6913	78.9
1999	7636.7	1330.0	76.1	74.7	73.7	73.0	65.5	67.7	6505	74.3
2000	9819.8	1330.0	94.7	76.0	94.4	74.4	84.1	68.8	8199	93.3
2001	7815.9	1330.0	81.6	76.4	79.6	74.7	67.1	68.7	6796	77.6
2002	8900.5	1330.0	82.3	76.7	80.4	75.1	76.4	69.1	7366	84.1
2003	8181.7	1330.0	74.9	76.6	74.3	75.0	70.2	69.2	6567	75.0
2004	6395.5	1330.0	57.0	75.6	56.0	74.0	54.7	68.4	5147	58.6
2005	8157.6	1330.0	76.9	75.6	73.1	74.0	70.0	68.5	6573	75.0
2006	10549.6	1330.0	98.6	76.7	96.8	75.1	90.5	69.6	8671	99.0
2007	3908.8	1330.0	36.3	74.9	34.8	73.2	33.5	67.9	3402	38.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		3128			640	
B. Refuelling without a maintenance				44	4	
C. Inspection, maintenance or repair combined with refuelling	2231			906	42	
D. Inspection, maintenance or repair without refuelling				43		
E. Testing of plant systems or components	0			36	1	10
H. Nuclear regulatory requirements					5	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					3	21
L. Human factor related					2	
Z. Others					2	
Subtotal	2231	3128	0	1029	699	31
Total		5359			1759	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		55
12. Reactor I&C Systems		86
13. Reactor Auxiliary Systems		45
14. Safety Systems	24	40
15. Reactor Cooling Systems		84
16. Steam generation systems		6
17. Safety I&C Systems (excluding reactor I&C)		1
21. Fuel Handling and Storage Facilities	24	12
31. Turbine and auxiliaries		28
32. Feedwater and Main Steam System	7	78
33. Circulating Water System		56
35. All other I&C Systems		0
41. Main Generator Systems	2853	54
42. Electrical Power Supply Systems	220	42
XX. Miscellaneous Systems		2
Total	3128	589

FR-39 PALUEL-4

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 1330.0 MW(e)
 Design Net Capacity: 1330.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8421.5 GW(e).h
 Energy Availability Factor: 73.7%
 Load Factor: 72.3%
 Operating Factor: 77.9%
 Energy Unavailability Factor: 26.3%
 Total Off-line Time: 1936 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	944.2	867.4	942.4	899.8	937.4	845.3	328.4	0.0	0.0	804.7	903.0	948.9	8421.5
EAF (%)	98.7	98.0	98.1	98.0	96.4	88.4	33.6	0.0	0.7	82.4	95.4	96.4	73.7
UCF (%)	100.0	99.2	99.5	99.4	99.2	100.0	42.0	0.0	0.7	86.7	97.4	100.0	76.8
LF (%)	95.4	97.0	95.2	94.1	94.7	88.3	33.2	0.0	0.0	81.2	94.3	95.9	72.3
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	42.2	0.0	4.4	90.9	99.2	100.0	77.9
EUf (%)	1.3	2.0	1.9	2.0	3.6	11.6	66.4	100.0	99.3	17.6	4.6	3.6	26.3
PUF (%)	0.0	0.0	0.2	0.0	0.0	0.0	58.0	100.0	10.4	6.5	0.1	0.0	14.9
UCLF (%)	0.0	0.8	0.3	0.6	0.8	0.0	0.0	0.0	88.9	6.7	2.5	0.0	8.3
XUF (%)	1.2	1.2	1.4	1.3	2.8	11.6	8.4	0.0	0.0	4.3	2.0	3.6	3.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Feb 1980 Lifetime Generation: 177482.2 GW(e).h
 Date of First Criticality: 29 Mar 1986 Cumulative Energy Availability Factor: 76.2%
 Date of Grid Connection: 11 Apr 1986 Cumulative Load Factor: 70.3%
 Date of Commercial Operation: 01 Jun 1986 Cumulative Unit Capability Factor: 78.0%
 Cumulative Energy Unavailability Factor: 23.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	5171.6	1300.0	85.7	85.7	85.2	85.2	78.0	78.0	4298	83.7
1987	8014.6	1290.0	69.8	75.7	69.7	75.5	70.9	73.6	6289	71.8
1988	5909.0	1330.0	54.0	67.1	53.6	66.8	50.6	64.5	4812	54.8
1989	8268.3	1330.0	72.1	68.5	71.0	68.0	71.0	66.3	6349	72.5
1990	8067.7	1330.0	78.7	70.8	78.5	70.3	69.2	67.0	6770	77.3
1991	8325.6	1330.0	74.5	71.5	74.2	71.0	71.5	67.8	6677	76.2
1992	5553.3	1330.0	48.9	68.0	48.6	67.6	47.5	64.7	4529	51.6
1993	8683.8	1330.0	77.8	69.3	75.3	68.6	74.5	66.0	6938	79.2
1994	8329.7	1330.0	77.3	70.2	76.5	69.5	71.5	66.6	6945	79.3
1995	8346.8	1330.0	88.5	72.1	88.1	71.5	71.6	67.2	7354	83.9
1996	7848.1	1330.0	75.2	72.4	72.4	71.6	67.2	67.2	6745	76.8
1997	8633.7	1330.0	81.9	73.3	78.2	72.1	74.1	67.8	7219	82.4
1998	7776.7	1330.0	71.2	73.1	68.3	71.8	66.7	67.7	6506	74.3
1999	9879.7	1330.0	96.1	74.8	94.6	73.5	84.8	68.9	8345	95.3
2000	8358.8	1330.0	86.0	75.6	84.4	74.3	71.5	69.1	7532	85.7
2001	8581.0	1330.0	84.5	76.1	82.1	74.8	73.7	69.4	7489	85.5
2002	9303.3	1330.0	95.7	77.3	92.7	75.9	79.9	70.0	8216	93.8
2003	7960.7	1330.0	82.8	77.6	81.9	76.2	68.3	69.9	7307	83.4
2004	7138.6	1330.0	67.9	77.1	64.6	75.6	61.1	69.5	6027	68.6
2005	9682.1	1330.0	93.3	77.9	89.2	76.3	83.1	70.2	7949	90.7
2006	8270.8	1330.0	81.4	78.1	77.2	76.3	71.0	70.2	7320	83.6
2007	8421.5	1330.0	76.8	78.0	73.7	76.2	72.3	70.3	6824	77.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		678			558	1
B. Refuelling without a maintenance				59	3	
C. Inspection, maintenance or repair combined with refuelling	1222			893	14	
D. Inspection, maintenance or repair without refuelling				40		
E. Testing of plant systems or components	0			22	0	
H. Nuclear regulatory requirements		12				
J. Grid failure or grid unavailability						6
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					26	1
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)			24			
Z. Others					18	
Subtotal	1222	690	24	1014	619	8
Total		1936			1641	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		100
12. Reactor I&C Systems	592	15
13. Reactor Auxiliary Systems		9
14. Safety Systems		17
15. Reactor Cooling Systems		39
16. Steam generation systems		78
21. Fuel Handling and Storage Facilities	36	63
31. Turbine and auxiliaries	12	37
32. Feedwater and Main Steam System	32	14
33. Circulating Water System		2
41. Main Generator Systems	6	123
42. Electrical Power Supply Systems		37
Total	678	534

FR-63 PENLY-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1330.0 MW(e)
 Design Net Capacity: 1330.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9243.6 GW(e).h
 Energy Availability Factor: 82.1%
 Load Factor: 79.3%
 Operating Factor: 84.0%
 Energy Unavailability Factor: 17.9%
 Total Off-line Time: 1404 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	979.7	853.0	936.4	907.1	917.9	894.8	937.1	923.2	838.3	0.0	153.5	902.8	9243.6
EAF (%)	99.7	98.3	98.8	98.3	99.1	97.2	98.7	96.7	87.7	0.0	17.4	93.6	82.1
UCF (%)	99.9	98.7	99.1	98.6	99.3	97.7	99.2	97.3	92.7	0.0	17.4	93.8	82.7
LF (%)	99.0	95.4	94.6	94.9	92.8	93.4	94.7	93.3	87.5	0.0	16.0	91.2	79.3
OF (%)	100.0	98.8	99.9	99.2	100.0	98.8	100.0	98.8	93.8	0.0	24.7	94.8	84.0
EUF (%)	0.3	1.7	1.2	1.7	0.9	2.8	1.3	3.3	12.3	100.0	82.6	6.4	17.9
PUF (%)	0.1	0.0	0.0	0.0	0.2	0.0	0.1	0.0	6.5	100.0	70.9	0.5	14.9
UCLF (%)	0.0	1.3	0.8	1.4	0.6	2.3	0.8	2.7	0.8	0.0	11.7	5.8	2.3
XUF (%)	0.2	0.3	0.3	0.3	0.2	0.5	0.4	0.6	5.1	0.0	0.0	0.1	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Sep 1982 Lifetime Generation: 152220.0 GW(e).h
 Date of First Criticality: 01 Apr 1990 Cumulative Energy Availability Factor: 81.2%
 Date of Grid Connection: 04 May 1990 Cumulative Load Factor: 75.6%
 Date of Commercial Operation: 01 Dec 1990 Cumulative Unit Capability Factor: 82.7%
 Cumulative Energy Unavailability Factor: 18.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1990	971.2	1330.0	98.9	98.9	98.9	98.9	98.2	98.2	738	99.2
1991	8436.7	1330.0	74.3	76.2	74.2	76.2	72.4	74.4	6645	75.9
1992	7922.2	1330.0	71.2	73.8	70.9	73.6	67.8	71.2	6315	71.9
1993	8023.9	1330.0	84.6	77.3	71.9	73.1	68.9	70.5	7298	83.3
1994	7969.1	1330.0	86.1	79.5	85.0	76.0	68.4	70.0	6654	76.0
1995	8879.1	1330.0	81.9	79.9	80.8	76.9	76.2	71.2	7248	82.7
1996	9530.8	1330.0	85.7	80.9	85.2	78.3	81.6	72.9	7625	86.8
1997	8503.4	1330.0	77.5	80.4	76.7	78.1	73.0	72.9	6872	78.4
1998	9965.7	1330.0	98.0	82.6	97.9	80.5	85.5	74.5	8140	92.9
1999	7998.5	1330.0	74.4	81.7	71.5	79.5	68.7	73.8	6633	75.7
2000	8271.7	1330.0	73.8	80.9	73.7	79.0	70.8	73.5	6640	75.6
2001	9825.8	1330.0	98.7	82.5	98.4	80.7	84.3	74.5	8304	94.8
2002	7146.7	1330.0	67.2	81.2	66.9	79.6	61.3	73.4	5948	67.9
2003	9290.8	1330.0	84.6	81.5	84.6	80.0	79.7	73.9	7525	85.9
2004	10500.2	1330.0	98.9	82.7	98.6	81.3	89.9	75.0	8733	99.4
2005	8491.3	1330.0	79.1	82.5	76.9	81.0	72.9	74.9	7104	81.1
2006	9533.1	1330.0	86.1	82.7	83.6	81.1	81.8	75.3	7656	87.4
2007	9243.6	1330.0	82.7	82.7	82.1	81.2	79.3	75.6	7356	84.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1990 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		155			288	0
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	1249			802	1	
D. Inspection, maintenance or repair without refuelling				215		
E. Testing of plant systems or components	1			24		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					4	
L. Human factor related					2	
Subtotal	1250	155	0	1041	297	0
Total		1405			1338	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1990 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		43
12. Reactor I&C Systems	16	9
13. Reactor Auxiliary Systems	12	24
14. Safety Systems		14
15. Reactor Cooling Systems		36
16. Steam generation systems		45
17. Safety I&C Systems (excluding reactor I&C)		5
21. Fuel Handling and Storage Facilities		0
31. Turbine and auxiliaries	26	28
32. Feedwater and Main Steam System		22
33. Circulating Water System		2
41. Main Generator Systems		31
42. Electrical Power Supply Systems	67	1
XX. Miscellaneous Systems		1
Total	121	261

FR-64 PENLY-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1330.0 MW(e)
 Design Net Capacity: 1330.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8718.7 GW(e).h
 Energy Availability Factor: 76.7%
 Load Factor: 74.8%
 Operating Factor: 80.8%
 Energy Unavailability Factor: 23.3%
 Total Off-line Time: 1679 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	873.0	406.2	0.0	212.1	934.5	911.4	949.9	910.8	852.0	942.5	904.1	822.3	8718.7
EAF (%)	88.2	45.9	0.1	23.6	96.2	98.7	97.7	94.0	90.4	96.3	97.0	89.3	76.7
UCF (%)	100.0	57.3	0.1	23.6	96.7	99.5	98.9	98.8	92.1	97.3	97.3	89.4	79.4
LF (%)	88.2	45.4	0.0	22.2	94.4	95.2	96.0	92.0	89.0	95.1	94.4	83.1	74.8
OF (%)	100.0	57.6	0.0	33.2	97.4	100.0	100.0	96.4	92.9	100.0	100.0	90.2	80.8
EUF (%)	11.8	54.1	99.9	76.4	3.8	1.3	2.3	6.0	9.6	3.7	3.0	10.7	23.3
PUF (%)	0.0	42.7	99.9	65.9	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1	17.2
UCLF (%)	0.0	0.0	0.0	10.6	3.2	0.5	1.1	1.1	7.9	2.7	2.7	10.5	3.4
XUF (%)	11.8	11.4	0.0	0.0	0.5	0.7	1.1	4.8	1.7	1.0	0.3	0.1	2.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Aug 1984 Lifetime Generation: 137947.0 GW(e).h
 Date of First Criticality: 10 Jan 1992 Cumulative Energy Availability Factor: 82.8%
 Date of Grid Connection: 04 Feb 1992 Cumulative Load Factor: 76.3%
 Date of Commercial Operation: 01 Nov 1992 Cumulative Unit Capability Factor: 84.0%
 Cumulative Energy Unavailability Factor: 17.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1992	1970.8	1330.0	100.0	100.0	100.0	100.0	101.2	101.2	1464	100.0
1993	8611.8	1330.0	75.2	78.7	74.4	78.1	73.9	77.8	6658	76.0
1994	8759.7	1330.0	81.3	79.9	77.6	77.8	75.2	76.6	7228	82.5
1995	8169.7	1330.0	74.0	78.0	73.8	76.6	70.1	74.6	6574	75.0
1996	9758.0	1330.0	91.3	81.2	89.3	79.6	83.5	76.7	8025	91.4
1997	8068.9	1330.0	84.3	81.8	82.9	80.3	69.3	75.3	7186	82.0
1998	8877.5	1330.0	82.9	82.0	81.1	80.4	76.2	75.4	7318	83.5
1999	8637.0	1330.0	81.3	81.9	79.4	80.2	74.1	75.2	7203	82.2
2000	9584.5	1330.0	97.1	83.8	96.8	82.3	82.0	76.1	8393	95.5
2001	8816.2	1330.0	82.1	83.6	80.2	82.1	75.7	76.0	7333	83.7
2002	8464.3	1330.0	79.1	83.1	79.0	81.8	72.6	75.7	6890	78.7
2003	10207.8	1330.0	97.6	84.4	97.6	83.2	87.6	76.8	8603	98.2
2004	7225.8	1330.0	69.2	83.2	69.1	82.0	61.9	75.5	6231	70.9
2005	9102.6	1330.0	84.8	83.3	84.0	82.2	78.1	75.7	7546	86.1
2006	9885.2	1330.0	97.7	84.3	97.0	83.2	84.8	76.4	8447	96.4
2007	8718.7	1330.0	79.4	84.0	76.7	82.8	74.8	76.3	7081	80.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1992 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		184			457	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1455			787		
E. Testing of plant systems or components				52		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					6	
L. Human factor related		11			0	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			29			
Z. Others					0	
Subtotal	1455	195	29	839	463	0
Total		1679			1302	

7. Equipment Related Full Outages, Analysis by System

System	2007	1992 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		44
12. Reactor I&C Systems		26
13. Reactor Auxiliary Systems	43	14
14. Safety Systems		5
15. Reactor Cooling Systems		52
16. Steam generation systems		15
21. Fuel Handling and Storage Facilities		3
31. Turbine and auxiliaries	141	37
32. Feedwater and Main Steam System		21
33. Circulating Water System		1
41. Main Generator Systems		1
42. Electrical Power Supply Systems		199
XX. Miscellaneous Systems		4
Total	184	422

FR-10 PHENIX

Operator: CEA/EDF (Commissariat à l'Energie Atomique (80%))

Contractor: CNCLNEY (CNIM-CONSTRUCTIONS NAVALES ET INDUSTRIELLES DE MEDITERRANEE CL - CREUSOT LOIRE , N

1. Station Details

Type: FBR
Net Reference Unit Power at the beginning of 2007: 130.0 MW(e)
Design Net Capacity: 250.0 MW(e)
Design Discharge Burnup: 100000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 565.1 GW(e).h
Energy Availability Factor: 49.6%
Load Factor: 49.6%
Operating Factor: 50.8%
Energy Unavailability Factor: 50.4%
Total Off-line Time: 4308 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	95.5	86.6	83.2	0.0	64.0	91.5	29.4	61.7	0.0	0.0	0.0	53.3	565.1
EAF (%)	98.7	99.2	86.0	-0.1	66.1	97.7	30.4	63.7	0.0	0.1	0.0	55.1	49.6
UCF (%)	98.7	99.2	86.0	-0.1	66.1	97.7	30.4	63.8	0.0	0.1	0.0	55.1	49.6
LF (%)	98.7	99.2	86.0	0.0	66.1	97.7	30.4	63.7	0.0	0.0	0.0	55.1	49.6
OF (%)	100.0	100.0	87.6	0.0	68.5	100.0	32.1	65.9	0.0	0.0	0.0	57.1	50.8
EUF (%)	1.3	0.8	14.0	100.1	33.9	2.3	69.6	36.3	100.0	99.9	100.0	44.9	50.4
PUF (%)	1.3	0.8	4.6	100.1	10.6	2.3	1.7	25.0	100.0	82.4	0.0	2.0	27.5
UCLF (%)	0.0	0.0	9.4	0.0	23.3	0.0	67.9	11.3	0.0	17.5	100.0	42.9	22.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

* EUROPEAN RECORD OF CONNECTION TO THE GRID, FOR SFR : 151.2 DAYS (153.34 OF CRITICAL DAYS)*
 BEST PRODUCTION IN ONE GO (WITHOUT SHUTDOWN) : 510 GWH* THE 2007 SFEN (FRENCH NUCLEAR SOCIETY) GRAND PRIZE WAS AWARDED TO THE PHENIX PLANT IN RECOGNITION OF ITS SUCCESSFUL RE-COMMISSIONING UP TO ITS RECORD OPERATIONAL DURATION.TWO PLANNED OUTAGES : A7 AND A8.*
 DURING A7 OUTAGE, A FIRST IN FRANCE : THE ENTIRE CONDENSER (20,000 TUBES) WAS COATED WITH EPOXY TO PREVENT EROSION ON THE TUBES.* MANY VARIOUS CONTINGENCIES DURING A8 OUTAGE LED TO AN EXTENSION OF ITS DURATION BY 5 WEEKS.IN AUGUST, THE REACTOR WAS DELIBERATELY SHUTDOWN, FOLLOWING THE DISCOVERY OF A SMALL SODIUM LEAK ON A SECONDARY LOOP PIPE. THIS WAS 3 DAYS PRIOR TO THE BEGINNING OF THE PLANNED A8 OUTAGE.FINALLY PHENIX ENDED WITH 184 DAYS OF OPERATION (FOR 210 EXPECTED) WHICH REPRESENTS A 69% LOAD FACTOR.THE 23,000 TONS OF STEAM SUPPLIED TO THE MARCOULE CENTRE FOR ITS HEATING ACCOUNT FOR SAVINGS OF 3,600 TONS OF CO2.

5. Historical Summary

Date of Construction Start: 01 Nov 1968
Date of First Criticality: 31 Aug 1973
Date of Grid Connection: 13 Dec 1973
Date of Commercial Operation: 14 Jul 1974

Lifetime Generation: 23529.8 GW(e).h
Cumulative Energy Availability Factor: 52.6%
Cumulative Load Factor: 46.1%
Cumulative Unit Capability Factor: 52.9%
Cumulative Energy Unavailability Factor: 47.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	735.6	233.0	71.6	71.6	71.5	71.5	71.5	71.5	3515	79.6
1975	1308.4	233.0	64.1	66.6	64.1	66.6	64.1	66.6	5932	67.7
1976	950.8	233.0	47.4	58.9	46.7	58.6	46.5	58.5	4799	54.6
1977	300.8	233.0	15.9	46.6	15.5	46.3	14.7	46.0	2120	24.2
1978	1238.8	233.0	61.4	49.9	60.9	49.6	60.7	49.3	5905	67.4
1979	1719.0	233.0	84.0	56.1	84.0	55.8	84.2	55.6	7350	83.9
1980	1319.0	233.0	64.7	57.4	64.7	57.2	64.4	57.0	5679	64.7
1981	1421.9	233.0	69.9	59.1	69.9	58.9	69.7	58.7	6217	71.0
1982	989.1	233.0	48.7	57.9	48.7	57.7	48.5	57.5	5429	62.0
1983	1122.0	233.0	55.1	57.6	55.1	57.4	55.0	57.2	5515	63.0
1984	1414.0	233.0	53.7	57.2	53.7	57.0	69.1	58.3	6206	70.7
1985	1153.0	233.0	60.4	57.5	60.4	57.3	56.5	58.2	6784	77.4
1986	1519.1	233.0	73.2	58.7	73.2	58.6	74.4	59.5	6996	79.9
1987	1556.4	233.0	75.3	60.0	71.5	59.6	76.3	60.7	7059	80.6
1988	1475.4	233.0	72.0	60.8	71.4	60.4	72.1	61.5	6300	71.7
1989	601.2	233.0	30.4	58.8	29.6	58.4	29.5	59.4	2678	30.6
1990	982.5	233.0	47.9	58.2	47.9	57.8	48.1	58.8	4637	52.9
1991	0.0	233.0	58.6	58.2	58.6	57.8	0.0	55.4	0	0.0
1992	0.0	233.0	0.0	55.0	0.0	54.7	0.0	52.4	0	0.0
1993	34.8	233.0	94.1	57.1	94.1	56.7	1.7	49.8	286	3.3
1994	22.6	233.0	17.1	55.1	17.1	54.8	1.1	47.4	184	2.1
1995	Data not provided									
1996	2.7	233.0	0.0	52.5	0.0	52.2	0.1	45.2	0	0.0
1997	Data not provided									
1998	"									
1999	"									
2000	"									
2001	"									
2002	"									
2003	"									
2004	"									
2005	804.5	130.0	71.8	53.0	71.2	52.7	70.6	45.9	6341	72.4
2006	591.0	130.0	51.9	53.0	51.9	52.7	51.9	46.0	4601	52.5
2007	565.1	130.0	49.6	52.9	49.6	52.6	49.6	46.1	4452	50.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1931			887	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	2308			485		
D. Inspection, maintenance or repair without refuelling				246	7	
E. Testing of plant systems or components		70			1	
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					6	2
Subtotal	2308	2001	0	731	902	4
Total		4309			1637	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		66
12. Reactor I&C Systems		70
14. Safety Systems		0
15. Reactor Cooling Systems	129	231
16. Steam generation systems		250
21. Fuel Handling and Storage Facilities	173	59
31. Turbine and auxiliaries		88
32. Feedwater and Main Steam System		68
33. Circulating Water System		1
41. Main Generator Systems	505	13
42. Electrical Power Supply Systems		7
XX. Miscellaneous Systems	1124	24
Total	1931	877

FR-48 ST. ALBAN-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1335.0 MW(e)
 Design Net Capacity: 1335.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6342.0 GW(e).h
 Energy Availability Factor: 54.6%
 Load Factor: 54.2%
 Operating Factor: 56.9%
 Energy Unavailability Factor: 45.4%
 Total Off-line Time: 3773 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	972.4	884.0	961.5	918.4	913.2	787.7	828.5	76.5	0.0	0.0	0.0	0.0	6342.0
EAF (%)	98.4	98.8	98.7	95.6	92.1	82.3	83.6	8.3	0.0	-0.1	0.0	0.0	54.6
UCF (%)	99.0	99.1	99.3	96.6	93.5	86.2	90.2	9.8	0.0	-0.1	0.0	0.0	55.9
LF (%)	97.9	98.5	96.8	95.5	91.9	81.9	83.4	7.7	0.0	0.0	0.0	0.0	54.2
OF (%)	99.7	100.0	99.9	100.0	96.0	87.1	93.4	9.9	0.0	0.0	0.0	0.0	56.9
EUF (%)	1.6	1.2	1.3	4.4	7.9	17.7	16.4	91.7	100.0	100.1	100.0	100.0	45.4
PUF (%)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	90.2	100.0	100.1	100.0	95.2	40.7
UCLF (%)	1.0	0.9	0.7	3.2	6.5	13.8	9.8	0.0	0.0	0.0	0.0	4.8	3.4
XUF (%)	0.6	0.2	0.6	1.1	1.4	3.9	6.6	1.5	0.0	0.0	0.0	0.0	1.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 29 Jan 1979 Lifetime Generation: 171746.0 GW(e).h
 Date of First Criticality: 04 Aug 1985 Cumulative Energy Availability Factor: 74.9%
 Date of Grid Connection: 30 Aug 1985 Cumulative Load Factor: 66.4%
 Date of Commercial Operation: 01 May 1986 Cumulative Unit Capability Factor: 76.6%
 Cumulative Energy Unavailability Factor: 25.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	3909.9	1300.0	67.6	67.6	66.4	66.4	51.1	51.1	3182	54.1
1987	6101.6	1300.0	56.6	61.0	56.2	60.3	53.6	52.6	4944	56.4
1988	4562.0	1335.0	83.4	69.6	82.4	68.7	38.9	47.4	3721	42.4
1989	6781.3	1335.0	70.7	69.9	63.5	67.3	58.0	50.3	5907	67.4
1990	7799.1	1335.0	70.4	70.0	68.6	67.6	66.7	53.8	6295	71.9
1991	7935.3	1335.0	74.4	70.8	73.3	68.6	67.9	56.3	6380	72.8
1992	4812.2	1335.0	42.1	66.4	42.1	64.6	41.0	54.0	3775	43.0
1993	7376.0	1335.0	68.2	66.7	65.7	64.7	63.1	55.2	6010	68.6
1994	7575.6	1335.0	94.5	69.9	93.8	68.1	64.8	56.3	6777	77.4
1995	8535.7	1335.0	81.1	71.1	78.2	69.2	73.0	58.0	7197	82.2
1996	8126.6	1335.0	83.7	72.2	83.1	70.5	69.3	59.1	6950	79.1
1997	7112.8	1335.0	65.5	71.7	63.6	69.9	60.8	59.3	5833	66.6
1998	8255.9	1335.0	90.6	73.2	89.9	71.5	70.6	60.2	6802	77.6
1999	9240.6	1335.0	86.3	74.1	85.7	72.5	79.0	61.5	7656	87.4
2000	8027.8	1335.0	72.2	74.0	71.4	72.4	68.5	62.0	6494	73.9
2001	9298.5	1335.0	89.8	75.0	89.6	73.5	79.5	63.1	7843	89.5
2002	8768.8	1335.0	81.0	75.4	79.6	73.9	75.0	63.8	7275	83.0
2003	8691.9	1335.0	80.6	75.7	78.0	74.1	74.3	64.4	7029	80.2
2004	10127.4	1335.0	96.6	76.8	95.3	75.3	86.4	65.6	8283	94.3
2005	9697.0	1335.0	88.6	77.4	86.0	75.8	82.9	66.5	7949	90.7
2006	8882.1	1335.0	82.5	77.6	78.4	75.9	76.0	67.0	7342	83.8
2007	6342.0	1335.0	55.9	76.6	54.6	74.9	54.2	66.4	4987	56.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		166			595	
B. Refuelling without a maintenance				32	4	
C. Inspection, maintenance or repair combined with refuelling	3563			919	10	
D. Inspection, maintenance or repair without refuelling				71	0	
E. Testing of plant systems or components				29		
H. Nuclear regulatory requirements		6			39	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					31	1
L. Human factor related					0	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			4			4
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant, spare part delivery problems etc.)			24			
Z. Others		16			0	
Subtotal	3563	188	28	1051	679	5
Total		3779			1735	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	2	54
12. Reactor I&C Systems	31	21
13. Reactor Auxiliary Systems	7	12
14. Safety Systems		12
15. Reactor Cooling Systems	8	123
16. Steam generation systems		5
21. Fuel Handling and Storage Facilities		6
31. Turbine and auxiliaries	49	114
32. Feedwater and Main Steam System	67	41
33. Circulating Water System		3
35. All other I&C Systems		1
41. Main Generator Systems		89
42. Electrical Power Supply Systems	2	64
XX. Miscellaneous Systems		6
Total	166	551

FR-49 ST. ALBAN-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1335.0 MW(e)
 Design Net Capacity: 1335.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10476.0 GW(e).h
 Energy Availability Factor: 95.0%
 Load Factor: 89.6%
 Operating Factor: 98.9%
 Energy Unavailability Factor: 5.0%
 Total Off-line Time: 100 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	874.1	803.4	836.0	916.4	890.8	851.6	922.0	882.8	861.9	899.9	877.8	859.2	10476.0
EAF (%)	98.5	99.7	97.8	98.7	98.7	99.0	99.4	90.7	89.7	90.5	91.3	86.7	95.0
UCF (%)	99.3	99.8	97.9	99.1	99.2	99.4	99.7	92.0	91.4	91.5	91.7	87.2	95.6
LF (%)	88.0	89.6	84.2	95.5	89.7	88.6	92.8	88.9	89.7	90.5	91.3	86.5	89.6
OF (%)	100.0	100.0	98.9	100.1	96.6	96.3	100.0	98.8	100.0	100.0	100.0	95.7	98.9
EUF (%)	1.5	0.3	2.2	1.3	1.3	1.0	0.6	9.3	10.3	9.5	8.7	13.3	5.0
PUF (%)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
UCLF (%)	0.7	0.2	2.1	0.8	0.8	0.6	0.3	8.0	8.6	8.4	8.3	12.8	4.3
XUF (%)	0.8	0.1	0.1	0.4	0.5	0.4	0.3	1.3	1.7	1.0	0.4	0.5	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 31 Jul 1979 Lifetime Generation: 163047.0 GW(e).h
 Date of First Criticality: 07 Jun 1986 Cumulative Energy Availability Factor: 74.6%
 Date of Grid Connection: 03 Jul 1986 Cumulative Load Factor: 66.1%
 Date of Commercial Operation: 01 Mar 1987 Cumulative Unit Capability Factor: 77.2%
 Cumulative Energy Unavailability Factor: 25.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	5639.8	1300.0	79.1	79.1	79.0	79.0	59.1	59.1	5014	68.3
1988	5185.0	1335.0	47.3	61.5	46.5	61.1	44.2	50.9	4308	49.0
1989	6126.5	1335.0	57.5	60.1	56.2	59.4	52.4	51.4	4806	54.9
1990	6070.6	1335.0	60.3	60.1	56.5	58.6	51.9	51.5	5146	58.7
1991	7962.6	1335.0	73.3	62.9	71.1	61.2	68.1	55.0	6484	74.0
1992	6375.1	1335.0	64.3	63.1	62.3	61.4	54.4	54.9	5405	61.5
1993	6433.1	1335.0	90.9	67.2	83.1	64.6	55.0	54.9	6121	69.9
1994	7125.8	1335.0	74.9	68.2	73.0	65.7	60.9	55.7	6074	69.3
1995	7751.4	1335.0	76.1	69.1	72.7	66.5	66.3	56.9	6763	77.2
1996	8344.6	1335.0	81.5	70.3	79.7	67.8	71.2	58.3	7247	82.5
1997	8049.7	1335.0	92.3	72.4	91.8	70.0	68.8	59.3	7072	80.7
1998	6555.7	1335.0	66.7	71.9	63.2	69.4	56.1	59.0	5654	64.5
1999	8607.0	1335.0	80.3	72.6	79.3	70.2	73.6	60.2	7188	82.1
2000	8729.6	1335.0	86.5	73.6	79.0	70.9	74.4	61.2	7202	82.0
2001	8654.8	1335.0	91.4	74.8	91.3	72.2	74.0	62.1	7657	87.4
2002	8290.6	1335.0	77.3	74.9	75.2	72.4	70.9	62.6	6950	79.3
2003	9254.8	1335.0	87.8	75.7	83.0	73.1	79.1	63.6	7558	86.3
2004	10476.5	1335.0	97.8	76.9	97.7	74.4	89.3	65.0	8709	99.1
2005	7238.0	1335.0	70.6	76.6	65.2	73.9	61.9	64.9	6361	72.6
2006	7584.2	1335.0	69.1	76.2	67.4	73.6	64.9	64.9	6292	71.8
2007	10476.0	1335.0	95.6	77.2	95.0	74.6	89.6	66.1	8660	98.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		48			745	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling				911	28	
D. Inspection, maintenance or repair without refuelling				88		
E. Testing of plant systems or components				62	2	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			54		13	29
L. Human factor related					0	0
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						7
Subtotal	0	48	54	1061	793	36
Total		102			1890	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		59
12. Reactor I&C Systems	28	64
13. Reactor Auxiliary Systems		14
14. Safety Systems		4
15. Reactor Cooling Systems		55
16. Steam generation systems		112
21. Fuel Handling and Storage Facilities		0
31. Turbine and auxiliaries	7	127
32. Feedwater and Main Steam System	4	45
33. Circulating Water System		1
35. All other I&C Systems		0
41. Main Generator Systems		178
42. Electrical Power Supply Systems		15
XX. Miscellaneous Systems	9	2
Total	48	676

FR-17 ST. LAURENT-B-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 915.0 MW(e)
 Design Net Capacity: 915.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6426.7 GW(e).h
 Energy Availability Factor: 80.5%
 Load Factor: 80.2%
 Operating Factor: 84.2%
 Energy Unavailability Factor: 19.5%
 Total Off-line Time: 1380 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	611.3	601.9	665.1	629.0	302.1	0.0	425.2	650.9	637.5	597.7	633.3	672.7	6426.7
EAF (%)	90.0	97.9	97.8	95.4	45.6	0.0	65.2	95.6	96.8	88.0	96.1	98.6	80.5
UCF (%)	91.5	99.1	99.2	99.2	50.4	0.0	67.8	99.3	99.9	91.1	99.8	99.9	83.1
LF (%)	89.8	97.9	97.7	95.6	44.4	0.0	62.5	95.6	96.8	87.7	96.1	98.8	80.2
OF (%)	92.7	100.0	99.9	100.1	52.8	0.0	74.1	100.0	100.0	91.7	100.0	100.0	84.2
EUF (%)	10.0	2.1	2.2	4.6	54.4	100.0	34.8	4.4	3.2	12.0	3.9	1.4	19.5
PUF (%)	0.1	0.2	0.1	0.1	41.8	100.0	20.3	0.1	0.1	0.1	0.2	0.1	13.6
UCLF (%)	8.4	0.7	0.8	0.7	7.8	0.0	11.9	0.6	0.0	8.7	0.0	0.0	3.4
XUF (%)	1.5	1.3	1.3	3.8	4.8	0.0	2.5	3.7	3.1	3.1	3.7	1.3	2.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BASE LOAD OPERATION

5. Historical Summary

Date of Construction Start: 01 May 1976 Lifetime Generation: 141780.4 GW(e).h
 Date of First Criticality: 04 Jan 1981 Cumulative Energy Availability Factor: 75.8%
 Date of Grid Connection: 21 Jan 1981 Cumulative Load Factor: 72.0%
 Date of Commercial Operation: 01 Aug 1983 Cumulative Unit Capability Factor: 77.4%
 Cumulative Energy Unavailability Factor: 24.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	2970.0	880.0	92.0	92.0	92.0	92.0	91.9	91.9	3447	93.8
1984	4401.0	880.0	56.0	66.6	56.0	66.6	56.9	67.2	5042	57.4
1985	5630.4	880.0	76.1	70.5	75.0	70.1	73.0	69.6	6827	77.9
1986	5476.4	880.0	79.8	73.2	79.7	72.9	71.0	70.0	7144	81.6
1987	5171.3	880.0	76.8	74.0	76.1	73.6	67.1	69.4	6667	76.1
1988	5721.0	915.0	76.3	74.5	75.9	74.1	71.2	69.7	6464	73.6
1989	6609.8	915.0	85.4	76.2	82.7	75.4	82.5	71.8	7699	87.9
1990	6113.7	915.0	86.3	77.6	84.1	76.6	76.3	72.4	7089	80.9
1991	4005.4	915.0	53.7	74.7	52.3	73.7	50.0	69.7	4736	54.1
1992	5621.1	915.0	75.4	74.8	74.0	73.7	69.9	69.7	6690	76.2
1993	5668.5	915.0	75.3	74.8	72.4	73.6	70.7	69.8	6821	77.9
1994	6095.7	915.0	87.0	75.9	85.1	74.6	76.1	70.4	7252	82.8
1995	4443.0	915.0	64.3	75.0	60.3	73.4	55.4	69.1	5211	59.5
1996	5541.1	915.0	79.1	75.3	78.8	73.9	68.9	69.1	6888	78.4
1997	5132.6	915.0	76.2	75.3	75.4	74.0	64.0	68.8	6404	73.1
1998	6030.7	915.0	84.6	75.9	82.1	74.5	75.2	69.2	7366	84.1
1999	5062.6	915.0	69.7	75.6	67.9	74.1	63.2	68.8	6207	70.9
2000	5086.7	915.0	66.4	75.0	66.0	73.6	63.3	68.5	5957	67.8
2001	6814.8	915.0	86.8	75.7	86.4	74.3	85.0	69.4	7735	88.3
2002	6637.0	890.0	85.2	76.2	82.9	74.8	85.1	70.2	7592	86.7
2003	6630.4	915.0	86.5	76.7	82.8	75.2	82.7	70.8	7658	87.4
2004	6364.2	915.0	82.4	76.9	80.4	75.4	79.2	71.2	7356	83.7
2005	5384.1	915.0	69.5	76.6	68.1	75.1	67.2	71.0	6186	70.6
2006	6914.1	915.0	88.9	77.1	88.2	75.6	86.3	71.7	7973	91.0
2007	6426.7	915.0	83.1	77.4	80.5	75.8	80.2	72.0	7380	84.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		243			510	
B. Refuelling without a maintenance				58	4	
C. Inspection, maintenance or repair combined with refuelling	1123			1153	21	
E. Testing of plant systems or components	0			10	2	0
H. Nuclear regulatory requirements					0	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			12		376	16
L. Human factor related		3				
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)					2	
Z. Others					2	
Subtotal	1123	246	12	1221	917	16
Total		1381			2154	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		12
12. Reactor I&C Systems		40
13. Reactor Auxiliary Systems	12	17
14. Safety Systems	9	41
15. Reactor Cooling Systems		10
16. Steam generation systems		83
21. Fuel Handling and Storage Facilities		2
31. Turbine and auxiliaries	85	49
32. Feedwater and Main Steam System	35	15
33. Circulating Water System		3
41. Main Generator Systems	92	170
42. Electrical Power Supply Systems		12
XX. Miscellaneous Systems		15
Total	233	469

FR-23 ST. LAURENT-B-2

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 915.0 MW(e)
 Design Net Capacity: 880.0 MW(e)
 Design Discharge Burnup: 33735 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5906.8 GW(e).h
 Energy Availability Factor: 74.7%
 Load Factor: 73.7%
 Operating Factor: 79.3%
 Energy Unavailability Factor: 25.3%
 Total Off-line Time: 1811 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	656.1	527.9	31.0	0.0	448.9	626.3	593.1	650.6	561.6	518.9	642.1	650.5	5906.8
EAF (%)	96.4	85.8	5.3	-0.1	66.7	97.0	90.0	97.7	86.5	77.8	98.3	95.7	74.7
UCF (%)	99.9	99.9	7.1	-0.1	69.0	99.9	92.0	100.0	89.0	79.6	100.0	97.7	77.7
LF (%)	96.4	85.8	4.6	0.0	65.9	95.1	87.1	95.6	85.3	76.1	97.5	95.6	73.7
OF (%)	100.0	100.0	7.0	0.0	82.4	100.0	94.4	100.0	90.6	80.1	100.0	98.5	79.3
EUf (%)	3.6	14.2	94.7	100.1	33.3	3.0	10.0	2.3	13.5	22.2	1.7	4.3	25.3
PUF (%)	0.1	0.1	92.9	70.0	8.8	0.1	0.2	0.0	0.1	0.1	0.0	0.0	14.4
UCLF (%)	0.0	0.0	0.0	30.2	22.3	0.0	7.8	0.0	10.9	20.3	0.0	2.3	7.8
XUF (%)	3.6	14.0	1.9	0.0	2.3	2.9	2.0	2.2	2.5	1.9	1.6	1.9	3.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start: 01 Jul 1976 Lifetime Generation: 141606.8 GW(e).h
 Date of First Criticality: 12 May 1981 Cumulative Energy Availability Factor: 76.4%
 Date of Grid Connection: 01 Jun 1981 Cumulative Load Factor: 70.4%
 Date of Commercial Operation: 01 Aug 1983 Cumulative Unit Capability Factor: 78.1%
 Cumulative Energy Unavailability Factor: 23.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	512.0	880.0	16.1	16.1	16.1	16.1	15.8	15.8	615	16.7
1984	5724.0	880.0	88.9	67.4	88.9	67.4	74.0	56.9	7237	82.4
1985	5295.6	880.0	77.6	71.6	75.7	70.8	68.7	61.8	6806	77.7
1986	5662.8	880.0	81.7	74.6	79.8	73.4	73.5	65.2	7337	83.8
1987	5060.2	880.0	79.9	75.8	79.4	74.8	65.6	65.3	6798	77.6
1988	5108.0	880.0	69.6	74.6	69.6	73.8	66.1	65.4	6262	71.3
1989	5034.0	880.0	81.4	75.7	75.9	74.2	65.3	65.4	6490	74.1
1990	5165.9	915.0	73.8	75.4	71.3	73.8	64.4	65.3	6212	70.9
1991	6043.0	915.0	86.1	76.7	84.2	75.0	75.4	66.5	7374	84.2
1992	5490.1	915.0	80.6	77.1	79.4	75.5	68.3	66.7	6982	79.5
1993	5042.2	915.0	68.7	76.3	64.1	74.4	62.9	66.3	6149	70.2
1994	6322.7	915.0	83.7	77.0	81.2	75.0	78.9	67.5	7406	84.5
1995	5311.3	915.0	72.9	76.6	72.1	74.8	66.3	67.4	6720	76.7
1996	6057.7	915.0	82.2	77.1	80.8	75.2	75.4	68.0	7303	83.1
1997	5960.7	915.0	80.8	77.3	78.1	75.4	74.4	68.4	7147	81.6
1998	6415.3	915.0	85.7	77.9	83.2	75.9	80.0	69.2	7585	86.6
1999	5845.9	915.0	79.0	77.9	77.3	76.0	72.9	69.4	7013	80.1
2000	5134.0	915.0	67.6	77.3	67.0	75.5	63.9	69.1	6069	69.1
2001	6046.7	915.0	81.7	77.6	80.1	75.7	75.4	69.4	7226	82.5
2002	6215.0	890.0	82.2	77.8	82.2	76.1	79.7	70.0	7434	84.9
2003	4702.4	915.0	61.6	77.0	61.6	75.4	58.7	69.4	5580	63.7
2004	6468.6	915.0	87.6	77.5	85.6	75.8	80.5	69.9	7838	89.2
2005	5728.0	915.0	78.6	77.6	77.0	75.9	71.5	70.0	7038	80.3
2006	6004.3	915.0	89.8	78.1	88.3	76.4	74.9	70.2	7580	86.5
2007	5906.8	915.0	77.7	78.1	74.7	76.4	73.7	70.4	6949	79.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		396			602	
B. Refuelling without a maintenance				23	8	
C. Inspection, maintenance or repair combined with refuelling	1194			1000	15	
D. Inspection, maintenance or repair without refuelling				6		
E. Testing of plant systems or components				9	1	
H. Nuclear regulatory requirements		33			13	
J. Grid failure or grid unavailability						5
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					138	
L. Human factor related		108				
Z. Others		83			6	
Subtotal	1194	620	0	1038	783	5
Total		1814			1826	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		14
12. Reactor I&C Systems		20
13. Reactor Auxiliary Systems		11
14. Safety Systems		47
15. Reactor Cooling Systems		50
16. Steam generation systems		38
21. Fuel Handling and Storage Facilities		4
31. Turbine and auxiliaries		235
32. Feedwater and Main Steam System	14	15
41. Main Generator Systems	190	65
42. Electrical Power Supply Systems		25
XX. Miscellaneous Systems		1
Total	204	525

FR-18 TRICASTIN-1

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 915.0 MW(e)
Design Net Capacity: 915.0 MW(e)
Design Discharge Burnup: 42000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6344.7 GW(e).h
Energy Availability Factor: 82.6%
Load Factor: 79.2%
Operating Factor: 85.6%
Energy Unavailability Factor: 17.4%
Total Off-line Time: 1264 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	628.6	587.7	648.3	618.6	468.5	0.0	348.2	511.5	616.0	615.6	635.3	666.4	6344.7
EAF (%)	98.5	98.9	98.5	94.1	69.1	0.0	52.1	89.6	98.7	93.4	98.8	99.1	82.6
UCF (%)	100.0	100.0	100.0	99.8	80.6	0.0	52.2	91.2	100.0	95.4	99.5	99.6	84.8
LF (%)	92.3	95.6	95.2	93.9	68.8	0.0	51.1	75.1	93.5	90.4	96.4	97.9	79.2
OF (%)	100.0	100.0	99.9	100.0	81.3	0.0	62.6	86.6	100.0	96.5	100.0	100.0	85.6
EUF (%)	1.5	1.1	1.5	5.9	30.9	100.0	47.9	10.4	1.3	6.6	1.2	0.9	17.4
PUF (%)	0.0	0.0	0.0	0.0	18.8	100.0	19.1	0.5	0.0	0.0	0.2	0.0	11.5
UCLF (%)	0.0	0.0	0.0	0.2	0.6	0.0	28.7	8.3	0.0	4.6	0.3	0.4	3.7
XUF (%)	1.5	1.1	1.5	5.6	11.5	0.0	0.0	1.6	1.3	2.0	0.7	0.5	2.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Nov 1974	Lifetime Generation:	159380.1 GW(e).h
Date of First Criticality:	21 Feb 1980	Cumulative Energy Availability Factor:	76.8%
Date of Grid Connection:	31 May 1980	Cumulative Load Factor:	72.6%
Date of Commercial Operation:	01 Dec 1980	Cumulative Unit Capability Factor:	79.6%
		Cumulative Energy Unavailability Factor:	23.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	656.0	918.0	56.6	56.6	56.6	56.6	95.8	95.8	722	97.0
1981	4416.0	920.0	56.3	56.4	56.3	56.4	54.8	58.0	5176	59.1
1982	5909.8	915.0	82.8	69.0	81.9	68.6	73.7	65.5	8151	93.0
1983	5111.0	915.0	67.2	68.4	67.2	68.1	63.8	65.0	6097	69.6
1984	6468.0	915.0	86.7	72.9	86.7	72.7	80.5	68.8	7662	87.2
1985	6217.9	915.0	86.0	75.5	81.6	74.4	77.6	70.5	7560	86.3
1986	5880.3	915.0	79.4	76.1	77.0	74.9	73.4	71.0	7188	82.1
1987	5978.1	915.0	83.5	77.1	78.2	75.3	74.6	71.5	7360	84.0
1988	5836.0	915.0	79.8	77.5	76.7	75.5	72.6	71.6	7200	82.0
1989	5830.2	915.0	83.3	78.1	83.2	76.3	72.7	71.7	7550	86.2
1990	5099.7	915.0	68.8	77.2	65.1	75.2	63.6	70.9	6377	72.8
1991	5909.1	915.0	83.2	77.7	77.0	75.4	73.7	71.2	7262	82.9
1992	5659.3	915.0	85.3	78.4	83.0	76.0	70.4	71.1	7573	86.2
1993	6134.8	915.0	83.9	78.8	77.7	76.1	76.5	71.5	7393	84.4
1994	5008.4	915.0	75.4	78.5	70.3	75.7	62.5	70.9	6458	73.7
1995	5372.7	915.0	71.3	78.1	70.6	75.4	67.0	70.6	6374	72.8
1996	7302.1	915.0	94.5	79.1	93.8	76.5	90.9	71.9	8448	96.2
1997	5548.3	915.0	73.1	78.7	72.5	76.3	69.2	71.7	6711	76.6
1998	5503.7	915.0	71.0	78.3	71.0	76.0	68.7	71.6	7075	80.8
1999	3426.7	915.0	44.9	76.6	44.5	74.4	42.8	70.1	4016	45.8
2000	6644.9	915.0	87.7	77.1	87.1	75.0	82.7	70.7	7842	89.3
2001	6053.3	915.0	83.2	77.4	82.0	75.3	75.5	70.9	7261	82.9
2002	6384.6	880.0	87.2	77.8	86.1	75.8	82.8	71.4	7778	88.8
2003	5670.1	915.0	85.2	78.1	73.0	75.7	70.7	71.4	7029	80.2
2004	6832.5	915.0	91.5	78.7	89.0	76.2	85.0	72.0	8049	91.6
2005	5831.0	915.0	85.3	79.0	74.0	76.1	72.7	72.0	7007	80.0
2006	6466.8	915.0	90.7	79.4	87.4	76.6	80.7	72.3	7989	91.2
2007	6344.7	915.0	84.8	79.6	82.6	76.8	79.2	72.6	7496	85.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		266			335	1
B. Refuelling without a maintenance				21	6	
C. Inspection, maintenance or repair combined with refuelling	922			1040	11	
D. Inspection, maintenance or repair without refuelling				21	2	
E. Testing of plant systems or components	2			5	0	
H. Nuclear regulatory requirements						3
J. Grid failure or grid unavailability			49			1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					31	
L. Human factor related		27			0	
Z. Others					1	
Subtotal	924	293	49	1087	386	5
Total		1266			1478	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		93
12. Reactor I&C Systems	35	4
13. Reactor Auxiliary Systems		2
14. Safety Systems	34	2
15. Reactor Cooling Systems		23
16. Steam generation systems	13	39
21. Fuel Handling and Storage Facilities	96	10
31. Turbine and auxiliaries	40	32
32. Feedwater and Main Steam System	24	8
35. All other I&C Systems	24	
41. Main Generator Systems		85
42. Electrical Power Supply Systems		15
Total	266	313

FR-19 TRICASTIN-2**Operator:** EDF (ELECTRICITE DE FRANCE)**Contractor:** FRAM (FRAMATOME)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 915.0 MW(e)
Design Net Capacity: 915.0 MW(e)
Design Discharge Burnup: 33735 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6910.1 GW(e).h
Energy Availability Factor: 89.3%
Load Factor: 86.2%
Operating Factor: 91.2%
Energy Unavailability Factor: 10.7%
Total Off-line Time: 772 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	651.7	603.0	660.7	627.4	631.1	599.1	628.6	497.1	69.4	665.6	625.7	650.6	6910.1
EAF (%)	99.3	99.2	99.3	98.6	97.3	98.3	97.0	74.8	11.6	97.6	98.1	99.2	89.3
UCF (%)	100.0	100.0	100.0	99.8	99.6	99.8	99.1	77.3	11.6	97.6	98.9	100.0	90.4
LF (%)	95.7	98.1	97.1	95.2	92.7	90.9	92.3	73.0	10.5	97.6	95.0	95.6	86.2
OF (%)	100.0	100.0	99.9	100.0	100.0	100.0	100.0	77.7	16.0	100.0	100.0	100.0	91.2
EUF (%)	0.7	0.8	0.7	1.4	2.7	1.7	3.0	25.2	88.4	2.4	1.9	0.8	10.7
PUF (%)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	22.3	81.3	2.3	0.3	0.0	8.8
UCLF (%)	0.0	0.0	0.0	0.2	0.4	0.2	0.9	0.4	7.1	0.0	0.8	0.0	0.8
XUF (%)	0.7	0.8	0.7	1.1	2.3	1.5	2.1	2.5	0.0	0.0	0.8	0.7	1.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Dec 1974	Lifetime Generation:	158363.0 GW(e).h
Date of First Criticality:	22 Jul 1980	Cumulative Energy Availability Factor:	76.9%
Date of Grid Connection:	07 Aug 1980	Cumulative Load Factor:	72.5%
Date of Commercial Operation:	01 Dec 1980	Cumulative Unit Capability Factor:	79.5%
		Cumulative Energy Unavailability Factor:	23.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	466.0	917.0	68.7	68.7	68.7	68.7	68.1	68.1	568	76.3
1981	6155.1	920.0	82.3	81.3	82.3	81.3	76.4	75.7	7819	89.3
1982	4056.2	915.0	63.0	72.5	63.0	72.5	50.6	63.7	5932	67.7
1983	5624.0	915.0	81.9	75.6	81.9	75.6	70.2	65.8	7245	82.7
1984	6603.0	915.0	87.2	78.4	87.2	78.4	82.2	69.8	7684	87.5
1985	6261.7	915.0	86.0	79.9	79.4	78.6	78.1	71.4	7375	84.2
1986	6286.6	915.0	85.8	80.9	82.6	79.3	78.4	72.6	7631	87.1
1987	5302.3	915.0	73.2	79.8	69.6	77.9	66.2	71.7	6500	74.2
1988	4896.0	915.0	76.0	79.3	73.1	77.3	60.9	70.3	6628	75.5
1989	5164.7	915.0	74.3	78.8	71.4	76.7	64.4	69.7	6650	75.9
1990	5614.4	915.0	80.9	79.0	72.5	76.2	70.0	69.7	7177	81.9
1991	4459.1	915.0	60.8	77.3	58.2	74.6	55.6	68.5	5429	62.0
1992	6099.1	915.0	80.0	77.6	78.7	75.0	75.9	69.1	7118	81.0
1993	5777.1	915.0	77.3	77.5	72.9	74.8	72.1	69.3	6876	78.5
1994	6216.7	915.0	81.7	77.8	79.1	75.1	77.6	69.9	7222	82.4
1995	6312.3	915.0	84.6	78.3	81.6	75.5	78.8	70.5	7504	85.7
1996	6391.3	915.0	84.9	78.7	82.1	75.9	79.5	71.0	7615	86.7
1997	5218.8	915.0	68.5	78.1	66.8	75.4	65.1	70.7	6107	69.7
1998	6293.9	915.0	83.0	78.4	81.2	75.7	78.5	71.1	7354	83.9
1999	5661.5	915.0	75.0	78.2	73.0	75.6	70.6	71.1	6674	76.2
2000	4293.8	915.0	56.7	77.1	55.3	74.6	53.4	70.2	5092	58.0
2001	6710.5	915.0	87.2	77.6	87.1	75.2	83.7	70.9	7779	88.8
2002	6593.9	880.0	86.6	78.0	86.3	75.7	85.5	71.5	7714	88.1
2003	6196.0	915.0	88.4	78.4	84.4	76.0	77.3	71.7	7521	85.9
2004	5684.2	915.0	86.4	78.8	80.7	76.2	70.7	71.7	7271	82.8
2005	5878.7	915.0	82.6	78.9	77.8	76.3	73.3	71.8	7128	81.4
2006	6221.3	915.0	83.0	79.1	80.7	76.5	77.6	72.0	7366	84.1
2007	6910.1	915.0	90.4	79.5	89.3	76.9	86.2	72.5	7989	91.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		30			335	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	720			1054	37	
D. Inspection, maintenance or repair without refuelling				36		
E. Testing of plant systems or components				5	1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					35	43
L. Human factor related		21			0	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						7
Z. Others					0	
Subtotal	720	51	0	1095	411	50
Total		771			1556	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		5
12. Reactor I&C Systems		42
13. Reactor Auxiliary Systems		8
14. Safety Systems		22
15. Reactor Cooling Systems		44
16. Steam generation systems		10
21. Fuel Handling and Storage Facilities	30	24
31. Turbine and auxiliaries		50
32. Feedwater and Main Steam System		8
41. Main Generator Systems		29
42. Electrical Power Supply Systems		10
XX. Miscellaneous Systems		1
Total	30	253

FR-25 TRICASTIN-3

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 915.0 MW(e)
Design Net Capacity: 915.0 MW(e)
Design Discharge Burnup: 33735 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6775.0 GW(e).h
Energy Availability Factor: 87.6%
Load Factor: 84.5%
Operating Factor: 89.7%
Energy Unavailability Factor: 12.4%
Total Off-line Time: 898 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	561.0	602.5	665.3	521.4	56.8	611.0	633.4	608.8	566.2	630.9	653.2	664.6	6775.0
EAF (%)	85.8	99.7	98.0	79.4	9.5	97.0	99.4	99.5	91.3	95.2	99.9	97.8	87.6
UCF (%)	85.9	99.9	100.0	89.4	9.5	98.0	99.9	100.0	91.5	97.6	100.0	97.9	89.0
LF (%)	82.4	98.0	97.7	79.1	8.3	92.7	93.0	89.4	85.9	92.7	99.2	97.6	84.5
OF (%)	87.4	100.0	99.9	89.7	14.1	100.0	100.0	100.0	91.8	95.8	100.0	100.0	89.7
EUF (%)	14.2	0.3	2.0	20.6	90.5	3.0	0.6	0.5	8.7	4.8	0.1	2.2	12.4
PUF (%)	0.1	0.1	0.0	10.6	74.3	0.6	0.0	0.0	0.0	0.1	0.0	0.0	7.3
UCLF (%)	14.0	0.0	0.1	0.0	16.3	1.4	0.2	0.0	8.5	2.3	0.0	2.2	3.8
XUF (%)	0.1	0.2	2.0	9.9	0.0	1.0	0.4	0.5	0.2	2.4	0.0	0.0	1.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 Apr 1975	Lifetime Generation:	162190.8 GW(e).h
Date of First Criticality:	29 Nov 1980	Cumulative Energy Availability Factor:	79.0%
Date of Grid Connection:	10 Feb 1981	Cumulative Load Factor:	75.5%
Date of Commercial Operation:	11 May 1981	Cumulative Unit Capability Factor:	81.4%
		Cumulative Energy Unavailability Factor:	21.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	3998.5	919.0	78.0	78.0	78.0	78.0	73.9	73.9	4815	81.9
1982	5067.3	915.0	65.8	70.7	65.8	70.7	63.2	67.5	5966	68.1
1983	6342.0	915.0	82.8	75.2	82.8	75.2	79.1	71.9	7544	86.1
1984	6682.0	915.0	85.1	77.9	85.1	77.9	83.1	74.9	7668	87.3
1985	7166.0	915.0	97.1	82.0	94.3	81.4	89.4	78.0	8518	97.2
1986	6230.4	915.0	86.8	82.9	83.5	81.8	77.7	78.0	7704	87.9
1987	5654.3	915.0	76.9	82.0	75.4	80.8	70.5	76.9	6810	77.7
1988	5722.0	915.0	80.3	81.7	78.0	80.5	71.2	76.1	7106	80.9
1989	5834.6	915.0	80.9	81.7	75.9	79.9	72.8	75.7	7188	82.1
1990	6457.2	915.0	85.8	82.1	84.6	80.4	80.6	76.2	7671	87.6
1991	4746.8	915.0	66.5	80.6	62.1	78.7	59.2	74.6	5941	67.8
1992	5199.0	915.0	67.5	79.5	66.6	77.7	64.7	73.8	6010	68.4
1993	6423.9	915.0	83.3	79.8	81.4	78.0	80.1	74.3	7373	84.2
1994	6496.5	915.0	86.3	80.3	83.6	78.4	81.1	74.8	7641	87.2
1995	6494.7	915.0	87.0	80.7	85.1	78.8	81.0	75.2	7675	87.6
1996	5806.7	915.0	79.3	80.6	76.2	78.7	72.2	75.0	7172	81.6
1997	6192.8	915.0	82.6	80.7	79.1	78.7	77.3	75.2	7331	83.7
1998	6359.5	915.0	82.3	80.8	80.5	78.8	79.3	75.4	7375	84.2
1999	5731.7	915.0	76.7	80.6	74.0	78.5	71.5	75.2	6828	77.9
2000	5985.2	915.0	82.3	80.7	79.0	78.6	74.5	75.1	7325	83.4
2001	4929.5	915.0	65.8	80.0	65.2	77.9	61.5	74.5	5777	65.9
2002	5976.1	880.0	79.7	80.0	79.4	78.0	77.5	74.6	7140	81.5
2003	6144.9	915.0	86.9	80.3	79.7	78.0	76.7	74.7	7607	86.8
2004	6377.1	915.0	84.3	80.4	82.9	78.3	79.3	74.9	7455	84.9
2005	6563.0	915.0	90.4	80.8	86.1	78.6	81.9	75.2	7981	91.1
2006	6006.9	915.0	86.5	81.1	81.3	78.7	74.9	75.2	7488	85.5
2007	6775.0	915.0	89.0	81.4	87.6	79.0	84.5	75.5	7862	89.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		258			306	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling	592			1053	10	
D. Inspection, maintenance or repair without refuelling				35		
E. Testing of plant systems or components				5	1	
H. Nuclear regulatory requirements		17			1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					26	
L. Human factor related					0	
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)					8	
Z. Others					1	
Subtotal	592	275	0	1093	365	0
Total		867			1458	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	28	13
12. Reactor I&C Systems	116	40
13. Reactor Auxiliary Systems	20	13
14. Safety Systems		17
15. Reactor Cooling Systems		49
16. Steam generation systems		4
21. Fuel Handling and Storage Facilities	34	
31. Turbine and auxiliaries		55
32. Feedwater and Main Steam System		6
33. Circulating Water System		3
41. Main Generator Systems	60	85
42. Electrical Power Supply Systems		2
Total	258	287

FR-26 TRICASTIN-4

Operator: EDF (ELECTRICITE DE FRANCE)

Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 915.0 MW(e)
Design Net Capacity: 915.0 MW(e)
Design Discharge Burnup: 33735 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7047.0 GW(e).h
Energy Availability Factor: 90.4%
Load Factor: 87.9%
Operating Factor: 92.4%
Energy Unavailability Factor: 9.6%
Total Off-line Time: 665 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	648.7	595.4	646.4	635.2	653.4	594.4	387.7	296.3	624.4	653.1	638.3	673.7	7047.0
EAF (%)	100.0	99.8	99.9	99.8	99.3	90.5	57.3	44.3	97.8	99.7	99.1	99.4	90.4
UCF (%)	100.0	99.8	100.0	100.0	99.9	100.0	64.8	44.7	98.8	100.0	99.9	100.0	92.2
LF (%)	95.3	96.8	95.0	96.4	96.0	90.2	56.9	43.5	94.8	95.8	96.9	99.0	87.9
OF (%)	100.0	100.0	99.9	100.0	100.0	94.7	64.8	51.1	100.0	100.0	100.0	100.0	92.4
EUF (%)	0.0	0.2	0.1	0.2	0.7	9.5	42.7	55.7	2.2	0.3	0.9	0.6	9.6
PUF (%)	0.0	0.1	0.0	0.0	0.1	0.0	35.2	45.4	0.0	0.0	0.0	0.0	6.9
UCLF (%)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	9.9	1.2	0.0	0.1	0.0	1.0
XUF (%)	0.0	0.0	0.1	0.2	0.6	9.4	7.5	0.4	1.0	0.3	0.8	0.6	1.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

LOAD FOLLOWING

5. Historical Summary

Date of Construction Start:	01 May 1975	Lifetime Generation:	155710.6 GW(e).h
Date of First Criticality:	31 May 1981	Cumulative Energy Availability Factor:	79.3%
Date of Grid Connection:	12 Jun 1981	Cumulative Load Factor:	73.8%
Date of Commercial Operation:	01 Nov 1981	Cumulative Unit Capability Factor:	82.1%
		Cumulative Energy Unavailability Factor:	20.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	1283.6	917.0	97.2	97.2	97.2	97.2	95.3	95.3	1462	99.9
1982	5470.5	915.0	69.8	73.8	69.8	73.8	68.2	72.1	6311	72.0
1983	6170.0	915.0	80.7	77.0	80.7	77.0	77.0	74.4	7386	84.3
1984	5446.0	915.0	87.1	80.2	87.1	80.2	67.8	72.3	7587	86.4
1985	6161.7	915.0	91.3	82.8	84.8	81.3	76.9	73.4	7816	89.2
1986	5873.9	915.0	85.7	83.4	81.8	81.4	73.3	73.4	7568	86.4
1987	5725.7	915.0	84.2	83.5	80.1	81.2	71.4	73.0	7257	82.8
1988	3770.0	915.0	67.7	81.3	66.2	79.1	46.9	69.4	4772	54.3
1989	5729.1	915.0	82.9	81.5	79.8	79.2	71.5	69.7	7335	83.7
1990	5201.6	915.0	82.7	81.6	77.4	79.0	64.9	69.1	7329	83.7
1991	5742.8	915.0	77.1	81.2	74.5	78.5	71.6	69.4	6838	78.1
1992	6459.3	915.0	90.2	82.0	86.7	79.3	80.4	70.4	7968	90.7
1993	5302.8	915.0	80.1	81.8	70.9	78.6	66.2	70.0	6842	78.1
1994	5953.0	915.0	80.9	81.8	77.8	78.5	74.3	70.3	7049	80.5
1995	6208.9	915.0	85.7	82.0	82.0	78.8	77.5	70.8	7562	86.3
1996	6700.4	915.0	87.6	82.4	86.5	79.3	83.4	71.7	7774	88.5
1997	6488.8	915.0	86.0	82.6	84.8	79.6	81.0	72.2	7595	86.7
1998	5913.0	915.0	80.4	82.5	76.2	79.4	73.8	72.3	7138	81.5
1999	5887.9	915.0	80.5	82.4	78.0	79.3	73.5	72.4	7158	81.7
2000	5780.3	915.0	77.4	82.1	75.8	79.2	71.9	72.4	6873	78.2
2001	6036.9	915.0	83.0	82.2	81.2	79.3	75.3	72.5	7138	81.5
2002	6260.6	880.0	83.3	82.2	81.2	79.4	81.2	72.9	7168	81.8
2003	6387.9	915.0	82.9	82.3	79.9	79.4	79.7	73.2	7399	84.5
2004	4724.1	915.0	59.8	81.3	58.8	78.5	58.8	72.6	5359	61.0
2005	6501.4	915.0	88.8	81.6	83.6	78.7	81.1	72.9	7728	88.2
2006	6410.4	915.0	84.1	81.7	83.0	78.9	80.0	73.2	7412	84.6
2007	7047.0	915.0	92.2	82.1	90.4	79.3	87.9	73.8	8096	92.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		16			233	0
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	576			1029	11	
D. Inspection, maintenance or repair without refuelling				21		
E. Testing of plant systems or components	0			1		
H. Nuclear regulatory requirements		22				
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					81	10
L. Human factor related		12			6	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			31			0
Z. Others					3	
Subtotal	576	50	31	1051	335	10
Total		657			1396	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		24
12. Reactor I&C Systems	7	17
13. Reactor Auxiliary Systems		10
14. Safety Systems		31
15. Reactor Cooling Systems		22
16. Steam generation systems		31
21. Fuel Handling and Storage Facilities	9	0
31. Turbine and auxiliaries		14
32. Feedwater and Main Steam System		8
41. Main Generator Systems		42
42. Electrical Power Supply Systems		10
XX. Miscellaneous Systems		1
Total	16	210

DE-12 BIBLIS-A (KWB A)

Operator: RWE (RWE Power AG)
Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1167.0 MW(e)
Design Net Capacity: 1146.0 MW(e)
Design Discharge Burnup: 36000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 0.0 GW(e).h
Energy Availability Factor: 0.0%
Load Factor: 0.0%
Operating Factor: 0.0%
Energy Unavailability Factor: 100.0%
Total Off-line Time: 8760 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAF (%)	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCF (%)	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUUF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PUF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE PLANT STAYED SHUT DOWN SINCE SEPT. 15, 2006 AS EQUIPMENT HOLDING COOLING PIPES NEEDED UPDATING.

5. Historical Summary

Date of Construction Start: 01 Jan 1970
Date of First Criticality: 16 Jul 1974
Date of Grid Connection: 25 Aug 1974
Date of Commercial Operation: 26 Feb 1975

Lifetime Generation: 216665.1 GW(e).h
Cumulative Energy Availability Factor: 69.0%
Cumulative Load Factor: 65.2%
Cumulative Unit Capability Factor: 69.4%
Cumulative Energy Unavailability Factor: 31.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	7571.9	1146.0	82.4	82.4	82.4	82.4	82.4	82.4	6886	85.9
1976	5102.8	1146.0	60.2	70.8	52.7	66.9	50.7	65.8	4617	52.6
1977	6164.5	1089.0	65.4	69.0	65.4	66.4	64.6	65.4	5970	68.2
1978	7067.1	1089.0	70.0	69.3	70.0	67.3	74.1	67.6	6524	74.5
1979	6569.0	1089.0	87.4	72.9	87.4	71.3	68.9	67.8	7507	85.7
1980	3855.0	1146.0	42.5	67.6	42.5	66.3	38.3	62.7	4119	46.9
1981	6844.3	1146.0	69.6	67.9	69.6	66.8	68.2	63.5	6288	71.8
1982	8994.3	1146.0	86.6	70.3	86.6	69.3	89.6	66.9	7723	88.2
1983	7766.0	1146.0	75.8	70.9	75.8	70.1	77.4	68.1	6783	77.4
1984	6901.0	1146.0	67.9	70.6	67.9	69.8	68.6	68.1	6175	70.3
1985	7564.9	1146.0	79.2	71.4	75.1	70.3	75.4	68.8	6797	77.6
1986	6968.1	1146.0	76.9	71.9	76.9	70.9	69.4	68.8	7227	82.5
1987	7467.8	1146.0	80.9	72.6	80.9	71.7	74.4	69.3	7154	81.7
1988	5985.4	1146.0	72.5	72.6	72.5	71.7	59.5	68.6	6594	75.1
1989	6431.0	1146.0	66.9	72.2	66.9	71.4	64.1	68.3	5904	67.4
1990	5052.7	1146.0	53.1	71.0	53.1	70.2	50.3	67.1	4676	53.4
1991	6931.0	1146.0	76.3	71.3	76.3	70.6	69.0	67.2	6778	77.4
1992	6884.8	1146.0	79.6	71.8	79.6	71.1	68.4	67.3	7024	80.0
1993	8240.7	1146.0	97.5	73.1	97.5	72.5	82.1	68.1	8558	97.7
1994	7483.6	1146.0	76.8	73.3	76.8	72.7	74.5	68.4	6697	76.4
1995	2509.4	1156.0	30.0	71.2	30.0	70.7	24.8	66.3	2655	30.3
1996	4012.5	1167.0	39.7	69.7	39.7	69.2	39.1	65.0	3503	39.9
1997	8002.3	1167.0	87.0	70.5	87.0	70.0	78.3	65.6	7648	87.3
1998	10042.3	1167.0	99.7	71.8	99.7	71.3	98.2	67.0	8752	99.9
1999	7251.1	1167.0	78.0	72.0	78.0	71.5	70.9	67.2	6865	78.4
2000	5910.1	1167.0	62.5	71.6	62.5	71.2	57.7	66.8	5497	62.6
2001	9532.0	1167.0	94.9	72.5	94.9	72.1	93.2	67.8	8334	95.1
2002	6167.7	1167.0	68.1	72.3	68.1	71.9	60.3	67.5	5988	68.4
2003	2695.8	1167.0	26.6	70.7	26.6	70.3	26.4	66.1	2406	27.5
2004	9645.5	1167.0	95.2	71.6	95.2	71.2	94.1	67.0	8395	95.6
2005	7355.9	1167.0	73.4	71.6	72.7	71.2	71.9	67.2	6489	74.1
2006	6994.5	1167.0	70.6	71.6	69.3	71.2	68.4	67.2	6190	70.7
2007	0.0	1167.0	0.0	69.4	0.0	69.0	0.0	65.2	0	0.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					788	
B. Refuelling without a maintenance				7	3	
C. Inspection, maintenance or repair combined with refuelling				1413	2	
D. Inspection, maintenance or repair without refuelling	8760			36		
E. Testing of plant systems or components				26	6	
H. Nuclear regulatory requirements					12	19
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				2	3	0
Subtotal	8760	0	0	1484	814	19
Total		8760			2317	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		11
12. Reactor I&C Systems		20
13. Reactor Auxiliary Systems		3
14. Safety Systems		387
15. Reactor Cooling Systems		193
16. Steam generation systems		76
17. Safety I&C Systems (excluding reactor I&C)		1
21. Fuel Handling and Storage Facilities		7
31. Turbine and auxiliaries		30
32. Feedwater and Main Steam System		21
33. Circulating Water System		3
41. Main Generator Systems		29
42. Electrical Power Supply Systems		1
Total	0	782

DE-18 BIBLIS-B (KWB B)

Operator: RWE (RWE Power AG)

Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1240.0 MW(e)
Design Net Capacity: 1178.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 885.2 GW(e).h
Energy Availability Factor: 8.2%
Load Factor: 8.1%
Operating Factor: 8.3%
Energy Unavailability Factor: 91.8%
Total Off-line Time: 8029 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	885.2	885.2
EAF (%)	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.5	8.2
UCF (%)	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.5	8.2
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.0	8.1
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.3	8.3
EUUF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	3.5	91.8
PUF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	3.5	91.8
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE PLANT STAYED SHUT AS EQUIPMENT HOLDING COOLING PIPES NEEDED UPDATING.

5. Historical Summary

Date of Construction Start:	01 Feb 1972	Lifetime Generation:	224193.4 GW(e).h
Date of First Criticality:	25 Mar 1976	Cumulative Energy Availability Factor:	73.3%
Date of Grid Connection:	25 Apr 1976	Cumulative Load Factor:	66.8%
Date of Commercial Operation:	31 Jan 1977	Cumulative Unit Capability Factor:	73.6%
		Cumulative Energy Unavailability Factor:	26.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	8017.2	1178.0	78.8	78.8	78.8	78.8	77.7	77.7	7490	85.5
1978	5658.0	1178.0	55.3	67.1	55.3	67.1	54.8	66.3	6015	68.7
1979	6026.0	1178.0	77.9	70.7	77.9	70.7	58.4	63.6	7254	82.8
1980	5592.0	1240.0	57.8	67.3	57.8	67.3	51.3	60.4	5761	65.6
1981	8105.6	1240.0	75.4	69.0	75.4	69.0	74.6	63.4	6804	77.7
1982	9196.0	1240.0	85.5	71.8	85.5	71.8	84.7	67.0	7681	87.7
1983	6490.0	1240.0	60.6	70.2	60.6	70.2	59.7	65.9	5360	61.2
1984	8216.0	1240.0	77.6	71.1	77.6	71.1	75.4	67.2	7338	83.5
1985	7780.2	1240.0	75.3	71.6	75.3	71.6	71.6	67.7	6918	79.0
1986	6722.6	1240.0	68.2	71.2	68.2	71.2	61.9	67.1	6370	72.7
1987	5623.0	1240.0	76.2	71.7	76.2	71.7	51.8	65.7	7273	83.0
1988	5591.8	1240.0	74.8	72.0	74.8	72.0	51.3	64.5	6593	75.1
1989	5165.8	1240.0	53.6	70.5	53.6	70.5	47.6	63.1	4807	54.9
1990	9100.1	1240.0	90.1	71.9	90.1	71.9	83.8	64.6	8631	98.5
1991	3917.8	1240.0	41.1	69.9	39.3	69.7	36.1	62.7	3626	41.4
1992	7630.5	1240.0	81.5	70.6	81.5	70.5	70.1	63.2	7184	81.8
1993	7441.8	1240.0	83.8	71.4	83.8	71.3	68.5	63.5	7368	84.1
1994	7973.8	1240.0	84.9	72.1	84.9	72.0	73.4	64.0	7468	85.3
1995	7854.2	1240.0	75.4	72.3	75.4	72.2	72.3	64.5	6603	75.4
1996	7857.4	1240.0	80.1	72.7	80.1	72.6	72.1	64.9	6762	77.0
1997	8469.4	1240.0	85.9	73.3	85.9	73.3	78.0	65.5	7560	86.3
1998	8182.1	1240.0	84.4	73.8	84.4	73.8	75.3	65.9	7409	84.6
1999	8707.4	1240.0	85.0	74.3	85.0	74.2	80.2	66.6	7474	85.3
2000	8295.7	1240.0	89.2	75.0	89.2	74.9	76.2	67.0	7950	90.5
2001	7442.2	1240.0	73.8	74.9	73.8	74.8	68.5	67.0	6470	73.9
2002	10173.6	1240.0	95.2	75.7	95.2	75.6	93.7	68.1	8371	95.6
2003	7792.0	1240.0	75.3	75.7	75.3	75.6	71.7	68.2	6630	75.7
2004	8768.4	1240.0	82.7	75.9	82.5	75.9	80.5	68.6	7309	83.2
2005	6892.5	1240.0	67.8	75.7	64.0	75.4	63.5	68.5	6014	68.7
2006	8312.1	1240.0	78.9	75.8	77.9	75.5	76.5	68.7	6929	79.1
2007	885.2	1240.0	8.2	73.6	8.2	73.3	8.1	66.8	731	8.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					476	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling				1280		
D. Inspection, maintenance or repair without refuelling	168			40		
E. Testing of plant systems or components				2	0	
F. Major back-fitting, refurbishment or upgrading activities with refuelling	7861					
H. Nuclear regulatory requirements				15	36	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						0
Subtotal	8029	0	0	1337	512	0
Total	8029			1849		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1976 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		29
12. Reactor I&C Systems		2
13. Reactor Auxiliary Systems		68
15. Reactor Cooling Systems		166
16. Steam generation systems		145
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		11
32. Feedwater and Main Steam System		23
33. Circulating Water System		1
41. Main Generator Systems		26
Total	0	472

DE-32 BROKDORF (KBR)

Operator: E.ON (E.ON Kernkraft GmbH)
Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1370.0 MW(e)
Design Net Capacity: 1307.0 MW(e)
Design Discharge Burnup: 34000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 11425.6 GW(e).h
Energy Availability Factor: 94.3%
Load Factor: 95.2%
Operating Factor: 94.7%
Energy Unavailability Factor: 5.7%
Total Off-line Time: 468 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	1009.4	927.5	1004.1	984.2	800.9	531.4	1033.3	1028.2	1008.3	1047.0	1013.4	1038.0	11425.6
EAF (%)	100.0	99.6	100.0	99.9	79.0	53.4	99.9	100.0	100.0	100.0	100.0	100.0	94.3
UCF (%)	100.0	99.6	100.0	99.9	81.0	53.4	99.9	100.0	100.0	100.0	100.0	100.0	94.5
LF (%)	99.0	100.7	98.5	99.8	78.6	53.9	101.4	100.9	102.2	102.6	102.7	101.8	95.2
OF (%)	100.0	100.0	99.9	100.0	81.5	54.3	100.0	100.0	100.0	100.0	100.0	100.0	94.7
EUUF (%)	0.0	0.4	0.0	0.1	21.0	46.6	0.1	0.0	0.0	0.0	0.0	0.0	5.7
PUF (%)	0.0	0.0	0.0	0.1	19.0	42.9	0.0	0.0	0.0	0.0	0.0	0.0	5.2
UCLF (%)	0.0	0.4	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.3
XUF (%)	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERMICAL POWER WAS INCREASED TO 3900 MW

5. Historical Summary

Date of Construction Start: 01 Jan 1976 **Lifetime Generation:** 220028.9 GW(e).h
Date of First Criticality: 08 Oct 1986 **Cumulative Energy Availability Factor:** 90.2%
Date of Grid Connection: 14 Oct 1986 **Cumulative Load Factor:** 88.1%
Date of Commercial Operation: 22 Dec 1986 **Cumulative Unit Capability Factor:** 90.4%
Cumulative Energy Unavailability Factor: 9.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	296.8	1307.0	100.0	100.0	100.0	100.0	30.5	30.5	228	30.6
1987	9481.3	1307.0	85.2	86.3	85.2	86.3	82.8	78.7	7477	85.4
1988	8581.8	1326.0	85.2	85.8	85.2	85.8	73.7	76.3	7014	79.8
1989	8991.3	1326.0	80.0	83.9	80.0	83.9	77.4	76.6	7134	81.4
1990	8337.2	1326.0	72.5	81.1	72.5	81.1	71.8	75.4	6447	73.6
1991	9492.7	1326.0	85.7	82.0	85.7	82.0	81.7	76.7	7542	86.1
1992	10788.0	1326.0	96.0	84.3	96.0	84.3	92.6	79.3	8461	96.3
1993	9447.1	1326.0	85.6	84.5	84.8	84.4	81.3	79.6	7441	84.9
1994	10228.6	1326.0	88.7	85.0	88.7	84.9	88.1	80.6	7793	89.0
1995	9912.4	1326.0	86.6	85.2	86.6	85.1	85.3	81.2	7833	89.4
1996	10555.4	1326.0	93.2	86.0	93.2	85.9	90.6	82.1	8212	93.5
1997	11249.3	1326.0	95.1	86.8	95.1	86.7	96.8	83.4	8328	95.1
1998	10752.3	1326.0	92.6	87.3	90.4	87.0	92.6	84.2	7966	90.9
1999	11093.3	1370.0	93.3	87.8	93.3	87.5	92.4	84.8	8177	93.3
2000	11335.1	1370.0	95.6	88.3	95.6	88.1	94.2	85.5	8397	95.6
2001	11215.4	1370.0	95.0	88.8	95.0	88.6	93.5	86.1	8331	95.1
2002	11336.9	1370.0	95.8	89.2	95.8	89.0	94.5	86.6	8405	95.9
2003	10564.6	1370.0	90.1	89.3	90.1	89.1	88.0	86.7	7903	90.2
2004	11040.8	1370.0	94.7	89.6	94.7	89.4	91.7	87.0	8327	94.8
2005	11400.7	1370.0	96.1	89.9	95.9	89.8	95.0	87.4	8433	96.3
2006	11201.3	1370.0	94.7	90.2	93.7	90.0	93.3	87.7	8307	94.8
2007	11425.6	1370.0	94.5	90.4	94.3	90.2	95.2	88.1	8293	94.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					88	
B. Refuelling without a maintenance					15	
C. Inspection, maintenance or repair combined with refuelling	447			604		
D. Inspection, maintenance or repair without refuelling				8		
H. Nuclear regulatory requirements					49	8
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					9	3
L. Human factor related		20				
Z. Others					15	
Subtotal	447	20	0	612	176	11
Total		467			799	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		8
16. Steam generation systems		2
31. Turbine and auxiliaries		0
32. Feedwater and Main Steam System		1
41. Main Generator Systems		75
Total	0	86

DE-13 BRUNSBUETTEL (KKB)

Operator: KKB (Kernkraftwerk Brunsbüttel GmbH)
Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 771.0 MW(e)
Design Net Capacity: 770.0 MW(e)
Design Discharge Burnup: 32000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2487.9 GW(e).h
Energy Availability Factor: 38.2%
Load Factor: 36.8%
Operating Factor: 38.4%
Energy Unavailability Factor: 61.8%
Total Off-line Time: 5398 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	543.1	520.1	570.1	176.2	0.0	392.6	285.8	0.0	0.0	0.0	0.0	0.0	2487.9
EAF (%)	97.6	100.0	99.6	33.4	0.0	80.3	52.5	0.0	0.0	-0.1	0.0	0.0	38.2
UCF (%)	97.6	100.0	99.6	33.4	0.0	80.3	52.5	0.0	0.0	-0.1	0.0	0.0	38.2
LF (%)	94.7	100.4	99.4	31.7	0.0	70.7	49.8	0.0	0.0	0.0	0.0	0.0	36.8
OF (%)	100.0	100.0	99.9	33.5	0.0	77.8	54.0	0.0	0.0	0.0	0.0	0.0	38.4
EUF (%)	2.4	0.0	0.4	66.6	100.0	19.7	47.5	100.0	100.0	100.1	100.0	100.0	61.8
PUF (%)	1.3	0.0	0.4	66.6	45.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5
UCLF (%)	1.1	0.0	0.0	0.0	54.8	19.7	47.5	100.0	100.0	100.1	100.0	100.0	52.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	15 Apr 1970	Lifetime Generation:	120371.3 GW(e).h
Date of First Criticality:	23 Jun 1976	Cumulative Energy Availability Factor:	61.0%
Date of Grid Connection:	13 Jul 1976	Cumulative Load Factor:	57.0%
Date of Commercial Operation:	09 Feb 1977	Cumulative Unit Capability Factor:	62.0%
		Cumulative Energy Unavailability Factor:	39.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	2925.9	770.0	47.4	47.4	47.4	47.4	47.4	47.4	4043	50.4
1978	2333.5	770.0	34.5	40.7	34.5	40.7	34.6	40.7	3405	38.9
1979	0.0	770.0	0.0	26.7	0.0	26.7	0.0	26.7	0	0.0
1980	714.9	770.0	11.3	22.8	11.3	22.8	10.6	22.6	1354	15.4
1981	4462.4	770.0	66.4	31.6	66.4	31.6	66.2	31.5	7432	84.8
1982	3439.2	770.0	51.1	34.9	51.1	34.9	51.0	34.8	5007	57.2
1983	2416.0	770.0	34.2	34.8	34.2	34.8	35.8	34.9	3241	37.0
1984	5334.0	770.0	78.9	40.4	78.9	40.4	78.9	40.5	7549	85.9
1985	5625.3	770.0	83.1	45.2	83.1	45.2	83.4	45.3	7661	87.5
1986	5630.9	771.0	86.1	49.3	86.1	49.3	83.4	49.1	7802	89.1
1987	5233.8	771.0	85.9	52.7	85.9	52.7	77.5	51.7	7837	89.5
1988	5085.3	771.0	85.4	55.4	85.4	55.4	75.1	53.7	7800	88.8
1989	4097.2	771.0	71.6	56.7	71.6	56.7	60.7	54.2	6730	76.8
1990	4780.3	771.0	93.8	59.4	93.8	59.4	70.8	55.4	8527	97.3
1991	3819.3	771.0	80.8	60.8	61.2	59.5	56.5	55.5	6317	72.1
1992	3487.4	771.0	57.4	60.6	57.4	59.3	51.5	55.2	5425	61.8
1993	0.0	771.0	0.0	57.0	0.0	55.8	0.0	52.0	0	0.0
1994	0.0	771.0	0.0	53.8	0.0	52.7	0.0	49.1	0	0.0
1995	3001.0	771.0	51.4	53.7	51.3	52.6	44.4	48.8	4750	54.2
1996	4696.4	771.0	77.9	54.9	74.7	53.8	69.3	49.9	7255	82.6
1997	5102.9	771.0	97.4	56.9	97.4	55.8	75.6	51.1	8760	100.0
1998	3993.9	771.0	64.7	57.3	64.7	56.2	59.1	51.5	5712	65.2
1999	6219.8	771.0	93.6	58.9	93.6	57.9	92.1	53.2	8290	94.6
2000	5784.8	771.0	93.8	60.3	93.8	59.4	85.4	54.6	8295	94.4
2001	5764.3	771.0	93.1	61.7	86.8	60.5	85.3	55.8	8202	93.6
2002	860.0	771.0	13.1	59.8	13.1	58.7	12.7	54.2	1167	13.3
2003	4905.8	771.0	76.3	60.4	76.3	59.3	72.6	54.8	6688	76.3
2004	4873.2	771.0	73.3	60.9	73.3	59.8	72.0	55.5	6504	74.0
2005	6027.2	771.0	90.3	61.9	89.0	60.8	89.2	56.6	7989	91.2
2006	5967.4	771.0	89.8	62.8	88.5	61.8	88.4	57.7	7958	90.8
2007	2487.9	771.0	38.2	62.0	38.2	61.0	36.8	57.0	3362	38.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1578			1337	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	815			621	13	
D. Inspection, maintenance or repair without refuelling				431		
E. Testing of plant systems or components				0	2	
H. Nuclear regulatory requirements		2929		0	22	26
J. Grid failure or grid unavailability			75			
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					3	
M. Governmental requirements or court decisions						5
Z. Others					63	
Subtotal	815	4507	75	1052	1440	31
Total		5397			2523	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1976 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		3
13. Reactor Auxiliary Systems		707
15. Reactor Cooling Systems		102
16. Steam generation systems	1521	
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		458
32. Feedwater and Main Steam System		0
35. All other I&C Systems		0
41. Main Generator Systems	57	6
42. Electrical Power Supply Systems		48
Total	1578	1324

DE-33 EMSLAND (KKE)

Operator: KLE (Kernkraftwerke Lippe-Ems GmbH)
Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1329.0 MW(e)
Design Net Capacity: 1242.0 MW(e)
Design Discharge Burnup: 37000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10989.2 GW(e).h
Energy Availability Factor: 94.4%
Load Factor: 94.4%
Operating Factor: 94.9%
Energy Unavailability Factor: 5.6%
Total Off-line Time: 450 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	979.8	901.0	992.7	956.0	976.0	337.9	971.4	973.5	949.2	991.6	962.8	997.2	10989.2
EAF (%)	98.6	100.0	99.9	100.0	98.8	35.4	99.7	100.0	100.0	99.9	100.0	100.0	94.4
UCF (%)	98.6	100.0	99.9	100.0	100.0	37.5	99.7	100.0	100.0	99.9	100.0	100.0	94.7
LF (%)	99.1	100.9	100.4	99.9	98.7	35.3	98.2	98.5	99.2	100.2	100.6	100.9	94.4
OF (%)	98.8	100.0	99.9	100.0	100.0	38.9	100.0	100.0	100.0	100.0	100.0	100.0	94.9
EUF (%)	1.4	0.0	0.1	0.0	1.2	64.6	0.3	0.0	0.0	0.1	0.0	0.0	5.6
PUF (%)	0.0	0.0	0.1	0.0	0.0	53.6	0.0	0.0	0.0	0.1	0.0	0.0	4.4
UCLF (%)	1.4	0.0	0.0	0.0	0.0	8.9	0.3	0.0	0.0	0.0	0.0	0.0	0.9
XUF (%)	0.0	0.0	0.0	0.0	1.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 10 Aug 1982
Date of First Criticality: 14 Apr 1988
Date of Grid Connection: 19 Apr 1988
Date of Commercial Operation: 20 Jun 1988

Lifetime Generation: 209818.4 GW(e).h
Cumulative Energy Availability Factor: 93.4%
Cumulative Load Factor: 93.2%
Cumulative Unit Capability Factor: 93.5%
Cumulative Energy Unavailability Factor: 6.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	5694.9	1262.0	96.8	96.8	96.8	96.8	89.3	89.3	4516	87.9
1989	9857.2	1242.0	88.7	91.7	88.7	91.7	90.6	90.1	7794	89.0
1990	10039.2	1256.0	90.4	91.2	90.4	91.2	91.2	90.5	7956	90.8
1991	9287.3	1242.0	82.0	88.6	82.0	88.6	85.4	89.1	7304	83.4
1992	10158.0	1290.0	90.2	89.0	90.2	89.0	89.6	89.2	7933	90.3
1993	10477.1	1290.0	92.9	89.7	92.9	89.7	92.7	89.9	8147	93.0
1994	10526.7	1290.0	93.4	90.3	93.4	90.3	93.2	90.4	8193	93.5
1995	10495.7	1290.0	93.1	90.6	93.1	90.6	92.9	90.7	8168	93.2
1996	10557.3	1290.0	93.2	90.9	93.2	90.9	93.2	91.0	8195	93.3
1997	10650.2	1290.0	94.6	91.3	94.6	91.3	94.2	91.3	8298	94.7
1998	10794.7	1290.0	95.7	91.7	95.7	91.7	95.5	91.7	8388	95.8
1999	10729.2	1290.0	96.0	92.1	96.0	92.1	94.9	92.0	8413	96.0
2000	10802.0	1306.0	94.9	92.3	94.9	92.3	94.1	92.2	8339	94.9
2001	10933.2	1329.0	94.1	92.5	93.8	92.4	93.9	92.3	8257	94.3
2002	11242.3	1329.0	96.9	92.8	96.9	92.8	96.6	92.6	8497	97.0
2003	11097.0	1329.0	95.8	93.0	95.8	93.0	95.3	92.8	8401	95.9
2004	11147.2	1329.0	96.1	93.2	96.1	93.2	95.5	93.0	8456	96.3
2005	10887.8	1329.0	93.9	93.2	93.9	93.2	93.5	93.0	8239	94.0
2006	11147.6	1329.0	96.4	93.4	95.8	93.3	95.8	93.2	8461	96.6
2007	10989.2	1329.0	94.7	93.5	94.4	93.4	94.4	93.2	8311	94.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					28	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	384			455		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	
L. Human factor related		65				
Z. Others					2	
Subtotal	384	65	0	455	30	0
Total	449			485		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
15. Reactor Cooling Systems		16
31. Turbine and auxiliaries		3
41. Main Generator Systems		7
42. Electrical Power Supply Systems		1
Total	0	27

DE-23 GRAFENRHEINFELD (KKG)

Operator: E.ON (E.ON Kernkraft GmbH)
Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1275.0 MW(e)
Design Net Capacity: 1225.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10311.5 GW(e).h
Energy Availability Factor: 93.4%
Load Factor: 92.3%
Operating Factor: 94.0%
Energy Unavailability Factor: 6.6%
Total Off-line Time: 524 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	947.5	861.3	950.5	319.6	873.2	882.4	888.3	922.4	906.8	906.7	914.1	938.7	10311.5
EAF (%)	99.9	99.9	100.0	34.8	93.4	100.0	96.3	100.0	100.0	96.2	100.0	100.0	93.4
UCF (%)	99.9	99.9	100.0	35.0	94.8	100.0	96.3	100.0	100.0	96.2	100.0	100.0	93.6
LF (%)	99.9	100.5	100.2	34.9	92.0	96.1	93.6	97.2	98.8	95.4	99.6	99.0	92.3
OF (%)	100.0	100.0	99.9	35.6	95.2	100.0	100.0	100.0	100.0	96.8	100.0	100.0	94.0
EUf (%)	0.1	0.1	0.0	65.2	6.6	0.0	3.7	0.0	0.0	3.8	0.0	0.0	6.6
PUF (%)	0.0	0.0	0.0	49.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
UCLF (%)	0.0	0.1	0.1	15.9	4.8	0.0	3.7	0.0	0.0	3.8	0.0	0.0	2.4
XUF (%)	0.0	0.0	0.0	0.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Jan 1975
Date of First Criticality: 09 Dec 1981
Date of Grid Connection: 30 Dec 1981
Date of Commercial Operation: 17 Jun 1982

Lifetime Generation: 245338.3 GW(e).h
Cumulative Energy Availability Factor: 88.1%
Cumulative Load Factor: 86.4%
Cumulative Unit Capability Factor: 88.1%
Cumulative Energy Unavailability Factor: 11.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1982	6199.2	1229.0	98.3	98.3	98.3	98.3	98.2	98.2	5122	99.7
1983	9412.0	1229.0	87.5	91.5	87.5	91.5	87.4	91.4	7898	90.2
1984	9590.0	1229.0	88.7	90.4	88.7	90.4	88.8	90.4	7890	89.8
1985	9741.6	1235.0	90.6	90.4	90.6	90.4	90.0	90.3	8155	93.1
1986	8718.2	1235.0	80.9	88.3	80.9	88.3	80.6	88.2	7179	82.0
1987	8360.6	1235.0	77.8	86.5	77.8	86.5	77.3	86.2	7509	85.7
1988	8799.9	1235.0	84.3	86.1	84.3	86.1	81.1	85.5	7604	86.6
1989	9401.7	1235.0	88.0	86.4	88.0	86.4	86.9	85.6	7840	89.5
1990	7910.3	1235.0	73.5	84.9	73.5	84.9	73.1	84.2	6743	77.0
1991	9753.5	1235.0	92.5	85.7	92.5	85.7	90.2	84.8	8114	92.6
1992	9657.2	1235.0	91.8	86.3	91.8	86.3	89.0	85.2	8074	91.9
1993	8845.9	1235.0	84.5	86.1	84.5	86.1	81.8	84.9	7524	85.9
1994	9674.5	1275.0	88.8	86.3	88.8	86.3	86.6	85.0	8116	92.6
1995	9946.0	1275.0	93.5	86.9	93.5	86.9	89.1	85.4	8193	93.5
1996	9528.6	1275.0	89.1	87.0	89.1	87.0	85.1	85.3	7886	89.8
1997	10131.0	1275.0	93.5	87.5	93.5	87.4	90.7	85.7	8202	93.6
1998	9147.0	1275.0	84.6	87.3	84.6	87.3	81.9	85.5	7429	84.8
1999	8336.7	1275.0	76.1	86.6	76.1	86.6	74.6	84.8	6737	76.9
2000	9600.9	1275.0	89.1	86.8	89.1	86.8	85.7	84.9	7829	89.1
2001	10573.9	1275.0	95.7	87.2	95.7	87.2	94.7	85.4	8392	95.8
2002	9889.9	1275.0	91.0	87.4	91.0	87.4	88.5	85.5	7977	91.1
2003	10270.2	1275.0	93.4	87.7	93.4	87.7	92.0	85.8	8196	93.6
2004	10129.4	1275.0	91.6	87.9	91.6	87.9	90.4	86.0	8059	91.7
2005	10106.0	1275.0	91.8	88.0	91.5	88.0	90.5	86.2	8046	91.8
2006	9424.9	1275.0	85.2	87.9	84.9	87.9	84.4	86.2	7588	86.6
2007	10311.5	1275.0	93.6	88.1	93.4	88.1	92.3	86.4	8236	94.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		173			167	
C. Inspection, maintenance or repair combined with refuelling	351			748	4	
Z. Others					6	
Subtotal	351	173	0	748	177	0
Total		524			925	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
14. Safety Systems		0
15. Reactor Cooling Systems		43
16. Steam generation systems		24
31. Turbine and auxiliaries		29
32. Feedwater and Main Steam System	173	10
41. Main Generator Systems		60
Total	173	166

DE-27 GROHNDE (KWG)**Operator:** KWG (Gemeinschaftskernkraftwerk Grohnde GmbH & Co. oHG)**Contractor:** KWU (SIEMENS KRAFTWERK UNION AG)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1360.0 MW(e)
Design Net Capacity: 1289.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10818.4 GW(e).h
Energy Availability Factor: 93.6%
Load Factor: 90.8%
Operating Factor: 94.4%
Energy Unavailability Factor: 6.4%
Total Off-line Time: 491 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	965.9	914.1	964.1	917.2	303.6	923.4	958.6	967.3	930.9	1002.0	965.3	1006.1	10818.4
EAF (%)	100.0	100.0	99.7	97.1	30.3	99.8	100.0	99.8	98.2	100.0	100.0	100.0	93.6
UCF (%)	100.0	100.0	99.7	100.0	32.6	99.8	100.0	99.8	98.2	100.0	100.0	100.0	94.1
LF (%)	95.5	100.0	95.3	93.7	30.0	94.3	94.7	95.6	95.1	98.9	98.6	99.4	90.8
OF (%)	100.0	100.0	99.9	100.0	34.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.4
EUUF (%)	0.0	0.0	0.3	2.9	69.7	0.2	0.0	0.2	1.8	0.0	0.0	0.0	6.4
PUF (%)	0.0	0.0	0.0	0.0	45.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.9
UCLF (%)	0.0	0.0	0.3	0.0	21.6	0.0	0.0	0.2	1.8	0.0	0.0	0.0	2.0
XUF (%)	0.0	0.0	0.0	2.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

2007-01-27: 250000 GWE.H (GROSS) GENERATED

5. Historical Summary

Date of Construction Start: 01 Jun 1976 **Lifetime Generation:** 246467.3 GW(e).h
Date of First Criticality: 01 Sep 1984 **Cumulative Energy Availability Factor:** 92.4%
Date of Grid Connection: 05 Sep 1984 **Cumulative Load Factor:** 90.9%
Date of Commercial Operation: 01 Feb 1985 **Cumulative Unit Capability Factor:** 92.5%
Cumulative Energy Unavailability Factor: 7.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	9896.4	1300.0	95.2	95.2	95.2	95.2	95.0	95.0	7662	95.6
1986	10205.4	1300.0	89.7	92.3	89.7	92.3	89.6	92.2	8120	92.7
1987	9648.5	1300.0	86.4	90.3	86.4	90.3	84.7	89.6	7979	91.1
1988	10208.3	1300.0	90.8	90.4	90.8	90.4	89.4	89.6	8104	92.3
1989	10279.4	1300.0	90.3	90.4	90.3	90.4	90.3	89.7	8058	92.0
1990	10123.6	1314.0	88.1	90.0	88.1	90.0	87.9	89.4	7872	89.9
1991	9957.8	1325.0	86.4	89.5	86.4	89.5	85.8	88.9	7603	86.8
1992	10424.3	1325.0	90.0	89.6	90.0	89.6	89.6	89.0	7981	90.9
1993	10680.1	1325.0	92.8	89.9	92.8	89.9	92.0	89.3	8147	93.0
1994	10266.5	1325.0	91.9	90.1	91.9	90.1	88.5	89.2	8063	92.0
1995	10771.2	1349.0	91.1	90.2	91.1	90.2	91.1	89.4	7986	91.2
1996	10589.8	1360.0	88.9	90.1	88.9	90.1	88.6	89.3	7861	89.5
1997	11864.7	1360.0	100.0	90.9	100.0	90.9	99.6	90.1	8760	100.0
1998	11146.3	1360.0	94.5	91.2	94.5	91.2	93.6	90.4	8301	94.8
1999	11212.1	1360.0	95.3	91.4	95.3	91.4	94.1	90.7	8351	95.3
2000	11055.9	1360.0	93.7	91.6	93.7	91.6	92.5	90.8	8250	93.9
2001	10926.6	1360.0	94.7	91.8	94.2	91.7	91.7	90.8	8310	94.9
2002	10791.9	1360.0	93.8	91.9	93.8	91.9	90.6	90.8	8233	94.0
2003	10933.0	1360.0	95.0	92.1	95.0	92.0	91.8	90.9	8343	95.2
2004	10695.4	1360.0	93.6	92.1	93.6	92.1	89.5	90.8	8245	93.9
2005	10840.9	1360.0	95.1	92.3	94.5	92.2	91.0	90.8	8364	95.5
2006	10995.7	1360.0	94.5	92.4	94.2	92.3	92.3	90.9	8296	94.7
2007	10818.4	1360.0	94.1	92.5	93.6	92.4	90.8	90.9	8270	94.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		153			47	
C. Inspection, maintenance or repair combined with refuelling	338			476	4	
D. Inspection, maintenance or repair without refuelling				2		
Z. Others					11	
Subtotal	338	153	0	478	62	0
Total		491			540	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	1	
12. Reactor I&C Systems		4
15. Reactor Cooling Systems	152	3
31. Turbine and auxiliaries		0
32. Feedwater and Main Steam System		1
35. All other I&C Systems		1
41. Main Generator Systems		30
42. Electrical Power Supply Systems		4
Total	153	43

DE-26 GUNDREMMINGEN-B (GUN-B)**Operator:** KGG (Kernkraftwerk Gundremmingen GmbH)**Contractor:** KWU (SIEMENS KRAFTWERK UNION AG)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1284.0 MW(e)
Design Net Capacity: 1244.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10496.5 GW(e).h
Energy Availability Factor: 92.9%
Load Factor: 93.3%
Operating Factor: 94.7%
Energy Unavailability Factor: 7.1%
Total Off-line Time: 461 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	960.7	874.2	955.6	925.7	920.9	582.5	551.9	950.7	931.0	963.2	913.4	966.7	10496.5
EAF (%)	100.0	100.0	99.5	100.0	96.6	63.6	58.2	99.6	100.0	100.0	97.7	100.0	92.9
UCF (%)	100.0	100.0	99.5	100.0	99.7	74.8	58.2	99.6	100.0	100.0	97.7	100.0	94.1
LF (%)	100.6	101.3	100.0	100.3	96.4	63.0	57.8	99.5	100.7	100.7	98.8	101.2	93.3
OF (%)	100.0	100.0	99.9	100.1	100.0	75.4	61.8	100.0	100.0	100.0	100.0	100.0	94.7
EUUF (%)	0.0	0.0	0.5	0.0	3.4	36.4	41.8	0.4	0.0	0.0	2.3	0.0	7.1
PUF (%)	0.0	0.0	0.5	0.0	0.0	25.2	28.8	0.4	0.0	0.0	2.3	0.0	4.8
UCLF (%)	0.0	0.0	0.0	0.0	0.3	0.0	12.9	0.0	0.0	0.0	0.0	0.0	1.1
XUF (%)	0.0	0.0	0.0	0.0	3.1	11.2	0.0	0.0	0.0	0.0	0.0	0.0	1.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

SINCE COMMISSIONING THE HIGHEST POWER GENERATION

5. Historical Summary

Date of Construction Start: 20 Jul 1976 **Lifetime Generation:** 216590.1 GW(e).h
Date of First Criticality: 09 Mar 1984 **Cumulative Energy Availability Factor:** 88.3%
Date of Grid Connection: 16 Mar 1984 **Cumulative Load Factor:** 82.5%
Date of Commercial Operation: 19 Jul 1984 **Cumulative Unit Capability Factor:** 88.6%
Cumulative Energy Unavailability Factor: 11.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	4656.0	1250.0	85.3	85.3	85.3	85.3	84.7	84.7	3958	89.6
1985	9147.5	1244.0	85.5	85.4	85.5	85.4	83.9	84.2	7852	89.6
1986	8298.3	1244.0	83.1	84.5	83.1	84.5	76.1	81.0	7434	84.9
1987	8413.2	1240.0	84.4	84.5	84.4	84.5	77.5	80.0	7876	89.9
1988	7079.3	1240.0	83.6	84.3	83.6	84.3	65.0	76.7	7706	87.7
1989	9653.7	1240.0	97.9	86.8	97.9	86.8	88.9	78.9	8743	99.8
1990	8442.3	1240.0	83.6	86.3	83.6	86.3	77.7	78.7	7717	88.1
1991	8002.7	1240.0	77.7	85.1	74.8	84.7	73.7	78.0	7520	85.8
1992	7366.8	1240.0	78.4	84.3	78.4	84.0	67.6	76.8	7073	80.5
1993	8015.8	1240.0	84.9	84.4	84.9	84.1	73.8	76.5	7632	87.1
1994	8825.6	1240.0	92.1	85.1	91.7	84.8	81.2	76.9	8213	93.8
1995	8681.7	1284.0	84.7	85.1	84.7	84.8	77.2	77.0	7535	86.0
1996	9370.9	1284.0	88.6	85.4	88.6	85.1	83.1	77.5	7903	90.0
1997	9206.1	1284.0	92.8	85.9	92.8	85.7	81.8	77.8	8264	94.3
1998	9072.1	1284.0	89.2	86.2	89.2	85.9	80.7	78.0	7996	91.3
1999	9595.4	1284.0	93.3	86.6	93.3	86.4	85.3	78.5	8257	94.3
2000	9336.4	1284.0	88.8	86.8	88.8	86.6	82.8	78.7	7887	89.8
2001	10216.7	1284.0	94.8	87.2	94.8	87.1	90.8	79.5	8405	95.9
2002	9976.9	1284.0	92.1	87.5	92.1	87.3	88.7	80.0	8139	92.9
2003	10480.4	1284.0	94.4	87.9	94.4	87.7	93.2	80.7	8325	95.0
2004	10283.1	1284.0	91.3	88.0	91.3	87.9	91.2	81.2	8208	93.4
2005	10299.9	1284.0	92.3	88.2	91.5	88.1	91.6	81.7	8145	93.0
2006	10085.8	1284.0	90.1	88.3	89.4	88.1	89.7	82.0	7963	90.9
2007	10496.5	1284.0	94.1	88.6	92.9	88.3	93.3	82.5	8299	94.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		88			15	
B. Refuelling without a maintenance				6	0	
C. Inspection, maintenance or repair combined with refuelling	369			700	1	
D. Inspection, maintenance or repair without refuelling				13		
E. Testing of plant systems or components	4			0		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				5		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					5	
Subtotal	373	88	0	724	21	0
Total		461			745	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	88	
14. Safety Systems		0
15. Reactor Cooling Systems		1
31. Turbine and auxiliaries		3
32. Feedwater and Main Steam System		9
Total	88	13

DE-28 GUNDREMMINGEN-C (GUN-C)**Operator:** KGG (Kernkraftwerk Gundremmingen GmbH)**Contractor:** KWU (SIEMENS KRAFTWERK UNION AG)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1288.0 MW(e)
Design Net Capacity: 1249.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9888.3 GW(e).h
Energy Availability Factor: 87.4%
Load Factor: 87.6%
Operating Factor: 88.2%
Energy Unavailability Factor: 12.6%
Total Off-line Time: 1031 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	950.1	879.9	965.6	928.6	958.7	904.7	946.0	676.6	923.2	198.0	583.6	973.1	9888.3
EAF (%)	97.9	100.0	99.7	99.7	100.0	98.4	99.7	71.4	100.0	20.8	62.5	100.0	87.4
UCF (%)	98.0	100.0	99.8	99.7	100.0	98.4	99.7	71.4	100.0	21.2	62.5	100.0	87.4
LF (%)	99.1	101.7	100.8	100.3	100.0	97.6	98.7	70.6	99.6	20.6	62.9	101.6	87.6
OF (%)	98.5	100.0	99.9	100.1	100.0	100.0	100.0	73.4	100.0	21.6	66.9	100.0	88.2
EUUF (%)	2.1	0.0	0.3	0.3	0.0	1.6	0.3	28.6	0.0	79.2	37.5	0.0	12.6
PUF (%)	0.0	0.0	0.3	0.0	0.0	1.6	0.0	0.0	0.0	78.8	37.5	0.0	9.9
UCLF (%)	2.1	0.0	0.0	0.3	0.0	0.0	0.4	28.6	0.0	0.0	0.0	0.0	2.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 20 Jul 1976
Date of First Criticality: 26 Oct 1984
Date of Grid Connection: 02 Nov 1984
Date of Commercial Operation: 18 Jan 1985

Lifetime Generation: 206886.1 GW(e).h
Cumulative Energy Availability Factor: 86.6%
Cumulative Load Factor: 80.0%
Cumulative Unit Capability Factor: 86.9%
Cumulative Energy Unavailability Factor: 13.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	9149.6	1244.0	85.5	85.5	85.5	85.5	84.0	84.0	7663	87.5
1986	8018.5	1244.0	84.7	85.1	84.7	85.1	73.6	78.8	7945	90.7
1987	7333.2	1248.0	74.7	81.6	74.7	81.6	67.1	74.9	7345	83.8
1988	7456.1	1248.0	88.3	83.3	88.3	83.3	68.0	73.1	7887	89.8
1989	7884.5	1248.0	84.2	83.5	84.2	83.5	72.1	72.9	7722	88.2
1990	8264.8	1248.0	80.2	82.9	80.2	82.9	75.6	73.4	7519	85.8
1991	8341.3	1248.0	85.9	83.3	85.9	83.3	76.3	73.8	7709	88.0
1992	9381.0	1248.0	98.9	85.3	98.9	85.3	85.6	75.3	8784	100.0
1993	6689.2	1248.0	79.1	84.6	79.1	84.6	61.2	73.7	7051	80.5
1994	7502.0	1248.0	81.1	84.3	80.7	84.2	68.6	73.2	7147	81.6
1995	9376.7	1288.0	89.3	84.7	89.3	84.7	83.1	74.1	7929	90.5
1996	9509.0	1288.0	91.7	85.3	91.7	85.3	84.0	75.0	8176	93.1
1997	9013.6	1288.0	89.1	85.6	88.7	85.6	79.9	75.4	7861	89.7
1998	9629.5	1288.0	91.5	86.1	91.5	86.0	85.3	76.1	8153	93.1
1999	8187.6	1288.0	77.0	85.4	77.0	85.4	72.6	75.9	6942	79.2
2000	10176.8	1288.0	94.6	86.0	94.6	86.0	90.0	76.8	8375	95.3
2001	9838.4	1288.0	90.7	86.3	87.2	86.0	87.2	77.4	8016	91.5
2002	10335.8	1288.0	93.4	86.7	93.4	86.5	91.6	78.2	8301	94.8
2003	9965.6	1288.0	89.2	86.8	89.2	86.6	88.3	78.7	7931	90.5
2004	8470.5	1288.0	74.9	86.2	74.9	86.0	74.9	78.5	6747	76.8
2005	10015.6	1288.0	92.6	86.5	89.2	86.2	88.8	79.0	8158	93.1
2006	10543.0	1288.0	93.9	86.9	93.7	86.5	93.4	79.7	8289	94.6
2007	9888.3	1288.0	87.4	86.9	87.4	86.6	87.6	80.0	7729	88.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		209			178	
B. Refuelling without a maintenance				33	0	
C. Inspection, maintenance or repair combined with refuelling	822			677		
D. Inspection, maintenance or repair without refuelling				22		
E. Testing of plant systems or components					1	
Subtotal	822	209	0	732	179	0
Total		1031			911	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	198	
14. Safety Systems		15
15. Reactor Cooling Systems		9
31. Turbine and auxiliaries	11	34
32. Feedwater and Main Steam System		0
41. Main Generator Systems		118
Total	209	176

DE-16 ISAR-1 (KKI 1)**Operator:** E.ON (E.ON Kernkraft GmbH)**Contractor:** KWU (SIEMENS KRAFTWERK UNION AG)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 878.0 MW(e)
Design Net Capacity: 870.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6755.8 GW(e).h
Energy Availability Factor: 88.6%
Load Factor: 87.8%
Operating Factor: 92.3%
Energy Unavailability Factor: 11.4%
Total Off-line Time: 674 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	629.2	588.9	629.2	567.8	589.6	612.3	605.5	605.8	89.1	552.4	631.1	654.8	6755.8
EAF (%)	99.7	99.4	96.1	90.8	93.4	98.2	94.7	92.9	13.5	84.3	100.0	100.0	88.6
UCF (%)	99.7	99.4	96.1	92.3	100.0	99.8	98.2	100.0	15.6	84.3	100.0	100.0	90.5
LF (%)	96.3	99.8	96.3	89.8	90.3	96.9	92.7	92.7	14.1	84.6	99.8	100.2	87.8
OF (%)	100.0	100.0	96.6	95.0	100.0	100.0	100.0	100.0	23.3	91.8	100.0	100.0	92.3
EUF (%)	0.3	0.6	3.9	9.2	6.6	1.8	5.3	7.1	86.5	15.7	0.0	0.0	11.4
PUF (%)	0.3	0.0	3.9	7.7	0.0	0.1	1.2	0.0	81.0	0.0	0.0	0.0	7.8
UCLF (%)	0.0	0.6	0.0	0.0	0.0	0.2	0.6	0.0	3.3	15.7	0.0	0.0	1.7
XUF (%)	0.0	0.0	0.0	1.5	6.6	1.6	3.5	7.0	2.1	0.0	0.0	0.0	1.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	01 May 1972	Lifetime Generation:	176043.3 GW(e).h
Date of First Criticality:	20 Nov 1977	Cumulative Energy Availability Factor:	82.2%
Date of Grid Connection:	03 Dec 1977	Cumulative Load Factor:	78.3%
Date of Commercial Operation:	21 Mar 1979	Cumulative Unit Capability Factor:	82.5%
		Cumulative Energy Unavailability Factor:	17.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	4503.0	870.0	70.5	70.5	70.5	70.5	70.5	70.5	5969	81.3
1980	4202.0	870.0	55.2	62.1	55.2	62.1	55.0	62.0	5791	65.9
1981	4155.9	870.0	53.7	59.2	53.7	59.2	54.5	59.4	5880	67.1
1982	1603.3	870.0	21.1	49.3	21.1	49.3	21.0	49.4	2232	25.5
1983	7143.0	870.0	93.9	58.5	93.9	58.5	93.7	58.6	8627	98.5
1984	5587.0	870.0	73.2	61.0	73.2	61.0	73.1	61.1	7262	82.7
1985	6515.6	870.0	86.0	64.7	86.0	64.7	85.5	64.6	8006	91.4
1986	6370.4	870.0	83.4	67.0	83.4	67.0	83.6	67.0	7871	89.9
1987	7164.7	870.0	93.6	70.1	93.6	70.1	94.0	70.1	8335	95.1
1988	5639.1	870.0	82.3	71.3	82.3	71.3	73.8	70.5	7674	87.4
1989	5205.3	870.0	74.4	71.6	74.4	71.6	68.3	70.3	7233	82.6
1990	5054.8	870.0	74.2	71.8	74.2	71.8	66.3	69.9	7577	86.5
1991	6760.6	870.0	94.9	73.6	94.9	73.6	88.7	71.4	8381	95.7
1992	5872.0	870.0	89.4	74.7	89.4	74.7	76.8	71.8	7903	90.0
1993	5575.2	870.0	85.5	75.5	85.5	75.5	73.2	71.9	7553	86.2
1994	5150.3	870.0	73.5	75.3	73.5	75.3	67.6	71.6	6462	73.8
1995	6446.0	870.0	94.7	76.5	94.7	76.5	84.6	72.4	8306	94.8
1996	5816.3	870.0	86.2	77.0	86.2	77.0	76.1	72.6	7674	87.4
1997	5998.4	870.0	91.5	77.8	91.5	77.8	78.7	72.9	8059	92.0
1998	6335.8	870.0	89.3	78.4	89.2	78.4	83.1	73.4	7857	89.7
1999	7532.1	870.0	98.7	79.4	98.7	79.3	98.8	74.6	8736	99.7
2000	6646.0	874.0	90.8	79.9	90.8	79.9	86.5	75.2	8231	93.7
2001	5889.0	878.0	82.4	80.0	76.2	79.7	76.6	75.3	7353	83.9
2002	7566.2	878.0	98.6	80.8	98.6	80.5	98.4	76.2	8731	99.7
2003	6301.4	878.0	87.4	81.0	87.4	80.8	81.9	76.5	7773	88.7
2004	6771.1	878.0	89.1	81.4	89.1	81.1	87.8	76.9	7984	90.9
2005	7336.9	878.0	96.1	81.9	95.2	81.6	95.4	77.6	8546	97.5
2006	6808.1	878.0	91.4	82.3	89.4	81.9	88.5	78.0	8064	92.1
2007	6755.8	878.0	90.5	82.5	88.6	82.2	87.8	78.3	8086	92.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					142	
B. Refuelling without a maintenance				6		
C. Inspection, maintenance or repair combined with refuelling	528			852	3	
D. Inspection, maintenance or repair without refuelling				87		
E. Testing of plant systems or components				96		
G. Major back-fitting, refurbishment or upgrading activities without refuelling	60					
H. Nuclear regulatory requirements					23	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				8	0	0
L. Human factor related		86				
Z. Others					10	
Subtotal	588	86	0	1049	178	0
Total		674			1227	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		12
15. Reactor Cooling Systems		28
21. Fuel Handling and Storage Facilities		6
31. Turbine and auxiliaries		25
32. Feedwater and Main Steam System		4
41. Main Generator Systems		18
42. Electrical Power Supply Systems		29
Total	0	122

DE-31 ISAR-2 (KKI 2)

Operator: E.ON (E.ON Kernkraft GmbH)
Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1400.0 MW(e)
Design Net Capacity: 1285.0 MW(e)
Design Discharge Burnup: 60000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 11377.5 GW(e).h
Energy Availability Factor: 93.1%
Load Factor: 92.8%
Operating Factor: 93.6%
Energy Unavailability Factor: 6.9%
Total Off-line Time: 561 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	1017.6	952.0	1045.1	1001.3	1015.7	969.8	222.2	1023.7	1004.5	1049.1	1019.7	1056.9	11377.5
EAF (%)	100.0	100.0	100.0	100.0	100.0	96.9	21.3	100.0	100.0	100.0	100.0	100.0	93.1
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	22.8	100.0	100.0	100.0	100.0	100.0	93.4
LF (%)	97.7	101.2	100.3	99.3	97.5	96.2	21.3	98.3	99.6	100.6	101.2	101.5	92.8
OF (%)	100.0	100.0	99.9	100.0	100.0	100.0	24.7	100.0	100.0	100.0	100.0	100.0	93.6
EUF (%)	0.0	0.0	0.0	0.0	0.0	3.1	78.7	0.0	0.0	0.0	0.0	0.0	6.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	59.8	0.0	0.0	0.0	0.0	0.0	5.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	17.5	0.0	0.0	0.0	0.0	0.0	1.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	3.1	1.4	0.0	0.0	0.0	0.0	0.0	0.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 15 Sep 1982
Date of First Criticality: 15 Jan 1988
Date of Grid Connection: 22 Jan 1988
Date of Commercial Operation: 09 Apr 1988

Lifetime Generation: 210614.0 GW(e).h
Cumulative Energy Availability Factor: 91.7%
Cumulative Load Factor: 88.6%
Cumulative Unit Capability Factor: 92.1%
Cumulative Energy Unavailability Factor: 8.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	6023.0	1323.0	95.1	95.1	95.1	95.1	69.7	69.7	6177	93.6
1989	7728.9	1310.0	73.4	82.7	73.4	82.7	67.4	68.3	6876	78.5
1990	9271.4	1310.0	84.9	83.5	84.9	83.5	80.8	72.9	7915	90.4
1991	9699.2	1318.0	87.8	84.7	87.8	84.7	84.0	75.8	7732	88.3
1992	9843.5	1320.0	89.9	85.8	89.9	85.8	84.9	77.8	7917	90.1
1993	10193.0	1330.0	91.3	86.7	88.1	86.2	87.5	79.5	8052	91.9
1994	10499.9	1330.0	93.1	87.7	93.1	87.2	90.1	81.1	8209	93.7
1995	10040.3	1332.0	89.8	88.0	89.8	87.6	86.0	81.7	7891	90.1
1996	10265.1	1338.0	90.7	88.3	88.5	87.7	87.3	82.3	7989	90.9
1997	10906.4	1365.0	94.1	88.9	94.1	88.4	91.2	83.3	8258	94.3
1998	10758.1	1365.0	93.6	89.4	93.6	88.9	90.0	83.9	8356	95.4
1999	11610.9	1380.0	96.5	90.0	96.5	89.5	96.0	85.0	8465	96.6
2000	11291.1	1400.0	94.5	90.4	94.5	89.9	91.8	85.5	8311	94.6
2001	11731.3	1400.0	97.1	90.9	97.1	90.5	95.7	86.3	8506	97.1
2002	11512.2	1400.0	95.1	91.2	95.1	90.8	93.9	86.8	8350	95.3
2003	11671.6	1400.0	96.7	91.5	95.9	91.1	95.2	87.4	8491	96.9
2004	11595.3	1400.0	95.4	91.8	95.4	91.4	94.3	87.8	8395	95.6
2005	11102.6	1400.0	90.9	91.7	90.5	91.4	90.5	88.0	7976	91.1
2006	11755.3	1400.0	96.8	92.0	96.6	91.6	95.9	88.4	8494	97.0
2007	11377.5	1400.0	93.4	92.1	93.1	91.7	92.8	88.6	8200	93.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					67	
B. Refuelling without a maintenance				17		
C. Inspection, maintenance or repair combined with refuelling	438			490	10	
D. Inspection, maintenance or repair without refuelling				0		
E. Testing of plant systems or components				0	1	
L. Human factor related		122				
Z. Others					1	
Subtotal	438	122	0	507	79	0
Total		560			586	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
15. Reactor Cooling Systems		15
31. Turbine and auxiliaries		5
32. Feedwater and Main Steam System		0
41. Main Generator Systems		45
Total	0	65

DE-20 KRUEMEL (KKK)

Operator: KKK (Kernkraftwerk Krümmel GmbH & Co. oHG)
Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1346.0 MW(e)
Design Net Capacity: 1260.0 MW(e)
Design Discharge Burnup: 32000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5454.9 GW(e).h
Energy Availability Factor: 46.5%
Load Factor: 46.3%
Operating Factor: 47.4%
Energy Unavailability Factor: 53.5%
Total Off-line Time: 4609 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	996.4	908.4	779.6	953.6	981.0	835.8	0.0	0.0	0.0	0.0	0.0	0.0	5454.9
EAF (%)	100.0	100.0	77.8	98.9	99.0	88.3	0.0	0.0	0.0	0.0	0.0	0.0	46.5
UCF (%)	100.0	100.0	77.8	99.8	99.9	92.1	0.0	0.0	0.0	0.0	0.0	0.0	47.0
LF (%)	99.5	100.4	77.9	98.5	98.0	86.2	0.0	0.0	0.0	0.0	0.0	0.0	46.3
OF (%)	100.0	100.0	81.7	100.1	100.0	92.1	0.0	0.0	0.0	0.0	0.0	0.0	47.4
EUUF (%)	0.0	0.0	22.2	1.1	1.0	11.7	100.0	100.0	100.0	100.0	100.0	100.0	53.5
PUF (%)	0.0	0.0	22.2	0.2	0.1	0.0	28.1	90.3	0.0	0.0	0.0	0.0	12.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	7.9	71.9	9.7	100.0	100.0	100.0	100.0	41.0
XUF (%)	0.0	0.0	0.0	1.0	0.9	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

REPLACEMENT OF ROTOR AND TURBINE VANES IMPROVED EFFICIENCY; THE REFERENCE UNIT POWER (NET) UPDATED TO 1346 MWE SINCE JANUARY 2007.

5. Historical Summary

Date of Construction Start: 05 Apr 1974 **Lifetime Generation:** 201377.1 GW(e).h
Date of First Criticality: 14 Sep 1983 **Cumulative Energy Availability Factor:** 78.7%
Date of Grid Connection: 28 Sep 1983 **Cumulative Load Factor:** 75.5%
Date of Commercial Operation: 28 Mar 1984 **Cumulative Unit Capability Factor:** 79.1%
Cumulative Energy Unavailability Factor: 21.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	8569.0	1260.0	92.0	92.0	92.0	92.0	92.6	92.6	6984	95.1
1985	9301.9	1260.0	86.2	88.8	84.5	87.9	84.3	88.1	7551	86.2
1986	9488.3	1260.0	87.0	88.2	87.0	87.6	86.0	87.3	7780	88.8
1987	9180.2	1260.0	87.9	88.1	87.9	87.7	83.2	86.2	7822	89.3
1988	9219.2	1260.0	90.1	88.5	90.1	88.2	83.3	85.6	8018	91.3
1989	8241.6	1260.0	78.5	86.8	78.5	86.5	74.7	83.8	7247	82.7
1990	8830.2	1260.0	84.5	86.5	84.5	86.2	80.0	83.2	7507	85.7
1991	7737.6	1260.0	80.0	85.6	80.0	85.4	70.1	81.5	6946	79.3
1992	8325.0	1260.0	83.2	85.4	83.2	85.2	75.2	80.8	7188	81.8
1993	6558.5	1260.0	61.3	82.9	61.3	82.8	59.4	78.6	5399	61.6
1994	2479.8	1260.0	25.1	77.6	25.1	77.4	22.5	73.5	2091	23.9
1995	9217.9	1260.0	88.2	78.5	88.2	78.3	83.5	74.3	7824	89.3
1996	8242.3	1260.0	83.9	78.9	83.9	78.8	74.5	74.3	6868	78.2
1997	9250.6	1260.0	87.3	79.5	85.1	79.2	83.8	75.0	7492	85.5
1998	4611.1	1260.0	46.1	77.3	44.0	76.9	41.8	72.8	3878	44.3
1999	10517.1	1260.0	99.4	78.7	99.4	78.3	95.3	74.2	8760	100.0
2000	9022.9	1260.0	90.2	79.3	90.2	79.0	81.5	74.6	7975	90.8
2001	8141.9	1260.0	76.7	79.2	76.2	78.8	73.8	74.6	6591	75.2
2002	8483.9	1260.0	78.0	79.1	78.0	78.8	76.9	74.7	7069	80.7
2003	9488.5	1260.0	88.2	79.6	88.2	79.3	86.0	75.3	7809	89.1
2004	9626.7	1260.0	87.7	80.0	87.7	79.7	87.0	75.8	7825	89.1
2005	9243.4	1260.0	82.8	80.1	82.4	79.8	83.7	76.2	7328	83.7
2006	10177.8	1260.0	90.6	80.6	88.6	80.2	92.2	76.9	7941	90.7
2007	5454.9	1346.0	47.0	79.1	46.5	78.7	46.3	75.5	4151	47.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		3001			468	
C. Inspection, maintenance or repair combined with refuelling	881			976	22	
D. Inspection, maintenance or repair without refuelling	135			22		
E. Testing of plant systems or components				8	1	
H. Nuclear regulatory requirements					7	15
J. Grid failure or grid unavailability						7
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	
L. Human factor related					0	
P. Fire		592				
Z. Others					18	
Subtotal	1016	3593	0	1006	516	22
Total		4609			1544	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		0
14. Safety Systems		1
15. Reactor Cooling Systems		1
21. Fuel Handling and Storage Facilities		22
31. Turbine and auxiliaries		0
32. Feedwater and Main Steam System		419
41. Main Generator Systems		18
42. Electrical Power Supply Systems	3001	
XX. Miscellaneous Systems		4
Total	3001	465

DE-15 NECKARWESTHEIM-1 (GKN 1)

Operator: EnKK (EnBW Kernkraft GmbH)

Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 785.0 MW(e)
Design Net Capacity: 805.0 MW(e)
Design Discharge Burnup: 36700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4713.5 GW(e).h
Energy Availability Factor: 92.2%
Load Factor: 68.5%
Operating Factor: 93.1%
Energy Unavailability Factor: 7.8%
Total Off-line Time: 608 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	578.0	528.8	458.8	479.8	298.8	305.1	357.2	293.2	283.2	394.0	394.7	342.0	4713.5
EAF (%)	100.0	99.3	89.9	96.1	54.3	67.2	100.0	100.0	100.0	100.0	100.0	100.0	92.2
UCF (%)	100.0	99.3	90.3	96.1	57.0	67.2	100.0	100.0	100.0	100.0	100.0	100.0	92.4
LF (%)	99.0	100.2	78.6	84.9	51.2	54.0	61.2	50.2	50.1	67.4	69.8	58.6	68.5
OF (%)	100.0	100.0	92.2	97.5	58.7	68.8	100.0	100.0	100.0	100.0	100.0	100.0	93.1
EUF (%)	0.0	0.7	10.1	3.9	45.7	32.8	0.0	0.0	0.0	0.0	0.0	0.0	7.8
PUF (%)	0.0	0.0	0.0	0.0	41.6	32.8	0.0	0.0	0.0	0.0	0.0	0.0	6.2
UCLF (%)	0.0	0.7	9.7	3.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
XUF (%)	0.0	0.1	0.3	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

OSART-MISSION OF IAEA TAKES PLACE FROM 8 TO 24 OCTOBER 2007

5. Historical Summary

Date of Construction Start: 01 Feb 1972
Date of First Criticality: 26 May 1976
Date of Grid Connection: 03 Jun 1976
Date of Commercial Operation: 01 Dec 1976

Lifetime Generation: 175388.2 GW(e).h
Cumulative Energy Availability Factor: 83.1%
Cumulative Load Factor: 80.3%
Cumulative Unit Capability Factor: 83.2%
Cumulative Energy Unavailability Factor: 16.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	508.6	788.0	89.3	89.3	89.3	89.3	86.4	86.4	658	88.4
1977	4946.6	810.0	70.6	72.0	70.6	72.0	69.7	71.0	6513	74.3
1978	4934.5	810.0	70.2	71.1	70.2	71.1	69.5	70.3	6583	75.1
1979	3573.0	810.0	53.6	65.5	53.6	65.5	50.4	63.8	4698	53.6
1980	5473.0	810.0	77.8	68.5	77.8	68.5	76.9	67.0	7080	80.6
1981	5949.3	810.0	84.9	71.7	84.9	71.7	83.8	70.3	7705	88.0
1982	5781.1	810.0	82.4	73.5	82.4	73.5	81.5	72.2	7517	85.8
1983	6047.0	810.0	85.3	75.1	85.3	75.1	85.2	74.0	7910	90.3
1984	5842.0	795.0	83.1	76.1	83.1	76.1	83.7	75.2	7618	86.7
1985	6161.4	795.0	88.8	77.5	88.8	77.5	88.5	76.6	8050	91.9
1986	4153.1	795.0	59.6	75.7	59.6	75.7	59.6	75.0	5368	61.3
1987	5395.1	795.0	76.8	75.8	76.8	75.8	77.5	75.2	6828	77.9
1988	5269.4	795.0	75.5	75.8	75.5	75.8	75.5	75.2	6772	77.1
1989	4019.5	795.0	64.2	74.9	64.2	74.9	57.7	73.9	6395	73.0
1990	5754.1	785.0	82.8	75.5	82.8	75.5	83.7	74.6	7524	85.9
1991	5404.5	785.0	85.0	76.1	85.0	76.1	78.6	74.8	7614	86.9
1992	5270.1	785.0	83.6	76.6	83.6	76.6	76.4	74.9	7470	85.0
1993	5559.5	785.0	81.6	76.8	81.6	76.8	80.8	75.3	7371	84.1
1994	6307.8	785.0	92.0	77.7	92.0	77.7	91.7	76.2	8184	93.4
1995	5966.0	785.0	87.4	78.2	87.4	78.2	86.8	76.7	8020	91.6
1996	6054.5	785.0	92.0	78.9	92.0	78.9	87.8	77.3	8301	94.5
1997	6230.2	785.0	92.6	79.5	92.6	79.5	90.6	77.9	8305	94.8
1998	5907.8	785.0	91.3	80.0	91.1	80.0	85.9	78.2	8185	93.4
1999	5849.1	785.0	90.0	80.4	90.0	80.4	85.1	78.5	8022	91.6
2000	6141.4	785.0	94.2	81.0	94.2	81.0	89.1	79.0	8284	94.3
2001	5991.5	785.0	90.0	81.4	88.1	81.3	87.1	79.3	8038	91.8
2002	6238.3	785.0	92.7	81.8	92.7	81.7	90.7	79.7	8239	94.1
2003	6024.0	785.0	90.5	82.1	90.5	82.0	87.6	80.0	8304	94.8
2004	5928.5	785.0	89.7	82.4	89.7	82.3	86.0	80.2	8270	94.1
2005	5882.7	785.0	86.9	82.5	86.9	82.5	85.5	80.4	8069	92.1
2006	6182.2	785.0	93.5	82.9	93.1	82.8	89.9	80.7	8250	94.2
2007	4713.5	785.0	92.4	83.2	92.2	83.1	68.5	80.3	8153	93.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		75			33	
C. Inspection, maintenance or repair combined with refuelling	532			1083		
D. Inspection, maintenance or repair without refuelling				21		
E. Testing of plant systems or components					48	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						1
Subtotal	532	75	0	1104	81	1
Total	607			1186		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1976 to 2007 Average Hours Lost Per Year
14. Safety Systems		1
15. Reactor Cooling Systems	18	18
31. Turbine and auxiliaries	57	2
32. Feedwater and Main Steam System		7
41. Main Generator Systems		3
42. Electrical Power Supply Systems		0
Total	75	31

DE-44 NECKARWESTHEIM-2 (GKN 2)

Operator: EnKK (EnBW Kernkraft GmbH)
Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1310.0 MW(e)
Design Net Capacity: 1225.0 MW(e)
Design Discharge Burnup: 36800 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10411.1 GW(e).h
Energy Availability Factor: 91.1%
Load Factor: 90.7%
Operating Factor: 91.3%
Energy Unavailability Factor: 8.9%
Total Off-line Time: 758 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	977.2	884.8	976.7	939.9	965.5	929.5	961.7	301.8	777.8	772.0	944.0	980.1	10411.1
EAF (%)	100.0	99.9	100.0	100.0	100.0	100.0	100.0	31.8	83.1	79.7	99.9	100.0	91.1
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	32.4	83.1	79.7	99.9	100.0	91.1
LF (%)	100.3	100.5	100.2	99.6	99.1	98.5	98.7	31.0	82.5	79.2	100.1	100.6	90.7
OF (%)	100.0	100.0	99.9	100.0	100.0	100.0	100.0	32.8	83.5	81.5	100.0	100.0	91.3
EUF (%)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	68.2	16.9	20.3	0.1	0.0	8.9
PUF (%)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	67.6	16.9	0.2	0.1	0.0	7.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.1	0.0	0.0	1.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 09 Nov 1982
Date of First Criticality: 29 Dec 1988
Date of Grid Connection: 03 Jan 1989
Date of Commercial Operation: 15 Apr 1989

Lifetime Generation: 194515.5 GW(e).h
Cumulative Energy Availability Factor: 93.5%
Cumulative Load Factor: 92.3%
Cumulative Unit Capability Factor: 93.6%
Cumulative Energy Unavailability Factor: 6.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	6810.0	1225.0	99.8	99.8	99.8	99.8	84.2	84.2	6254	94.7
1990	9693.9	1225.0	90.2	94.3	90.2	94.3	90.3	87.7	7958	90.8
1991	9434.9	1225.0	90.5	92.9	90.5	92.9	87.9	87.8	7932	90.5
1992	10204.6	1269.0	91.6	92.6	91.6	92.6	91.5	88.8	8094	92.1
1993	9912.2	1269.0	89.0	91.8	89.0	91.8	89.2	88.9	8163	93.2
1994	10320.7	1269.0	93.6	92.1	93.6	92.1	92.8	89.6	8215	93.8
1995	10532.0	1269.0	94.7	92.5	94.7	92.5	94.7	90.4	8351	95.3
1996	10614.3	1269.0	95.1	92.8	95.1	92.8	95.2	91.0	8419	95.8
1997	10111.6	1269.0	91.5	92.7	91.5	92.7	91.0	91.0	8028	91.6
1998	10610.8	1269.0	96.0	93.0	96.0	93.0	95.5	91.5	8411	96.0
1999	10460.9	1269.0	96.1	93.3	96.1	93.3	94.1	91.7	8435	96.3
2000	10473.9	1269.0	96.2	93.6	96.2	93.6	94.0	91.9	8450	96.2
2001	10423.9	1269.0	95.4	93.7	94.2	93.6	93.8	92.0	8363	95.5
2002	9787.5	1269.0	88.7	93.3	88.7	93.3	88.0	91.8	7777	88.8
2003	10545.0	1269.0	95.8	93.5	95.8	93.4	94.9	92.0	8408	96.0
2004	10470.7	1269.0	92.9	93.5	92.9	93.4	93.9	92.1	8165	93.0
2005	10836.4	1305.0	95.4	93.6	94.8	93.5	94.8	92.3	8371	95.6
2006	10877.5	1305.0	95.9	93.7	95.4	93.6	95.2	92.4	8405	95.9
2007	10411.1	1310.0	91.1	93.6	91.1	93.5	90.7	92.3	8002	91.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling	619	139		469	6	
Subtotal	619	139	0	469	6	0
Total	758			475		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	139	5
32. Feedwater and Main Steam System		0
41. Main Generator Systems		0
Total	139	5

DE-14 PHILIPPSBURG-1 (KKP 1)

Operator: EnKK (EnBW Kernkraft GmbH)

Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 890.0 MW(e)
Design Net Capacity: 864.0 MW(e)
Design Discharge Burnup: 39900 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6944.9 GW(e).h
Energy Availability Factor: 90.0%
Load Factor: 89.1%
Operating Factor: 92.7%
Energy Unavailability Factor: 10.0%
Total Off-line Time: 636 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	644.9	588.0	605.0	121.5	576.7	620.1	604.0	624.2	622.0	647.6	633.7	657.2	6944.9
EAF (%)	98.3	99.2	92.0	19.6	88.0	98.0	92.5	95.5	98.3	98.8	99.4	99.8	90.0
UCF (%)	98.6	99.7	100.0	23.0	90.8	100.0	94.3	97.1	100.0	99.7	100.0	100.0	92.0
LF (%)	97.4	98.3	91.4	19.0	87.1	96.8	91.2	94.3	97.1	97.7	98.9	99.3	89.1
OF (%)	100.0	100.0	99.9	23.8	93.4	100.0	96.4	98.5	100.0	100.0	100.0	100.0	92.7
EUF (%)	1.7	0.8	8.0	80.4	12.0	2.0	7.5	4.5	1.7	1.2	0.6	0.2	10.0
PUF (%)	0.9	0.0	0.0	77.0	9.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	7.2
UCLF (%)	0.5	0.3	0.0	0.0	0.0	0.0	5.3	2.9	0.0	0.3	0.0	0.0	0.8
XUF (%)	0.3	0.5	8.0	3.3	2.8	2.0	1.8	1.7	1.7	1.0	0.6	0.2	2.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	01 Oct 1970	Lifetime Generation:	166935.2 GW(e).h
Date of First Criticality:	09 Mar 1979	Cumulative Energy Availability Factor:	79.4%
Date of Grid Connection:	05 May 1979	Cumulative Load Factor:	77.3%
Date of Commercial Operation:	26 Mar 1980	Cumulative Unit Capability Factor:	79.5%
		Cumulative Energy Unavailability Factor:	20.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	1205.0	864.0	19.2	19.2	19.2	19.2	19.0	19.0	1562	21.3
1981	1090.9	864.0	16.6	17.8	16.6	17.8	14.4	16.5	1465	16.7
1982	5034.4	840.0	66.5	34.6	66.5	34.6	68.4	34.5	6237	71.2
1983	5503.0	864.0	72.7	44.6	72.7	44.6	72.7	44.5	6567	75.0
1984	6325.0	864.0	83.2	52.7	83.2	52.7	83.3	52.6	7482	85.2
1985	6120.2	864.0	81.1	57.6	81.1	57.6	80.9	57.5	7561	86.3
1986	5222.0	864.0	69.1	59.3	69.1	59.3	69.0	59.1	6148	70.2
1987	6488.4	864.0	84.9	62.5	84.9	62.5	85.7	62.5	7582	86.6
1988	6199.6	864.0	83.7	64.9	83.7	64.9	81.7	64.7	7302	83.1
1989	6158.9	864.0	81.4	66.6	81.4	66.6	81.4	66.4	7432	84.8
1990	5203.1	864.0	68.3	66.8	68.3	66.8	68.7	66.6	6138	70.1
1991	6171.9	864.0	82.9	68.1	82.9	68.1	81.5	67.9	7304	83.4
1992	6513.0	864.0	86.6	69.6	86.6	69.6	85.8	69.3	7647	87.1
1993	4614.5	864.0	74.7	69.9	74.7	69.9	61.0	68.7	6599	75.3
1994	6565.9	864.0	86.5	71.1	86.5	71.1	86.8	69.9	7645	87.3
1995	6317.1	876.0	86.9	72.1	86.9	72.1	82.3	70.7	7671	87.6
1996	6929.8	864.0	91.1	73.2	91.1	73.2	91.3	71.9	8087	92.1
1997	6409.5	876.0	85.3	73.9	85.3	73.9	83.5	72.6	7510	85.7
1998	6905.9	890.0	93.9	75.0	93.9	75.0	88.6	73.5	8253	94.2
1999	6892.9	890.0	94.3	76.0	94.3	76.0	88.4	74.2	8292	94.7
2000	6904.9	890.0	92.9	76.8	92.9	76.8	88.3	74.9	8187	93.2
2001	6956.9	890.0	92.7	77.6	92.7	77.6	89.2	75.6	8206	93.7
2002	6559.4	890.0	89.4	78.1	89.4	78.1	84.1	76.0	7885	90.0
2003	6395.2	890.0	86.0	78.4	86.0	78.4	82.0	76.2	7629	87.1
2004	6332.0	890.0	83.5	78.6	83.5	78.6	81.0	76.4	7425	84.5
2005	5811.8	890.0	77.5	78.6	75.8	78.5	74.5	76.4	6835	78.0
2006	6888.8	890.0	90.3	79.0	90.3	79.0	88.4	76.8	7983	91.1
2007	6944.9	890.0	92.0	79.5	90.0	79.4	89.1	77.3	8124	92.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		38			144	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	598			966	2	
D. Inspection, maintenance or repair without refuelling				18		
E. Testing of plant systems or components					6	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					5	
Z. Others					6	
Subtotal	598	38	0	984	163	0
Total		636			1147	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems	27	2
14. Safety Systems		9
15. Reactor Cooling Systems		45
31. Turbine and auxiliaries		21
32. Feedwater and Main Steam System		24
33. Circulating Water System		1
41. Main Generator Systems	11	10
42. Electrical Power Supply Systems		0
XX. Miscellaneous Systems		14
Total	38	132

DE-24 PHILIPPSBURG-2 (KKP 2)

Operator: EnKK (EnBW Kernkraft GmbH)
Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1392.0 MW(e)
Design Net Capacity: 1268.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 11172.9 GW(e).h
Energy Availability Factor: 92.1%
Load Factor: 91.6%
Operating Factor: 94.2%
Energy Unavailability Factor: 7.9%
Total Off-line Time: 506 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	1022.4	926.4	1019.0	972.7	998.8	902.3	328.8	1003.9	972.6	1013.6	986.9	1025.6	11172.9
EAF (%)	98.9	99.2	98.9	97.4	97.6	90.7	32.4	97.7	98.0	98.0	98.7	99.3	92.1
UCF (%)	99.9	100.0	99.9	99.9	100.0	96.7	34.4	100.0	100.0	99.9	100.0	100.0	94.1
LF (%)	98.7	99.0	98.4	97.2	96.4	90.0	31.7	96.9	97.0	97.7	98.5	99.0	91.6
OF (%)	100.0	100.0	99.9	100.1	100.0	97.2	34.7	100.0	100.0	100.0	100.0	100.0	94.2
EUF (%)	1.1	0.8	1.1	2.6	2.4	9.3	67.6	2.3	2.0	2.0	1.3	0.7	7.9
PUF (%)	0.0	0.0	0.0	0.1	0.0	3.3	65.6	0.0	0.0	0.0	0.0	0.0	5.9
UCLF (%)	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	1.0	0.8	1.0	2.5	2.4	6.0	2.0	2.3	2.0	1.9	1.3	0.7	2.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 07 Jul 1977
Date of First Criticality: 13 Dec 1984
Date of Grid Connection: 17 Dec 1984
Date of Commercial Operation: 18 Apr 1985

Lifetime Generation: 236607.3 GW(e).h
Cumulative Energy Availability Factor: 89.2%
Cumulative Load Factor: 88.4%
Cumulative Unit Capability Factor: 90.5%
Cumulative Energy Unavailability Factor: 10.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	7930.0	1268.0	95.0	95.0	95.0	95.0	94.7	94.7	6411	97.1
1986	10235.3	1268.0	90.6	92.5	90.6	92.5	92.1	93.3	7958	90.8
1987	9616.2	1268.0	85.0	89.8	85.0	89.8	86.6	90.8	7446	85.0
1988	9710.8	1268.0	86.5	88.9	86.5	88.9	87.2	89.9	7656	87.2
1989	9677.3	1268.0	86.2	88.3	86.2	88.3	87.1	89.3	7575	86.5
1990	8516.3	1268.0	75.5	86.1	75.5	86.1	76.7	87.1	6628	75.7
1991	9903.3	1268.0	88.4	86.4	88.0	86.4	89.1	87.4	7757	88.6
1992	9400.0	1285.0	82.2	85.9	82.2	85.8	83.3	86.9	7273	82.8
1993	10481.3	1324.0	90.5	86.4	90.5	86.4	90.4	87.3	7946	90.7
1994	10284.8	1336.0	88.7	86.7	88.7	86.6	87.9	87.3	7778	88.8
1995	10550.5	1336.0	91.0	87.1	91.0	87.0	90.1	87.6	7990	91.2
1996	11217.6	1358.0	94.7	87.8	94.7	87.7	94.0	88.2	8323	94.8
1997	11113.5	1358.0	95.3	88.4	95.3	88.4	93.4	88.6	8358	95.4
1998	10731.5	1358.0	93.0	88.7	93.0	88.7	90.2	88.7	8304	94.8
1999	11122.9	1358.0	96.1	89.3	96.1	89.2	93.5	89.1	8431	96.2
2000	10689.1	1363.0	92.2	89.5	92.2	89.4	89.2	89.1	8115	92.4
2001	8995.8	1392.0	96.0	89.9	76.6	88.6	73.8	88.1	6749	77.0
2002	11053.2	1392.0	92.4	90.0	92.4	88.8	90.6	88.3	8138	92.9
2003	11010.2	1392.0	93.5	90.2	93.5	89.1	90.3	88.4	8234	94.0
2004	10295.0	1392.0	86.9	90.0	86.9	89.0	84.2	88.2	7641	87.0
2005	10823.4	1392.0	92.3	90.2	89.3	89.0	88.8	88.2	8099	92.5
2006	10956.2	1392.0	92.8	90.3	91.2	89.1	89.8	88.3	8138	92.9
2007	11172.9	1392.0	94.1	90.5	92.1	89.2	91.6	88.4	8254	94.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					82	
C. Inspection, maintenance or repair combined with refuelling	506			646	5	
D. Inspection, maintenance or repair without refuelling				49		
E. Testing of plant systems or components				0		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						72
Z. Others					18	
Subtotal	506	0	0	695	105	72
Total		506			872	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		5
15. Reactor Cooling Systems		54
31. Turbine and auxiliaries		1
32. Feedwater and Main Steam System		0
41. Main Generator Systems		13
42. Electrical Power Supply Systems		6
Total	0	79

DE-17 UNTERWESER (KKU)

Operator: E.ON (E.ON Kernkraft GmbH)

Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1345.0 MW(e)
Design Net Capacity: 1230.0 MW(e)
Design Discharge Burnup: 35400 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9076.3 GW(e).h
Energy Availability Factor: 77.3%
Load Factor: 77.0%
Operating Factor: 79.7%
Energy Unavailability Factor: 22.7%
Total Off-line Time: 1777 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	993.8	909.4	993.9	944.7	978.7	794.5	584.0	0.0	223.1	1006.0	973.9	674.3	9076.3
EAF (%)	100.0	100.0	100.0	99.7	98.9	82.3	58.7	0.0	23.0	100.0	99.9	67.0	77.3
UCF (%)	100.0	100.0	100.0	99.7	99.2	100.0	64.5	0.0	23.0	100.0	99.9	67.0	79.3
LF (%)	99.3	100.6	99.3	97.6	97.8	82.0	58.4	0.0	23.0	100.4	100.6	67.4	77.0
OF (%)	100.0	100.0	99.9	100.0	100.0	100.0	64.8	0.0	25.7	100.0	100.0	68.4	79.7
EUF (%)	0.0	0.0	0.0	0.3	1.1	17.7	41.3	100.0	77.0	0.0	0.1	33.0	22.7
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	35.5	100.0	29.7	0.0	0.0	0.0	14.0
UCLF (%)	0.0	0.0	0.0	0.3	0.8	0.0	0.0	0.0	47.3	0.0	0.0	33.0	6.8
XUF (%)	0.0	0.0	0.0	0.0	0.2	17.7	5.7	0.0	0.0	0.0	0.0	0.0	2.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	01 Jul 1972	Lifetime Generation:	257355.3 GW(e).h
Date of First Criticality:	16 Sep 1978	Cumulative Energy Availability Factor:	82.1%
Date of Grid Connection:	29 Sep 1978	Cumulative Load Factor:	79.8%
Date of Commercial Operation:	06 Sep 1979	Cumulative Unit Capability Factor:	82.6%
		Cumulative Energy Unavailability Factor:	17.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	3338.0	1230.0	92.1	92.1	92.1	92.1	92.7	92.7	2731	93.3
1980	9272.0	1230.0	85.8	87.3	85.8	87.3	85.8	87.5	7832	89.2
1981	9023.5	1230.0	83.5	85.7	83.5	85.7	83.7	85.9	7606	86.8
1982	9114.2	1230.0	84.7	85.4	84.7	85.4	84.6	85.5	8022	91.6
1983	8215.0	1230.0	75.8	83.2	75.8	83.2	76.2	83.4	7191	82.1
1984	9483.0	1230.0	87.2	83.9	87.2	83.9	87.8	84.2	7908	90.0
1985	9931.8	1230.0	93.4	85.4	93.4	85.4	92.2	85.5	8279	94.5
1986	7280.8	1230.0	67.4	83.0	67.4	83.0	67.6	83.0	6254	71.4
1987	8673.9	1230.0	80.7	82.7	80.7	82.7	80.5	82.7	7277	83.1
1988	9108.4	1230.0	84.9	82.9	84.9	82.9	84.3	82.9	7627	86.8
1989	9245.6	1230.0	89.3	83.6	89.3	83.6	85.8	83.2	7873	89.9
1990	8485.0	1230.0	78.9	83.2	78.9	83.2	78.7	82.8	6921	79.0
1991	6485.9	1231.0	61.1	81.4	61.1	81.4	60.1	80.9	5369	61.3
1992	8731.5	1230.0	86.5	81.7	86.5	81.7	80.8	80.9	7646	87.0
1993	10824.8	1255.0	99.9	83.0	99.9	83.0	98.5	82.2	8760	100.0
1994	7685.9	1255.0	80.1	82.8	80.1	82.8	69.9	81.4	7039	80.4
1995	7980.6	1255.0	77.5	82.5	77.5	82.5	72.6	80.8	6832	78.0
1996	9907.7	1285.0	91.3	83.0	91.3	83.0	87.8	81.2	8055	91.7
1997	9932.4	1285.0	94.4	83.7	94.4	83.7	88.2	81.6	8291	94.6
1998	6618.0	1285.0	58.7	82.3	58.7	82.3	58.8	80.4	5217	59.6
1999	8096.6	1285.0	78.3	82.1	78.3	82.1	71.9	80.0	6899	78.8
2000	9615.8	1295.0	86.2	82.3	86.2	82.3	84.5	80.2	7604	86.6
2001	10656.7	1345.0	95.2	83.0	90.8	82.7	90.4	80.7	8378	95.6
2002	6774.8	1345.0	60.5	81.9	60.5	81.7	57.5	79.6	5313	60.7
2003	9254.9	1345.0	88.3	82.2	88.3	82.0	78.5	79.6	7882	90.0
2004	9724.0	1345.0	87.4	82.4	87.4	82.2	82.3	79.7	7711	87.8
2005	8890.6	1345.0	76.7	82.2	75.9	82.0	75.5	79.5	6742	77.0
2006	10391.5	1345.0	94.7	82.7	88.6	82.2	88.2	79.9	8315	94.9
2007	9076.3	1345.0	79.3	82.6	77.3	82.1	77.0	79.8	6984	79.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		235			269	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling	1220			822	88	
D. Inspection, maintenance or repair without refuelling				28		
E. Testing of plant systems or components				29		
H. Nuclear regulatory requirements				0	26	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					18	
L. Human factor related		321				
Subtotal	1220	556	0	879	413	0
Total		1776			1292	

7. Equipment Related Full Outages, Analysis by System

System	2007	1978 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		33
12. Reactor I&C Systems		6
13. Reactor Auxiliary Systems		22
15. Reactor Cooling Systems		14
31. Turbine and auxiliaries		54
32. Feedwater and Main Steam System	235	2
33. Circulating Water System		0
41. Main Generator Systems		134
42. Electrical Power Supply Systems		1
XX. Miscellaneous Systems		0
Total	235	266

HU-1 PAKS-1

Operator: PAKS Zrt (PAKS NUCLEAR POWER PLANT LTD)

Contractor: AEE (ATOMENERGOEXPORT)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 440.0 MW(e)
Design Net Capacity: 408.0 MW(e)
Design Discharge Burnup: 37000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3179.4 GW(e).h
Energy Availability Factor: 79.7%
Load Factor: 79.7%
Operating Factor: 79.1%
Energy Unavailability Factor: 20.3%
Total Off-line Time: 1827 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	327.3	295.6	11.0	0.0	179.1	314.8	349.7	349.4	337.0	327.9	337.9	349.6	3179.4
EAF (%)	100.0	100.0	3.3	-0.1	54.7	99.4	100.0	99.9	99.6	93.2	100.0	100.0	79.7
UCF (%)	100.0	100.0	3.3	-0.1	54.7	99.4	100.0	99.9	99.6	93.2	100.0	100.0	79.7
LF (%)	100.0	100.0	3.4	0.0	54.7	99.4	100.0	99.9	99.6	93.6	99.9	100.0	79.7
OF (%)	100.0	100.0	3.2	0.0	58.3	100.0	100.0	100.0	100.0	89.5	100.0	100.0	79.1
EUF (%)	0.0	0.0	96.7	100.1	45.3	0.6	0.0	0.1	0.4	6.8	0.0	0.0	20.3
PUF (%)	0.0	0.0	96.7	100.1	9.8	0.6	0.0	0.0	0.4	2.1	0.0	0.0	17.0
UCLF (%)	0.0	0.0	0.0	0.0	35.5	0.0	0.0	0.1	0.0	4.7	0.0	0.0	3.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

OPERATION AT FULL POWER IN BASE LOAD MODE. IN ORDER TO ENHANCE ITS ECONOMIC AND OPERATIONAL EFFECTIVENESS AND TO IMPROVE ITS MARKET POSITION, PAKS NUCLEAR POWER PLANT COMMENCED AN ECONOMICAL EFFECTIVENESS ENHANCEMENT PROGRAMME IN 2005, PRINCIPAL ELEMENTS OF WHICH ARE AS FOLLOWS: POWER UPRATING, MAINTENANCE OPTIMIZATION, OPERATING LIFETIME EXTENSION. ACCORDING TO THE SCHEDULE OF THE POWER UPRATING PROGRAM UPRATING OF UNIT 1 WAS PERFORMED IN 2007 AFTER UNIT 4. DURING THE ANNUAL OUTAGE OF UNIT 1 THE SPECIALISTS PERFORMED THE REQUIRED MODIFICATIONS ACCORDING TO THE LICENCE ISSUED BY THE HUNGARIAN NUCLEAR REGULATORY BODY. AFTER THE OUTAGE THE POWER UPRATING PROGRAM FROM 100 % TO 108 % WAS STARTED AND PERFORMED IN THREE STEPS ON UNIT 1. ON 19 JULY THE REACTOR POWER REACHED THE LICENSED VALUE OF 108 %. THE NOMINAL ELECTRIC CAPACITY OF UNIT 1 REACHED 500 MW (NET 470 MW).

5. Historical Summary

Date of Construction Start:	01 Aug 1974	Lifetime Generation:	79553.4 GW(e).h
Date of First Criticality:	14 Dec 1982	Cumulative Energy Availability Factor:	85.4%
Date of Grid Connection:	28 Dec 1982	Cumulative Load Factor:	86.4%
Date of Commercial Operation:	10 Aug 1983	Cumulative Unit Capability Factor:	85.5%
		Cumulative Energy Unavailability Factor:	14.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	1370.0	410.0	91.0	91.0	91.0	91.0	91.0	91.0	3662	99.7
1984	2595.3	403.0	75.7	80.3	75.6	80.2	73.3	78.5	6901	78.6
1985	2997.3	410.0	84.2	81.9	84.2	81.9	83.5	80.6	7491	85.5
1986	3114.6	410.0	87.1	83.4	87.1	83.4	86.7	82.4	7718	88.1
1987	2883.1	415.0	79.2	82.5	79.2	82.4	79.3	81.7	7107	81.1
1988	3076.9	415.0	85.8	83.1	85.8	83.1	84.4	82.2	7737	88.1
1989	3182.2	415.0	87.7	83.8	87.7	83.8	87.5	83.0	7929	90.5
1990	3216.8	415.0	87.2	84.3	87.2	84.3	88.5	83.8	7837	89.5
1991	2883.9	410.0	75.1	83.2	75.1	83.2	80.3	83.4	6823	77.9
1992	3498.9	430.0	84.9	83.4	84.9	83.4	92.6	84.4	7629	86.9
1993	3512.4	430.0	85.8	83.6	85.8	83.6	93.2	85.3	7637	87.2
1994	3441.5	430.0	89.9	84.2	89.8	84.2	91.4	85.8	8031	91.7
1995	3056.3	430.0	79.6	83.8	79.5	83.8	81.1	85.4	7088	80.9
1996	3472.7	430.0	90.7	84.3	90.6	84.3	91.9	85.9	8033	91.5
1997	3328.5	430.0	87.0	84.5	86.9	84.5	88.4	86.1	7646	87.3
1998	3487.7	430.0	92.4	85.1	92.4	85.0	92.6	86.5	8095	92.4
1999	3117.5	430.0	81.6	84.8	81.2	84.8	82.8	86.3	7240	82.6
2000	3192.1	430.0	82.5	84.7	82.3	84.6	84.5	86.2	7268	82.7
2001	3514.9	437.0	91.8	85.1	91.6	85.0	91.8	86.5	8069	92.1
2002	3330.7	437.0	90.2	85.4	90.1	85.3	87.0	86.5	7909	90.3
2003	3097.8	437.0	81.0	85.1	81.0	85.1	80.9	86.3	7197	82.1
2004	3342.3	437.0	87.1	85.2	87.1	85.2	87.1	86.3	7692	87.6
2005	3503.5	437.0	91.5	85.5	91.5	85.5	91.5	86.5	8029	91.7
2006	3468.5	437.0	90.8	85.8	90.8	85.7	90.6	86.7	7979	91.1
2007	3179.4	470.0	79.7	85.5	79.7	85.4	79.7	86.4	6933	79.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		306			74	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	1512			941	27	
D. Inspection, maintenance or repair without refuelling	17			17		
E. Testing of plant systems or components					0	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					6	
Z. Others					8	
Subtotal	1529	306	0	958	116	0
Total		1835			1074	

7. Equipment Related Full Outages, Analysis by System

System	2007	1983 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems		17
14. Safety Systems		4
15. Reactor Cooling Systems		1
16. Steam generation systems		13
31. Turbine and auxiliaries	68	2
32. Feedwater and Main Steam System		12
33. Circulating Water System	237	1
35. All other I&C Systems		0
41. Main Generator Systems		0
42. Electrical Power Supply Systems		4
Total	305	54

HU-2 PAKS-2

Operator: PAKS Zrt (PAKS NUCLEAR POWER PLANT LTD)

Contractor: AEE (ATOMENERGOEXPORT)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 443.0 MW(e)
Design Net Capacity: 410.0 MW(e)
Design Discharge Burnup: 37000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3477.0 GW(e).h
Energy Availability Factor: 89.2%
Load Factor: 89.6%
Operating Factor: 90.0%
Energy Unavailability Factor: 10.8%
Total Off-line Time: 873 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	329.4	289.0	286.5	298.4	329.6	309.0	13.7	324.5	318.9	330.0	318.6	329.4	3477.0
EAF (%)	99.9	97.1	86.5	93.3	100.0	96.6	0.3	98.1	100.0	100.0	100.0	100.0	89.2
UCF (%)	99.9	97.1	86.5	93.3	100.0	96.6	0.3	98.1	100.0	100.0	100.0	100.0	89.2
LF (%)	99.9	97.1	86.9	93.7	100.0	96.9	4.2	98.5	100.0	100.0	99.9	99.9	89.6
OF (%)	100.0	100.0	87.0	94.3	100.0	96.9	4.2	100.0	100.0	100.0	100.0	100.0	90.0
EUF (%)	0.1	2.9	13.5	6.7	0.0	3.4	99.7	1.9	0.0	0.0	0.0	0.0	10.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	3.4	99.7	0.5	0.0	0.0	0.0	0.0	8.8
UCLF (%)	0.1	2.9	13.5	6.7	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	2.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

OPERATION AT FULL POWER IN BASE LOAD MODE. IN ORDER TO ENHANCE ITS ECONOMIC AND OPERATIONAL EFFECTIVENESS AND TO IMPROVE ITS MARKET POSITION, PAKS NUCLEAR POWER PLANT COMMENCED AN ECONOMICAL EFFECTIVENESS ENHANCEMENT PROGRAMME IN 2005, PRINCIPAL ELEMENTS OF WHICH ARE AS FOLLOWS: POWER UPRATING, MAINTENANCE OPTIMIZATION, OPERATING LIFETIME EXTENSION. THE OBJECTIVES OF THE ECONOMICAL EFFECTIVENESS PROGRAMME WERE ACCOMPLISHED TIME-PROPORTIONALLY. FROM 01.01.2007 THE NOMINAL ELECTRIC CAPACITY OF UNIT 2 REACHED 470 MW (NET 443 MW)

5. Historical Summary

Date of Construction Start:	01 Aug 1974	Lifetime Generation:	70014.3 GW(e).h
Date of First Criticality:	26 Aug 1984	Cumulative Energy Availability Factor:	79.0%
Date of Grid Connection:	06 Sep 1984	Cumulative Load Factor:	80.0%
Date of Commercial Operation:	14 Nov 1984	Cumulative Unit Capability Factor:	79.1%
		Cumulative Energy Unavailability Factor:	21.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	584.2	425.0	94.1	94.1	94.1	94.1	97.3	97.3	1456	99.5
1985	3101.6	415.0	85.1	86.4	85.1	86.4	85.3	87.0	7695	87.8
1986	3148.3	415.0	86.0	86.2	86.0	86.2	86.6	86.8	7643	87.2
1987	3193.9	415.0	85.3	85.9	85.3	85.9	87.9	87.2	7770	88.7
1988	3046.3	415.0	81.9	85.0	81.9	85.0	83.6	86.3	7352	83.7
1989	3300.7	415.0	88.6	85.7	88.6	85.7	90.8	87.2	7962	90.9
1990	3338.2	425.0	88.0	86.1	88.0	86.1	89.7	87.6	7845	89.6
1991	3421.6	415.0	88.6	86.4	88.6	86.4	94.1	88.5	7912	90.3
1992	3174.9	433.0	76.0	85.1	76.0	85.1	83.5	87.8	6829	77.7
1993	3569.0	433.0	87.0	85.3	87.0	85.3	94.1	88.6	7731	88.3
1994	3440.4	433.0	89.5	85.7	89.4	85.7	90.7	88.8	8000	91.3
1995	3309.1	433.0	86.6	85.8	86.4	85.8	87.2	88.6	7657	87.4
1996	3019.9	433.0	79.5	85.3	79.4	85.3	79.4	87.8	7011	79.8
1997	3267.6	433.0	88.3	85.5	88.2	85.5	86.1	87.7	7807	89.1
1998	3206.7	433.0	88.3	85.7	88.2	85.7	84.5	87.5	7717	88.1
1999	3246.6	433.0	90.2	86.0	89.2	85.9	85.6	87.4	7780	88.8
2000	3059.3	433.0	80.1	85.6	80.0	85.5	80.4	86.9	7073	80.5
2001	3266.9	441.0	84.9	85.6	84.8	85.5	84.6	86.8	7484	85.4
2002	3338.5	441.0	86.7	85.7	86.5	85.6	86.4	86.8	7644	87.3
2003	918.8	441.0	23.8	82.3	23.8	82.2	23.8	83.4	2089	23.8
2004	1137.2	441.0	29.4	79.6	29.4	79.5	29.4	80.6	2620	29.8
2005	2929.5	441.0	75.8	79.4	75.8	79.4	75.8	80.4	6669	76.1
2006	2399.6	441.0	62.6	78.7	62.3	78.6	62.1	79.5	5493	62.7
2007	3477.0	443.0	89.2	79.1	89.2	79.0	89.6	80.0	7887	90.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		148			546	
B. Refuelling without a maintenance					16	
C. Inspection, maintenance or repair combined with refuelling	751			910	18	
D. Inspection, maintenance or repair without refuelling				103		
E. Testing of plant systems or components				1	0	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					21	
L. Human factor related					7	
Z. Others					5	
Subtotal	751	148	0	1014	613	0
Total		899			1627	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	148	20
15. Reactor Cooling Systems		4
16. Steam generation systems		10
17. Safety I&C Systems (excluding reactor I&C)		20
21. Fuel Handling and Storage Facilities		480
31. Turbine and auxiliaries		1
32. Feedwater and Main Steam System		0
41. Main Generator Systems		0
42. Electrical Power Supply Systems		2
Total	148	537

HU-3 PAKS-3

Operator: PAKS Zrt (PAKS NUCLEAR POWER PLANT LTD)

Contractor: AEE (ATOMENERGOEXPORT)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 443.0 MW(e)
Design Net Capacity: 410.0 MW(e)
Design Discharge Burnup: 37000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3396.0 GW(e).h
Energy Availability Factor: 87.5%
Load Factor: 87.5%
Operating Factor: 87.8%
Energy Unavailability Factor: 12.5%
Total Off-line Time: 1069 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	329.6	297.6	328.7	318.9	329.6	318.9	328.6	183.3	0.0	312.7	318.6	329.5	3396.0
EAF (%)	100.0	100.0	99.9	100.0	100.0	100.0	99.7	55.7	0.0	94.7	100.0	100.0	87.5
UCF (%)	100.0	100.0	99.9	100.0	100.0	100.0	99.7	55.7	0.0	94.7	100.0	100.0	87.5
LF (%)	100.0	100.0	99.7	100.1	100.0	100.0	99.7	55.6	0.0	94.7	99.9	100.0	87.5
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	54.7	0.0	98.4	100.0	100.0	87.8
EUF (%)	0.0	0.0	0.1	0.0	0.0	0.0	0.3	44.3	100.0	5.3	0.0	0.0	12.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.3	100.0	1.0	0.0	0.0	12.1
UCLF (%)	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	4.3	0.0	0.0	0.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

OPERATION AT FULL POWER IN BASE LOAD MODE. IN ORDER TO ENHANCE ITS ECONOMIC AND OPERATIONAL EFFECTIVENESS AND TO IMPROVE ITS MARKET POSITION, PAKS NUCLEAR POWER PLANT COMMENCED AN ECONOMICAL EFFECTIVENESS ENHANCEMENT PROGRAMME IN 2005, PRINCIPAL ELEMENTS OF WHICH ARE AS FOLLOWS: POWER UPRATING, MAINTENANCE OPTIMIZATION, OPERATING LIFETIME EXTENSION. THE OBJECTIVES OF THE ECONOMICAL EFFECTIVENESS PROGRAMME WERE ACCOMPLISHED TIME-PROPORTIONALLY. FROM 01.01.2007 THE NOMINAL ELECTRIC CAPACITY OF UNIT 3 REACHED 470 MW (NET 443 MW).

5. Historical Summary

Date of Construction Start:	01 Oct 1979	Lifetime Generation:	69388.9 GW(e).h
Date of First Criticality:	15 Sep 1986	Cumulative Energy Availability Factor:	86.3%
Date of Grid Connection:	28 Sep 1986	Cumulative Load Factor:	87.2%
Date of Commercial Operation:	01 Dec 1986	Cumulative Unit Capability Factor:	86.8%
		Cumulative Energy Unavailability Factor:	13.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	314.1	427.0	99.6	99.6	99.6	99.6	101.7	101.7	744	100.0
1987	3209.6	415.0	87.0	87.9	87.0	87.9	88.3	89.3	7648	87.3
1988	3300.9	415.0	88.1	88.0	88.1	88.0	90.6	89.9	7874	89.6
1989	3140.5	415.0	82.4	86.2	82.4	86.2	86.4	88.8	7343	83.8
1990	3273.4	435.0	85.6	86.1	85.6	86.1	85.9	88.0	7755	88.5
1991	3256.0	410.0	84.2	85.7	84.2	85.7	90.7	88.6	7580	86.5
1992	3587.3	433.0	87.7	86.0	87.5	86.0	94.3	89.5	7852	89.4
1993	3177.9	433.0	77.6	84.8	77.4	84.8	83.8	88.7	6950	79.3
1994	3376.0	433.0	88.6	85.3	88.5	85.2	89.0	88.7	7884	90.0
1995	3392.8	433.0	89.2	85.7	89.0	85.7	89.4	88.8	7911	90.3
1996	3429.4	433.0	90.9	86.3	90.8	86.2	90.2	89.0	8136	92.6
1997	3066.1	433.0	81.1	85.8	80.9	85.7	80.8	88.2	7136	81.5
1998	3294.1	433.0	88.0	86.0	88.0	85.9	86.8	88.1	7566	86.4
1999	3445.7	433.0	92.3	86.5	92.2	86.4	90.8	88.3	8058	92.0
2000	3517.3	433.0	93.0	86.9	92.8	86.8	92.5	88.6	8163	92.9
2001	3040.4	433.0	80.7	86.5	80.3	86.4	80.2	88.0	7159	81.7
2002	3256.8	433.0	90.5	86.8	90.4	86.6	85.9	87.9	7900	90.2
2003	3008.3	433.0	87.8	86.8	80.5	86.3	79.3	87.4	7746	88.4
2004	3333.3	433.0	87.6	86.9	87.6	86.4	87.6	87.4	7732	88.0
2005	3038.7	433.0	80.1	86.5	80.1	86.0	80.1	87.0	7088	80.9
2006	3454.9	433.0	91.2	86.8	91.2	86.3	91.1	87.2	8007	91.4
2007	3396.0	443.0	87.5	86.8	87.5	86.3	87.5	87.2	7691	87.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					131	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1068			855	127	
D. Inspection, maintenance or repair without refuelling				24		
E. Testing of plant systems or components				1	6	
Z. Others					11	
Subtotal	1068	0	0	880	275	0
Total		1068			1155	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		15
12. Reactor I&C Systems		44
14. Safety Systems		0
15. Reactor Cooling Systems		0
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		22
42. Electrical Power Supply Systems		35
Total	0	118

HU-4 PAKS-4

Operator: PAKS Zrt (PAKS NUCLEAR POWER PLANT LTD)
Contractor: AEE (ATOMENERGOEXPORT)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 473.0 MW(e)
Design Net Capacity: 410.0 MW(e)
Design Discharge Burnup: 37000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3810.4 GW(e).h
Energy Availability Factor: 92.0%
Load Factor: 92.0%
Operating Factor: 92.2%
Energy Unavailability Factor: 8.0%
Total Off-line Time: 682 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	351.9	317.5	351.4	340.5	189.2	172.4	351.8	351.1	340.6	352.4	340.0	351.7	3810.4
EAF (%)	100.0	99.9	100.0	100.0	53.8	50.6	100.0	99.9	100.0	100.0	99.9	100.0	92.0
UCF (%)	100.0	99.9	100.0	100.0	53.8	50.6	100.0	99.9	100.0	100.0	99.9	100.0	92.0
LF (%)	100.0	99.9	99.9	100.1	53.8	50.6	100.0	99.8	100.0	100.0	99.8	99.9	92.0
OF (%)	100.0	100.0	99.9	100.1	54.8	51.9	100.0	100.0	100.0	100.0	100.0	100.0	92.2
EUF (%)	0.0	0.1	0.0	0.0	46.2	49.4	0.0	0.1	0.0	0.0	0.1	0.0	8.0
PUF (%)	0.0	0.0	0.0	0.0	46.2	49.0	0.0	0.1	0.0	0.0	0.0	0.0	8.0
UCLF (%)	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

OPERATION AT FULL POWER IN BASE LOAD MODE. IN ORDER TO ENHANCE ITS ECONOMIC AND OPERATIONAL EFFECTIVENESS AND TO IMPROVE ITS MARKET POSITION, PAKS NUCLEAR POWER PLANT COMMENCED AN ECONOMICAL EFFECTIVENESS ENHANCEMENT PROGRAMME IN 2005, PRINCIPAL ELEMENTS OF WHICH ARE AS FOLLOWS: POWER UPRATING, MAINTENANCE OPTIMIZATION, OPERATING LIFETIME EXTENSION. THE OBJECTIVES OF THE ECONOMICAL EFFECTIVENESS PROGRAMME WERE ACCOMPLISHED TIME-PROPORTIONALLY. DURING THE ANNUAL OUTAGE OF UNIT 4 IN 2006 THE SPECIALISTS PERFORMED THE REQUIRED MODIFICATIONS ACCORDING TO THE LICENCE ISSUED BY THE HUNGARIAN NUCLEAR REGULATORY BODY. AFTER THE OUTAGE THE POWER UPRATING PROGRAM FROM 100 % TO 108 % WAS STARTED AND PERFORMED IN THREE STEPS ON UNIT 4. FROM 01.01. 2007 THE NEW NOMINAL ELECTRIC CAPACITY OF UNIT 4 REACHED 500 MW (NET 473 MW).

5. Historical Summary

Date of Construction Start:	01 Oct 1979	Lifetime Generation:	68695.6 GW(e).h
Date of First Criticality:	09 Aug 1987	Cumulative Energy Availability Factor:	87.6%
Date of Grid Connection:	16 Aug 1987	Cumulative Load Factor:	89.3%
Date of Commercial Operation:	01 Nov 1987	Cumulative Unit Capability Factor:	87.8%
		Cumulative Energy Unavailability Factor:	12.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	618.3	425.0	100.0	100.0	100.0	100.0	101.8	101.8	1464	100.0
1988	3200.9	415.0	85.6	87.7	85.6	87.7	87.8	89.8	7564	86.1
1989	3425.3	415.0	89.7	88.6	89.7	88.6	94.2	91.8	7974	91.0
1990	3064.5	435.0	76.7	84.7	76.7	84.7	80.4	88.1	7253	82.8
1991	3343.0	410.0	86.5	85.2	86.5	85.2	93.1	89.3	7787	88.9
1992	3702.8	433.0	90.9	86.3	90.7	86.3	97.4	90.9	8082	92.0
1993	3537.2	430.0	87.5	86.5	87.0	86.4	93.9	91.4	7767	88.7
1994	2971.2	433.0	78.1	85.3	78.1	85.2	78.3	89.5	7019	80.1
1995	3443.8	433.0	90.8	86.0	90.4	85.9	90.8	89.7	8049	91.9
1996	3487.5	433.0	91.3	86.6	90.7	86.4	91.7	89.9	8087	92.1
1997	3487.1	433.0	92.0	87.1	91.6	86.9	91.9	90.1	8098	92.4
1998	3136.1	433.0	84.3	86.9	83.7	86.6	82.7	89.4	7389	84.3
1999	3464.0	433.0	89.3	87.1	89.3	86.8	91.3	89.6	8046	91.8
2000	3578.4	433.0	92.3	87.5	92.2	87.3	94.1	89.9	8116	92.4
2001	3471.7	444.0	90.1	87.7	90.0	87.5	89.3	89.9	7916	90.4
2002	3182.9	444.0	83.4	87.4	83.1	87.2	81.8	89.3	7287	83.2
2003	3607.6	444.0	93.0	87.7	92.8	87.5	92.8	89.6	8119	92.7
2004	3396.6	444.0	87.1	87.7	87.1	87.5	87.1	89.4	7878	89.7
2005	3548.8	444.0	91.2	87.9	91.2	87.7	91.2	89.5	8046	91.8
2006	3185.2	444.0	81.9	87.6	81.9	87.4	81.9	89.1	7196	82.1
2007	3810.4	473.0	92.0	87.8	92.0	87.6	92.0	89.3	8078	92.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					59	
C. Inspection, maintenance or repair combined with refuelling	682			846	27	
D. Inspection, maintenance or repair without refuelling				6		
E. Testing of plant systems or components				1		
H. Nuclear regulatory requirements				0		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				3		
L. Human factor related					3	
Z. Others					4	
Subtotal	682	0	0	856	93	0
Total		682			949	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		16
15. Reactor Cooling Systems		16
16. Steam generation systems		5
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		5
32. Feedwater and Main Steam System		5
41. Main Generator Systems		0
42. Electrical Power Supply Systems		1
Total	0	49

IN-13 KAIGA-1**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 202.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: 6700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 946.3 GW(e).h
Energy Availability Factor: 54.4%
Load Factor: 53.5%
Operating Factor: 82.8%
Energy Unavailability Factor: 45.6%
Total Off-line Time: 1510 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	103.3	92.8	104.2	99.3	96.9	55.7	0.0	82.3	34.8	92.9	90.3	93.7	946.3
EAF (%)	69.8	69.3	70.3	69.2	65.5	39.5	0.0	55.7	24.9	62.9	63.1	63.4	54.4
UCF (%)	100.0	100.0	100.0	100.0	99.6	63.8	0.0	90.3	41.4	100.0	100.0	100.0	82.9
LF (%)	68.8	68.4	69.3	68.3	64.5	38.3	0.0	54.7	23.9	61.8	62.1	62.4	53.5
OF (%)	100.0	100.0	100.0	100.1	99.6	63.5	0.0	90.2	40.7	99.9	100.0	100.0	82.8
EUUF (%)	30.2	30.7	29.7	30.8	34.5	60.5	100.0	44.3	75.1	37.1	36.9	36.6	45.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	36.2	76.2	0.0	58.3	0.0	0.0	0.0	14.2
UCLF (%)	0.0	0.0	0.0	0.0	0.4	0.0	23.8	9.7	0.4	0.0	0.0	0.0	2.9
XUF (%)	30.2	30.7	29.7	30.8	34.1	24.3	0.0	34.5	16.4	37.1	36.9	36.6	28.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

AVAILABILITY FACTOR WAS 82.77% . UNIT OPERATED CONTINUOUSLY FOR 222 DAYS FROM 11TH NOV 2006 TO 20TH JUNE 2007

5. Historical Summary

Date of Construction Start: 01 Sep 1989 **Lifetime Generation:** 8990.9 GW(e).h
Date of First Criticality: 26 Sep 2000 **Cumulative Energy Availability Factor:** 73.4%
Date of Grid Connection: 12 Oct 2000 **Cumulative Load Factor:** 71.8%
Date of Commercial Operation: 16 Nov 2000 **Cumulative Unit Capability Factor:** 88.9%
Cumulative Energy Unavailability Factor: 26.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2000	188.4	200.0	86.9	86.9	86.9	86.9	64.4	64.4	1037	70.8
2001	1241.1	200.0	75.8	77.4	70.4	72.8	70.8	69.9	6316	72.1
2002	1692.9	202.0	95.6	85.8	92.4	81.9	95.7	81.9	8082	92.3
2003	1336.0	202.0	87.5	86.4	83.4	82.4	75.5	79.8	7255	82.8
2004	1344.9	202.0	94.6	88.4	77.8	81.3	75.8	78.9	8181	93.1
2005	1183.6	202.0	88.9	88.5	66.5	78.4	66.9	76.5	7580	86.5
2006	1167.3	202.0	97.4	89.9	67.0	76.5	66.0	74.8	8524	97.3
2007	946.3	202.0	82.9	88.9	54.4	73.4	53.5	71.8	7250	82.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2000 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					581	
B. Refuelling without a maintenance					22	
D. Inspection, maintenance or repair without refuelling	1251			67		
E. Testing of plant systems or components		2		14		
H. Nuclear regulatory requirements		252				
J. Grid failure or grid unavailability			2			198
Z. Others					27	
Subtotal	1251	254	2	81	630	198
Total		1507			909	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2000 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		38
12. Reactor I&C Systems		40
13. Reactor Auxiliary Systems		6
14. Safety Systems		25
15. Reactor Cooling Systems		19
17. Safety I&C Systems (excluding reactor I&C)		26
21. Fuel Handling and Storage Facilities		62
31. Turbine and auxiliaries		80
32. Feedwater and Main Steam System		32
35. All other I&C Systems		0
41. Main Generator Systems		228
42. Electrical Power Supply Systems		8
XX. Miscellaneous Systems		12
Total	0	576

IN-14 KAIGA-2**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 202.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: 6700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1083.1 GW(e).h
Energy Availability Factor: 62.2%
Load Factor: 61.2%
Operating Factor: 100.0%
Energy Unavailability Factor: 37.8%
Total Off-line Time: 3 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	103.4	92.9	103.8	100.6	93.5	81.9	85.5	86.4	82.0	84.9	83.0	85.4	1083.1
EAF (%)	69.8	69.4	70.0	70.1	63.2	57.3	57.9	58.5	57.3	57.5	58.1	57.8	62.2
UCF (%)	100.0	100.0	100.0	100.0	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	68.8	68.4	69.0	69.3	62.2	56.3	56.9	57.5	56.4	56.4	57.1	56.8	61.2
OF (%)	100.0	100.0	100.0	100.1	99.9	99.9	99.9	100.0	100.0	99.9	100.0	100.0	100.0
EUUF (%)	30.2	30.6	30.0	29.9	36.8	42.7	42.1	41.5	42.7	42.5	41.9	42.2	37.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	30.2	30.6	30.0	29.9	36.7	42.7	42.0	41.5	42.7	42.5	41.9	42.2	37.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNIT HAD AVAILABILITY FACTOR OF 99.97%. UNIT HAD CONTINUOUS OPERATION FROM 19-08-06 AND COMPLETED 499 DAYS CONTINUOUS OPERATION AS ON 31/12/07

5. Historical Summary

Date of Construction Start: 01 Dec 1989 **Lifetime Generation:** 10217.1 GW(e).h
Date of First Criticality: 24 Sep 1999 **Cumulative Energy Availability Factor:** 75.6%
Date of Grid Connection: 02 Dec 1999 **Cumulative Load Factor:** 74.1%
Date of Commercial Operation: 16 Mar 2000 **Cumulative Unit Capability Factor:** 89.3%
Cumulative Energy Unavailability Factor: 24.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2000	1036.0	200.0	76.9	76.9	76.9	76.9	70.5	70.5	5428	73.9
2001	1308.6	200.0	82.1	79.7	74.2	75.5	74.7	72.8	6670	76.1
2002	1559.2	202.0	87.5	82.5	85.8	79.1	88.1	78.2	7455	85.1
2003	1413.0	202.0	88.7	84.1	86.9	81.2	79.9	78.7	7535	86.0
2004	1290.2	202.0	91.0	85.6	74.7	79.8	72.7	77.4	7732	88.0
2005	1509.4	202.0	96.4	87.4	82.9	80.4	85.3	78.8	8428	96.2
2006	1064.2	202.0	89.2	87.7	61.1	77.5	60.1	76.0	7806	89.1
2007	1083.1	202.0	100.0	89.3	62.2	75.6	61.2	74.1	8757	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2000 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					670	
D. Inspection, maintenance or repair without refuelling				296	24	
E. Testing of plant systems or components					3	
J. Grid failure or grid unavailability		1				194
Z. Others		0			6	
Subtotal	0	1	0	296	703	194
Total		1			1193	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2000 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		12
12. Reactor I&C Systems		133
13. Reactor Auxiliary Systems		12
15. Reactor Cooling Systems		61
17. Safety I&C Systems (excluding reactor I&C)		45
31. Turbine and auxiliaries		280
32. Feedwater and Main Steam System		45
41. Main Generator Systems		30
42. Electrical Power Supply Systems		48
Total	0	666

IN-15 KAIGA-3**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 202.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: —
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 348.4 GW(e).h
Energy Availability Factor: 29.9%
Load Factor: 29.3%
Operating Factor: 34.1%
Energy Unavailability Factor: 70.1%
Total Off-line Time: 3873 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h					84.4	35.8	115.7	112.4	0.0	0.0	0.0	0.0	348.4
EAF (%)					61.1	22.6	77.8	71.2	1.0	1.1	1.0	1.0	29.9
UCF (%)					71.0	32.5	87.7	81.2	1.0	1.1	1.0	1.0	34.8
LF (%)					56.2	24.6	77.0	74.8	0.0	0.0	0.0	0.0	29.3
OF (%)					70.7	31.8	87.5	80.9	0.0	0.0	0.0	0.0	34.1
EUF (%)					38.9	77.4	22.2	28.8	99.0	98.9	99.0	99.0	70.1
PUF (%)					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)					29.0	67.5	12.4	18.9	99.0	98.9	99.0	99.0	65.2
XUF (%)					9.9	9.9	9.9	9.9	0.0	0.0	0.0	0.0	5.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

KAIGA-3 WAS MADE CRITICAL ON 26 FEBRUARY 2007 AT 1010 HRS. THE UNIT WAS FIRST SYNCHRONIZED ON 11 APRIL 2007 AT 1248 HRS. THE UNIT OPERATED AT 90% FP AND WAS DECLARED COMMERCIAL 6TH MAY 2007.

5. Historical Summary

Date of Construction Start: 30 Mar 2002 **Lifetime Generation:** 353.3 GW(e).h
Date of First Criticality: 26 Feb 2007 **Cumulative Energy Availability Factor:** 29.9%
Date of Grid Connection: 11 Apr 2007 **Cumulative Load Factor:** 29.3%
Date of Commercial Operation: 06 May 2007 **Cumulative Unit Capability Factor:** 34.8%
Cumulative Energy Unavailability Factor: 70.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2007	348.4	202.0	34.8	34.8	29.9	29.9	29.3	29.3	2008	34.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2007 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External

The reactor has not yet completed a full year of commercial operation.

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2007 to 2007 Average Hours Lost Per Year

The reactor has not yet completed a full year of commercial operation.

IN-9 KAKRAPAR-1**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 202.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: 6500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 828.7 GW(e).h
Energy Availability Factor: 53.3%
Load Factor: 46.8%
Operating Factor: 78.4%
Energy Unavailability Factor: 46.7%
Total Off-line Time: 1893 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	87.5	90.3	102.7	97.7	88.1	78.1	1.4	0.0	41.6	81.0	78.2	82.2	828.7
EAF (%)	75.1	71.0	71.1	70.0	62.8	61.4	6.4	3.5	35.8	61.4	61.4	61.4	53.3
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	8.4	3.5	56.9	100.0	100.0	100.0	80.5
LF (%)	58.2	66.5	68.3	67.3	58.6	53.7	0.9	0.0	28.6	53.8	53.7	54.7	46.8
OF (%)	86.0	97.6	99.9	100.1	100.0	100.0	5.1	0.0	55.3	99.9	100.0	100.0	78.4
EUUF (%)	24.9	29.0	28.9	30.0	37.2	38.6	93.6	96.5	64.2	38.6	38.6	38.6	46.7
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	91.6	46.7	0.0	0.0	0.0	0.0	11.7
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.8	43.1	0.0	0.0	0.0	7.8
XUF (%)	24.9	29.0	28.9	30.0	37.2	38.6	2.0	0.0	21.1	38.6	38.6	38.6	27.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNIT OPERATED AT 78.4% AF DURING THE YEAR.

5. Historical Summary

Date of Construction Start: 01 Dec 1984 **Lifetime Generation:** 16450.4 GW(e).h
Date of First Criticality: 03 Sep 1992 **Cumulative Energy Availability Factor:** 70.1%
Date of Grid Connection: 24 Nov 1992 **Cumulative Load Factor:** 66.6%
Date of Commercial Operation: 06 May 1993 **Cumulative Unit Capability Factor:** 78.4%
Cumulative Energy Unavailability Factor: 29.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1993			Data not provided							
1994	130.3	194.0	13.2	13.2	12.0	12.0	7.7	7.7	1049	12.0
1995	1089.1	195.0	70.5	41.9	66.5	39.3	63.8	35.8	6225	71.1
1996	1295.8	195.0	84.6	56.2	75.7	51.5	75.7	49.1	7539	85.8
1997	906.7	195.0	58.4	56.8	52.9	51.8	53.1	50.1	5140	58.7
1998	1090.6	195.0	67.0	58.8	63.1	54.1	63.8	52.9	5987	68.3
1999	1407.1	195.0	87.7	63.6	85.1	59.2	82.4	57.8	7450	85.0
2000	1645.4	195.0	95.2	68.2	94.5	64.3	96.1	63.3	8445	96.1
2001	1517.5	195.0	86.5	70.4	86.5	67.1	88.8	66.5	7690	87.8
2002	1697.8	202.0	96.8	73.5	96.7	70.5	95.9	69.8	8488	96.9
2003	1419.4	202.0	87.5	74.9	81.9	71.6	80.2	70.9	7622	87.0
2004	1064.4	202.0	89.1	76.2	89.1	73.3	60.0	69.9	7416	84.4
2005	1089.4	202.0	94.2	77.8	63.1	72.4	61.6	69.2	7969	91.0
2006	985.6	202.0	83.9	78.2	59.8	71.4	55.7	68.1	7316	83.5
2007	828.7	202.0	80.5	78.4	53.3	70.1	46.8	66.6	6867	78.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1994 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					600	
D. Inspection, maintenance or repair without refuelling				961		
E. Testing of plant systems or components	1069	702		8	23	
G. Major back-fitting, refurbishment or upgrading activities without refuelling						23
H. Nuclear regulatory requirements					80	
J. Grid failure or grid unavailability			120			64
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					13	10
L. Human factor related					7	
Subtotal	1069	702	120	969	723	97
Total		1891			1789	

7. Equipment Related Full Outages, Analysis by System

System	2007	1994 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		50
12. Reactor I&C Systems		50
13. Reactor Auxiliary Systems		17
15. Reactor Cooling Systems		115
16. Steam generation systems		13
17. Safety I&C Systems (excluding reactor I&C)		16
31. Turbine and auxiliaries		121
32. Feedwater and Main Steam System		17
35. All other I&C Systems		17
41. Main Generator Systems		97
42. Electrical Power Supply Systems		59
Total	0	572

IN-10 KAKRAPAR-2**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 202.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: 6500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1011.7 GW(e).h
Energy Availability Factor: 63.1%
Load Factor: 57.2%
Operating Factor: 96.4%
Energy Unavailability Factor: 36.9%
Total Off-line Time: 313 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	102.5	91.9	95.7	98.5	88.6	66.4	81.7	82.6	80.1	63.2	79.1	81.4	1011.7
EAF (%)	71.0	71.0	73.0	70.7	63.9	52.7	61.4	61.4	61.4	49.1	61.4	61.4	63.1
UCF (%)	100.0	100.0	100.0	100.0	100.0	85.4	100.0	100.0	100.0	79.3	100.0	100.0	97.0
LF (%)	68.2	67.7	63.6	67.8	58.9	45.7	54.3	54.9	55.1	42.0	54.4	54.2	57.2
OF (%)	99.9	99.9	93.4	100.1	100.0	85.6	100.0	100.0	100.0	78.7	100.0	100.0	96.4
EUUF (%)	29.0	29.0	27.0	29.3	36.1	47.3	38.6	38.6	38.6	50.9	38.6	38.6	36.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	14.6	0.0	0.0	0.0	20.7	0.0	0.0	3.0
XUF (%)	29.0	29.0	27.0	29.3	36.1	32.7	38.6	38.6	38.6	30.3	38.6	38.6	33.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNIT HAD AN AF OF 96.43%.

5. Historical Summary

Date of Construction Start: 01 Apr 1985 **Lifetime Generation:** 16534.8 GW(e).h
Date of First Criticality: 08 Jan 1995 **Cumulative Energy Availability Factor:** 79.4%
Date of Grid Connection: 04 Mar 1995 **Cumulative Load Factor:** 76.2%
Date of Commercial Operation: 01 Sep 1995 **Cumulative Unit Capability Factor:** 87.5%
Cumulative Energy Unavailability Factor: 20.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1995	452.7	196.0	92.0	92.0	88.2	88.2	79.3	79.3	2513	85.8
1996	1326.8	195.0	86.3	87.7	77.5	80.2	77.5	77.9	7663	87.2
1997	1093.4	195.0	66.7	78.7	63.8	73.2	64.0	72.0	6139	70.1
1998	1291.6	195.0	78.7	78.7	76.6	74.2	75.6	73.1	6932	79.1
1999	1512.3	195.0	92.4	81.8	91.1	78.1	88.5	76.6	7955	90.8
2000	1489.9	195.0	85.8	82.6	85.6	79.5	87.0	78.6	7697	87.6
2001	1685.4	195.0	96.0	84.7	95.3	82.0	98.7	81.7	8500	97.0
2002	1597.1	202.0	89.5	85.4	89.2	83.0	90.3	82.9	7940	90.6
2003	1613.2	202.0	97.3	86.8	92.3	84.1	91.2	84.0	8515	97.2
2004	1142.0	202.0	90.9	87.3	90.9	84.9	64.4	81.8	7658	87.2
2005	1255.0	202.0	92.9	87.8	72.3	83.6	70.9	80.7	7979	91.1
2006	865.8	202.0	74.6	86.7	53.1	80.9	48.9	77.9	6473	73.9
2007	1011.7	202.0	97.0	87.5	63.1	79.4	57.2	76.2	8447	96.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1995 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		262			517	
B. Refuelling without a maintenance					10	
D. Inspection, maintenance or repair without refuelling				386	56	
E. Testing of plant systems or components				10	26	
G. Major back-fitting, refurbishment or upgrading activities without refuelling						4
H. Nuclear regulatory requirements					68	
J. Grid failure or grid unavailability			49			34
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					4	
Z. Others					0	
Subtotal	0	262	49	396	681	38
Total		311			1115	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1995 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		32
13. Reactor Auxiliary Systems		11
14. Safety Systems		12
15. Reactor Cooling Systems		27
16. Steam generation systems		15
17. Safety I&C Systems (excluding reactor I&C)		41
31. Turbine and auxiliaries	104	112
32. Feedwater and Main Steam System		101
35. All other I&C Systems		4
41. Main Generator Systems		81
42. Electrical Power Supply Systems	157	64
Total	261	500

IN-5 MADRAS-1**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 205.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: 6700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 695.8 GW(e).h
Energy Availability Factor: 39.3%
Load Factor: 38.7%
Operating Factor: 66.4%
Energy Unavailability Factor: 60.7%
Total Off-line Time: 2946 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	95.2	92.8	90.6	99.6	82.9	58.8	0.0	0.0	0.0	26.0	74.2	75.6	695.8
EAF (%)	62.4	67.3	59.4	74.1	54.4	39.9	0.0	0.0	0.0	17.2	50.3	49.6	39.3
UCF (%)	93.1	100.0	87.5	100.0	100.0	84.4	0.0	0.0	0.0	35.4	100.0	100.0	66.4
LF (%)	62.4	67.3	59.4	67.6	54.4	39.9	0.0	0.0	0.0	17.0	50.3	49.6	38.7
OF (%)	93.1	100.0	87.5	100.1	100.0	84.4	0.0	0.0	0.0	35.2	100.0	100.0	66.4
EUUF (%)	37.6	32.7	40.6	25.9	45.6	60.1	100.0	100.0	100.0	82.8	49.7	50.4	60.7
PUF (%)	0.0	0.0	0.0	0.0	0.0	6.5	100.0	100.0	100.0	64.6	0.0	0.0	31.2
UCLF (%)	6.9	0.0	12.5	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	2.4
XUF (%)	30.7	32.7	28.1	25.9	45.6	44.6	0.0	0.0	0.0	18.2	49.7	50.4	27.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNIT WAS OPERATED AT LOWER POWER AS PER HQ INSTRUCTIONS. THE AVAILABILITY FACTOR DURING THE YEAR WAS 66.5%

5. Historical Summary

Date of Construction Start: 01 Jan 1971 **Lifetime Generation:** 19746.0 GW(e).h
Date of First Criticality: 02 Jul 1983 **Cumulative Energy Availability Factor:** 54.3%
Date of Grid Connection: 23 Jul 1983 **Cumulative Load Factor:** 49.3%
Date of Commercial Operation: 27 Jan 1984 **Cumulative Unit Capability Factor:** 58.3%
Cumulative Energy Unavailability Factor: 45.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	1115.8	210.0	61.0	61.0	60.5	60.5	60.5	60.5	6333	72.1
1985	822.1	215.0	50.1	55.5	49.5	54.9	43.6	52.0	4827	55.1
1986	757.1	220.0	40.7	50.5	39.3	49.6	39.3	47.7	4629	52.8
1987	1100.0	220.0	61.0	53.2	57.1	51.5	57.1	50.1	6047	69.0
1988	1258.0	220.0	65.7	55.7	65.1	54.3	65.1	53.1	6691	76.2
1989	404.6	220.0	21.0	49.8	21.0	48.7	21.0	47.7	4350	49.7
1990	863.7	215.0	47.8	49.6	45.6	48.2	45.9	47.4	7320	83.6
1991	499.9	215.0	44.8	49.0	44.4	47.7	26.5	44.9	3546	40.5
1992	1082.6	194.0	87.3	52.8	84.6	51.5	63.5	46.7	7412	84.4
1993	538.9	194.0	46.3	52.2	43.9	50.8	31.7	45.4	3836	43.8
1994	809.0	194.0	72.5	53.9	66.6	52.1	47.6	45.5	5974	68.2
1995	1085.2	194.0	98.4	57.4	86.8	54.8	63.9	47.0	7584	86.6
1996	617.1	161.0	50.6	57.0	50.6	54.5	43.7	46.8	4348	49.5
1997	893.0	150.0	74.3	57.9	68.0	55.2	68.0	47.9	6451	73.6
1998	703.4	150.0	56.1	57.8	55.5	55.2	53.5	48.2	4858	55.5
1999	1182.4	150.0	92.5	59.5	92.5	57.0	90.0	50.2	8095	92.4
2000	667.8	150.0	50.9	59.1	50.9	56.8	50.7	50.2	4468	50.9
2001	1174.5	150.0	90.1	60.4	88.5	58.1	89.4	51.9	7751	88.5
2002	895.8	155.0	69.7	60.8	67.7	58.6	66.0	52.5	5885	67.2
2003	810.6	155.0	65.3	61.0	65.3	58.8	59.7	52.8	5421	61.9
2004	0.0	155.0	0.0	58.6	0.0	56.5	0.0	50.7	0	0.0
2005	0.0	155.0	0.0	56.3	0.0	54.3	0.0	48.8	0	0.0
2006	1225.0	185.0	89.3	57.9	68.6	55.0	70.2	49.8	7823	89.3
2007	695.8	205.0	66.4	58.3	39.3	54.3	38.7	49.3	5814	66.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		210			933	7
B. Refuelling without a maintenance					7	
D. Inspection, maintenance or repair without refuelling	2735			611		
E. Testing of plant systems or components				12	23	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				382		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				366		
H. Nuclear regulatory requirements				661		
J. Grid failure or grid unavailability					8	109
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					21	
Subtotal	2735	210	0	2032	992	116
Total		2945			3140	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	93	151
12. Reactor I&C Systems	51	78
13. Reactor Auxiliary Systems		26
15. Reactor Cooling Systems		77
16. Steam generation systems		29
31. Turbine and auxiliaries	1	99
32. Feedwater and Main Steam System		39
35. All other I&C Systems		4
41. Main Generator Systems		29
42. Electrical Power Supply Systems	65	360
XX. Miscellaneous Systems		6
Total	210	898

IN-6 MADRAS-2**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 202.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: 6700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 971.1 GW(e).h
Energy Availability Factor: 54.1%
Load Factor: 54.9%
Operating Factor: 97.5%
Energy Unavailability Factor: 45.9%
Total Off-line Time: 223 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	103.4	93.5	104.3	99.9	82.8	71.1	74.1	51.0	72.5	73.1	71.0	74.4	971.1
EAF (%)	67.3	67.4	67.9	67.1	53.6	55.5	47.8	32.5	48.4	47.2	47.3	48.0	54.1
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	69.6	100.0	100.0	100.0	100.0	97.4
LF (%)	68.8	68.9	69.4	68.8	55.1	48.9	49.3	34.0	49.9	48.6	48.8	49.5	54.9
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	70.0	100.0	99.9	100.0	100.0	97.5
EUUF (%)	32.7	32.6	32.1	32.9	46.4	44.5	52.2	67.5	51.6	52.8	52.7	52.0	45.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	0.0	0.0	0.0	0.0	2.6
XUF (%)	32.7	32.6	32.1	32.9	46.4	44.5	52.2	37.1	51.6	52.8	52.7	52.0	43.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNIT OPERATED AT REDUCED POWER AS PER HQ INSTRUCTIONS. THE AVAILABILITY FACTOR WAS 97.45%.

5. Historical Summary

Date of Construction Start: 01 Oct 1972 **Lifetime Generation:** 19953.0 GW(e).h
Date of First Criticality: 12 Aug 1985 **Cumulative Energy Availability Factor:** 60.3%
Date of Grid Connection: 20 Sep 1985 **Cumulative Load Factor:** 56.2%
Date of Commercial Operation: 21 Mar 1986 **Cumulative Unit Capability Factor:** 65.7%
Cumulative Energy Unavailability Factor: 39.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	649.9	220.0	40.2	40.2	40.2	40.2	40.2	40.2	4409	60.0
1987	1066.0	220.0	62.5	52.3	55.5	48.5	55.3	48.4	6382	72.9
1988	642.0	220.0	33.2	45.6	33.2	43.1	33.2	43.1	3535	40.2
1989	438.2	220.0	22.7	39.6	22.7	37.8	22.7	37.8	4350	49.7
1990	1082.4	215.0	61.6	44.1	57.2	41.7	57.5	41.8	7726	88.2
1991	1083.0	215.0	87.2	51.4	86.6	49.3	57.5	44.4	7642	87.2
1992	665.2	194.0	55.2	51.9	54.2	50.0	39.0	43.7	4751	54.1
1993	950.3	205.0	80.2	55.3	77.1	53.3	52.9	44.8	6625	75.6
1994	1032.1	194.0	85.5	58.5	80.9	56.1	60.7	46.5	7071	80.7
1995	274.7	194.0	22.7	55.1	21.4	52.9	16.2	43.6	1871	21.4
1996	1061.9	161.0	84.7	57.3	82.2	55.0	75.1	45.9	7256	82.6
1997	958.2	150.0	75.6	58.4	72.4	56.1	72.9	47.6	6464	73.8
1998	1104.2	150.0	87.0	60.1	85.4	57.8	84.0	49.8	7478	85.4
1999	879.9	150.0	68.0	60.6	65.7	58.3	67.0	50.8	5755	65.7
2000	1273.4	150.0	95.7	62.4	94.6	60.2	96.6	53.2	8304	94.5
2001	1119.1	150.0	88.5	63.7	87.6	61.6	85.2	54.8	7671	87.6
2002	22.7	155.0	1.7	60.7	1.7	58.6	1.7	52.2	183	2.1
2003	589.1	155.0	40.0	59.7	40.0	57.7	43.4	51.8	3135	35.8
2004	1274.3	155.0	92.4	61.2	90.9	59.2	93.6	53.7	7970	90.7
2005	1475.8	155.0	92.5	62.5	91.3	60.6	108.7	56.0	8165	93.2
2006	1086.6	202.0	90.0	64.0	59.9	60.6	61.4	56.3	7894	90.1
2007	971.1	202.0	97.4	65.7	54.1	60.3	54.9	56.2	8537	97.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		222			851	6
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling					9	
D. Inspection, maintenance or repair without refuelling				611		
E. Testing of plant systems or components				54	9	
G. Major back-fitting, refurbishment or upgrading activities without refuelling				585		
H. Nuclear regulatory requirements				147	5	
J. Grid failure or grid unavailability					3	97
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					7	17
Subtotal	0	222	0	1397	892	120
Total		222			2409	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		252
12. Reactor I&C Systems		56
13. Reactor Auxiliary Systems		10
14. Safety Systems		5
15. Reactor Cooling Systems		160
16. Steam generation systems		40
17. Safety I&C Systems (excluding reactor I&C)	222	2
21. Fuel Handling and Storage Facilities		7
31. Turbine and auxiliaries		73
32. Feedwater and Main Steam System		29
35. All other I&C Systems		3
41. Main Generator Systems		52
42. Electrical Power Supply Systems		53
XX. Miscellaneous Systems		13
Total	222	755

IN-7 NARORA-1

Operator: NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)
Contractor: NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 202.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: 15000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 0.0 GW(e).h
Energy Availability Factor: 0.0%
Load Factor: 0.0%
Operating Factor: 0.0%
Energy Unavailability Factor: 100.0%
Total Off-line Time: 8760 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
UCF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUAF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
PUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNIT REMAINED UNDER LONG PLANNED SHUT DOWN DURING THE YEAR FOR CARRYING OUT EN MASS COOLANT CHANNEL REPLACEMENT FOR LIFE EXTENSION OF THE REACTOR

5. Historical Summary

Date of Construction Start: 01 Dec 1976 **Lifetime Generation:** 16312.0 GW(e).h
Date of First Criticality: 12 Mar 1989 **Cumulative Energy Availability Factor:** 56.4%
Date of Grid Connection: 29 Jul 1989 **Cumulative Load Factor:** 53.6%
Date of Commercial Operation: 01 Jan 1991 **Cumulative Unit Capability Factor:** 61.0%
Cumulative Energy Unavailability Factor: 43.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1991	449.3	210.0	42.8	42.8	42.3	42.3	24.4	24.4	4331	49.4
1992	742.7	200.0	42.8	42.8	42.3	42.3	42.3	33.1	5514	62.8
1993	339.6	200.0	19.4	35.1	19.4	34.8	19.4	28.6	2032	23.2
1994	0.0	200.0	0.0	26.5	0.0	26.2	0.0	21.6	0	0.0
1995	944.4	200.0	68.3	34.7	66.0	34.1	53.9	28.0	5740	65.5
1996	1162.3	200.0	76.9	41.7	66.2	39.4	66.2	34.3	6407	72.9
1997	1585.2	200.0	92.8	49.0	89.3	46.5	90.5	42.3	8128	92.8
1998	1485.6	200.0	90.8	54.2	83.9	51.1	84.8	47.5	7986	91.2
1999	1128.6	200.0	76.8	56.7	76.5	53.9	64.4	49.4	6703	76.5
2000	1386.3	200.0	87.2	59.7	83.4	56.8	78.9	52.3	7452	84.8
2001	1563.0	200.0	91.9	62.6	89.2	59.8	89.2	55.7	8157	93.1
2002	1574.5	202.0	89.3	64.9	88.0	62.1	89.0	58.5	7912	90.3
2003	1528.2	202.0	95.1	67.2	86.0	64.0	86.4	60.6	8254	94.2
2004	1120.6	202.0	82.5	68.3	64.8	64.0	63.2	60.8	6860	78.1
2005	1064.8	202.0	80.5	69.1	62.4	63.9	60.2	60.8	6924	79.0
2006	0.0	202.0	0.0	64.8	0.0	59.9	0.0	57.0	0	0.0
2007	0.0	202.0	0.0	61.0	0.0	56.4	0.0	53.6	0	0.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1991 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					1027	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling				115		
D. Inspection, maintenance or repair without refuelling				759		
E. Testing of plant systems or components				27	21	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				86		
G. Major back-fitting, refurbishment or upgrading activities without refuelling	8760			515	20	
H. Nuclear regulatory requirements				113	12	
J. Grid failure or grid unavailability						70
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						14
Z. Others						4
Subtotal	8760	0	0	1615	1081	88
Total	8760			2784		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1991 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		29
12. Reactor I&C Systems		69
13. Reactor Auxiliary Systems		26
15. Reactor Cooling Systems		128
16. Steam generation systems		11
17. Safety I&C Systems (excluding reactor I&C)		35
21. Fuel Handling and Storage Facilities		2
31. Turbine and auxiliaries		505
32. Feedwater and Main Steam System		23
33. Circulating Water System		2
41. Main Generator Systems		86
42. Electrical Power Supply Systems		68
XX. Miscellaneous Systems		2
Total	0	986

IN-8 NARORA-2

Operator: NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)
Contractor: NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 202.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: 15000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 496.8 GW(e).h
Energy Availability Factor: 30.0%
Load Factor: 28.1%
Operating Factor: 54.9%
Energy Unavailability Factor: 70.0%
Total Off-line Time: 3952 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	3.9	0.0	0.0	0.0	0.7	96.1	99.7	90.3	52.2	60.9	59.1	34.1	496.8
EAF (%)	4.6	2.0	2.0	1.8	2.4	68.1	68.3	62.0	37.8	42.6	42.6	23.8	30.0
UCF (%)	4.6	2.0	2.0	1.8	2.4	100.0	100.0	100.0	85.2	100.0	100.0	57.8	54.9
LF (%)	2.6	0.0	0.0	0.0	0.4	66.1	66.3	60.1	35.9	40.5	40.6	22.7	28.1
OF (%)	6.2	0.0	0.0	0.0	6.6	100.0	100.0	100.0	84.9	99.9	100.0	57.8	54.9
EUF (%)	95.4	98.0	98.0	98.2	97.6	31.9	31.7	38.0	62.2	57.4	57.4	76.2	70.0
PUF (%)	95.4	98.0	98.0	98.2	92.0	0.0	0.0	0.0	0.0	0.0	0.0	42.2	43.4
UCLF (%)	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	14.8	0.0	0.0	0.0	1.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	31.9	31.7	38.0	47.3	57.4	57.4	34.0	24.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNIT OPERATED AT REDUCED POWER AS PER HQ INSTRUCTIONS

5. Historical Summary

Date of Construction Start: 01 Nov 1977 **Lifetime Generation:** 17988.0 GW(e).h
Date of First Criticality: 24 Oct 1991 **Cumulative Energy Availability Factor:** 67.0%
Date of Grid Connection: 05 Jan 1992 **Cumulative Load Factor:** 65.9%
Date of Commercial Operation: 01 Jul 1992 **Cumulative Unit Capability Factor:** 75.8%
Cumulative Energy Unavailability Factor: 33.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1992	567.0	201.0	65.2	65.2	64.2	64.2	64.2	64.2	3553	80.5
1993	83.3	200.0	4.8	25.1	4.8	24.7	4.8	24.7	548	6.3
1994	761.7	200.0	53.1	36.3	43.5	32.2	43.5	32.2	5494	62.7
1995	1036.8	200.0	68.6	45.5	66.1	41.9	59.2	39.9	5798	66.2
1996	1227.5	200.0	79.4	53.0	69.9	48.1	69.9	46.6	6572	74.8
1997	1568.7	200.0	91.4	60.0	89.2	55.6	89.5	54.4	8121	92.7
1998	1333.2	200.0	80.1	63.1	75.1	58.6	76.1	57.7	6829	78.0
1999	1425.9	200.0	87.0	66.3	85.8	62.2	81.4	60.9	7468	85.3
2000	1340.8	200.0	80.6	68.0	79.9	64.3	76.3	62.7	7182	81.8
2001	1343.0	200.0	75.4	68.7	74.5	65.4	76.7	64.2	6897	78.7
2002	1692.8	202.0	95.7	71.3	94.8	68.2	95.7	67.2	8416	96.1
2003	1287.1	202.0	85.4	72.6	70.7	68.4	72.7	67.7	7458	85.1
2004	1364.6	202.0	96.7	74.5	78.9	69.2	76.9	68.4	8447	96.2
2005	1222.9	202.0	93.2	75.9	71.5	69.4	69.1	68.5	7907	90.3
2006	1229.4	202.0	94.6	77.2	71.9	69.6	69.5	68.5	8278	94.5
2007	496.8	202.0	54.9	75.8	30.0	67.0	28.1	65.9	4808	54.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1992 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		151			553	
B. Refuelling without a maintenance					10	
C. Inspection, maintenance or repair combined with refuelling				80		
D. Inspection, maintenance or repair without refuelling	3486			826	1	
E. Testing of plant systems or components				10	25	
F. Major back-fitting, refurbishment or upgrading activities with refuelling	314					
H. Nuclear regulatory requirements				33	28	
J. Grid failure or grid unavailability					2	106
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					6	
Subtotal	3800	151	0	949	625	106
Total		3951			1680	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1992 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		48
12. Reactor I&C Systems	42	50
13. Reactor Auxiliary Systems		5
15. Reactor Cooling Systems		62
16. Steam generation systems		3
17. Safety I&C Systems (excluding reactor I&C)		15
21. Fuel Handling and Storage Facilities		9
31. Turbine and auxiliaries		198
32. Feedwater and Main Steam System		27
41. Main Generator Systems	109	27
42. Electrical Power Supply Systems		78
Total	151	522

IN-3 RAJASTHAN-1**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** AECL (ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 90.0 MW(e)
Design Net Capacity: 207.0 MW(e)
Design Discharge Burnup: 6700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 0.0 GW(e).h
Energy Availability Factor: 0.0%
Load Factor: 0.0%
Operating Factor: 0.0%
Energy Unavailability Factor: 100.0%
Total Off-line Time: 8760 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
UCF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
PUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNIT IS UNDER LONG SHUTDOWN. TECHNO-COMMERCIAL REVIEW OF UNIT-1 FOR OPERATION IS BEING DONE.

5. Historical Summary

Date of Construction Start:	01 Aug 1965	Lifetime Generation:	10138.0 GW(e).h
Date of First Criticality:	11 Aug 1972	Cumulative Energy Availability Factor:	24.8%
Date of Grid Connection:	30 Nov 1972	Cumulative Load Factor:	21.3%
Date of Commercial Operation:	16 Dec 1973	Cumulative Unit Capability Factor:	25.7%
		Cumulative Energy Unavailability Factor:	75.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	55.0	145.0	90.6	90.6	90.6	90.6	51.0	51.0	553	74.3
1974	667.6	207.0	36.8	39.8	36.8	39.8	36.8	37.6	4690	53.5
1975	599.7	206.0	33.2	36.6	33.2	36.6	33.2	35.5	3817	43.6
1976	801.9	206.0	44.3	39.1	44.3	39.1	44.3	38.4	5728	65.2
1977	456.9	206.0	26.4	36.0	26.4	36.0	25.3	35.2	3312	37.8
1978	153.2	206.0	8.5	30.6	8.5	30.6	8.5	29.9	1537	17.5
1979	1147.3	206.0	63.6	36.0	63.6	36.0	63.6	35.5	7217	82.4
1980	953.1	206.0	52.7	38.4	52.7	38.4	52.7	37.9	6346	72.2
1981	441.5	220.0	22.9	36.4	22.9	36.4	22.9	35.9	3732	42.6
1982	38.2	206.0	2.1	32.6	2.1	32.6	2.1	32.2	496	5.7
1983	0.0	202.0	0.0	29.4	0.0	29.4	0.0	29.1	0	0.0
1984	0.0	180.0	0.0	27.1	0.0	27.1	0.0	26.8	0	0.0
1985	226.2	204.0	12.7	25.9	12.7	25.9	12.7	25.6	1914	21.8
1986	0.0	207.0	0.0	23.9	0.0	23.9	0.0	23.6	0	0.0
1987	169.9	207.0	16.6	23.4	9.4	22.9	9.4	22.6	2555	29.2
1988	376.5	207.0	25.3	23.5	20.7	22.7	20.7	22.5	5793	65.9
1989	312.8	207.0	18.7	23.2	17.3	22.4	17.3	22.2	4779	54.6
1990	364.1	192.0	22.3	23.2	19.4	22.2	21.6	22.1	5789	66.1
1991	197.5	192.0	74.8	25.9	74.8	25.0	11.7	21.6	2858	32.6
1992	57.7	84.0	12.2	25.5	12.2	24.7	7.8	21.3	1070	12.2
1993	167.6	84.0	22.8	25.5	22.8	24.6	22.8	21.3	2435	27.8
1994	2.9	84.0	2.2	25.0	2.2	24.1	0.4	20.9	195	2.2
1995	0.0	84.0	0.0	24.5	0.0	23.6	0.0	20.4	0	0.0
1996	0.0	84.0	0.0	24.0	0.0	23.2	0.0	20.0	0	0.0
1997	264.6	84.0	39.2	24.3	31.9	23.3	36.0	20.3	2792	31.9
1998	567.4	134.0	63.8	25.5	62.2	24.5	48.3	21.2	5448	62.2
1999	795.0	134.0	81.0	27.2	73.6	26.0	67.7	22.6	6443	73.6
2000	681.3	134.0	57.5	28.1	57.0	26.9	57.9	23.6	5008	57.0
2001	173.2	134.0	10.5	27.6	10.0	26.4	14.8	23.4	860	9.8
2002	0.0	90.0	0.0	27.0	0.0	25.9	0.0	22.9	0	0.0
2003	0.0	134.0	0.0	26.3	0.0	25.2	0.0	22.3	0	0.0
2004	303.8	134.0	56.8	27.1	56.8	26.1	25.8	22.4	3785	43.1
2005	0.0	90.0	0.0	26.6	0.0	25.6	0.0	22.0	0	0.0
2006	0.0	90.0	0.0	26.2	0.0	25.2	0.0	21.6	0	0.0
2007	0.0	90.0	0.0	25.7	0.0	24.8	0.0	21.3	0	0.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1973 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				141	2315	
B. Refuelling without a maintenance					35	
D. Inspection, maintenance or repair without refuelling				2553		
E. Testing of plant systems or components					6	
G. Major back-fitting, refurbishment or upgrading activities without refuelling				35	19	
H. Nuclear regulatory requirements				295		
J. Grid failure or grid unavailability					2	102
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				15		45
Z. Others	8760			250		
Subtotal	8760	0	0	3289	2377	147
Total		8760			5813	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1973 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		1145
12. Reactor I&C Systems		159
13. Reactor Auxiliary Systems		52
14. Safety Systems		30
15. Reactor Cooling Systems		396
16. Steam generation systems		5
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		435
32. Feedwater and Main Steam System		10
41. Main Generator Systems		93
42. Electrical Power Supply Systems		101
XX. Miscellaneous Systems		6
Total	0	2433

IN-4 RAJASTHAN-2

Operator: NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)

Contractor: AECL/DAE (ATOMIC ENERGY OF CANADA Ltda AND DEPARTMENT OF ATOMIC ENERGY(INDIA))

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 187.0 MW(e)
Design Net Capacity: 207.0 MW(e)
Design Discharge Burnup: 6700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 508.7 GW(e).h
Energy Availability Factor: 34.0%
Load Factor: 31.1%
Operating Factor: 42.9%
Energy Unavailability Factor: 66.0%
Total Off-line Time: 5002 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	109.5	85.6	50.3	83.0	103.5	76.8	0.0	0.0	0.0	0.0	0.0	0.0	508.7
EAF (%)	78.8	79.2	39.8	62.2	85.8	66.1	0.0	0.0	0.0	0.0	0.0	0.0	34.0
UCF (%)	100.0	100.0	51.6	79.6	100.0	82.8	0.0	0.0	0.0	0.0	0.0	0.0	42.4
LF (%)	78.7	68.1	36.2	61.6	74.4	57.1	0.0	0.0	0.0	0.0	0.0	0.0	31.1
OF (%)	100.0	100.0	55.2	81.0	100.0	83.9	0.0	0.0	0.0	0.0	0.0	0.0	42.9
EUF (%)	21.2	20.8	60.2	37.8	14.2	33.9	100.0	100.0	100.0	100.0	100.0	100.0	66.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	50.4
UCLF (%)	0.0	0.0	48.4	20.4	0.0	17.2	0.0	0.0	0.0	0.0	0.0	0.0	7.2
XUF (%)	21.2	20.8	11.8	17.3	14.2	16.7	0.0	0.0	0.0	0.0	0.0	0.0	8.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

FROM JAN TO JUNE UNIT OPERATED AT 88.21% CF AND 86.53% AF. THEN UNIT WAS SHUT DOWN FOR ENMASS FEDDER REPLACEMENT JOB SINCE 02-07-2007

5. Historical Summary

Date of Construction Start:	01 Apr 1968	Lifetime Generation:	21754.0 GW(e).h
Date of First Criticality:	08 Oct 1980	Cumulative Energy Availability Factor:	56.3%
Date of Grid Connection:	01 Nov 1980	Cumulative Load Factor:	52.8%
Date of Commercial Operation:	01 Apr 1981	Cumulative Unit Capability Factor:	59.8%
		Cumulative Energy Unavailability Factor:	43.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	551.9	220.0	38.4	38.4	38.4	38.4	38.0	38.0	5316	80.5
1982	372.9	206.0	20.7	28.6	20.7	28.6	20.7	28.4	3651	41.7
1983	957.2	202.0	54.1	37.6	54.1	37.6	54.1	37.4	6673	76.2
1984	908.7	185.0	56.1	42.1	49.1	40.4	55.9	42.0	5870	66.8
1985	959.9	184.0	73.3	48.2	71.3	46.4	59.6	45.4	6243	71.3
1986	1080.5	207.0	65.2	51.3	59.6	48.8	59.6	47.9	6743	77.0
1987	1031.1	207.0	63.2	53.1	56.9	50.0	56.9	49.3	6277	71.7
1988	1234.0	207.0	70.1	55.3	67.9	52.4	67.9	51.8	7935	90.3
1989	1084.2	207.0	60.5	55.9	59.8	53.3	59.8	52.7	6980	79.7
1990	1173.8	192.0	68.7	57.2	68.7	54.8	69.8	54.4	7151	81.6
1991	895.1	192.0	62.9	57.7	62.9	55.5	53.2	54.3	5416	61.8
1992	874.4	184.0	90.3	60.3	58.1	55.7	54.1	54.3	5297	60.3
1993	1153.5	184.0	74.2	61.3	71.1	56.8	71.6	55.5	6983	79.7
1994	519.4	184.0	39.4	59.8	32.2	55.2	32.2	53.9	3244	37.0
1995	0.0	184.0	0.0	56.0	0.0	51.6	0.0	50.5	0	0.0
1996	0.0	184.0	0.0	52.6	0.0	48.5	0.0	47.5	0	0.0
1997	0.0	184.0	0.0	49.7	0.0	45.8	0.0	44.8	0	0.0
1998	512.4	184.0	49.6	49.7	49.6	46.0	31.8	44.1	3728	42.6
1999	1162.3	184.0	87.6	51.6	83.1	47.9	72.1	45.5	7264	82.9
2000	1308.1	184.0	92.3	53.6	92.3	50.0	80.9	47.2	8104	92.3
2001	1348.3	184.0	86.9	55.1	85.5	51.7	83.6	48.9	7486	85.5
2002	1430.9	187.0	90.7	56.7	89.0	53.3	87.3	50.6	7768	88.7
2003	1391.5	187.0	92.3	58.2	84.7	54.7	84.9	52.1	8018	91.5
2004	1047.7	187.0	77.8	59.0	77.8	55.6	63.8	52.6	6806	77.5
2005	1134.8	187.0	80.5	59.9	80.0	56.6	69.3	53.2	7581	86.5
2006	1026.8	187.0	75.9	60.5	70.4	57.1	62.7	53.6	7207	82.3
2007	508.7	187.0	42.4	59.8	34.0	56.3	31.1	52.8	3758	42.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		469			790	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling				103		
D. Inspection, maintenance or repair without refuelling				1466	2	
E. Testing of plant systems or components					13	
G. Major back-fitting, refurbishment or upgrading activities without refuelling	4416					15
H. Nuclear regulatory requirements				131	2	1
J. Grid failure or grid unavailability					29	175
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				47	21	2
P. Fire		116				
Z. Others					25	2
Subtotal	4416	585	0	1747	887	195
Total		5001			2829	

7. Equipment Related Full Outages, Analysis by System

System	2007	1980 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories	469	28
12. Reactor I&C Systems		150
13. Reactor Auxiliary Systems		14
14. Safety Systems		27
15. Reactor Cooling Systems		93
16. Steam generation systems		12
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		255
32. Feedwater and Main Steam System		41
35. All other I&C Systems		15
41. Main Generator Systems		66
42. Electrical Power Supply Systems		54
XX. Miscellaneous Systems		11
Total	469	767

IN-11 RAJASTHAN-3**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 202.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: 6700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1043.0 GW(e).h
Energy Availability Factor: 61.1%
Load Factor: 58.9%
Operating Factor: 90.6%
Energy Unavailability Factor: 38.9%
Total Off-line Time: 826 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	99.6	74.9	100.0	94.4	71.2	81.4	89.9	98.1	89.8	99.6	84.9	59.1	1043.0
EAF (%)	67.3	57.2	67.3	67.3	49.8	59.3	62.3	67.3	66.7	67.4	59.0	41.9	61.1
UCF (%)	100.0	84.9	100.0	100.0	73.8	88.0	92.5	100.0	99.1	100.0	87.6	62.1	90.7
LF (%)	66.3	55.2	66.5	65.0	47.4	56.0	59.8	65.3	61.8	66.2	58.4	39.3	58.9
OF (%)	100.0	84.8	100.0	100.1	73.5	87.8	92.3	100.0	99.0	99.9	87.5	61.7	90.6
EUF (%)	32.7	42.8	32.7	32.7	50.2	40.7	37.7	32.7	33.3	32.6	41.0	58.1	38.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	15.1	0.0	0.0	26.2	12.1	7.5	0.0	0.9	0.0	12.4	37.9	9.3
XUF (%)	32.7	27.7	32.7	32.7	24.0	28.7	30.2	32.7	32.4	32.6	28.6	20.2	29.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

AF DURING THE YEAR WAS 90.57% AND CF OF 63.25%

5. Historical Summary

Date of Construction Start: 01 Feb 1990 **Lifetime Generation:** 10986.3 GW(e).h
Date of First Criticality: 24 Dec 1999 **Cumulative Energy Availability Factor:** 74.4%
Date of Grid Connection: 10 Mar 2000 **Cumulative Load Factor:** 72.4%
Date of Commercial Operation: 01 Jun 2000 **Cumulative Unit Capability Factor:** 88.2%
Cumulative Energy Unavailability Factor: 25.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2000	797.7	200.0	76.4	76.4	76.4	76.4	77.6	77.6	3986	77.6
2001	1366.1	200.0	84.9	81.7	83.6	80.9	78.0	77.8	7317	83.5
2002	1317.9	202.0	81.2	81.5	75.5	78.8	74.5	76.5	6715	76.7
2003	1442.1	202.0	95.3	85.4	84.5	80.4	81.5	77.9	8285	94.6
2004	1260.3	202.0	90.0	86.4	72.3	78.6	71.0	76.4	7711	87.8
2005	1487.9	202.0	98.3	88.5	84.6	79.7	84.1	77.8	8581	98.0
2006	985.6	202.0	83.8	87.8	57.8	76.4	55.7	74.4	7323	83.6
2007	1043.0	202.0	90.7	88.2	61.1	74.4	58.9	72.4	7934	90.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2000 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		825			518	
D. Inspection, maintenance or repair without refuelling				358		
E. Testing of plant systems or components					61	
J. Grid failure or grid unavailability						78
L. Human factor related					15	
Subtotal	0	825	0	358	594	78
Total		825			1030	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2000 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	43	140
13. Reactor Auxiliary Systems		62
15. Reactor Cooling Systems	102	33
16. Steam generation systems		51
31. Turbine and auxiliaries	43	76
32. Feedwater and Main Steam System	304	59
41. Main Generator Systems		39
42. Electrical Power Supply Systems	276	28
XX. Miscellaneous Systems	56	
Total	824	488

IN-12 RAJASTHAN-4**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 202.0 MW(e)
Design Net Capacity: 202.0 MW(e)
Design Discharge Burnup: 6700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 943.4 GW(e).h
Energy Availability Factor: 54.7%
Load Factor: 53.3%
Operating Factor: 81.1%
Energy Unavailability Factor: 45.3%
Total Off-line Time: 1659 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	93.1	91.7	95.4	0.0	57.9	91.7	97.3	97.0	60.0	60.4	98.0	100.9	943.4
EAF (%)	62.1	67.3	61.8	-0.1	43.0	66.3	67.3	67.3	44.3	42.2	67.3	67.3	54.7
UCF (%)	92.1	100.0	91.8	-0.1	63.6	98.4	100.0	100.0	65.6	62.4	100.0	100.0	81.2
LF (%)	61.9	67.5	63.5	0.0	38.5	63.1	64.7	64.5	41.2	40.1	67.4	67.2	53.3
OF (%)	92.1	100.0	91.7	0.0	63.3	98.3	100.0	100.0	65.3	61.9	100.0	100.0	81.1
EUUF (%)	37.9	32.7	38.2	100.1	57.0	33.7	32.7	32.7	55.7	57.8	32.7	32.7	45.3
PUF (%)	0.0	0.0	0.0	100.1	33.5	0.0	0.0	0.0	34.4	0.0	0.0	0.0	13.9
UCLF (%)	7.9	0.0	8.2	0.0	2.9	1.6	0.0	0.0	0.0	37.6	0.0	0.0	4.9
XUF (%)	30.1	32.7	30.0	0.0	20.7	32.1	32.7	32.7	21.3	20.2	32.7	32.7	26.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

RAPS#4 ACHIEVED ANNUAL AVAILABILITY FACTOR OF 81.06%. THERE WERE 4 REACTOR TRIPS AND 2 TURBINE TRIPS DURING THIS PERIOD

5. Historical Summary

Date of Construction Start: 01 Oct 1990 **Lifetime Generation:** 10239.2 GW(e).h
Date of First Criticality: 03 Nov 2000 **Cumulative Energy Availability Factor:** 74.2%
Date of Grid Connection: 17 Nov 2000 **Cumulative Load Factor:** 73.7%
Date of Commercial Operation: 23 Dec 2000 **Cumulative Unit Capability Factor:** 89.7%
Cumulative Energy Unavailability Factor: 25.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2000	54.9	200.0	54.8	54.8	54.8	54.8	36.9	36.9	410	55.1
2001	1200.8	200.0	82.0	79.9	71.0	69.7	68.5	66.1	6214	70.9
2002	1671.5	202.0	96.5	87.9	94.3	81.6	94.5	79.8	8255	94.2
2003	1318.2	202.0	87.6	87.8	74.8	79.4	74.5	78.0	7633	87.1
2004	1447.7	202.0	95.8	89.7	79.5	79.4	81.6	78.9	8329	94.8
2005	1461.9	202.0	92.8	90.3	82.3	80.0	82.6	79.6	8074	92.2
2006	1128.1	202.0	95.2	91.1	64.1	77.4	63.8	77.0	8334	95.1
2007	943.4	202.0	81.2	89.7	54.7	74.2	53.3	73.7	7101	81.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2000 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure	250	437			272	
D. Inspection, maintenance or repair without refuelling	971			153		
J. Grid failure or grid unavailability						131
Subtotal	1221	437	0	153	272	131
Total		1658			556	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2000 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		15
12. Reactor I&C Systems		50
15. Reactor Cooling Systems	311	40
16. Steam generation systems		23
21. Fuel Handling and Storage Facilities		21
31. Turbine and auxiliaries	21	12
32. Feedwater and Main Steam System		51
41. Main Generator Systems	70	10
42. Electrical Power Supply Systems	283	45
Total	685	267

IN-1 TARAPUR-1**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** GE (GENERAL ELECTRIC CO.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 150.0 MW(e)
Design Net Capacity: 200.0 MW(e)
Design Discharge Burnup: 21000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1218.3 GW(e).h
Energy Availability Factor: 92.7%
Load Factor: 92.7%
Operating Factor: 95.9%
Energy Unavailability Factor: 7.3%
Total Off-line Time: 360 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	105.5	96.1	101.5	106.9	109.7	102.0	87.8	110.6	106.7	82.2	107.1	102.3	1218.3
EAF (%)	94.6	95.3	90.9	99.0	98.3	94.4	78.7	99.1	98.8	73.7	99.2	91.7	92.7
UCF (%)	94.6	100.0	90.9	100.0	100.0	94.4	78.7	100.0	100.0	73.7	100.0	91.7	93.6
LF (%)	94.6	95.3	90.9	99.1	98.3	94.4	78.7	99.1	98.8	73.5	99.2	91.7	92.7
OF (%)	95.7	96.7	94.5	100.1	100.0	100.0	83.7	100.0	100.0	85.9	100.0	94.6	95.9
EUF (%)	5.4	4.7	9.1	1.0	1.7	5.6	21.3	0.9	1.2	26.3	0.8	8.3	7.3
PUF (%)	5.4	0.0	9.1	0.0	0.0	5.6	21.3	0.0	0.0	26.3	0.0	0.0	5.7
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.7
XUF (%)	0.0	4.7	0.0	1.0	1.7	0.0	0.0	0.9	1.2	0.0	0.8	0.0	0.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNIT GENERATION WAS 1319756 MWH(E) WHICH IS HIGHEST GENERATION SINCE COMMERCIAL OPERATION ANNUAL CAPACITY FACTOR WAS 94.16% AND AVAILABILITY FACTOR WAS 95.90%

5. Historical Summary

Date of Construction Start:	01 Oct 1964	Lifetime Generation:	33992.5 GW(e).h
Date of First Criticality:	01 Feb 1969	Cumulative Energy Availability Factor:	68.6%
Date of Grid Connection:	01 Apr 1969	Cumulative Load Factor:	56.2%
Date of Commercial Operation:	28 Oct 1969	Cumulative Unit Capability Factor:	69.3%
		Cumulative Energy Unavailability Factor:	31.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1969	0.0	210.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1970	0.0	210.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1971	0.0	210.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1972	652.4	210.0	35.4	80.1	35.4	80.1	35.4	10.9	5071	57.7
1973	757.1	210.0	41.2	70.9	41.2	70.9	41.2	18.0	5181	59.1
1974	832.6	156.0	60.5	69.4	60.5	69.4	60.9	24.4	6938	79.2
1975	926.6	200.0	53.0	66.8	53.0	66.8	52.9	28.9	5825	66.5
1976	1156.6	210.0	62.7	66.2	62.7	66.2	62.7	33.8	7617	86.7
1977	994.8	210.0	54.1	64.7	54.1	64.7	54.1	36.4	6675	76.2
1978	941.0	210.0	51.2	63.1	51.2	63.1	51.2	38.0	6427	73.4
1979	965.9	210.0	52.5	62.1	52.5	62.1	52.5	39.5	7143	81.5
1980	893.9	210.0	67.8	62.6	67.8	62.6	48.5	40.3	5955	67.8
1981	793.8	210.0	68.4	63.1	68.4	63.1	43.2	40.5	5986	68.3
1982	1112.2	210.0	89.9	65.2	89.9	65.2	60.5	42.1	7872	89.9
1983	730.0	200.0	41.7	63.5	41.7	63.5	41.7	42.0	5396	61.6
1984	826.9	200.0	90.3	65.3	89.6	65.2	47.1	42.4	7688	87.5
1985	790.9	170.0	64.6	65.2	64.6	65.2	53.2	42.9	6194	70.7
1986	1090.2	150.0	84.6	66.1	83.0	66.0	83.0	44.7	7954	90.8
1987	193.4	150.0	14.7	63.9	14.7	63.8	14.7	43.4	1533	17.5
1988	1085.5	150.0	83.8	64.7	82.4	64.6	82.4	45.0	8010	91.2
1989	800.3	150.0	61.6	64.6	61.4	64.4	60.9	45.6	6177	70.5
1990	1045.2	150.0	80.5	65.2	80.2	65.0	79.5	46.9	7772	88.7
1991	566.9	150.0	82.4	65.8	80.4	65.6	43.1	46.7	6536	74.6
1992	762.3	150.0	58.7	65.6	57.9	65.3	57.9	47.1	5487	62.5
1993	967.7	150.0	76.9	65.9	74.4	65.6	73.6	48.0	7291	83.2
1994	280.6	150.0	22.9	64.6	21.4	64.2	21.4	47.1	2450	28.0
1995	1092.3	150.0	91.0	65.4	83.1	64.8	83.1	48.3	7893	90.1
1996	403.3	150.0	32.3	64.4	30.6	63.7	30.6	47.7	3872	44.1
1997	985.5	150.0	75.9	64.7	75.0	64.1	75.0	48.5	7347	83.9
1998	1162.6	150.0	92.8	65.5	91.6	64.9	88.5	49.7	8283	94.6
1999	852.6	150.0	67.9	65.6	67.0	64.9	64.9	50.1	6405	73.1
2000	1181.1	150.0	91.6	66.3	91.6	65.6	89.6	51.2	8337	94.9
2001	1084.2	150.0	84.3	66.8	83.6	66.1	82.5	52.0	7635	87.2
2002	1180.7	150.0	93.8	67.5	92.0	66.8	89.9	53.0	8394	95.8
2003	1100.4	150.0	86.9	67.9	85.2	67.2	83.7	53.7	7901	90.2
2004	1148.6	150.0	90.9	68.5	89.0	67.8	87.2	54.6	8111	92.3
2005	965.0	150.0	74.2	68.6	74.2	67.9	73.4	55.0	6552	74.8
2006	938.7	150.0	71.9	68.7	71.4	68.0	71.4	55.4	6652	75.9
2007	1218.3	150.0	93.6	69.3	92.7	68.6	92.7	56.2	8400	95.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		39			340	1
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling				1345	20	
D. Inspection, maintenance or repair without refuelling	193			210	0	
E. Testing of plant systems or components	104			5		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				90		
J. Grid failure or grid unavailability			22		0	49
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	2	3
Subtotal	297	39	22	1650	362	53
Total		358			2065	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		3
12. Reactor I&C Systems		12
13. Reactor Auxiliary Systems		1
14. Safety Systems		2
15. Reactor Cooling Systems	39	56
16. Steam generation systems		18
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		160
32. Feedwater and Main Steam System		49
41. Main Generator Systems		0
42. Electrical Power Supply Systems		33
XX. Miscellaneous Systems		0
Total	39	335

IN-2 TARAPUR-2

Operator: NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 150.0 MW(e)
Design Net Capacity: 200.0 MW(e)
Design Discharge Burnup: 21000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1142.4 GW(e).h
Energy Availability Factor: 86.5%
Load Factor: 86.9%
Operating Factor: 89.2%
Energy Unavailability Factor: 13.5%
Total Off-line Time: 948 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	112.7	92.6	110.4	107.5	91.4	104.1	109.0	104.3	79.8	6.5	108.0	115.9	1142.4
EAF (%)	100.0	91.9	98.9	99.5	81.9	96.4	97.7	93.5	73.9	5.9	100.0	100.0	86.5
UCF (%)	100.0	100.0	100.0	99.5	81.9	96.4	97.7	93.5	73.9	5.9	100.0	100.0	87.2
LF (%)	101.0	91.9	98.9	99.7	81.9	96.4	97.7	93.5	73.9	5.8	100.0	103.8	86.9
OF (%)	100.0	94.2	100.0	100.1	89.1	100.0	100.0	99.7	76.3	11.9	100.0	100.0	89.2
EUF (%)	0.0	8.1	1.1	0.5	18.1	3.6	2.3	6.5	26.1	94.1	0.0	0.0	13.5
PUF (%)	0.0	0.0	0.0	0.5	18.1	3.6	0.0	6.5	26.1	94.1	0.0	0.0	12.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.2
XUF (%)	0.0	8.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

ANNUAL CAPACITY FACTOR WAS 88.11% AND AVAILABILITY FACTOR WAS 89.19%

5. Historical Summary

Date of Construction Start: 01 Oct 1964
Date of First Criticality: 28 Feb 1969
Date of Grid Connection: 05 May 1969
Date of Commercial Operation: 28 Oct 1969

Lifetime Generation: 34143.1 GW(e).h
Cumulative Energy Availability Factor: 67.2%
Cumulative Load Factor: 55.9%
Cumulative Unit Capability Factor: 67.9%
Cumulative Energy Unavailability Factor: 32.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1969	0.0	210.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1970	0.0	210.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1971	0.0	210.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1972	218.0	210.0	11.8	72.8	11.8	72.8	11.8	3.6	1987	22.6
1973	1249.6	210.0	67.9	71.7	67.9	71.7	67.9	18.7	7402	84.5
1974	597.0	194.0	35.2	65.2	35.0	65.1	35.1	21.7	4016	45.8
1975	925.8	200.0	52.8	63.2	52.8	63.2	52.8	26.5	5654	64.5
1976	1137.9	210.0	61.7	63.0	61.7	63.0	61.7	31.5	6534	74.4
1977	1161.5	210.0	68.2	63.7	68.2	63.6	63.1	35.4	7650	87.3
1978	1146.1	210.0	62.3	63.5	62.3	63.5	62.3	38.3	6678	76.2
1979	993.0	210.0	53.9	62.6	53.9	62.6	54.0	39.8	6216	71.0
1980	899.9	210.0	78.4	64.0	78.4	64.0	48.8	40.7	6883	78.4
1981	964.0	210.0	77.1	65.1	77.1	65.1	52.4	41.6	6748	77.0
1982	556.7	210.0	55.4	64.3	55.4	64.3	30.3	40.8	4844	55.3
1983	867.7	200.0	49.5	63.3	49.5	63.3	49.5	41.4	7519	85.8
1984	803.1	200.0	70.6	63.8	69.6	63.7	45.7	41.6	5615	63.9
1985	1070.9	170.0	83.4	64.8	83.4	64.7	72.0	43.2	8059	92.0
1986	769.5	150.0	58.9	64.5	58.6	64.5	58.6	43.8	5615	64.1
1987	1167.2	150.0	91.5	65.7	88.8	65.5	88.8	45.7	8221	93.8
1988	813.5	150.0	62.1	65.5	61.7	65.3	61.7	46.3	6077	69.2
1989	427.1	150.0	34.8	64.3	34.8	64.2	32.5	45.8	3052	34.8
1990	762.4	150.0	58.7	64.1	58.7	64.0	58.0	46.3	7827	89.3
1991	848.5	150.0	76.4	64.6	75.0	64.3	64.6	46.9	6265	71.5
1992	819.8	150.0	62.8	64.5	62.2	64.3	62.2	47.4	6076	69.2
1993	779.7	150.0	60.7	64.4	59.3	64.1	59.3	47.8	5750	65.6
1994	843.6	150.0	64.9	64.4	64.2	64.1	64.2	48.4	6722	76.7
1995	640.0	150.0	55.6	64.1	48.7	63.6	48.7	48.4	4911	56.1
1996	361.2	150.0	30.4	63.1	27.4	62.5	27.4	47.7	3203	36.5
1997	775.7	150.0	59.6	63.0	59.0	62.4	59.0	48.1	6978	79.7
1998	881.1	150.0	71.2	63.2	67.8	62.6	67.1	48.6	6522	74.5
1999	1103.5	150.0	87.6	63.9	86.4	63.2	84.0	49.6	7711	88.0
2000	1023.1	150.0	79.0	64.3	79.0	63.7	77.6	50.3	7162	81.5
2001	1197.4	150.0	93.9	65.1	93.3	64.4	91.1	51.4	8364	95.5
2002	1163.3	150.0	90.8	65.7	90.2	65.1	88.5	52.3	7978	91.1
2003	1117.1	150.0	86.1	66.3	85.9	65.6	85.0	53.2	7890	90.1
2004	1238.3	150.0	95.2	67.0	94.5	66.3	94.0	54.2	8455	96.3
2005	893.3	150.0	70.7	67.0	68.9	66.4	68.0	54.5	6359	72.6
2006	1090.9	150.0	83.9	67.4	82.7	66.8	83.0	55.1	7439	84.9
2007	1142.4	150.0	87.2	67.9	86.5	67.2	86.9	55.9	7812	89.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					558	2
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	826			1327		
D. Inspection, maintenance or repair without refuelling	80			199		
E. Testing of plant systems or components				2	4	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				61		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				31		
H. Nuclear regulatory requirements					6	
J. Grid failure or grid unavailability			39			36
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	15
Subtotal	906	0	39	1620	570	53
Total		945			2243	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		20
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems		48
14. Safety Systems		4
15. Reactor Cooling Systems		80
16. Steam generation systems		16
31. Turbine and auxiliaries		69
32. Feedwater and Main Steam System		63
41. Main Generator Systems		110
42. Electrical Power Supply Systems		119
XX. Miscellaneous Systems		12
Total	0	545

IN-23 TARAPUR-3**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 490.0 MW(e)
Design Net Capacity: 502.0 MW(e)
Design Discharge Burnup: 7000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2482.8 GW(e).h
Energy Availability Factor: 66.2%
Load Factor: 57.8%
Operating Factor: 90.9%
Energy Unavailability Factor: 33.8%
Total Off-line Time: 793 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	178.9	201.6	223.6	220.4	282.7	241.7	279.5	238.4	157.4	151.6	149.6	157.3	2482.8
EAF (%)	56.5	69.6	69.9	70.4	86.8	77.4	85.8	74.1	52.1	49.9	50.6	51.1	66.2
UCF (%)	75.6	100.0	89.2	85.8	93.6	85.7	100.0	94.7	81.0	100.0	100.0	100.0	92.1
LF (%)	49.1	61.2	61.3	62.6	77.6	68.5	76.7	65.4	44.6	41.5	42.4	43.2	57.8
OF (%)	69.0	92.1	89.2	86.0	93.5	85.7	100.0	94.8	81.0	99.9	100.0	100.0	90.9
EUUF (%)	43.5	30.4	30.1	29.6	13.2	22.6	14.2	25.9	47.9	50.1	49.4	48.9	33.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	24.4	0.0	10.8	14.2	6.4	14.3	0.0	5.3	19.0	0.0	0.0	0.0	7.9
XUF (%)	19.1	30.4	19.3	15.4	6.7	8.3	14.2	20.7	28.9	50.1	49.4	48.9	25.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE NET ELECTRICITY GENERATION WAS 2482.81 GWEH DURING THE YEAR. THE AVAILABILITY FACTOR WAS 66.2% DURING THE YEAR

5. Historical Summary

Date of Construction Start: 12 May 2000 **Lifetime Generation:** 3511.8 GW(e).h
Date of First Criticality: 21 May 2006 **Cumulative Energy Availability Factor:** 60.7%
Date of Grid Connection: 15 Jun 2006 **Cumulative Load Factor:** 55.7%
Date of Commercial Operation: 18 Aug 2006 **Cumulative Unit Capability Factor:** 84.4%
Cumulative Energy Unavailability Factor: 39.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2006	909.1	490.0	66.0	66.0	47.5	47.5	50.5	50.5	2523	68.7
2007	2482.8	490.0	92.1	84.4	66.2	60.7	57.8	55.7	7967	90.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2006 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		690			578	
J. Grid failure or grid unavailability			102			
P. Fire					4	
Subtotal	0	690	102	0	582	0
Total		792			582	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2006 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	295	93
15. Reactor Cooling Systems		209
31. Turbine and auxiliaries	136	272
32. Feedwater and Main Steam System	101	1
41. Main Generator Systems	157	2
Total	689	577

IN-24 TARAPUR-4**Operator:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**Contractor:** NPCIL (NUCLEAR POWER CORPORATION OF INDIA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 490.0 MW(e)
Design Net Capacity: 502.0 MW(e)
Design Discharge Burnup: 7000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2033.0 GW(e).h
Energy Availability Factor: 54.4%
Load Factor: 47.4%
Operating Factor: 77.6%
Energy Unavailability Factor: 45.6%
Total Off-line Time: 1963 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	244.6	193.7	240.6	261.1	239.5	176.9	0.0	3.4	194.7	201.2	149.1	128.1	2033.0
EAF (%)	75.7	66.8	74.8	83.3	74.5	57.9	0.0	3.3	62.5	63.8	50.6	42.5	54.4
UCF (%)	100.0	100.0	93.8	100.0	100.0	80.0	0.0	5.2	83.9	100.0	99.9	83.5	78.5
LF (%)	67.1	58.8	66.0	74.1	65.7	50.1	0.0	0.9	55.2	55.1	42.2	35.1	47.4
OF (%)	99.6	88.1	93.8	100.1	100.0	80.0	0.0	5.1	83.9	99.9	99.9	83.5	77.6
EUF (%)	24.3	33.2	25.2	16.7	25.5	42.1	100.0	96.7	37.5	36.2	49.4	57.5	45.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	20.0	100.0	82.4	0.0	0.0	0.0	0.0	17.1
UCLF (%)	0.0	0.0	6.2	0.0	0.0	0.0	0.0	12.4	16.1	0.0	0.2	16.5	4.3
XUF (%)	24.3	33.2	19.0	16.7	25.5	22.1	0.0	1.9	21.4	36.2	49.3	40.9	24.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE AVAILABILITY FACTOR WAS 77.61% DURING THE YEAR

5. Historical Summary

Date of Construction Start: 08 Mar 2000 **Lifetime Generation:** 4797.5 GW(e).h
Date of First Criticality: 06 Mar 2005 **Cumulative Energy Availability Factor:** 50.6%
Date of Grid Connection: 04 Jun 2005 **Cumulative Load Factor:** 47.3%
Date of Commercial Operation: 12 Sep 2005 **Cumulative Unit Capability Factor:** 72.7%
Cumulative Energy Unavailability Factor: 49.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2005	942.8	490.0	77.4	77.4	73.8	73.8	65.7	65.7	2227	76.0
2006	1762.1	490.0	65.2	68.3	39.0	47.7	41.1	47.2	5454	62.3
2007	2033.0	490.0	78.5	72.7	54.4	50.6	47.4	47.3	6797	77.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2005 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		337			1181	
D. Inspection, maintenance or repair without refuelling	1500					
E. Testing of plant systems or components	0				165	
G. Major back-fitting, refurbishment or upgrading activities without refuelling				239		
J. Grid failure or grid unavailability			123			115
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)						138
Z. Others					18	
Subtotal	1500	337	123	239	1364	253
Total		1960			1856	

7. Equipment Related Full Outages, Analysis by System

System	2007	2005 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories	78	
12. Reactor I&C Systems		512
15. Reactor Cooling Systems	124	
21. Fuel Handling and Storage Facilities		18
31. Turbine and auxiliaries	5	25
32. Feedwater and Main Steam System		2
35. All other I&C Systems		0
41. Main Generator Systems	129	334
42. Electrical Power Supply Systems		246
XX. Miscellaneous Systems		42
Total	336	1179

JP-5 FUKUSHIMA-DAIICHI-1**Operator:** TEPCO (TOKYO ELECTRIC POWER CO.,INC.)**Contractor:** GE/GETSC (GENERAL ELECTRIC CO. / GENERAL ELECTRIC TECHNICAL SERVICES CO.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 439.0 MW(e)
Design Net Capacity: 439.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 610.8 GW(e).h
Energy Availability Factor: 15.9%
Load Factor: 15.9%
Operating Factor: 16.1%
Energy Unavailability Factor: 84.1%
Total Off-line Time: 7348 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	285.3	325.5	610.8
EAF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	90.6	100.0	15.9
UCF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	90.6	100.0	15.9
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.2	99.7	15.9
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.8	100.0	16.1
EUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	9.4	0.0	84.1
PUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	9.4	0.0	84.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	25 Jul 1967	Lifetime Generation:	73855.0 GW(e).h
Date of First Criticality:	10 Oct 1970	Cumulative Energy Availability Factor:	52.9%
Date of Grid Connection:	17 Nov 1970	Cumulative Load Factor:	52.2%
Date of Commercial Operation:	26 Mar 1971	Cumulative Unit Capability Factor:	52.9%
		Cumulative Energy Unavailability Factor:	47.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1971	1941.0	460.0	61.5	61.5	61.5	61.5	57.5	57.5	4738	64.5
1972	2589.1	460.0	66.4	64.2	66.4	64.2	64.1	61.1	5878	66.9
1973	2216.8	460.0	58.9	62.3	58.9	62.3	55.0	58.9	5469	62.4
1974	1629.7	439.0	47.0	58.5	47.0	58.5	42.4	54.8	4934	56.3
1975	0.0	439.0	0.0	46.7	0.0	46.7	0.0	43.8	5	0.1
1976	1563.9	439.0	40.5	45.7	40.5	45.7	40.6	43.2	4548	51.8
1977	0.0	439.0	0.0	39.1	0.0	39.1	0.0	37.0	0	0.0
1978	1497.6	439.0	38.9	39.1	38.9	39.1	38.9	37.3	4461	50.9
1979	2504.4	439.0	65.1	42.0	65.1	42.0	65.1	40.4	6626	75.6
1980	1249.5	439.0	32.4	41.1	32.4	41.1	32.4	39.6	3323	37.8
1981	1084.8	439.0	28.1	39.9	28.1	39.9	28.2	38.5	2915	33.3
1982	2355.0	439.0	61.0	41.6	61.0	41.6	61.2	40.4	5741	65.5
1983	3019.5	439.0	78.5	44.5	78.5	44.5	78.5	43.4	7384	84.3
1984	2669.8	439.0	69.5	46.3	69.5	46.3	69.2	45.2	6222	70.8
1985	1699.3	439.0	44.4	46.2	44.4	46.2	44.2	45.2	4005	45.7
1986	2524.7	439.0	66.1	47.4	66.1	47.4	65.7	46.4	5836	66.6
1987	3308.9	439.0	87.8	49.8	87.3	49.7	86.0	48.8	7727	88.2
1988	2794.5	439.0	72.8	51.1	72.8	51.0	72.5	50.1	6431	73.2
1989	1440.8	439.0	38.6	50.4	38.6	50.4	37.5	49.4	3457	39.5
1990	2352.4	439.0	61.4	51.0	61.4	50.9	61.2	50.0	5487	62.6
1991	1280.0	439.0	33.4	50.1	33.4	50.1	33.3	49.2	2985	34.1
1992	1794.1	439.0	46.9	50.0	46.9	49.9	46.5	49.1	4166	47.4
1993	2500.7	439.0	65.5	50.7	65.4	50.6	65.0	49.8	5811	66.3
1994	3337.5	439.0	87.2	52.2	87.2	52.1	86.8	51.3	7667	87.5
1995	3030.8	439.0	79.3	53.3	79.3	53.2	78.8	52.4	6977	79.6
1996	2298.6	439.0	60.0	53.5	60.0	53.5	59.6	52.7	5276	60.1
1997	3258.9	439.0	85.0	54.7	85.0	54.7	84.7	53.9	7445	85.0
1998	3287.2	439.0	86.2	55.8	85.9	55.8	85.5	55.0	7581	86.5
1999	2556.9	439.0	67.0	56.2	67.0	56.2	66.5	55.4	5876	67.1
2000	3706.3	439.0	96.9	57.6	96.9	57.5	96.1	56.8	8517	97.0
2001	487.5	439.0	12.9	56.1	12.9	56.1	12.7	55.4	1131	12.9
2002	3120.2	439.0	81.6	56.9	81.6	56.9	81.1	56.2	7146	81.6
2003	0.0	439.0	0.0	55.2	0.0	55.2	0.0	54.5	0	0.0
2004	0.0	439.0	0.0	53.6	0.0	53.5	0.0	52.9	0	0.0
2005	851.3	439.0	22.6	52.7	22.6	52.7	22.1	52.0	2050	23.4
2006	3714.6	439.0	97.2	53.9	97.1	53.9	96.6	53.2	8664	98.9
2007	610.8	439.0	15.9	52.9	15.9	52.9	15.9	52.2	1412	16.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					679	
C. Inspection, maintenance or repair combined with refuelling	7355			2797		
D. Inspection, maintenance or repair without refuelling				84		
H. Nuclear regulatory requirements					9	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					40	
Z. Others					106	
Subtotal	7355	0	0	2881	834	0
Total		7355			3715	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		56
13. Reactor Auxiliary Systems		263
14. Safety Systems		5
15. Reactor Cooling Systems		8
31. Turbine and auxiliaries		9
32. Feedwater and Main Steam System		53
41. Main Generator Systems		27
42. Electrical Power Supply Systems		4
XX. Miscellaneous Systems		0
Total	0	425

JP-9 FUKUSHIMA-DAIICHI-2

Operator: TEPCO (TOKYO ELECTRIC POWER CO.,INC.)

Contractor: GE/T (GENERAL ELECTRIC CO. / TOSHIBA CORPORATION)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 760.0 MW(e)
Design Net Capacity: 760.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5879.9 GW(e).h
Energy Availability Factor: 89.4%
Load Factor: 88.3%
Operating Factor: 90.1%
Energy Unavailability Factor: 10.6%
Total Off-line Time: 869 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	31.2	505.8	560.6	542.7	560.3	541.8	560.3	560.0	542.1	372.4	542.5	560.1	5879.9
EAF (%)	8.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	67.3	100.0	100.0	89.4
UCF (%)	8.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	67.3	100.0	100.0	89.4
LF (%)	5.5	99.0	99.1	99.3	99.1	99.0	99.1	99.0	99.1	65.8	99.1	99.1	88.3
OF (%)	12.4	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	70.7	100.0	100.0	90.1
EUF (%)	91.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.7	0.0	0.0	10.6
PUF (%)	61.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
UCLF (%)	30.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.7	0.0	0.0	5.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 09 Jun 1969
Date of First Criticality: 10 May 1973
Date of Grid Connection: 24 Dec 1973
Date of Commercial Operation: 18 Jul 1974

Lifetime Generation: 132006.0 GW(e).h
Cumulative Energy Availability Factor: 60.4%
Cumulative Load Factor: 59.6%
Cumulative Unit Capability Factor: 60.5%
Cumulative Energy Unavailability Factor: 39.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	2591.9	760.0	83.0	83.0	77.2	77.2	77.2	77.2	3739	84.7
1975	622.1	760.0	11.2	35.3	11.2	33.3	9.3	32.1	982	11.2
1976	4191.4	760.0	62.8	46.3	62.8	45.1	62.8	44.4	6918	78.8
1977	49.7	760.0	0.7	33.3	0.7	32.5	0.7	31.9	96	1.1
1978	3876.3	760.0	58.2	38.8	58.2	38.2	58.2	37.8	6538	74.6
1979	2976.0	760.0	44.7	39.9	44.7	39.4	44.7	39.0	4752	54.2
1980	2889.0	760.0	43.3	40.4	43.3	40.0	43.3	39.7	4619	52.6
1981	3841.8	760.0	57.8	42.7	57.8	42.3	57.7	42.1	5794	66.1
1982	5290.2	760.0	79.4	47.0	79.4	46.7	79.5	46.5	7531	86.0
1983	3422.7	760.0	51.4	47.5	51.4	47.2	51.4	47.0	4934	56.3
1984	3698.7	760.0	56.0	48.3	56.0	48.0	55.4	47.8	5069	57.7
1985	4266.3	760.0	65.1	49.8	65.1	49.5	64.1	49.2	5952	67.9
1986	5541.1	760.0	84.3	52.5	84.3	52.3	83.2	51.9	7478	85.4
1987	3851.1	760.0	58.6	53.0	58.6	52.8	57.8	52.4	5260	60.0
1988	4101.3	760.0	62.3	53.6	62.3	53.4	61.4	53.0	5724	65.2
1989	6516.4	760.0	100.0	56.6	100.0	56.4	97.9	55.9	8760	100.0
1990	3122.8	760.0	47.6	56.1	47.6	55.9	46.9	55.3	4385	50.1
1991	3853.1	760.0	59.3	56.2	59.3	56.1	57.9	55.5	5291	60.4
1992	4568.5	760.0	69.8	57.0	69.7	56.8	68.4	56.2	6261	71.3
1993	4186.7	760.0	64.3	57.4	64.3	57.2	62.9	56.5	5659	64.6
1994	2266.0	760.0	36.0	56.3	34.7	56.1	34.0	55.4	3138	35.8
1995	6396.5	760.0	97.2	58.2	97.2	58.0	96.1	57.3	8520	97.3
1996	5192.3	760.0	78.8	59.1	78.8	58.9	77.8	58.2	6948	79.1
1997	4618.9	760.0	70.3	59.6	70.3	59.4	69.4	58.7	6197	70.7
1998	3976.2	760.0	60.9	59.7	60.6	59.5	59.7	58.7	5352	61.1
1999	3158.4	760.0	48.1	59.2	48.1	59.0	47.4	58.3	4216	48.1
2000	5167.2	760.0	78.6	59.9	78.6	59.8	77.4	59.0	6904	78.6
2001	5996.5	760.0	91.3	61.1	91.3	60.9	90.1	60.2	8036	91.7
2002	5101.0	760.0	77.8	61.7	77.8	61.5	76.6	60.7	6815	77.8
2003	1601.1	760.0	24.3	60.4	24.3	60.2	24.0	59.5	2136	24.4
2004	3671.5	760.0	55.7	60.2	55.7	60.1	55.0	59.3	4949	56.3
2005	3424.9	760.0	52.2	60.0	52.2	59.8	51.4	59.1	4735	54.1
2006	3219.5	760.0	49.2	59.7	49.1	59.5	48.4	58.8	4447	50.8
2007	5879.9	760.0	89.4	60.5	89.4	60.4	88.3	59.6	7891	90.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		454			248	
B. Refuelling without a maintenance					45	
C. Inspection, maintenance or repair combined with refuelling	432			2641		
D. Inspection, maintenance or repair without refuelling				122		
H. Nuclear regulatory requirements						14
J. Grid failure or grid unavailability						2
L. Human factor related					19	
Z. Others					53	
Subtotal	432	454	0	2763	365	16
Total		886			3144	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		105
13. Reactor Auxiliary Systems	223	
14. Safety Systems	231	
15. Reactor Cooling Systems		60
31. Turbine and auxiliaries		37
32. Feedwater and Main Steam System		39
42. Electrical Power Supply Systems		5
Total	454	246

JP-10 FUKUSHIMA-DAIICHI-3**Operator:** TEPCO (TOKYO ELECTRIC POWER CO.,INC.)**Contractor:** TOSHIBA (TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 760.0 MW(e)
Design Net Capacity: 760.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4312.8 GW(e).h
Energy Availability Factor: 65.0%
Load Factor: 64.8%
Operating Factor: 66.7%
Energy Unavailability Factor: 35.0%
Total Off-line Time: 2920 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	566.4	512.0	566.9	548.6	566.2	240.6	526.5	496.6	0.0	0.0	0.0	288.9	4312.8
EAF (%)	100.0	100.0	100.0	100.0	100.0	45.2	93.8	88.8	0.0	0.1	0.0	52.3	65.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	45.2	93.8	92.2	0.0	0.1	0.0	52.3	65.3
LF (%)	100.2	100.2	100.3	100.4	100.1	44.0	93.1	87.8	0.0	0.0	0.0	51.1	64.8
OF (%)	100.0	100.0	100.0	100.1	100.0	46.7	96.0	99.9	0.0	0.0	0.0	56.9	66.7
EUF (%)	0.0	0.0	0.0	0.0	0.0	54.8	6.2	11.2	100.0	99.9	100.0	47.7	35.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.3	100.0	99.9	100.0	47.7	29.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	54.8	6.1	6.5	0.0	0.0	0.0	0.0	5.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 28 Dec 1970
Date of First Criticality: 06 Sep 1974
Date of Grid Connection: 26 Oct 1974
Date of Commercial Operation: 27 Mar 1976

Lifetime Generation: 139102.0 GW(e).h
Cumulative Energy Availability Factor: 64.7%
Cumulative Load Factor: 64.3%
Cumulative Unit Capability Factor: 64.7%
Cumulative Energy Unavailability Factor: 35.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	4441.7	784.0	80.2	80.2	80.2	80.2	77.1	77.1	6807	92.7
1977	2171.1	760.0	32.6	54.7	32.6	54.7	32.6	53.3	3575	40.8
1978	2753.7	760.0	41.4	50.0	41.4	50.0	41.4	49.1	4368	49.9
1979	4916.3	760.0	73.9	56.2	73.9	56.2	73.8	55.5	7190	82.1
1980	4287.0	760.0	64.2	57.9	64.2	57.9	64.2	57.3	6110	69.6
1981	3722.8	760.0	55.9	57.5	55.9	57.5	55.9	57.1	5173	59.1
1982	2886.8	760.0	42.8	55.4	42.8	55.4	43.4	55.1	4037	46.1
1983	4034.0	760.0	60.6	56.0	60.6	56.0	60.6	55.8	5643	64.4
1984	4497.3	760.0	67.7	57.4	67.7	57.4	67.4	57.1	6041	68.8
1985	5798.6	760.0	87.7	60.4	87.7	60.4	87.1	60.1	7738	88.3
1986	4234.2	760.0	63.5	60.7	63.5	60.7	63.6	60.4	5621	64.2
1987	3748.8	760.0	57.4	60.4	56.7	60.4	56.3	60.1	5086	58.1
1988	5123.0	760.0	77.0	61.7	77.0	61.7	76.7	61.4	6822	77.7
1989	5706.7	760.0	86.2	63.5	86.2	63.4	85.7	63.1	7616	86.9
1990	2919.5	760.0	44.3	62.2	44.3	62.2	43.9	61.8	3985	45.5
1991	4491.0	760.0	68.0	62.6	68.0	62.5	67.5	62.2	6003	68.5
1992	6098.7	760.0	92.0	64.3	92.0	64.3	91.4	63.9	8120	92.4
1993	4204.3	760.0	63.7	64.3	63.7	64.2	63.2	63.9	5655	64.6
1994	4202.3	760.0	63.6	64.2	63.6	64.2	63.1	63.8	5647	64.5
1995	5966.5	760.0	90.2	65.5	90.2	65.5	89.6	65.1	8036	91.7
1996	4909.7	760.0	73.9	65.9	73.9	65.9	73.5	65.5	6525	74.3
1997	2516.7	760.0	38.1	64.7	38.1	64.6	37.8	64.3	3345	38.2
1998	2632.7	760.0	42.2	63.7	42.2	63.7	39.5	63.2	3622	41.3
1999	5116.1	760.0	77.4	64.3	77.3	64.2	76.8	63.8	6792	77.5
2000	5932.5	760.0	89.5	65.3	89.4	65.2	88.9	64.8	7859	89.5
2001	5637.3	760.0	85.6	66.1	85.5	66.0	84.7	65.6	7506	85.7
2002	3567.3	760.0	54.1	65.6	54.0	65.6	53.6	65.1	4747	54.2
2003	2483.6	760.0	37.6	64.6	37.6	64.6	37.3	64.1	3290	37.6
2004	3969.7	760.0	59.5	64.4	59.5	64.4	59.5	63.9	5225	59.5
2005	5103.9	760.0	76.1	64.8	76.1	64.8	76.7	64.4	6987	79.8
2006	4081.9	760.0	61.8	64.7	61.8	64.7	61.3	64.3	5509	62.9
2007	4312.8	760.0	65.3	64.7	65.0	64.7	64.8	64.3	5840	66.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		420			288	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	2516			2471		
D. Inspection, maintenance or repair without refuelling				35		
E. Testing of plant systems or components				23		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	0
Z. Others					8	
Subtotal	2516	420	0	2529	296	0
Total		2936			2825	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1976 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		164
13. Reactor Auxiliary Systems		0
15. Reactor Cooling Systems		102
31. Turbine and auxiliaries	420	17
42. Electrical Power Supply Systems		3
Total	420	286

JP-16 FUKUSHIMA-DAIICHI-4**Operator:** TEPCO (TOKYO ELECTRIC POWER CO.,INC.)**Contractor:** HITACHI (HITACHI LTD.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 760.0 MW(e)
Design Net Capacity: 760.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5050.6 GW(e).h
Energy Availability Factor: 76.2%
Load Factor: 75.9%
Operating Factor: 78.2%
Energy Unavailability Factor: 23.8%
Total Off-line Time: 1908 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	549.8	175.3	0.0	0.0	528.1	505.5	563.5	560.8	542.9	562.6	528.8	533.4	5050.6
EAF (%)	97.6	35.1	0.0	-0.1	93.7	92.7	100.0	99.6	99.6	99.9	97.1	95.0	76.2
UCF (%)	97.7	35.1	0.0	-0.1	93.8	92.7	100.0	99.7	100.0	99.9	99.7	100.0	76.9
LF (%)	97.2	34.3	0.0	0.0	93.4	92.4	99.7	99.2	99.2	99.4	96.6	94.3	75.9
OF (%)	100.0	35.7	0.0	0.0	98.4	100.0	100.0	100.0	100.0	99.9	100.0	100.0	78.2
EUF (%)	2.4	64.9	100.0	100.1	6.3	7.3	0.0	0.4	0.4	0.1	2.9	5.0	23.8
PUF (%)	0.0	64.9	100.0	56.7	3.0	0.0	0.0	0.3	0.0	0.1	0.4	0.0	18.4
UCLF (%)	2.3	0.0	0.0	43.4	3.3	7.3	0.0	0.0	0.0	0.0	0.0	0.0	4.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	2.5	5.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 12 Feb 1973
Date of First Criticality: 28 Jan 1978
Date of Grid Connection: 24 Feb 1978
Date of Commercial Operation: 12 Oct 1978

Lifetime Generation: 138391.0 GW(e).h
Cumulative Energy Availability Factor: 70.2%
Cumulative Load Factor: 69.9%
Cumulative Unit Capability Factor: 70.3%
Cumulative Energy Unavailability Factor: 29.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	1432.4	760.0	85.4	85.4	85.4	85.4	85.4	85.4	2194	99.4
1979	3917.4	760.0	58.8	64.2	58.8	64.2	58.8	64.2	6213	70.9
1980	4317.0	760.0	64.7	64.4	64.7	64.4	64.7	64.4	6326	72.0
1981	4667.5	760.0	70.1	66.1	70.1	66.1	70.1	66.2	6585	75.2
1982	5734.7	760.0	86.1	70.8	86.1	70.8	86.1	70.8	7776	88.8
1983	4818.2	760.0	72.4	71.1	72.4	71.1	72.4	71.1	6485	74.0
1984	4433.2	760.0	66.8	70.4	66.8	70.4	66.4	70.4	5924	67.4
1985	4409.0	760.0	66.6	69.9	66.6	69.9	66.2	69.8	5889	67.2
1986	4315.2	760.0	65.0	69.3	65.0	69.3	64.8	69.2	5733	65.4
1987	5964.0	760.0	89.9	71.5	89.9	71.5	89.6	71.4	7927	90.5
1988	5309.9	760.0	79.7	72.3	79.7	72.3	79.5	72.2	7066	80.4
1989	4232.6	760.0	63.8	71.6	63.8	71.6	63.6	71.4	5661	64.6
1990	4273.8	760.0	64.6	71.0	64.6	71.0	64.2	70.8	5715	65.2
1991	6483.4	760.0	98.0	73.0	98.0	73.0	97.4	72.8	8630	98.5
1992	4082.7	760.0	61.4	72.2	61.4	72.2	61.2	72.0	5475	62.3
1993	4206.6	760.0	63.5	71.6	63.4	71.6	63.2	71.4	5597	63.9
1994	6323.3	760.0	95.3	73.1	95.3	73.1	95.0	72.9	8416	96.1
1995	5485.7	760.0	82.8	73.7	82.7	73.7	82.4	73.4	7339	83.8
1996	4949.9	760.0	74.4	73.7	74.4	73.7	74.1	73.5	6545	74.5
1997	4556.8	760.0	68.6	73.4	68.6	73.4	68.4	73.2	6038	68.9
1998	5441.4	760.0	82.0	73.9	82.0	73.9	81.7	73.6	7216	82.4
1999	5890.5	760.0	88.8	74.6	88.8	74.6	88.5	74.3	7826	89.3
2000	4415.9	760.0	66.5	74.2	66.5	74.2	66.1	74.0	5856	66.7
2001	5858.5	760.0	88.7	74.8	88.4	74.8	88.0	74.6	7772	88.7
2002	4687.7	760.0	70.9	74.7	70.9	74.6	70.4	74.4	6191	70.7
2003	0.0	760.0	0.0	71.7	0.0	71.7	0.0	71.5	0	0.0
2004	4729.0	760.0	71.2	71.7	71.2	71.7	70.8	71.4	6262	71.3
2005	1515.6	760.0	22.9	69.9	22.9	69.9	22.8	69.6	2188	25.0
2006	4811.4	760.0	73.1	70.0	73.0	70.0	72.3	69.7	6500	74.2
2007	5050.6	760.0	76.9	70.3	76.2	70.2	75.9	69.9	6852	78.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		339			419	
C. Inspection, maintenance or repair combined with refuelling	1590			1755		
D. Inspection, maintenance or repair without refuelling				51		
E. Testing of plant systems or components				0		
J. Grid failure or grid unavailability						0
Z. Others					93	
Subtotal	1590	339	0	1806	512	0
Total		1929			2318	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1978 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		278
12. Reactor I&C Systems		3
13. Reactor Auxiliary Systems		6
15. Reactor Cooling Systems	339	22
31. Turbine and auxiliaries		34
32. Feedwater and Main Steam System		64
41. Main Generator Systems		9
42. Electrical Power Supply Systems		0
Total	339	416

JP-17 FUKUSHIMA-DAIICHI-5**Operator:** TEPCO (TOKYO ELECTRIC POWER CO.,INC.)**Contractor:** TOSHIBA (TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 760.0 MW(e)
Design Net Capacity: 760.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5389.6 GW(e).h
Energy Availability Factor: 81.8%
Load Factor: 81.0%
Operating Factor: 82.2%
Energy Unavailability Factor: 18.2%
Total Off-line Time: 1555 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	562.3	342.0	0.0	64.7	561.5	543.2	560.0	557.4	538.1	558.6	541.8	559.8	5389.6
EAF (%)	100.0	68.1	0.0	13.8	100.0	100.0	99.8	99.6	99.4	99.7	99.8	99.8	81.8
UCF (%)	100.0	68.1	0.0	13.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	82.0
LF (%)	99.4	67.0	0.0	11.8	99.3	99.3	99.0	98.6	98.3	98.7	99.0	99.0	81.0
OF (%)	100.0	68.8	0.0	16.6	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	82.2
EUF (%)	0.0	31.9	100.0	86.2	0.0	0.0	0.2	0.4	0.6	0.3	0.2	0.2	18.2
PUF (%)	0.0	0.0	38.7	86.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4
UCLF (%)	0.0	31.9	61.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.6	0.3	0.2	0.2	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	22 May 1972	Lifetime Generation:	140891.0 GW(e).h
Date of First Criticality:	26 Aug 1977	Cumulative Energy Availability Factor:	71.4%
Date of Grid Connection:	22 Sep 1977	Cumulative Load Factor:	70.8%
Date of Commercial Operation:	18 Apr 1978	Cumulative Unit Capability Factor:	71.4%
		Cumulative Energy Unavailability Factor:	28.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	4047.9	760.0	80.7	80.7	80.7	80.7	80.7	80.7	6532	99.0
1979	3898.6	760.0	58.6	68.1	58.6	68.1	58.6	68.1	5847	66.7
1980	4282.6	760.0	64.1	66.6	64.1	66.6	64.2	66.6	6467	73.6
1981	4553.9	760.0	68.4	67.1	68.4	67.1	68.4	67.1	6616	75.5
1982	4061.3	760.0	60.7	65.8	60.7	65.8	61.0	65.8	5789	66.1
1983	5338.8	760.0	80.2	68.3	80.2	68.3	80.2	68.3	7328	83.7
1984	4691.5	760.0	70.9	68.7	70.9	68.7	70.3	68.6	6293	71.6
1985	4112.4	760.0	62.1	67.8	62.1	67.8	61.8	67.7	5547	63.3
1986	4157.4	760.0	63.2	67.3	63.2	67.3	62.4	67.1	5622	64.2
1987	3995.0	760.0	60.8	66.6	60.5	66.6	60.0	66.4	5399	61.6
1988	5952.7	760.0	90.0	68.8	90.0	68.8	89.2	68.5	7973	90.8
1989	4766.5	760.0	72.2	69.1	72.2	69.1	71.6	68.8	6401	73.1
1990	3956.5	760.0	60.2	68.4	60.2	68.4	59.4	68.0	5354	61.1
1991	6575.8	760.0	100.0	70.7	100.0	70.7	98.8	70.3	8760	100.0
1992	4841.2	760.0	73.3	70.9	73.3	70.8	72.5	70.4	6488	73.9
1993	4059.7	760.0	61.7	70.3	61.7	70.3	61.0	69.8	5448	62.2
1994	4246.2	760.0	64.6	70.0	64.6	69.9	63.8	69.5	5723	65.3
1995	5878.7	760.0	89.1	71.0	89.1	71.0	88.3	70.5	7885	90.0
1996	5666.9	760.0	85.6	71.8	85.6	71.8	84.9	71.3	7521	85.6
1997	4609.4	760.0	69.8	71.7	69.8	71.7	69.2	71.2	6139	70.1
1998	5369.9	760.0	81.7	72.2	81.5	72.2	80.7	71.7	7217	82.4
1999	6154.1	760.0	93.3	73.2	93.2	73.1	92.4	72.6	8184	93.4
2000	1647.0	760.0	24.9	71.0	24.9	71.0	24.7	70.5	2187	24.9
2001	5905.1	760.0	89.7	71.8	89.6	71.8	88.7	71.3	7869	89.8
2002	6590.5	760.0	100.0	73.0	99.8	72.9	99.0	72.4	8760	100.0
2003	2723.8	760.0	41.4	71.7	41.4	71.7	40.9	71.2	3627	41.4
2004	5471.3	760.0	82.9	72.2	82.8	72.1	82.0	71.6	7281	82.9
2005	2792.6	760.0	42.4	71.1	42.4	71.0	41.9	70.5	3781	43.2
2006	4656.9	760.0	70.7	71.1	70.6	71.0	69.9	70.5	6241	71.2
2007	5389.6	760.0	82.0	71.4	81.8	71.4	81.0	70.8	7205	82.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		672			116	
C. Inspection, maintenance or repair combined with refuelling				2071		
D. Inspection, maintenance or repair without refuelling	889			26		
E. Testing of plant systems or components				0		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	
Z. Others					53	
Subtotal	889	672	0	2097	169	0
Total		1561			2266	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1978 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		13
13. Reactor Auxiliary Systems		3
14. Safety Systems	672	41
15. Reactor Cooling Systems		7
31. Turbine and auxiliaries		19
32. Feedwater and Main Steam System		13
41. Main Generator Systems		14
42. Electrical Power Supply Systems		2
Total	672	112

JP-18 FUKUSHIMA-DAIICHI-6**Operator:** TEPCO (TOKYO ELECTRIC POWER CO.,INC.)**Contractor:** GE/T (GENERAL ELECTRIC CO. / TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
Design Net Capacity: 1067.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6833.5 GW(e).h
Energy Availability Factor: 73.0%
Load Factor: 73.1%
Operating Factor: 74.8%
Energy Unavailability Factor: 27.0%
Total Off-line Time: 2208 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	798.4	721.0	798.1	771.6	797.4	771.0	793.8	751.6	630.7	0.0	0.0	0.0	6833.5
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	99.9	95.3	83.1	0.1	0.0	0.0	73.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	99.2	0.1	0.0	0.0	74.7
LF (%)	100.6	100.6	100.5	100.6	100.4	100.4	100.0	94.7	82.1	0.0	0.0	0.0	73.1
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	74.8
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4.7	16.9	99.9	100.0	100.0	27.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.8	99.9	100.0	100.0	25.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	16.1	0.0	0.0	0.0	1.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 26 Oct 1973
Date of First Criticality: 09 Mar 1979
Date of Grid Connection: 04 May 1979
Date of Commercial Operation: 24 Oct 1979

Lifetime Generation: 185428.0 GW(e).h
Cumulative Energy Availability Factor: 70.1%
Cumulative Load Factor: 69.7%
Cumulative Unit Capability Factor: 70.2%
Cumulative Energy Unavailability Factor: 29.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	1967.8	1053.0	84.5	84.5	84.5	84.5	85.1	85.1	1906	86.3
1980	6441.1	1047.0	69.9	72.9	69.9	72.9	70.0	73.1	6289	71.6
1981	7418.6	1067.0	81.5	76.7	81.5	76.7	79.4	75.9	7756	88.5
1982	6666.5	1067.0	71.2	75.0	71.2	75.0	71.3	74.5	6577	75.1
1983	5387.8	1067.0	57.6	70.9	57.6	70.9	57.6	70.5	5308	60.6
1984	5933.2	1067.0	64.2	69.6	64.2	69.6	63.3	69.1	5708	65.0
1985	5384.8	1067.0	58.1	67.8	58.1	67.8	57.6	67.3	5196	59.3
1986	7783.5	1067.0	84.3	70.1	84.3	70.1	83.3	69.5	7390	84.4
1987	7789.2	1067.0	84.1	71.8	84.1	71.8	83.3	71.2	7406	84.5
1988	5593.1	1067.0	60.1	70.5	60.1	70.5	59.7	69.9	5385	61.3
1989	5128.4	1067.0	55.8	69.1	55.8	69.1	54.9	68.4	4956	56.6
1990	7727.1	1067.0	82.9	70.3	82.9	70.3	82.7	69.7	7394	84.4
1991	6948.7	1067.0	75.1	70.7	75.1	70.7	74.3	70.1	6627	75.7
1992	5213.6	1067.0	56.0	69.6	56.0	69.6	55.6	69.0	4993	56.8
1993	6530.9	1067.0	70.2	69.6	70.2	69.6	69.9	69.1	6168	70.4
1994	8079.4	1067.0	86.8	70.7	86.7	70.7	86.4	70.2	7679	87.7
1995	6850.8	1067.0	73.7	70.9	73.6	70.9	73.3	70.4	6517	74.4
1996	6157.8	1067.0	66.0	70.6	66.0	70.6	65.7	70.1	5804	66.1
1997	9307.7	1067.0	99.9	72.2	99.8	72.2	99.6	71.7	8760	100.0
1998	6329.0	1067.0	68.1	72.0	68.0	72.0	67.7	71.5	6026	68.8
1999	7960.5	1067.0	85.8	72.7	85.5	72.7	85.2	72.2	7523	85.9
2000	7495.6	1067.0	80.4	73.1	80.4	73.0	80.0	72.6	7074	80.5
2001	7778.9	1067.0	83.7	73.6	83.7	73.5	83.2	73.0	7417	84.7
2002	6270.9	1067.0	67.5	73.3	67.5	73.3	67.1	72.8	5912	67.5
2003	4623.9	1067.0	49.7	72.3	49.7	72.3	49.5	71.8	4338	49.5
2004	1088.8	1067.0	11.7	69.9	11.7	69.9	11.6	69.4	1028	11.7
2005	7986.5	1067.0	85.2	70.5	85.2	70.5	85.4	70.0	7503	85.7
2006	5321.8	1067.0	56.7	70.0	56.7	70.0	56.9	69.6	5004	57.1
2007	6833.5	1067.0	74.7	70.2	73.0	70.1	73.1	69.7	6552	74.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1979 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					231	
C. Inspection, maintenance or repair combined with refuelling	2216			1948		
D. Inspection, maintenance or repair without refuelling				145		
E. Testing of plant systems or components				0		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					7	
Z. Others					54	
Subtotal	2216	0	0	2093	292	0
Total		2216			2385	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1979 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		145
13. Reactor Auxiliary Systems		23
31. Turbine and auxiliaries		7
32. Feedwater and Main Steam System		43
41. Main Generator Systems		10
Total	0	228

JP-25 FUKUSHIMA-DAINI-1**Operator:** TEPCO (TOKYO ELECTRIC POWER CO.,INC.)**Contractor:** TOSHIBA (TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
Design Net Capacity: 1067.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6891.7 GW(e).h
Energy Availability Factor: 74.2%
Load Factor: 73.7%
Operating Factor: 74.7%
Energy Unavailability Factor: 25.8%
Total Off-line Time: 2213 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	794.5	716.9	793.4	769.2	794.1	766.1	787.8	784.9	563.4	0.0	0.0	121.3	6891.7
EAF (%)	100.0	100.0	100.0	100.0	100.0	99.9	99.9	99.9	75.1	0.1	0.0	17.7	74.2
UCF (%)	100.0	100.0	100.0	100.0	100.0	99.9	99.9	99.9	76.1	0.1	0.0	17.7	74.3
LF (%)	100.1	100.0	99.9	100.3	100.0	99.7	99.2	98.9	73.3	0.0	0.0	15.3	73.7
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	76.7	0.0	0.0	21.9	74.7
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	24.9	99.9	100.0	82.3	25.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	23.9	99.9	100.0	82.3	25.7
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	16 Mar 1976	Lifetime Generation:	180413.0 GW(e).h
Date of First Criticality:	17 Jun 1981	Cumulative Energy Availability Factor:	75.2%
Date of Grid Connection:	31 Jul 1981	Cumulative Load Factor:	74.4%
Date of Commercial Operation:	20 Apr 1982	Cumulative Unit Capability Factor:	75.3%
		Cumulative Energy Unavailability Factor:	24.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1982	6738.3	1067.0	95.7	95.7	95.7	95.7	95.7	95.7	6522	98.8
1983	6282.2	1067.0	67.2	79.4	67.2	79.4	67.2	79.4	6130	70.0
1984	6344.4	1067.0	68.6	75.5	68.6	75.5	67.7	75.2	6175	70.3
1985	8152.9	1067.0	88.0	78.8	88.0	78.8	87.2	78.4	7776	88.8
1986	7741.0	1067.0	83.6	79.8	83.6	79.8	82.8	79.3	7404	84.5
1987	6992.1	1067.0	75.8	79.1	75.8	79.1	74.8	78.5	6710	76.6
1988	5959.3	1067.0	64.4	76.9	64.4	76.9	63.6	76.3	5744	65.4
1989	6246.2	1067.0	67.4	75.7	67.4	75.7	66.8	75.1	6029	68.8
1990	8217.0	1067.0	88.9	77.2	88.9	77.2	87.9	76.6	7914	90.3
1991	6191.1	1067.0	67.2	76.2	67.2	76.2	66.2	75.5	5927	67.7
1992	6901.5	1067.0	75.1	76.1	74.6	76.0	73.6	75.3	6656	75.8
1993	5613.1	1067.0	60.9	74.8	60.9	74.8	60.1	74.0	5384	61.5
1994	8309.1	1067.0	90.1	76.0	90.1	76.0	88.9	75.2	7936	90.6
1995	7727.5	1067.0	83.5	76.5	83.5	76.5	82.7	75.7	7333	83.7
1996	6761.4	1067.0	73.1	76.3	73.1	76.3	72.1	75.5	6425	73.1
1997	7304.8	1067.0	79.2	76.5	79.2	76.5	78.2	75.7	6993	79.8
1998	7694.1	1067.0	83.3	76.9	83.3	76.9	82.3	76.1	7318	83.5
1999	7389.4	1067.0	80.0	77.1	80.0	77.0	79.1	76.2	7011	80.0
2000	8229.0	1067.0	89.1	77.7	89.1	77.7	87.8	76.8	7824	89.1
2001	5902.6	1067.0	64.4	77.0	64.4	77.0	63.2	76.2	5645	64.4
2002	9238.2	1067.0	100.0	78.1	99.9	78.1	98.8	77.2	8760	100.0
2003	3239.3	1067.0	34.9	76.2	34.9	76.1	34.7	75.3	3061	34.9
2004	6749.7	1067.0	73.2	76.0	72.6	76.0	72.0	75.1	6522	74.2
2005	5606.2	1067.0	60.3	75.4	60.3	75.3	60.0	74.5	5382	61.4
2006	6846.8	1067.0	73.5	75.3	73.5	75.2	73.3	74.5	6473	73.9
2007	6891.7	1067.0	74.3	75.3	74.2	75.2	73.7	74.4	6547	74.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					360	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	2230			1560		
D. Inspection, maintenance or repair without refuelling				35		
Subtotal	2230	0	0	1595	362	0
Total	2230			1957		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		100
13. Reactor Auxiliary Systems		19
15. Reactor Cooling Systems		191
31. Turbine and auxiliaries		18
35. All other I&C Systems		12
41. Main Generator Systems		2
42. Electrical Power Supply Systems		15
Total	0	357

JP-26 FUKUSHIMA-DAINI-2

Operator: TEPCO (TOKYO ELECTRIC POWER CO.,INC.)

Contractor: HITACHI (HITACHI LTD.)

1. Station Details

Type: BWR
 Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
 Design Net Capacity: 1067.0 MW(e)
 Design Discharge Burnup: 39500 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4793.1 GW(e).h
 Energy Availability Factor: 51.6%
 Load Factor: 51.3%
 Operating Factor: 52.4%
 Energy Unavailability Factor: 48.4%
 Total Off-line Time: 4167 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	794.2	714.5	776.6	107.4	0.0	0.0	0.0	0.0	495.1	787.7	324.0	793.6	4793.1
EAF (%)	100.0	99.7	98.6	14.9	0.0	0.0	0.0	0.0	65.4	99.4	43.4	100.0	51.6
UCF (%)	100.0	99.7	100.0	16.0	0.0	0.0	0.0	0.0	65.4	99.4	43.4	100.0	51.8
LF (%)	100.0	99.7	97.8	14.0	0.0	0.0	0.0	0.0	64.4	99.1	42.2	100.0	51.3
OF (%)	100.0	100.0	100.0	16.7	0.0	0.0	0.0	0.0	69.3	99.9	45.3	100.0	52.4
EUUF (%)	0.0	0.3	1.4	85.1	100.0	100.0	100.0	100.0	34.6	0.6	56.6	0.0	48.4
PUF (%)	0.0	0.3	0.0	84.0	100.0	100.0	100.0	100.0	34.6	0.6	56.6	0.0	48.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	1.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 25 May 1979 Lifetime Generation: 164943.0 GW(e).h
 Date of First Criticality: 26 Apr 1983 Cumulative Energy Availability Factor: 73.4%
 Date of Grid Connection: 23 Jun 1983 Cumulative Load Factor: 72.9%
 Date of Commercial Operation: 03 Feb 1984 Cumulative Unit Capability Factor: 73.4%
 Cumulative Energy Unavailability Factor: 26.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	8480.8	1067.0	98.9	98.9	98.9	98.9	98.9	98.9	8040	100.0
1985	6760.1	1067.0	72.9	85.3	72.9	85.3	72.3	85.0	6534	74.6
1986	7063.9	1067.0	76.2	82.2	76.2	82.2	75.6	81.8	6727	76.8
1987	6844.9	1067.0	74.3	80.2	74.3	80.2	73.2	79.6	6607	75.4
1988	7628.4	1067.0	82.1	80.6	82.1	80.6	81.4	80.0	7238	82.4
1989	8308.8	1067.0	89.4	82.1	89.4	82.1	88.9	81.5	7920	90.4
1990	6261.3	1067.0	67.3	79.9	67.3	79.9	67.0	79.4	5956	68.0
1991	6887.3	1067.0	74.3	79.2	74.3	79.2	73.7	78.7	6579	75.1
1992	8116.3	1067.0	87.1	80.1	87.1	80.1	86.6	79.6	7656	87.2
1993	6785.7	1067.0	73.2	79.4	73.2	79.4	72.6	78.9	6427	73.4
1994	7058.2	1067.0	76.0	79.1	76.0	79.1	75.5	78.5	6696	76.4
1995	6786.7	1067.0	73.1	78.6	73.1	78.6	72.6	78.0	6435	73.5
1996	9327.9	1067.0	100.0	80.3	100.0	80.3	99.5	79.7	8784	100.0
1997	7405.6	1067.0	79.8	80.2	79.8	80.2	79.2	79.7	7021	80.1
1998	7447.1	1067.0	80.2	80.2	80.2	80.2	79.7	79.7	7104	81.1
1999	8231.6	1067.0	88.7	80.8	88.6	80.8	88.1	80.2	7765	88.6
2000	8874.5	1067.0	95.2	81.6	95.2	81.6	94.7	81.1	8372	95.3
2001	6761.9	1067.0	73.1	81.1	73.1	81.1	72.3	80.6	6378	72.8
2002	4645.2	1067.0	50.2	79.5	50.2	79.5	49.7	78.9	4398	50.2
2003	0.0	1067.0	0.0	75.5	0.0	75.5	0.0	75.0	0	0.0
2004	3169.8	1067.0	33.9	73.5	33.9	73.5	33.8	73.0	2978	33.9
2005	7593.5	1067.0	81.3	73.9	81.2	73.9	81.2	73.4	7128	81.4
2006	7858.2	1067.0	84.3	74.3	84.3	74.3	84.1	73.9	7413	84.6
2007	4793.1	1067.0	51.8	73.4	51.6	73.4	51.3	72.9	4593	52.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					266	
C. Inspection, maintenance or repair combined with refuelling	3786			1638		
D. Inspection, maintenance or repair without refuelling	394			144		
Z. Others					157	
Subtotal	4180	0	0	1782	423	0
Total		4180			2205	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		125
12. Reactor I&C Systems		51
13. Reactor Auxiliary Systems		22
14. Safety Systems		7
15. Reactor Cooling Systems		60
Total	0	265

JP-35 FUKUSHIMA-DAINI-3

Operator: TEPCO (TOKYO ELECTRIC POWER CO.,INC.)

Contractor: TOSHIBA (TOSHIBA CORPORATION)

1. Station Details

Type: BWR
 Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
 Design Net Capacity: 1067.0 MW(e)
 Design Discharge Burnup: 39500 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6442.9 GW(e).h
 Energy Availability Factor: 69.8%
 Load Factor: 68.9%
 Operating Factor: 70.3%
 Energy Unavailability Factor: 30.2%
 Total Off-line Time: 2606 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	787.5	707.7	189.2	0.0	0.0	91.2	787.6	785.8	758.6	786.1	762.1	787.1	6442.9
EAF (%)	99.8	99.4	25.3	-0.1	0.0	14.2	100.0	100.0	100.0	99.9	100.0	100.0	69.8
UCF (%)	99.8	99.4	25.3	-0.1	0.0	14.2	100.0	100.0	100.0	99.9	100.0	100.0	69.8
LF (%)	99.2	98.7	23.8	0.0	0.0	11.9	99.2	99.0	98.7	98.9	99.2	99.2	68.9
OF (%)	100.0	100.0	25.8	0.0	0.0	18.1	100.0	100.0	100.0	99.9	100.0	100.0	70.3
EUUF (%)	0.2	0.6	74.7	100.1	100.0	85.8	0.0	0.0	0.0	0.1	0.0	0.0	30.2
PUF (%)	0.2	0.6	74.7	100.1	100.0	85.6	0.0	0.0	0.0	0.1	0.0	0.0	30.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 23 Mar 1981 Lifetime Generation: 137760.0 GW(e).h
 Date of First Criticality: 18 Oct 1984 Cumulative Energy Availability Factor: 65.4%
 Date of Grid Connection: 14 Dec 1984 Cumulative Load Factor: 64.5%
 Date of Commercial Operation: 21 Jun 1985 Cumulative Unit Capability Factor: 65.4%
 Cumulative Energy Unavailability Factor: 34.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	4851.3	1067.0	95.4	95.4	95.4	95.4	88.5	88.5	4707	91.6
1986	6837.4	1067.0	74.4	82.1	74.4	82.1	73.2	78.8	6559	74.9
1987	7459.9	1067.0	80.8	81.6	80.8	81.6	79.8	79.2	7104	81.1
1988	8389.1	1067.0	90.7	84.2	90.7	84.2	89.5	82.1	8126	92.5
1989	120.2	1067.0	1.3	66.1	1.3	66.1	1.3	64.5	144	1.6
1990	912.9	1067.0	9.8	56.0	9.8	56.0	9.8	54.7	1037	11.8
1991	7695.1	1067.0	83.1	60.1	83.1	60.1	82.3	58.9	7344	83.8
1992	7533.2	1067.0	81.3	62.9	81.3	62.9	80.4	61.7	7195	81.9
1993	6810.5	1067.0	73.8	64.2	73.8	64.2	72.9	63.0	6494	74.1
1994	4841.6	1067.0	52.5	63.0	52.5	63.0	51.8	61.9	4669	53.3
1995	8992.5	1067.0	97.2	66.2	97.2	66.2	96.2	65.1	8557	97.7
1996	8060.6	1067.0	87.0	68.0	87.0	68.0	86.0	66.9	7642	87.0
1997	7487.4	1067.0	81.2	69.0	81.2	69.0	80.1	68.0	7120	81.3
1998	8284.7	1067.0	89.9	70.6	89.7	70.6	88.6	69.5	7905	90.2
1999	8566.8	1067.0	92.7	72.1	92.7	72.1	91.7	71.0	8127	92.8
2000	7643.9	1067.0	82.5	72.8	82.5	72.8	81.6	71.7	7258	82.6
2001	3288.0	1067.0	35.9	70.6	35.8	70.5	35.2	69.5	3185	36.4
2002	6123.4	1067.0	66.3	70.3	66.3	70.3	65.5	69.2	5806	66.3
2003	0.0	1067.0	0.0	66.5	0.0	66.5	0.0	65.5	0	0.0
2004	6862.3	1067.0	73.7	66.9	73.7	66.9	73.2	65.9	6508	74.1
2005	359.5	1067.0	4.0	63.8	4.0	63.8	3.8	62.9	390	4.5
2006	8677.4	1067.0	93.6	65.2	93.6	65.2	92.8	64.3	8221	93.8
2007	6442.9	1067.0	69.8	65.4	69.8	65.4	68.9	64.5	6154	70.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					640	
C. Inspection, maintenance or repair combined with refuelling	2620			1934		
D. Inspection, maintenance or repair without refuelling				58		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					161	
Z. Others					36	
Subtotal	2620	0	0	1992	837	0
Total	2620			2829		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		155
12. Reactor I&C Systems		204
15. Reactor Cooling Systems		268
32. Feedwater and Main Steam System		13
Total	0	640

JP-38 FUKUSHIMA-DAINI-4

Operator: TEPCO (TOKYO ELECTRIC POWER CO.,INC.)

Contractor: HITACHI (HITACHI LTD.)

1. Station Details

Type: BWR
 Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
 Design Net Capacity: 1067.0 MW(e)
 Design Discharge Burnup: 39500 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6258.2 GW(e).h
 Energy Availability Factor: 67.1%
 Load Factor: 67.0%
 Operating Factor: 67.5%
 Energy Unavailability Factor: 32.9%
 Total Off-line Time: 2849 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	792.0	766.0	793.2	791.5	763.4	791.9	767.2	793.0	6258.2
EAF (%)	0.0	0.0	0.0	1.2	99.4	99.4	100.0	100.0	100.0	100.0	99.9	100.0	67.1
UCF (%)	0.0	0.0	0.0	1.2	99.4	99.4	100.0	100.0	100.0	100.0	99.9	100.0	67.1
LF (%)	0.0	0.0	0.0	0.0	99.8	99.7	99.9	99.7	99.4	99.6	99.9	99.9	67.0
OF (%)	0.0	0.0	0.0	4.3	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	67.5
EUUF (%)	100.0	100.0	100.0	98.8	0.6	0.6	0.0	0.0	0.0	0.0	0.1	0.0	32.9
PUF (%)	100.0	67.9	41.9	98.8	0.6	0.6	0.0	0.0	0.0	0.0	0.1	0.0	25.5
UCLF (%)	0.0	32.1	58.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 28 May 1981 Lifetime Generation: 138617.0 GW(e).h
 Date of First Criticality: 24 Oct 1986 Cumulative Energy Availability Factor: 72.3%
 Date of Grid Connection: 17 Dec 1986 Cumulative Load Factor: 71.6%
 Date of Commercial Operation: 25 Aug 1987 Cumulative Unit Capability Factor: 72.4%
 Cumulative Energy Unavailability Factor: 27.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	3642.2	1067.0	100.0	100.0	100.0	100.0	93.0	93.0	3463	94.3
1988	7010.3	1067.0	75.5	82.7	75.5	82.7	74.8	80.2	6739	76.7
1989	9137.9	1067.0	99.2	89.6	99.2	89.6	97.8	87.4	8728	99.6
1990	7051.4	1067.0	76.0	85.6	76.0	85.6	75.4	83.9	6757	77.1
1991	7278.9	1067.0	79.0	84.1	79.0	84.1	77.9	82.6	7029	80.2
1992	5901.7	1067.0	63.8	80.4	63.5	80.3	63.0	78.9	5646	64.3
1993	9049.0	1067.0	97.6	83.1	97.5	83.0	96.8	81.7	8608	98.3
1994	6735.5	1067.0	73.5	81.8	72.7	81.6	72.1	80.4	6481	74.0
1995	7782.7	1067.0	83.9	82.0	83.9	81.9	83.3	80.8	7385	84.3
1996	6842.6	1067.0	73.7	81.1	73.7	81.0	73.0	79.9	6470	73.7
1997	9275.9	1067.0	99.9	82.9	99.9	82.8	99.2	81.8	8760	100.0
1998	8075.0	1067.0	87.2	83.3	87.2	83.2	86.4	82.2	7678	87.6
1999	8136.0	1067.0	87.8	83.7	87.8	83.6	87.0	82.6	7699	87.9
2000	6685.2	1067.0	72.0	82.8	72.0	82.7	71.3	81.7	6329	72.1
2001	9250.2	1067.0	99.9	84.0	99.7	83.9	99.0	82.9	8760	100.0
2002	5986.6	1067.0	64.7	82.7	64.7	82.6	64.0	81.7	5668	64.7
2003	0.0	1067.0	0.0	77.7	0.0	77.6	0.0	76.7	0	0.0
2004	1450.0	1067.0	15.5	74.1	15.5	74.0	15.5	73.2	1360	15.5
2005	5345.9	1067.0	57.2	73.2	57.2	73.1	57.2	72.3	5048	57.6
2006	5763.7	1067.0	62.0	72.6	62.0	72.6	61.7	71.8	5482	62.6
2007	6258.2	1067.0	67.1	72.4	67.1	72.3	67.0	71.6	5911	67.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		648			486	
C. Inspection, maintenance or repair combined with refuelling	2214			1450		
D. Inspection, maintenance or repair without refuelling				96		
Z. Others					272	
Subtotal	2214	648	0	1546	758	0
Total	2862			2304		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		36
12. Reactor I&C Systems	648	
15. Reactor Cooling Systems		318
21. Fuel Handling and Storage Facilities		26
32. Feedwater and Main Steam System		93
33. Circulating Water System		1
42. Electrical Power Supply Systems		9
Total	648	483

JP-12 GENKAI-1

Operator: KYUSHU (KYUSHU ELECTRIC POWER CO.,INC.)
Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 529.0 MW(e)
Design Net Capacity: 529.0 MW(e)
Design Discharge Burnup: 55000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4299.3 GW(e).h
Energy Availability Factor: 89.8%
Load Factor: 92.8%
Operating Factor: 89.9%
Energy Unavailability Factor: 10.2%
Total Off-line Time: 887 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	408.1	368.7	408.2	394.1	407.8	394.1	405.8	403.1	390.4	406.0	313.2	0.0	4299.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	79.6	0.0	89.8
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	79.6	0.0	89.8
LF (%)	103.7	103.7	103.7	103.6	103.6	103.5	103.1	102.4	102.5	103.0	82.2	0.0	92.8
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	80.1	0.0	89.9
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.4	100.0	10.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.4	100.0	10.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	15 Sep 1971	Lifetime Generation:	111487.0 GW(e).h
Date of First Criticality:	28 Jan 1975	Cumulative Energy Availability Factor:	72.8%
Date of Grid Connection:	14 Feb 1975	Cumulative Load Factor:	73.1%
Date of Commercial Operation:	15 Oct 1975	Cumulative Unit Capability Factor:	72.8%
		Cumulative Energy Unavailability Factor:	27.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	1041.2	529.0	89.2	89.2	89.2	89.2	89.1	89.1	2208	100.0
1976	3652.7	559.0	74.4	77.2	74.4	77.2	74.4	77.2	7022	79.9
1977	3785.0	532.0	83.4	79.9	83.4	79.9	81.2	79.0	7764	88.6
1978	3415.8	529.0	73.7	78.0	73.7	78.0	73.7	77.4	6681	76.3
1979	2219.8	531.0	47.7	71.0	47.7	71.0	47.7	70.5	4390	50.1
1980	3533.0	529.0	75.6	71.9	75.6	71.9	76.0	71.5	6772	77.1
1981	2739.8	529.0	58.9	69.8	58.9	69.8	59.1	69.6	5309	60.6
1982	3744.7	529.0	80.7	71.3	80.7	71.3	80.8	71.1	7072	80.7
1983	3960.5	529.0	85.4	73.0	85.4	73.0	85.5	72.8	7678	87.6
1984	3139.7	529.0	67.5	72.4	67.5	72.4	67.6	72.3	6072	69.1
1985	3089.7	529.0	66.7	71.8	66.7	71.8	66.7	71.7	6056	69.1
1986	2867.2	529.0	61.8	71.0	61.8	71.0	61.9	70.9	5425	61.9
1987	3762.7	529.0	81.3	71.8	81.1	71.8	81.2	71.7	7285	83.2
1988	2365.6	529.0	50.9	70.2	50.9	70.2	50.9	70.1	4743	54.0
1989	2183.2	529.0	47.1	68.6	47.1	68.6	47.1	68.5	4310	49.2
1990	2725.7	529.0	58.8	68.0	58.8	68.0	58.8	67.9	5159	58.9
1991	3357.5	529.0	72.7	68.3	72.4	68.2	72.5	68.2	6542	74.7
1992	3291.7	529.0	70.8	68.4	70.7	68.4	70.8	68.3	6397	72.8
1993	2797.4	529.0	60.3	68.0	60.3	67.9	60.4	67.9	5459	62.3
1994	2530.6	529.0	54.5	67.3	54.5	67.3	54.6	67.2	4787	54.6
1995	4151.0	529.0	89.4	68.4	89.4	68.3	89.6	68.3	7842	89.5
1996	4107.8	529.0	88.3	69.3	88.3	69.3	88.4	69.2	7829	89.1
1997	3653.4	529.0	78.7	69.7	78.7	69.7	78.8	69.7	6984	79.7
1998	3703.2	529.0	79.8	70.2	79.8	70.1	79.9	70.1	7057	80.6
1999	3305.9	529.0	71.2	70.2	71.2	70.2	71.3	70.2	6362	72.6
2000	4435.5	529.0	95.3	71.2	95.3	71.2	95.5	71.2	8400	95.6
2001	2512.3	529.0	54.1	70.5	54.1	70.5	54.2	70.5	4745	54.2
2002	3822.9	529.0	81.0	70.9	81.0	70.9	82.5	71.0	7097	81.0
2003	3622.8	529.0	76.4	71.1	76.4	71.1	78.2	71.2	6692	76.4
2004	4768.4	529.0	100.0	72.1	100.0	72.1	102.6	72.3	8784	100.0
2005	3310.8	529.0	69.7	72.0	69.7	72.0	71.4	72.3	6180	70.5
2006	3722.6	529.0	78.1	72.2	78.1	72.2	80.3	72.5	6891	78.7
2007	4299.3	529.0	89.8	72.8	89.8	72.8	92.8	73.1	7873	89.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					146	
C. Inspection, maintenance or repair combined with refuelling	894			2096		
D. Inspection, maintenance or repair without refuelling				21		
Subtotal	894	0	0	2117	146	0
Total	894			2263		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		10
13. Reactor Auxiliary Systems		50
15. Reactor Cooling Systems		19
16. Steam generation systems		63
42. Electrical Power Supply Systems		2
Total	0	144

JP-27 GENKAI-2**Operator:** KYUSHU (KYUSHU ELECTRIC POWER CO.,INC.)**Contractor:** MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 529.0 MW(e)
Design Net Capacity: 529.0 MW(e)
Design Discharge Burnup: 55000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3327.3 GW(e).h
Energy Availability Factor: 69.7%
Load Factor: 71.8%
Operating Factor: 70.2%
Energy Unavailability Factor: 30.3%
Total Off-line Time: 2607 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	119.2	407.3	394.8	405.8	402.1	389.4	405.5	394.5	408.7	3327.3
EAF (%)	0.0	0.0	0.0	30.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	69.7
UCF (%)	0.0	0.0	0.0	30.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	69.7
LF (%)	0.0	0.0	0.0	31.3	103.5	103.7	103.1	102.2	102.2	102.9	103.6	103.8	71.8
OF (%)	0.0	0.0	0.0	38.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	70.2
EUF (%)	100.0	100.0	100.0	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3
PUF (%)	100.0	17.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9
UCLF (%)	0.0	82.1	100.0	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	01 Feb 1977	Lifetime Generation:	106082.0 GW(e).h
Date of First Criticality:	21 May 1980	Cumulative Energy Availability Factor:	81.1%
Date of Grid Connection:	03 Jun 1980	Cumulative Load Factor:	81.9%
Date of Commercial Operation:	30 Mar 1981	Cumulative Unit Capability Factor:	81.1%
		Cumulative Energy Unavailability Factor:	18.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	3852.3	529.0	98.8	98.8	98.8	98.8	99.2	99.2	7310	99.5
1982	3598.1	529.0	77.4	87.2	77.4	87.2	77.6	87.5	6931	79.1
1983	3671.7	529.0	79.0	84.3	79.0	84.3	79.2	84.6	7056	80.5
1984	3803.5	529.0	81.6	83.6	81.6	83.6	81.9	83.9	7359	83.8
1985	3857.5	529.0	82.9	83.4	82.9	83.4	83.2	83.7	7423	84.7
1986	4631.7	529.0	99.5	86.2	99.5	86.2	99.9	86.5	8760	100.0
1987	3874.4	529.0	83.3	85.8	83.3	85.8	83.6	86.1	7426	84.8
1988	3458.4	529.0	74.2	84.3	74.2	84.3	74.4	84.6	6630	75.5
1989	3241.4	529.0	69.8	82.6	69.8	82.6	69.9	82.9	6230	71.1
1990	4654.8	529.0	100.0	84.4	100.0	84.4	100.4	84.7	8760	100.0
1991	3732.4	529.0	80.2	84.0	80.2	84.0	80.5	84.3	7141	81.5
1992	3480.6	529.0	74.5	83.2	74.5	83.2	74.9	83.5	6638	75.6
1993	3722.3	529.0	79.9	83.0	79.9	83.0	80.3	83.3	7007	80.0
1994	4013.5	529.0	86.2	83.2	86.2	83.2	86.6	83.5	7561	86.3
1995	3784.1	529.0	81.3	83.1	81.3	83.1	81.7	83.4	7225	82.5
1996	3644.7	529.0	78.1	82.7	78.1	82.7	78.4	83.1	6991	79.6
1997	3448.3	529.0	74.1	82.2	74.1	82.2	74.4	82.6	6541	74.7
1998	3701.4	529.0	79.6	82.1	79.6	82.1	79.9	82.4	6978	79.7
1999	4347.9	529.0	93.4	82.7	93.4	82.7	93.8	83.0	8186	93.4
2000	3473.3	529.0	74.4	82.3	74.4	82.3	74.7	82.6	6541	74.5
2001	2216.4	529.0	47.7	80.6	47.7	80.6	47.8	80.9	4177	47.7
2002	4107.5	529.0	86.7	80.9	86.7	80.9	88.6	81.3	7598	86.7
2003	4490.5	529.0	93.7	81.4	93.7	81.4	96.9	82.0	8209	93.7
2004	3848.6	529.0	80.2	81.4	80.2	81.4	82.8	82.0	7052	80.3
2005	3776.2	529.0	78.7	81.3	78.7	81.3	81.5	82.0	6952	79.4
2006	4166.5	529.0	86.8	81.5	86.8	81.5	89.9	82.3	7609	86.9
2007	3327.3	529.0	69.7	81.1	69.7	81.1	71.8	81.9	6153	70.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling	864	1743		1547	25	
Subtotal	864	1743	0	1547	25	0
Total	2607			1572		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		5
15. Reactor Cooling Systems	1743	
16. Steam generation systems		19
Total	1743	24

JP-45 GENKAI-3

Operator: KYUSHU (KYUSHU ELECTRIC POWER CO.,INC.)

Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 1127.0 MW(e)
 Design Net Capacity: 1127.0 MW(e)
 Design Discharge Burnup: 43000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7988.3 GW(e).h
 Energy Availability Factor: 79.1%
 Load Factor: 80.9%
 Operating Factor: 79.8%
 Energy Unavailability Factor: 20.9%
 Total Off-line Time: 1773 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	376.6	829.8	858.0	831.1	858.4	854.3	827.5	859.3	833.0	860.2	7988.3
EAF (%)	0.0	0.0	44.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	79.1
UCF (%)	0.0	0.0	44.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	79.1
LF (%)	0.0	0.0	44.9	102.4	102.3	102.4	102.4	101.9	102.0	102.3	102.7	102.6	80.9
OF (%)	0.0	0.0	52.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	79.8
EUF (%)	100.0	100.0	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.9
PUF (%)	100.0	100.0	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Jun 1988 Lifetime Generation: 123546.0 GW(e).h
 Date of First Criticality: 28 May 1993 Cumulative Energy Availability Factor: 85.1%
 Date of Grid Connection: 15 Jun 1993 Cumulative Load Factor: 86.2%
 Date of Commercial Operation: 18 Mar 1994 Cumulative Unit Capability Factor: 85.1%
 Cumulative Energy Unavailability Factor: 14.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1994	8086.5	1127.0	97.2	97.2	97.2	97.2	97.7	97.7	7146	97.3
1995	7356.3	1127.0	74.1	84.7	74.1	84.7	74.5	85.1	6588	75.2
1996	7444.9	1127.0	74.9	81.2	74.9	81.2	75.2	81.6	6663	75.9
1997	8259.9	1127.0	83.3	81.8	83.3	81.8	83.7	82.1	7358	84.0
1998	9633.1	1127.0	97.1	84.9	97.1	84.9	97.6	85.3	8514	97.2
1999	7999.8	1127.0	80.7	84.2	80.7	84.2	81.0	84.6	7068	80.7
2000	8109.7	1127.0	81.6	83.8	81.6	83.8	81.9	84.2	7164	81.6
2001	8205.1	1127.0	82.7	83.7	82.7	83.7	83.1	84.1	7249	82.8
2002	9561.5	1127.0	96.4	85.1	96.4	85.1	96.9	85.5	8446	96.4
2003	8667.8	1127.0	85.6	85.2	85.6	85.2	87.8	85.7	7497	85.6
2004	8121.1	1127.0	79.9	84.7	79.9	84.7	82.0	85.4	7015	79.9
2005	8658.9	1127.0	85.3	84.7	85.3	84.7	87.7	85.6	7523	85.9
2006	9725.2	1127.0	95.9	85.6	95.9	85.6	98.5	86.6	8401	95.9
2007	7988.3	1127.0	79.1	85.1	79.1	85.1	80.9	86.2	6987	79.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1994 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
C. Inspection, maintenance or repair combined with refuelling	1773			1144		
Subtotal	1773	0	0	1144	0	0
Total	1773			1144		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1994 to 2007 Average Hours Lost Per Year

The reactor has not yet completed a full year of commercial operation.

JP-46 GENKAI-4

Operator: KYUSHU (KYUSHU ELECTRIC POWER CO.,INC.)

Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
 Net Reference Unit Power
 at the beginning of 2007: 1127.0 MW(e)
 Design Net Capacity: 1127.0 MW(e)
 Design Discharge Burnup: 44000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10025.3 GW(e).h
 Energy Availability Factor: 100.0%
 Load Factor: 101.5%
 Operating Factor: 100.0%
 Energy Unavailability Factor: 0.0%
 Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	851.0	768.9	850.3	826.1	853.6	825.2	851.3	848.4	821.4	851.5	825.0	852.4	10025.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	101.5	101.5	101.4	101.8	101.8	101.7	101.5	101.2	101.2	101.6	101.7	101.7	101.5
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

OPERATION WITHOUT ANY OUTAGE.

5. Historical Summary

Date of Construction Start: 15 Jul 1992 Lifetime Generation: 92482.0 GW(e).h
 Date of First Criticality: 23 Oct 1996 Cumulative Energy Availability Factor: 86.8%
 Date of Grid Connection: 12 Nov 1996 Cumulative Load Factor: 87.7%
 Date of Commercial Operation: 25 Jul 1997 Cumulative Unit Capability Factor: 86.8%
 Cumulative Energy Unavailability Factor: 13.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1997	4792.1	1127.0	100.0	100.0	100.0	100.0	96.3	96.3	4259	96.4
1998	7634.5	1127.0	76.7	84.5	76.7	84.5	77.3	83.7	6783	77.4
1999	9716.3	1127.0	97.7	89.8	97.7	89.8	98.4	89.6	8559	97.7
2000	8181.2	1127.0	82.0	87.6	82.0	87.6	82.6	87.6	7205	82.0
2001	8107.2	1127.0	81.5	86.2	81.5	86.2	82.1	86.4	7142	81.5
2002	8208.3	1127.0	82.4	85.5	82.4	85.5	83.1	85.8	7217	82.4
2003	9678.7	1127.0	96.1	87.2	96.1	87.2	98.0	87.7	8422	96.1
2004	8330.6	1127.0	82.4	86.5	82.4	86.5	84.2	87.2	7243	82.5
2005	8572.5	1127.0	85.0	86.3	85.0	86.3	86.8	87.2	7499	85.6
2006	7765.6	1127.0	77.0	85.4	77.0	85.4	78.7	86.3	6813	77.8
2007	10025.3	1127.0	100.0	86.8	100.0	86.8	101.5	87.7	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1998 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling				1157	53	
Subtotal	0	0	0	1157	53	0
Total	0			1210		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1998 to 2007 Average Hours Lost Per Year
15. Reactor Cooling Systems		22
41. Main Generator Systems		30
Total	0	52

JP-11 HAMAOKA-1

Operator: CHUBU (CHUBU ELECTRIC POWER CO.,INC.)

Contractor: TOSHIBA (TOSHIBA CORPORATION)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 515.0 MW(e)
Design Net Capacity: 516.0 MW(e)
Design Discharge Burnup: 27500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 0.0 GW(e).h
Energy Availability Factor: 0.0%
Load Factor: 0.0%
Operating Factor: 0.0%
Energy Unavailability Factor: 100.0%
Total Off-line Time: 8760 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
UCF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
PUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

EXTENDED OUTAGE THROUGHOUT THE YEAR IN ORDER TO REPLACE THE CORE SHROUD AND PLR PIPING

5. Historical Summary

Date of Construction Start:	10 Jun 1971	Lifetime Generation:	73631.0 GW(e).h
Date of First Criticality:	20 Jun 1974	Cumulative Energy Availability Factor:	49.9%
Date of Grid Connection:	13 Aug 1974	Cumulative Load Factor:	49.5%
Date of Commercial Operation:	17 Mar 1976	Cumulative Unit Capability Factor:	50.0%
		Cumulative Energy Unavailability Factor:	50.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	2050.0	515.0	54.2	54.2	54.2	54.2	54.2	54.2	4635	63.1
1977	2250.5	515.0	49.9	51.9	49.9	51.9	49.9	51.9	5194	59.3
1978	55.9	515.0	1.2	34.0	1.2	34.0	1.2	34.0	283	3.2
1979	3059.0	515.0	67.8	42.8	67.8	42.8	67.8	42.8	6980	79.7
1980	3051.9	515.0	67.5	47.9	67.5	47.9	67.5	47.9	6916	78.7
1981	2394.2	515.0	53.1	48.8	53.1	48.8	53.1	48.8	5052	57.7
1982	2997.6	515.0	66.6	51.4	66.6	51.4	66.4	51.4	6237	71.2
1983	3054.9	515.0	67.7	53.5	67.7	53.5	67.7	53.5	6236	71.2
1984	2377.5	515.0	53.6	53.5	53.6	53.5	52.6	53.4	4822	54.9
1985	4437.1	515.0	100.0	58.2	100.0	58.2	98.4	57.9	8760	100.0
1986	2919.8	515.0	65.0	58.9	65.0	58.9	64.7	58.6	5804	66.3
1987	3290.7	515.0	73.1	60.1	73.1	60.1	72.9	59.8	6560	74.9
1988	1838.7	515.0	40.7	58.6	40.7	58.6	40.6	58.3	3649	41.5
1989	1950.7	515.0	43.4	57.5	43.4	57.5	43.2	57.2	3904	44.6
1990	2040.6	515.0	49.0	56.9	49.0	56.9	45.2	56.4	4015	45.8
1991	2162.8	515.0	48.3	56.3	48.2	56.3	47.9	55.9	4319	49.3
1992	2730.1	515.0	60.7	56.6	60.7	56.6	60.3	56.1	5384	61.3
1993	2872.6	515.0	64.4	57.0	64.1	57.0	63.7	56.5	5681	64.9
1994	1642.1	515.0	36.6	56.0	36.6	55.9	36.4	55.5	3216	36.7
1995	3499.6	515.0	78.1	57.1	78.1	57.1	77.6	56.6	6892	78.7
1996	3662.3	515.0	81.4	58.2	81.4	58.2	81.0	57.8	7158	81.5
1997	4118.0	515.0	92.1	59.8	91.9	59.8	91.3	59.3	8086	92.3
1998	3609.8	515.0	80.5	60.7	80.5	60.7	80.0	60.2	7070	80.7
1999	2878.7	515.0	64.2	60.9	64.2	60.8	63.8	60.4	5630	64.3
2000	3198.0	515.0	71.3	61.3	71.2	61.2	70.7	60.8	6268	71.4
2001	3069.8	515.0	68.5	61.6	68.5	61.5	68.0	61.1	6000	68.5
2002	0.0	515.0	0.0	59.3	0.0	59.2	0.0	58.8	0	0.0
2003	0.0	515.0	0.0	57.1	0.0	57.1	0.0	56.7	0	0.0
2004	0.0	515.0	0.0	55.1	0.0	55.1	0.0	54.7	0	0.0
2005	0.0	515.0	0.0	53.3	0.0	53.3	0.0	52.9	0	0.0
2006	0.0	515.0	0.0	51.6	0.0	51.5	0.0	51.2	0	0.0
2007	0.0	515.0	0.0	50.0	0.0	49.9	0.0	49.5	0	0.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					1103	
C. Inspection, maintenance or repair combined with refuelling	8760			2642		
D. Inspection, maintenance or repair without refuelling				91		
E. Testing of plant systems or components				0		
Subtotal	8760	0	0	2733	1103	0
Total	8760			3836		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		615
12. Reactor I&C Systems		186
13. Reactor Auxiliary Systems		119
15. Reactor Cooling Systems		160
21. Fuel Handling and Storage Facilities		15
31. Turbine and auxiliaries		0
32. Feedwater and Main Steam System		5
Total	0	1100

JP-24 HAMAOKA-2

Operator: CHUBU (CHUBU ELECTRIC POWER CO.,INC.)

Contractor: TOSHIBA (TOSHIBA CORPORATION)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 806.0 MW(e)
Design Net Capacity: 814.0 MW(e)
Design Discharge Burnup: 27500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 0.0 GW(e).h
Energy Availability Factor: 0.0%
Load Factor: 0.0%
Operating Factor: 0.0%
Energy Unavailability Factor: 100.0%
Total Off-line Time: 8760 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
UCF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
PUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

EXTENDED OUTAGE THROUGHOUT THE YEAR IN ORDER TO REPLACE THE CORE SHROUD AND PLR PIPING

5. Historical Summary

Date of Construction Start:	14 Jun 1974	Lifetime Generation:	129570.0 GW(e).h
Date of First Criticality:	28 Mar 1978	Cumulative Energy Availability Factor:	61.8%
Date of Grid Connection:	04 May 1978	Cumulative Load Factor:	61.9%
Date of Commercial Operation:	29 Nov 1978	Cumulative Unit Capability Factor:	61.8%
		Cumulative Energy Unavailability Factor:	38.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	1048.6	812.0	88.0	88.0	88.0	88.0	88.0	88.0	1351	92.3
1979	4364.5	814.0	61.2	65.1	61.2	65.1	61.2	65.0	5905	67.4
1980	4709.3	814.0	65.9	65.4	65.9	65.4	65.9	65.4	6261	71.3
1981	5037.4	814.0	70.7	67.1	70.7	67.1	70.6	67.1	6527	74.5
1982	6223.6	814.0	87.3	71.9	87.3	71.9	87.3	71.9	8074	92.2
1983	4888.1	814.0	68.6	71.3	68.6	71.3	68.6	71.3	6250	71.3
1984	4693.8	815.0	66.3	70.5	66.3	70.5	65.6	70.3	5877	66.9
1985	4397.2	815.0	62.5	69.4	62.5	69.4	61.6	69.1	5553	63.4
1986	4845.5	815.0	68.1	69.2	68.1	69.2	67.9	69.0	6145	70.1
1987	7002.0	815.0	98.7	72.4	98.7	72.4	98.1	72.1	8760	100.0
1988	4015.9	815.0	56.4	70.8	56.4	70.8	56.1	70.6	5108	58.2
1989	4613.0	806.0	64.4	70.3	64.4	70.3	65.3	70.1	5864	66.9
1990	5828.1	806.0	82.2	71.2	82.2	71.2	82.5	71.1	7289	83.2
1991	5299.5	806.0	74.7	71.5	74.7	71.5	75.1	71.4	6625	75.6
1992	4319.6	806.0	60.6	70.7	60.6	70.7	61.0	70.7	5421	61.7
1993	5347.9	806.0	75.3	71.0	75.3	71.0	75.7	71.0	6657	76.0
1994	4537.8	806.0	64.1	70.6	64.1	70.6	64.3	70.6	5643	64.4
1995	6922.2	806.0	97.8	72.2	97.7	72.2	98.0	72.2	8577	97.9
1996	6152.7	806.0	86.5	73.0	86.5	73.0	86.9	73.0	7613	86.7
1997	5106.5	806.0	72.2	72.9	72.1	72.9	72.3	73.0	6350	72.5
1998	5191.8	806.0	73.4	73.0	73.2	72.9	73.5	73.0	6462	73.8
1999	5221.5	806.0	74.0	73.0	73.6	73.0	74.0	73.0	6481	74.0
2000	4972.9	806.0	70.0	72.9	69.9	72.8	70.2	72.9	6146	70.0
2001	5134.2	806.0	72.6	72.9	72.2	72.8	72.7	72.9	6362	72.6
2002	164.0	806.0	2.3	70.0	2.3	69.9	2.3	70.0	198	2.3
2003	6950.1	806.0	98.1	71.1	97.8	71.0	98.4	71.1	8617	98.4
2004	951.3	806.0	14.0	68.9	13.3	68.8	13.4	68.9	1225	13.9
2005	0.0	806.0	0.0	66.4	0.0	66.3	0.0	66.4	0	0.0
2006	0.0	806.0	0.0	64.0	0.0	63.9	0.0	64.0	0	0.0
2007	0.0	806.0	0.0	61.8	0.0	61.8	0.0	61.9	0	0.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					91	
C. Inspection, maintenance or repair combined with refuelling	8760			2400		
D. Inspection, maintenance or repair without refuelling				109		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					38	
Z. Others					217	
Subtotal	8760	0	0	2509	346	0
Total		8760			2855	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1978 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		60
32. Feedwater and Main Steam System		30
XX. Miscellaneous Systems		0
Total	0	90

JP-36 HAMAOKA-3**Operator:** CHUBU (CHUBU ELECTRIC POWER CO.,INC.)**Contractor:** TOSHIBA (TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1056.0 MW(e)
Design Net Capacity: 1056.0 MW(e)
Design Discharge Burnup: 29500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9196.5 GW(e).h
Energy Availability Factor: 99.2%
Load Factor: 99.4%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.8%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	792.8	715.8	788.1	761.7	783.7	746.9	788.5	786.0	760.1	788.0	760.9	724.3	9196.5
EAF (%)	100.0	100.0	99.8	99.8	99.5	98.5	100.0	100.0	100.0	100.0	99.9	93.0	99.2
UCF (%)	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	100.9	100.9	100.3	100.3	99.8	98.2	100.4	100.0	100.0	100.2	100.1	92.2	99.4
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
EUUF (%)	0.0	0.0	0.2	0.2	0.5	1.5	0.0	0.0	0.0	0.0	0.1	7.0	0.8
PUF (%)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.2	0.2	0.5	1.5	0.0	0.0	0.0	0.0	0.1	7.0	0.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BASE LOAD OPERATION AT RATED THERMAL POWER

5. Historical Summary

Date of Construction Start: 18 Apr 1983 **Lifetime Generation:** 149349.0 GW(e).h
Date of First Criticality: 21 Nov 1986 **Cumulative Energy Availability Factor:** 78.3%
Date of Grid Connection: 20 Jan 1987 **Cumulative Load Factor:** 77.5%
Date of Commercial Operation: 28 Aug 1987 **Cumulative Unit Capability Factor:** 78.4%
Cumulative Energy Unavailability Factor: 21.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	3622.6	1066.0	99.5	99.5	99.5	99.5	92.5	92.5	3470	94.5
1988	7066.8	1066.0	75.8	82.8	75.8	82.8	75.5	80.5	6862	78.1
1989	8542.0	1066.0	92.4	86.7	92.4	86.7	91.5	85.0	8167	93.2
1990	6601.3	1056.0	71.4	82.3	71.4	82.3	71.4	81.1	6366	72.7
1991	6763.1	1056.0	73.5	80.3	73.5	80.3	73.1	79.3	6472	73.9
1992	6585.4	1056.0	71.7	78.7	71.4	78.7	71.0	77.8	6371	72.5
1993	8768.0	1056.0	95.3	81.3	95.3	81.2	94.8	80.4	8359	95.4
1994	6490.5	1056.0	77.4	80.8	77.4	80.7	70.2	79.0	6784	77.4
1995	7725.7	1056.0	84.6	81.2	84.1	81.1	83.5	79.6	7429	84.8
1996	6891.6	1056.0	74.8	80.6	74.7	80.4	74.3	79.0	6573	74.8
1997	8109.7	1056.0	88.3	81.3	88.3	81.2	87.7	79.8	7863	89.8
1998	9200.7	1056.0	100.0	82.9	100.0	82.8	99.5	81.5	8760	100.0
1999	7618.3	1056.0	82.8	82.9	82.8	82.8	82.4	81.6	7255	82.8
2000	7706.0	1056.0	83.6	83.0	83.6	82.9	83.1	81.7	7340	83.6
2001	6476.8	1056.0	70.4	82.1	70.4	82.0	70.0	80.9	6171	70.4
2002	6350.9	1056.0	69.0	81.3	69.0	81.2	68.7	80.1	6044	69.0
2003	1486.6	1056.0	16.1	77.3	16.1	77.2	16.1	76.2	1403	16.0
2004	9342.5	1056.0	100.0	78.6	100.0	78.5	100.7	77.6	8784	100.0
2005	5793.4	1056.0	62.2	77.7	62.1	77.7	62.6	76.8	5473	62.5
2006	6396.9	1056.0	69.2	77.3	68.7	77.2	69.2	76.4	6081	69.4
2007	9196.5	1056.0	100.0	78.4	99.2	78.3	99.4	77.5	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					213	
C. Inspection, maintenance or repair combined with refuelling				1385		
D. Inspection, maintenance or repair without refuelling				33		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					5	
Z. Others					174	
Subtotal	0	0	0	1418	392	0
Total	0			1810		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		185
35. All other I&C Systems		0
Total	0	185

JP-49 HAMAOKA-4

Operator: CHUBU (CHUBU ELECTRIC POWER CO.,INC.)

Contractor: TOSHIBA (TOSHIBA CORPORATION)

1. Station Details

Type: BWR
 Net Reference Unit Power
 at the beginning of 2007: 1092.0 MW(e)
 Design Net Capacity: 1092.0 MW(e)
 Design Discharge Burnup: 39500 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7720.9 GW(e).h
 Energy Availability Factor: 80.5%
 Load Factor: 80.7%
 Operating Factor: 81.0%
 Energy Unavailability Factor: 19.5%
 Total Off-line Time: 1662 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	817.9	696.9	818.0	791.0	816.5	788.3	808.6	806.9	615.6	0.0	0.0	761.2	7720.9
EAF (%)	100.0	94.5	100.0	100.0	100.0	100.0	99.6	99.5	78.6	0.2	0.0	93.1	80.5
UCF (%)	100.0	94.5	100.0	100.0	100.0	100.0	100.0	100.0	80.1	0.2	0.0	93.1	80.6
LF (%)	100.7	95.0	100.7	100.7	100.5	100.3	99.5	99.3	78.3	0.0	0.0	93.7	80.7
OF (%)	100.0	96.6	100.0	100.1	100.0	100.0	100.0	100.0	80.7	0.0	0.0	95.2	81.0
EUUF (%)	0.0	5.5	0.0	0.0	0.0	0.0	0.4	0.5	21.4	99.8	100.0	6.9	19.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.9	99.8	49.7	2.1	14.4
UCLF (%)	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.3	4.8	5.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	1.4	0.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BASE LOAD OPERATION AT RATED THERMAL POWER

5. Historical Summary

Date of Construction Start: 13 Oct 1989 Lifetime Generation: 113720.0 GW(e).h
 Date of First Criticality: 02 Dec 1992 Cumulative Energy Availability Factor: 81.0%
 Date of Grid Connection: 27 Jan 1993 Cumulative Load Factor: 80.9%
 Date of Commercial Operation: 03 Sep 1993 Cumulative Unit Capability Factor: 81.1%
 Cumulative Energy Unavailability Factor: 19.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1993	3186.2	1092.0	99.9	99.9	99.9	99.9	99.7	99.7	2928	100.0
1994	7110.4	1092.0	74.9	81.2	74.7	81.0	74.3	80.7	6576	75.1
1995	9546.0	1092.0	100.0	89.2	100.0	89.1	99.8	88.9	8760	100.0
1996	8301.3	1092.0	86.7	88.5	86.7	88.4	86.5	88.2	7615	86.7
1997	7883.0	1092.0	83.1	87.2	82.6	87.1	82.4	86.8	7302	83.4
1998	7154.1	1092.0	74.9	84.9	74.9	84.8	74.8	84.6	6604	75.4
1999	9545.1	1092.0	99.9	87.3	99.9	87.2	99.8	87.0	8760	100.0
2000	8233.7	1092.0	86.3	87.2	86.0	87.0	85.8	86.8	7577	86.3
2001	8773.5	1092.0	91.8	87.7	91.8	87.6	91.7	87.4	8046	91.8
2002	6436.4	1092.0	67.4	85.5	67.4	85.4	67.3	85.3	5906	67.4
2003	3729.8	1092.0	39.1	81.1	39.1	81.0	39.0	80.8	3415	39.0
2004	7279.7	1092.0	75.8	80.6	75.8	80.5	75.9	80.3	6668	75.9
2005	9595.6	1092.0	100.0	82.2	100.0	82.1	100.3	82.0	8760	100.0
2006	6523.5	1092.0	68.2	81.1	68.2	81.0	68.2	80.9	6423	73.3
2007	7720.9	1092.0	80.6	81.1	80.5	81.0	80.7	80.9	7098	81.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1994 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		422			374	
C. Inspection, maintenance or repair combined with refuelling	1241			1046		
D. Inspection, maintenance or repair without refuelling				43		
Z. Others					75	
Subtotal	1241	422	0	1089	449	0
Total		1663			1538	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1994 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		374
13. Reactor Auxiliary Systems	398	
31. Turbine and auxiliaries	24	
Total	422	374

JP-60 HAMAOKA-5

Operator: CHUBU (CHUBU ELECTRIC POWER CO.,INC.)
Contractor: TOSHIBA (TOSHIBA CORPORATION)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1325.0 MW(e)
Design Net Capacity: 1325.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7652.5 GW(e).h
Energy Availability Factor: 65.9%
Load Factor: 65.9%
Operating Factor: 70.3%
Energy Unavailability Factor: 34.1%
Total Off-line Time: 2601 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	415.2	941.2	790.1	0.0	1.4	895.9	928.2	899.0	935.2	907.2	939.2	7652.5
EAF (%)	0.0	46.7	95.4	82.7	0.0	0.2	91.0	94.2	94.2	94.7	94.9	95.1	65.9
UCF (%)	0.0	46.7	95.4	82.7	0.0	0.2	91.0	94.2	94.2	94.7	95.0	95.1	65.9
LF (%)	0.0	46.6	95.5	82.9	0.0	0.1	90.9	94.2	94.2	94.7	95.1	95.3	65.9
OF (%)	0.0	53.4	100.0	87.6	0.0	1.4	100.0	100.0	100.0	99.9	100.0	100.0	70.3
EUUF (%)	100.0	53.3	4.6	17.3	100.0	99.8	9.0	5.8	5.8	5.3	5.1	4.9	34.1
PUF (%)	0.0	0.2	0.0	13.2	100.0	99.8	0.8	0.0	0.0	0.0	0.0	0.0	17.9
UCLF (%)	100.0	53.1	4.7	4.1	0.0	0.0	8.2	5.8	5.8	5.3	5.1	4.9	16.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BASE LOAD OPERATION AT RATED THERMAL POWER ALL 12TH STAGE BLADES OF THE LP-TURBINES ARE REPLACED WITH DEPRESSURIZING PLATES WHICH REDUCES ELECTRICAL OUTPUT BY ABOUT 8%

5. Historical Summary

Date of Construction Start: 12 Jul 2000 **Lifetime Generation:** 26636.0 GW(e).h
Date of First Criticality: 23 Mar 2004 **Cumulative Energy Availability Factor:** 64.8%
Date of Grid Connection: 26 Apr 2004 **Cumulative Load Factor:** 65.8%
Date of Commercial Operation: 18 Jan 2005 **Cumulative Unit Capability Factor:** 64.8%
Cumulative Energy Unavailability Factor: 35.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2005	11870.4	1325.0	100.0	100.0	100.0	100.0	102.3	102.3	8760	100.0
2006	3385.2	1325.0	28.5	64.3	28.5	64.3	29.2	65.7	2515	28.7
2007	7652.5	1325.0	65.9	64.8	65.9	64.8	65.9	65.8	6159	70.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2006 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling	1544	1057		730	2395	
Subtotal	1544	1057	0	730	2395	0
Total	2601			3125		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2006 to 2007 Average Hours Lost Per Year
31. Turbine and auxiliaries	1057	2395
Total	1057	2395

JP-58 HIGASHI DORI 1 (TOHOKU)

Operator: TOHOKU (TOHOKU ELECTRIC POWER CO.,INC)
Contractor: TOSHIBA (TOSHIBA CORPORATION)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
Design Net Capacity: 1067.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6150.8 GW(e).h
Energy Availability Factor: 66.2%
Load Factor: 65.8%
Operating Factor: 66.5%
Energy Unavailability Factor: 33.8%
Total Off-line Time: 2933 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	147.2	0.0	0.0	0.0	553.0	764.5	789.0	789.4	764.0	789.3	764.2	790.2	6150.8
EAF (%)	18.7	0.0	0.0	-0.1	70.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	66.2
UCF (%)	18.7	0.0	0.0	-0.1	70.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	66.2
LF (%)	18.5	0.0	0.0	0.0	69.7	99.5	99.4	99.4	99.4	99.3	99.5	99.5	65.8
OF (%)	19.5	0.0	0.0	0.0	73.4	100.0	100.0	100.0	100.0	99.9	100.0	100.0	66.5
EUUF (%)	81.3	100.0	100.0	100.1	29.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.8
PUF (%)	81.3	100.0	100.0	20.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.9
UCLF (%)	0.0	0.0	0.0	80.1	27.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(2007/1/6-2007/4/6)EXTENSION OF PERIODICAL INSPECTION(2007/4/7-2007/5/12)OPERATION AT FULL POWER IN BASE LOAD(2007/5/12-)

5. Historical Summary

Date of Construction Start: 07 Nov 2000 **Lifetime Generation:** 18348.0 GW(e).h
Date of First Criticality: 24 Jan 2005 **Cumulative Energy Availability Factor:** 83.7%
Date of Grid Connection: 09 Mar 2005 **Cumulative Load Factor:** 82.3%
Date of Commercial Operation: 08 Dec 2005 **Cumulative Unit Capability Factor:** 83.8%
Cumulative Energy Unavailability Factor: 16.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2005	610.5	1067.0	100.0	100.0	100.0	100.0	76.9	76.9	576	77.4
2006	9269.3	1067.0	100.0	100.0	99.7	99.8	99.2	97.4	8760	100.0
2007	6150.8	1067.0	66.2	83.8	66.2	83.7	65.8	82.3	5827	66.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2006 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
C. Inspection, maintenance or repair combined with refuelling	2159	783				
Subtotal	2159	783	0	0	0	0
Total	2942			0		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2006 to 2007 Average Hours Lost Per Year

The reactor has not yet completed a full year of commercial operation.

JP-23 IKATA-1**Operator:** SHIKOKU (SHIKOKU ELECTRIC POWER CO.,INC)**Contractor:** MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 538.0 MW(e)
Design Net Capacity: 538.0 MW(e)
Design Discharge Burnup: 51000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3919.4 GW(e).h
Energy Availability Factor: 82.5%
Load Factor: 83.2%
Operating Factor: 82.9%
Energy Unavailability Factor: 17.5%
Total Off-line Time: 1501 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	405.5	368.8	410.3	170.6	0.0	188.5	400.7	401.2	384.4	396.3	387.8	405.1	3919.4
EAF (%)	100.0	100.0	100.0	43.0	0.0	48.6	100.0	100.0	99.5	99.3	100.0	100.0	82.5
UCF (%)	100.0	100.0	100.0	43.1	0.0	48.6	100.0	100.0	100.0	100.0	100.0	100.0	82.6
LF (%)	101.3	102.0	102.5	44.1	0.0	48.7	100.1	100.2	99.2	98.9	100.1	101.2	83.2
OF (%)	100.0	100.0	100.0	43.4	0.0	51.5	100.0	100.0	100.0	99.9	100.0	100.0	82.9
EUF (%)	0.0	0.0	0.0	57.0	100.0	51.4	0.0	0.0	0.5	0.7	0.0	0.0	17.5
PUF (%)	0.0	0.0	0.0	57.0	100.0	36.2	0.0	0.0	0.0	0.0	0.0	0.0	16.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	15.2	0.0	0.0	0.0	0.0	0.0	0.0	1.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(2007.04.14-2007.06.15)

5. Historical Summary

Date of Construction Start:	15 Jun 1973	Lifetime Generation:	111466.0 GW(e).h
Date of First Criticality:	29 Jan 1977	Cumulative Energy Availability Factor:	78.0%
Date of Grid Connection:	17 Feb 1977	Cumulative Load Factor:	78.0%
Date of Commercial Operation:	30 Sep 1977	Cumulative Unit Capability Factor:	78.0%
		Cumulative Energy Unavailability Factor:	22.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	1299.7	538.0	82.5	82.5	82.5	82.5	82.5	82.5	2680	91.5
1978	3138.0	538.0	66.6	70.6	66.6	70.6	66.6	70.6	6272	71.6
1979	2564.5	538.0	54.4	63.7	54.4	63.7	54.4	63.7	4984	56.9
1980	3127.4	538.0	66.2	64.4	66.2	64.4	66.2	64.4	6006	68.4
1981	3236.8	538.0	68.7	65.4	68.7	65.4	68.7	65.4	6253	71.4
1982	3527.3	538.0	74.8	67.2	74.8	67.2	74.8	67.2	6662	76.1
1983	4667.6	538.0	99.0	72.2	99.0	72.2	99.0	72.2	8754	99.9
1984	3318.2	538.0	70.5	72.0	70.5	72.0	70.2	71.9	6283	71.5
1985	3674.1	538.0	78.2	72.7	78.2	72.7	78.0	72.6	6962	79.5
1986	3719.6	538.0	79.2	73.4	79.2	73.4	78.9	73.3	7044	80.4
1987	4696.0	538.0	100.0	76.0	100.0	76.0	99.6	75.9	8760	100.0
1988	3533.9	538.0	75.0	75.9	75.0	75.9	74.8	75.8	6719	76.5
1989	3563.6	538.0	76.2	75.9	76.2	75.9	75.6	75.8	6791	77.5
1990	3632.2	538.0	76.4	75.9	76.4	75.9	77.1	75.9	6932	79.1
1991	4382.4	538.0	93.4	77.2	93.4	77.2	93.0	77.0	8184	93.4
1992	3675.4	538.0	78.5	77.3	78.5	77.3	77.8	77.1	6995	79.6
1993	3494.2	538.0	74.4	77.1	74.4	77.1	74.1	76.9	6630	75.7
1994	3601.3	538.0	76.6	77.0	76.6	77.0	76.4	76.9	6717	76.7
1995	3598.7	538.0	76.5	77.0	76.5	77.0	76.4	76.9	6815	77.8
1996	3579.1	538.0	75.9	77.0	75.9	77.0	75.7	76.8	6768	77.0
1997	4688.9	538.0	99.7	78.1	99.7	78.1	99.5	77.9	8760	100.0
1998	3239.2	538.0	68.9	77.7	68.9	77.7	68.7	77.5	6127	69.9
1999	3783.2	538.0	80.4	77.8	80.4	77.8	80.3	77.6	7051	80.5
2000	3194.1	538.0	67.7	77.3	67.7	77.3	67.6	77.2	5953	67.8
2001	4477.6	538.0	95.2	78.1	95.2	78.1	95.0	77.9	8412	96.0
2002	3527.9	538.0	74.2	77.9	74.2	77.9	74.9	77.8	6505	74.3
2003	3734.6	538.0	77.8	77.9	77.8	77.9	79.2	77.8	6819	77.8
2004	3249.6	538.0	67.6	77.5	67.6	77.5	68.8	77.5	5949	67.7
2005	4267.9	538.0	90.3	78.0	90.1	78.0	90.6	78.0	7949	90.7
2006	3461.2	538.0	73.2	77.8	73.2	77.8	73.4	77.8	6465	73.8
2007	3919.4	538.0	82.6	78.0	82.5	78.0	83.2	78.0	7259	82.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		109			52	
C. Inspection, maintenance or repair combined with refuelling	1392			1651		
D. Inspection, maintenance or repair without refuelling				13		
J. Grid failure or grid unavailability						0
Z. Others					15	
Subtotal	1392	109	0	1664	67	0
Total		1501			1731	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		5
12. Reactor I&C Systems		19
31. Turbine and auxiliaries	109	27
42. Electrical Power Supply Systems		0
Total	109	51

JP-32 IKATA-2**Operator:** SHIKOKU (SHIKOKU ELECTRIC POWER CO.,INC)**Contractor:** MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 538.0 MW(e)
Design Net Capacity: 538.0 MW(e)
Design Discharge Burnup: 51000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4720.6 GW(e).h
Energy Availability Factor: 99.8%
Load Factor: 100.2%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.2%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	405.2	366.8	406.9	392.8	402.4	386.0	400.2	398.4	381.4	394.0	383.6	402.8	4720.6
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	98.9	98.8	99.9	100.0	99.8
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	101.2	101.5	101.7	101.5	100.5	99.6	100.0	99.5	98.5	98.3	99.0	100.6	100.2
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1	1.2	0.1	0.0	0.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1	1.2	0.1	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	21 Feb 1978	Lifetime Generation:	100235.0 GW(e).h
Date of First Criticality:	31 Jul 1981	Cumulative Energy Availability Factor:	82.4%
Date of Grid Connection:	19 Aug 1981	Cumulative Load Factor:	82.4%
Date of Commercial Operation:	19 Mar 1982	Cumulative Unit Capability Factor:	82.5%
		Cumulative Energy Unavailability Factor:	17.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1982	3893.9	538.0	98.6	98.6	98.6	98.6	98.6	98.6	7327	99.8
1983	3575.0	538.0	75.9	86.2	75.9	86.2	75.9	86.2	6798	77.6
1984	3776.6	538.0	80.3	84.1	80.1	84.1	79.9	84.0	7157	81.5
1985	3694.1	538.0	78.6	82.7	78.6	82.6	78.4	82.5	6995	79.9
1986	4698.6	538.0	100.0	86.3	100.0	86.2	99.7	86.1	8760	100.0
1987	3758.7	538.0	80.5	85.3	80.5	85.3	79.8	85.0	7137	81.5
1988	3541.5	538.0	75.1	83.8	75.1	83.8	74.9	83.5	6743	76.8
1989	3751.3	538.0	79.8	83.3	79.8	83.3	79.6	83.0	7128	81.4
1990	4694.9	538.0	99.9	85.2	99.9	85.2	99.6	84.9	8760	100.0
1991	3526.2	538.0	75.2	84.2	75.2	84.1	74.8	83.9	6731	76.8
1992	3479.9	538.0	74.3	83.3	74.3	83.2	73.6	82.9	6639	75.6
1993	3588.6	538.0	76.4	82.7	76.4	82.7	76.1	82.4	6799	77.6
1994	4700.6	538.0	99.9	84.0	99.9	84.0	99.7	83.7	8760	100.0
1995	3720.9	538.0	79.0	83.7	79.0	83.6	79.0	83.4	7014	80.1
1996	3664.8	538.0	77.7	83.3	77.7	83.2	77.5	83.0	6935	79.0
1997	3610.4	538.0	76.8	82.8	76.8	82.8	76.6	82.6	6831	78.0
1998	4701.1	538.0	99.9	83.9	99.9	83.8	99.7	83.6	8760	100.0
1999	3734.4	538.0	79.5	83.6	79.5	83.6	79.2	83.3	6973	79.6
2000	3695.0	538.0	78.3	83.3	78.3	83.3	78.2	83.1	6888	78.4
2001	3145.7	538.0	66.9	82.5	66.9	82.5	66.7	82.2	5875	67.1
2002	4718.5	538.0	99.2	83.3	99.2	83.3	100.1	83.1	8698	99.3
2003	3904.7	538.0	81.6	83.2	81.6	83.2	82.9	83.1	7150	81.6
2004	3611.9	538.0	76.1	82.9	75.8	82.9	76.4	82.8	6683	76.1
2005	3163.3	538.0	67.1	82.3	67.0	82.2	67.1	82.1	5890	67.2
2006	3329.2	538.0	70.4	81.8	70.3	81.8	70.6	81.7	6230	71.1
2007	4720.6	538.0	100.0	82.5	99.8	82.4	100.2	82.4	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					3	
C. Inspection, maintenance or repair combined with refuelling				1473		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				5		
J. Grid failure or grid unavailability						0
Subtotal	0	0	0	1478	3	0
Total		0			1481	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		1
31. Turbine and auxiliaries		2
Total	0	3

JP-47 IKATA-3

Operator: SHIKOKU (SHIKOKU ELECTRIC POWER CO.,INC)

Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 846.0 MW(e)
 Design Net Capacity: 846.0 MW(e)
 Design Discharge Burnup: 49000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6869.3 GW(e).h
 Energy Availability Factor: 88.9%
 Load Factor: 92.7%
 Operating Factor: 89.2%
 Energy Unavailability Factor: 11.1%
 Total Off-line Time: 947 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	658.1	594.7	658.1	636.3	657.5	635.4	655.8	652.2	144.7	283.2	635.2	658.1	6869.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	23.0	43.7	100.0	100.0	88.9
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	23.0	43.7	100.0	100.0	88.9
LF (%)	104.6	104.6	104.6	104.6	104.5	104.3	104.2	103.6	23.8	44.9	104.3	104.6	92.7
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	23.3	46.8	100.0	100.0	89.2
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	56.3	0.0	0.0	11.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	56.3	0.0	0.0	11.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(2007.09.7-2007.10.17)

5. Historical Summary

Date of Construction Start: 01 Nov 1986 Lifetime Generation: 84968.0 GW(e).h
 Date of First Criticality: 23 Feb 1994 Cumulative Energy Availability Factor: 85.6%
 Date of Grid Connection: 29 Mar 1994 Cumulative Load Factor: 87.9%
 Date of Commercial Operation: 15 Dec 1994 Cumulative Unit Capability Factor: 85.6%
 Cumulative Energy Unavailability Factor: 14.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1994	636.8	846.0	100.0	100.0	100.0	100.0	101.2	101.2	744	100.0
1995	7491.8	846.0	100.0	100.0	100.0	100.0	101.1	101.1	8760	100.0
1996	5578.2	846.0	74.2	87.6	74.2	87.6	75.1	88.6	6621	75.4
1997	6134.7	846.0	81.9	85.8	81.9	85.8	82.8	86.7	7242	82.7
1998	6250.4	846.0	83.4	85.2	83.4	85.2	84.3	86.1	7374	84.2
1999	6298.4	846.0	84.1	85.0	84.1	85.0	85.0	85.9	7368	84.1
2000	6660.3	846.0	88.7	85.6	88.7	85.6	89.6	86.5	7790	88.7
2001	6210.7	846.0	82.9	85.2	82.9	85.2	83.8	86.1	7267	83.0
2002	6599.5	846.0	85.8	85.3	85.8	85.3	89.1	86.5	7518	85.8
2003	5862.1	846.0	74.9	84.1	74.9	84.1	79.1	85.7	6560	74.9
2004	7828.9	846.0	100.0	85.7	100.0	85.7	105.4	87.6	8784	100.0
2005	6699.4	846.0	86.8	85.8	86.8	85.8	90.4	87.9	7637	87.2
2006	6134.6	846.0	79.5	85.3	79.5	85.3	82.8	87.5	6990	79.8
2007	6869.3	846.0	88.9	85.6	88.9	85.6	92.7	87.9	7813	89.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1996 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling	951			1180	98	
Subtotal	951	0	0	1180	98	0
Total	951			1278		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1996 to 2007 Average Hours Lost Per Year
41. Main Generator Systems		20
42. Electrical Power Supply Systems		78
Total	0	98

JP-33 KASHIWAZAKI KARIWA-1**Operator:** TEPCO (TOKYO ELECTRIC POWER CO.,INC.)**Contractor:** TOSHIBA (TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
Design Net Capacity: 1067.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3165.8 GW(e).h
Energy Availability Factor: 33.6%
Load Factor: 33.9%
Operating Factor: 33.7%
Energy Unavailability Factor: 66.4%
Total Off-line Time: 5808 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	801.4	723.5	801.2	776.0	63.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3165.8
EAF (%)	100.0	100.0	100.0	100.0	9.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	33.6
UCF (%)	100.0	100.0	100.0	100.0	9.1	0.0	0.0	0.0	40.0	100.0	100.0	100.0	62.1
LF (%)	100.9	100.9	100.9	101.2	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.9
OF (%)	100.0	100.0	100.0	100.1	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7
EUF (%)	0.0	0.0	0.0	0.0	90.9	100.0	100.0	100.0	100.0	99.9	100.0	100.0	66.4
PUF (%)	0.0	0.0	0.0	0.0	90.9	100.0	100.0	100.0	60.0	0.0	0.0	0.0	37.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	99.9	100.0	100.0	28.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

AT 10:13 AM ON JULY 16 A MAGNITUDE 6.8 EARTHQUAKE STRUCK JUST OFF THE COAST OF NIIGATA PREFECTURE ON THE JAPAN SEA SIDE OF HONSHU, JAPAN'S LARGEST ISLAND. AS A RESULT OF THE QUAKE, FOUR REACTORS (UNITS 2, 3, 4 & 7) AT TOKYO ELECTRIC POWER COMPANY'S (TEPCO) KASHIWAZAKI-KARIWA NUCLEAR POWER PLANT SHUT DOWN AUTOMATICALLY. AT THE TIME, UNIT 2 WAS BEING STARTED UP AFTER A PERIODIC INSPECTION, WHILE THE OTHER THREE UNITS (1, 5 & 6) WERE STILL SHUT DOWN FOR PERIODIC INSPECTION.

5. Historical Summary

Date of Construction Start:	05 Jun 1980	Lifetime Generation:	149236.0 GW(e).h
Date of First Criticality:	12 Dec 1984	Cumulative Energy Availability Factor:	71.4%
Date of Grid Connection:	13 Feb 1985	Cumulative Load Factor:	70.5%
Date of Commercial Operation:	18 Sep 1985	Cumulative Unit Capability Factor:	72.7%
		Cumulative Energy Unavailability Factor:	28.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	2939.8	1067.0	100.0	100.0	100.0	100.0	94.1	94.1	2808	95.9
1986	6703.7	1067.0	73.0	79.8	73.0	79.8	71.7	77.3	6463	73.8
1987	9195.5	1067.0	100.0	88.4	100.0	88.4	98.4	86.3	8760	100.0
1988	6959.7	1067.0	75.0	84.4	75.0	84.4	74.3	82.7	6660	75.8
1989	6442.3	1067.0	69.7	81.0	69.7	81.0	68.9	79.5	6236	71.2
1990	5987.4	1067.0	65.0	78.0	65.0	78.0	64.1	76.6	5711	65.2
1991	9031.6	1067.0	97.9	81.1	97.9	81.1	96.6	79.8	8618	98.4
1992	6958.1	1067.0	75.8	80.4	75.4	80.4	74.2	79.0	6728	76.6
1993	6874.3	1067.0	74.7	79.7	74.7	79.7	73.5	78.4	6575	75.1
1994	7020.2	1067.0	76.1	79.3	76.1	79.3	75.1	78.0	6744	77.0
1995	9235.2	1067.0	100.0	81.3	100.0	81.3	98.8	80.0	8760	100.0
1996	6814.4	1067.0	73.6	80.7	73.6	80.6	72.7	79.4	6469	73.6
1997	7899.9	1067.0	85.7	81.1	85.7	81.0	84.5	79.8	7525	85.9
1998	6176.2	1067.0	67.4	80.0	67.4	80.0	66.1	78.8	5960	68.0
1999	9198.8	1067.0	99.7	81.4	99.7	81.4	98.4	80.1	8760	100.0
2000	7714.7	1067.0	83.6	81.6	83.6	81.5	82.3	80.3	7346	83.6
2001	7070.5	1067.0	76.9	81.3	76.9	81.2	75.6	80.0	6743	77.0
2002	5906.2	1067.0	64.2	80.3	64.2	80.3	63.2	79.0	5628	64.2
2003	0.0	1067.0	0.0	75.9	0.0	75.9	0.0	74.7	0	0.0
2004	6496.7	1067.0	69.2	75.6	69.2	75.5	69.3	74.4	6171	70.3
2005	3125.9	1067.0	33.5	73.5	33.5	73.5	33.4	72.4	3051	34.8
2006	6299.4	1067.0	67.1	73.2	67.1	73.2	67.4	72.2	5899	67.3
2007	3165.8	1067.0	62.1	72.7	33.6	71.4	33.9	70.5	2952	33.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					408	
C. Inspection, maintenance or repair combined with refuelling	3319			1717		
D. Inspection, maintenance or repair without refuelling				39		
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			2496			
Z. Others					82	
Subtotal	3319	0	2496	1756	490	0
Total		5815			2246	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		55
15. Reactor Cooling Systems		256
21. Fuel Handling and Storage Facilities		43
32. Feedwater and Main Steam System		43
41. Main Generator Systems		10
Total	0	407

JP-39 KASHIWAZAKI KARIWA-2**Operator:** TEPCO (TOKYO ELECTRIC POWER CO.,INC.)**Contractor:** TOSHIBA (TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
Design Net Capacity: 1067.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1830.3 GW(e).h
Energy Availability Factor: 19.8%
Load Factor: 19.6%
Operating Factor: 20.4%
Energy Unavailability Factor: 80.2%
Total Off-line Time: 6974 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	792.7	454.7	0.0	0.0	0.0	495.9	87.0	0.0	0.0	0.0	0.0	0.0	1830.3
EAF (%)	99.2	63.5	0.0	0.0	0.0	65.8	12.7	0.0	0.0	0.0	0.0	0.0	19.8
UCF (%)	99.2	63.5	0.0	0.0	0.0	65.8	12.7	0.0	0.0	0.0	0.0	0.0	19.8
LF (%)	99.9	63.4	0.0	0.0	0.0	64.5	11.0	0.0	0.0	0.0	0.0	0.0	19.6
OF (%)	100.0	64.3	0.0	0.0	0.0	71.0	13.3	0.0	0.0	0.0	0.0	0.0	20.4
EUUF (%)	0.8	36.5	100.0	100.0	100.0	34.2	87.3	100.0	100.0	100.0	100.0	100.0	80.2
PUF (%)	0.8	36.5	100.0	100.0	100.0	27.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	7.2	87.3	100.0	100.0	100.0	100.0	100.0	49.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

AT 10:13 AM ON JULY 16 A MAGNITUDE 6.8 EARTHQUAKE STRUCK JUST OFF THE COAST OF NIIGATA PREFECTURE ON THE JAPAN SEA SIDE OF HONSHU, JAPAN'S LARGEST ISLAND. AS A RESULT OF THE QUAKE, FOUR REACTORS (UNITS 2, 3, 4 & 7) AT TOKYO ELECTRIC POWER COMPANY'S (TEPCO) KASHIWAZAKI-KARIWA NUCLEAR POWER PLANT SHUT DOWN AUTOMATICALLY. AT THE TIME, UNIT 2 WAS BEING STARTED UP AFTER A PERIODIC INSPECTION, WHILE THE OTHER THREE UNITS (1, 5 & 6) WERE STILL SHUT DOWN FOR PERIODIC INSPECTION.

5. Historical Summary

Date of Construction Start: 18 Nov 1985 **Lifetime Generation:** 120879.0 GW(e).h
Date of First Criticality: 30 Nov 1989 **Cumulative Energy Availability Factor:** 73.1%
Date of Grid Connection: 08 Feb 1990 **Cumulative Load Factor:** 72.2%
Date of Commercial Operation: 28 Sep 1990 **Cumulative Unit Capability Factor:** 73.2%
Cumulative Energy Unavailability Factor: 26.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1990	2935.8	1067.0	100.0	100.0	100.0	100.0	94.0	94.0	2813	96.1
1991	6642.4	1067.0	72.4	79.3	72.4	79.3	71.1	76.8	6440	73.5
1992	9046.9	1067.0	97.9	87.3	97.9	87.3	96.5	85.3	8623	98.2
1993	7212.6	1067.0	78.5	84.7	78.3	84.6	77.2	82.8	6911	78.9
1994	7291.1	1067.0	79.0	83.4	79.0	83.3	78.0	81.7	6962	79.5
1995	7696.8	1067.0	83.4	83.4	83.4	83.3	82.3	81.8	7329	83.7
1996	8811.1	1067.0	95.3	85.3	95.2	85.2	94.0	83.8	8396	95.6
1997	7284.4	1067.0	79.1	84.4	79.1	84.4	77.9	83.0	6913	78.9
1998	8142.1	1067.0	88.4	84.9	88.4	84.9	87.1	83.5	7769	88.7
1999	8208.8	1067.0	89.2	85.4	89.1	85.3	87.8	83.9	7814	89.2
2000	8140.0	1067.0	88.3	85.6	88.3	85.6	86.8	84.2	7760	88.3
2001	7595.5	1067.0	82.4	85.4	82.4	85.3	81.3	84.0	7223	82.5
2002	5866.2	1067.0	63.1	83.6	63.1	83.5	62.8	82.2	5532	63.2
2003	0.0	1067.0	0.0	77.3	0.0	77.3	0.0	76.1	0	0.0
2004	4660.3	1067.0	49.6	75.4	49.6	75.3	49.7	74.2	4361	49.6
2005	6388.4	1067.0	68.4	74.9	68.4	74.9	68.3	73.8	6035	68.9
2006	9330.8	1067.0	99.8	76.4	99.8	76.4	99.8	75.4	8760	100.0
2007	1830.3	1067.0	19.8	73.2	19.8	73.1	19.6	72.2	1786	20.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1991 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		4371			384	
B. Refuelling without a maintenance					10	
C. Inspection, maintenance or repair combined with refuelling	2624			1497		
D. Inspection, maintenance or repair without refuelling				14		
Z. Others					73	
Subtotal	2624	4371	0	1511	467	0
Total		6995			1978	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1991 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	55	
13. Reactor Auxiliary Systems		13
15. Reactor Cooling Systems		340
31. Turbine and auxiliaries	4316	30
Total	4371	383

JP-52 KASHIWAZAKI KARIWA-3

Operator: TEPCO (TOKYO ELECTRIC POWER CO.,INC.)

Contractor: TOSHIBA (TOSHIBA CORPORATION)

1. Station Details

Type: BWR
 Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
 Design Net Capacity: 1067.0 MW(e)
 Design Discharge Burnup: 39500 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5054.1 GW(e).h
 Energy Availability Factor: 53.7%
 Load Factor: 54.1%
 Operating Factor: 53.8%
 Energy Unavailability Factor: 46.3%
 Total Off-line Time: 4046 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	799.7	722.8	795.0	775.4	800.5	769.4	391.3	0.0	0.0	0.0	0.0	0.0	5054.1
EAF (%)	100.0	100.0	99.4	100.0	100.0	99.7	49.8	0.0	0.0	0.1	0.0	0.0	53.7
UCF (%)	100.0	100.0	99.4	100.0	100.0	99.7	100.0	100.0	60.0	0.1	0.0	0.0	71.4
LF (%)	100.7	100.8	100.1	101.1	100.8	100.2	49.3	0.0	0.0	0.0	0.0	0.0	54.1
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	49.7	0.0	0.0	0.0	0.0	0.0	53.8
EUUF (%)	0.0	0.0	0.6	0.0	0.0	0.3	50.2	100.0	100.0	99.9	100.0	100.0	46.3
PUF (%)	0.0	0.0	0.6	0.0	0.0	0.3	0.0	0.0	40.0	99.9	100.0	100.0	28.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	50.2	100.0	60.0	0.0	0.0	0.0	17.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

FORCED OUTAGE DUE TO THE EARTHQUAKE(2007/07/16-)PLANNED OUTAGE DUE TO THE INVESTIGATION OF THE EARTHQUAKE EFFECTS, ETC(2007/08/13-)

5. Historical Summary

Date of Construction Start: 07 Mar 1989 Lifetime Generation: 100277.0 GW(e).h
 Date of First Criticality: 19 Oct 1992 Cumulative Energy Availability Factor: 73.0%
 Date of Grid Connection: 08 Dec 1992 Cumulative Load Factor: 72.4%
 Date of Commercial Operation: 11 Aug 1993 Cumulative Unit Capability Factor: 74.2%
 Cumulative Energy Unavailability Factor: 27.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1993	3875.8	1067.0	100.0	100.0	100.0	100.0	98.9	98.9	3672	100.0
1994	7264.4	1067.0	78.9	85.1	78.9	85.1	77.7	84.0	6961	79.5
1995	9253.9	1067.0	100.0	91.3	100.0	91.3	99.0	90.2	8760	100.0
1996	7921.6	1067.0	85.5	89.6	85.5	89.6	84.5	88.5	7508	85.5
1997	8016.2	1067.0	86.8	88.9	86.8	88.9	85.8	87.9	7601	86.8
1998	6748.0	1067.0	73.1	86.0	73.1	86.0	72.2	85.0	6467	73.8
1999	9028.3	1067.0	97.7	87.8	97.7	87.8	96.6	86.8	8568	97.8
2000	7945.1	1067.0	85.8	87.6	85.8	87.6	84.8	86.5	7539	85.8
2001	6985.7	1067.0	75.8	86.2	75.8	86.2	74.7	85.1	6639	75.8
2002	5575.5	1067.0	60.4	83.4	60.4	83.4	59.7	82.4	5300	60.5
2003	0.0	1067.0	0.0	75.4	0.0	75.4	0.0	74.5	0	0.0
2004	6550.0	1067.0	69.9	74.9	69.9	74.9	69.9	74.1	6093	69.4
2005	6061.7	1067.0	64.9	74.1	64.9	74.1	64.9	73.4	5772	65.9
2006	7331.4	1067.0	78.3	74.5	78.3	74.4	78.4	73.7	6924	79.0
2007	5054.1	1067.0	71.4	74.2	53.7	73.0	54.1	72.4	4714	53.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1994 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.) Z. Others	2496		1550	1446	598	
Subtotal	2496	0	1550	1446	697	0
Total	4046			2143		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1994 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		558
15. Reactor Cooling Systems		39
Total	0	597

JP-53 KASHIWAZAKI KARIWA-4

Operator: TEPCO (TOKYO ELECTRIC POWER CO.,INC.)

Contractor: HITACHI (HITACHI LTD.)

1. Station Details

Type: BWR
 Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
 Design Net Capacity: 1067.0 MW(e)
 Design Discharge Burnup: 39500 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5061.7 GW(e).h
 Energy Availability Factor: 53.8%
 Load Factor: 54.2%
 Operating Factor: 53.8%
 Energy Unavailability Factor: 46.2%
 Total Off-line Time: 4046 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	799.9	722.7	800.5	775.6	798.6	772.2	392.2	0.0	0.0	0.0	0.0	0.0	5061.7
EAF (%)	100.0	100.0	100.0	100.0	99.9	100.0	49.8	0.0	0.0	0.1	0.0	0.0	53.8
UCF (%)	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	100.8	100.8	100.8	101.1	100.6	100.5	49.4	0.0	0.0	0.0	0.0	0.0	54.2
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	49.7	0.0	0.0	0.0	0.0	0.0	53.8
EUUF (%)	0.0	0.0	0.0	0.0	0.1	0.0	50.2	100.0	100.0	99.9	100.0	100.0	46.2
PUF (%)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	50.2	100.0	100.0	99.9	100.0	100.0	46.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

FORCED OUTAGE DUE TO THE EARTHQUAKE(2007/07/16-)PLANNED OUTAGE DUE TO THE INVESTIGATION OF THE EARTHQUAKE EFFECTS, ETC(2007/08/13-)

5. Historical Summary

Date of Construction Start: 05 Mar 1990 Lifetime Generation: 91851.0 GW(e).h
 Date of First Criticality: 01 Nov 1993 Cumulative Energy Availability Factor: 72.1%
 Date of Grid Connection: 21 Dec 1993 Cumulative Load Factor: 71.4%
 Date of Commercial Operation: 11 Aug 1994 Cumulative Unit Capability Factor: 75.6%
 Cumulative Energy Unavailability Factor: 27.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1994	3869.5	1067.0	99.8	99.8	99.8	99.8	98.8	98.8	3672	100.0
1995	6182.5	1067.0	67.0	76.7	67.0	76.7	66.1	75.8	5889	67.2
1996	8068.0	1067.0	87.1	81.0	87.1	81.0	86.1	80.0	7651	87.1
1997	7516.7	1067.0	81.7	81.2	81.5	81.1	80.4	80.2	7207	82.3
1998	9258.7	1067.0	100.0	85.4	100.0	85.4	99.1	84.4	8760	100.0
1999	8141.7	1067.0	88.1	85.9	88.1	85.9	87.1	84.9	7719	88.1
2000	6918.9	1067.0	75.1	84.2	75.1	84.2	73.8	83.2	6602	75.2
2001	5591.4	1067.0	60.6	81.1	60.6	81.0	59.8	80.0	5343	61.0
2002	9239.9	1067.0	100.0	83.3	99.9	83.3	98.9	82.3	8760	100.0
2003	4185.8	1067.0	45.0	79.2	45.0	79.2	44.8	78.3	3946	45.0
2004	5623.7	1067.0	59.9	77.4	59.9	77.3	60.0	76.5	5258	59.9
2005	7192.0	1067.0	76.8	77.3	76.8	77.3	76.9	76.6	6755	77.1
2006	2816.5	1067.0	31.0	73.6	30.4	73.5	30.1	72.8	2772	31.6
2007	5061.7	1067.0	100.0	75.6	53.8	72.1	54.2	71.4	4714	53.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1995 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					469	
C. Inspection, maintenance or repair combined with refuelling				1663	22	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					48	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			4045			
Subtotal	0	0	4045	1663	539	0
Total		4045			2202	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1995 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		44
15. Reactor Cooling Systems		176
31. Turbine and auxiliaries		38
41. Main Generator Systems		143
42. Electrical Power Supply Systems		66
Total	0	467

JP-40 KASHIWAZAKI KARIWA-5**Operator:** TEPCO (TOKYO ELECTRIC POWER CO.,INC.)**Contractor:** HITACHI (HITACHI LTD.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1067.0 MW(e)
Design Net Capacity: 1067.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 0.0 GW(e).h
Energy Availability Factor: 0.0%
Load Factor: 0.0%
Operating Factor: 0.0%
Energy Unavailability Factor: 100.0%
Total Off-line Time: 8760 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
UCF (%)	0.0	0.0	0.0	-0.1	0.0	6.7	100.0	100.0	100.0	100.0	100.0	100.0	51.0
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
PUF (%)	100.0	100.0	100.0	100.1	100.0	93.3	0.0	0.0	0.0	0.0	0.0	0.0	49.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	6.7	100.0	100.0	100.0	99.9	100.0	100.0	51.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

AT 10:13 AM ON JULY 16 A MAGNITUDE 6.8 EARTHQUAKE STRUCK JUST OFF THE COAST OF NIIGATA PREFECTURE ON THE JAPAN SEA SIDE OF HONSHU, JAPAN'S LARGEST ISLAND. AS A RESULT OF THE QUAKE, FOUR REACTORS (UNITS 2, 3, 4 & 7) AT TOKYO ELECTRIC POWER COMPANY'S (TEPCO) KASHIWAZAKI-KARIWA NUCLEAR POWER PLANT SHUT DOWN AUTOMATICALLY. AT THE TIME, UNIT 2 WAS BEING STARTED UP AFTER A PERIODIC INSPECTION, WHILE THE OTHER THREE UNITS (1, 5 & 6) WERE STILL SHUT DOWN FOR PERIODIC INSPECTION.

5. Historical Summary

Date of Construction Start: 20 Jun 1985 **Lifetime Generation:** 126197.0 GW(e).h
Date of First Criticality: 20 Jul 1989 **Cumulative Energy Availability Factor:** 75.5%
Date of Grid Connection: 12 Sep 1989 **Cumulative Load Factor:** 74.8%
Date of Commercial Operation: 10 Apr 1990 **Cumulative Unit Capability Factor:** 78.4%
Cumulative Energy Unavailability Factor: 24.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1990	6953.3	1067.0	100.0	100.0	100.0	100.0	98.7	98.7	6600	100.0
1991	7093.3	1067.0	76.7	86.7	76.7	86.7	75.9	85.7	6789	77.5
1992	6977.5	1067.0	75.5	82.6	75.5	82.6	74.4	81.6	6715	76.4
1993	9238.2	1067.0	99.9	87.2	99.9	87.2	98.8	86.2	8760	100.0
1994	7154.7	1067.0	77.5	85.2	77.5	85.2	76.5	84.2	6825	77.9
1995	7508.3	1067.0	81.5	84.5	81.5	84.5	80.3	83.5	7183	82.0
1996	7905.8	1067.0	85.6	84.7	85.6	84.7	84.4	83.6	7524	85.7
1997	8919.1	1067.0	96.6	86.2	96.6	86.2	95.4	85.1	8472	96.7
1998	7352.6	1067.0	79.6	85.5	79.6	85.5	78.7	84.4	6995	79.9
1999	7771.8	1067.0	84.3	85.4	84.3	85.4	83.1	84.3	7383	84.3
2000	7042.7	1067.0	76.4	84.5	76.3	84.5	75.1	83.4	6712	76.4
2001	9198.6	1067.0	99.6	85.8	99.6	85.8	98.4	84.7	8760	100.0
2002	8191.0	1067.0	88.3	86.0	88.3	86.0	87.6	84.9	7743	88.4
2003	1503.1	1067.0	16.1	80.9	16.1	80.9	16.1	79.9	1392	15.9
2004	6134.8	1067.0	65.3	79.9	65.3	79.8	65.5	78.9	5738	65.3
2005	6852.9	1067.0	73.0	79.4	73.0	79.4	73.3	78.6	6446	73.6
2006	8400.5	1067.0	89.5	80.0	89.5	80.0	89.9	79.3	7848	89.6
2007	0.0	1067.0	51.0	78.4	0.0	75.5	0.0	74.8	0	0.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1991 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					300	
C. Inspection, maintenance or repair combined with refuelling	4296			1344		
D. Inspection, maintenance or repair without refuelling				13		
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			4464			
Z. Others					57	
Subtotal	4296	0	4464	1357	357	0
Total	8760			1714		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1991 to 2007 Average Hours Lost Per Year
15. Reactor Cooling Systems		293
31. Turbine and auxiliaries		7
Total	0	300

JP-55 KASHIWAZAKI KARIWA-6**Operator:** TEPCO (TOKYO ELECTRIC POWER CO.,INC.)**Contractor:** TOSHIBA (TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1315.0 MW(e)
Design Net Capacity: 1315.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3758.2 GW(e).h
Energy Availability Factor: 31.6%
Load Factor: 32.6%
Operating Factor: 31.8%
Energy Unavailability Factor: 68.4%
Total Off-line Time: 5973 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	1000.6	913.0	1009.5	835.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3758.2
EAF (%)	99.1	100.0	100.0	85.9	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	31.6
UCF (%)	99.1	100.0	100.0	85.9	0.0	0.0	0.0	93.6	100.0	100.0	100.0	100.0	73.0
LF (%)	102.3	103.3	103.2	88.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.6
OF (%)	100.0	100.0	100.0	87.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.8
EUUF (%)	0.9	0.0	0.0	14.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	68.4
PUF (%)	0.0	0.0	0.0	0.2	25.8	100.0	100.0	6.5	0.0	0.0	0.0	0.0	19.5
UCLF (%)	0.9	0.0	0.0	13.9	74.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.5	100.0	99.9	100.0	100.0	41.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

AT 10:13 AM ON JULY 16 A MAGNITUDE 6.8 EARTHQUAKE STRUCK JUST OFF THE COAST OF NIIGATA PREFECTURE ON THE JAPAN SEA SIDE OF HONSHU, JAPAN'S LARGEST ISLAND. AS A RESULT OF THE QUAKE, FOUR REACTORS (UNITS 2, 3, 4 & 7) AT TOKYO ELECTRIC POWER COMPANY'S (TEPCO) KASHIWAZAKI-KARIWA NUCLEAR POWER PLANT SHUT DOWN AUTOMATICALLY. AT THE TIME, UNIT 2 WAS BEING STARTED UP AFTER A PERIODIC INSPECTION, WHILE THE OTHER THREE UNITS (1, 5 & 6) WERE STILL SHUT DOWN FOR PERIODIC INSPECTION.

5. Historical Summary

Date of Construction Start: 03 Nov 1992 **Lifetime Generation:** 106689.0 GW(e).h
Date of First Criticality: 18 Dec 1995 **Cumulative Energy Availability Factor:** 79.4%
Date of Grid Connection: 29 Jan 1996 **Cumulative Load Factor:** 80.1%
Date of Commercial Operation: 07 Nov 1996 **Cumulative Unit Capability Factor:** 83.1%
Cumulative Energy Unavailability Factor: 20.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1996	1920.8	1315.0	100.0	100.0	100.0	100.0	99.8	99.8	1464	100.0
1997	10161.5	1315.0	88.4	90.1	88.4	90.1	88.2	89.9	7752	88.5
1998	10702.3	1315.0	93.3	91.6	93.3	91.6	92.9	91.3	8217	93.8
1999	9710.4	1315.0	84.8	89.4	84.8	89.4	84.3	89.1	7480	85.4
2000	9411.6	1315.0	81.8	87.6	81.8	87.6	81.5	87.2	7183	81.8
2001	9270.0	1315.0	80.7	86.3	80.7	86.3	80.5	85.9	7079	80.8
2002	11504.1	1315.0	100.0	88.5	100.0	88.5	99.9	88.2	8760	100.0
2003	8401.2	1315.0	71.5	86.1	71.5	86.1	72.9	86.1	6163	70.4
2004	8635.2	1315.0	72.7	84.5	72.7	84.5	74.8	84.7	6410	73.0
2005	11126.5	1315.0	93.9	85.5	93.9	85.5	96.6	86.0	8232	94.0
2006	8446.7	1315.0	71.4	84.1	71.4	84.1	73.3	84.7	6301	71.9
2007	3758.2	1315.0	73.0	83.1	31.6	79.4	32.6	80.1	2787	31.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1997 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		645			66	
C. Inspection, maintenance or repair combined with refuelling	1704			1065		
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			3624			
Z. Others					147	
Subtotal	1704	645	3624	1065	213	0
Total		5973			1278	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1997 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		7
21. Fuel Handling and Storage Facilities		30
32. Feedwater and Main Steam System	645	
41. Main Generator Systems		19
42. Electrical Power Supply Systems		9
Total	645	65

JP-56 KASHIWAZAKI KARIWA-7

Operator: TEPCO (TOKYO ELECTRIC POWER CO.,INC.)

Contractor: HITACHI (HITACHI LTD.)

1. Station Details

Type: BWR
 Net Reference Unit Power
 at the beginning of 2007: 1315.0 MW(e)
 Design Net Capacity: 1315.0 MW(e)
 Design Discharge Burnup: 39500 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6358.6 GW(e).h
 Energy Availability Factor: 53.8%
 Load Factor: 55.2%
 Operating Factor: 53.8%
 Energy Unavailability Factor: 46.2%
 Total Off-line Time: 4046 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	1006.0	908.5	1005.4	973.5	1004.7	969.7	490.8	0.0	0.0	0.0	0.0	0.0	6358.6
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	49.8	0.0	0.0	0.1	0.0	0.0	53.8
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	46.7	0.0	87.1
LF (%)	102.8	102.8	102.8	103.0	102.7	102.4	50.2	0.0	0.0	0.0	0.0	0.0	55.2
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	49.7	0.0	0.0	0.0	0.0	0.0	53.8
EUUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	50.2	100.0	100.0	99.9	100.0	100.0	46.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.3	100.0	12.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	50.2	100.0	100.0	99.9	46.7	0.0	33.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

FORCED OUTAGE DUE TO THE EARTHQUAKE(2007/07/16-)PLANNED OUTAGE DUE TO THE INVESTIGATION OF THE EARTHQUAKE EFFECTS, ETC(2007/08/13-)

5. Historical Summary

Date of Construction Start: 01 Jul 1993 Lifetime Generation: 94682.0 GW(e).h
 Date of First Criticality: 01 Nov 1996 Cumulative Energy Availability Factor: 75.7%
 Date of Grid Connection: 17 Dec 1996 Cumulative Load Factor: 76.3%
 Date of Commercial Operation: 02 Jul 1997 Cumulative Unit Capability Factor: 79.2%
 Cumulative Energy Unavailability Factor: 24.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1997	5792.8	1315.0	100.0	100.0	100.0	100.0	99.8	99.8	4416	100.0
1998	9715.6	1315.0	84.7	89.8	84.7	89.8	84.3	89.5	7452	85.1
1999	8445.4	1315.0	73.7	83.4	73.7	83.4	73.3	83.0	6458	73.7
2000	11240.2	1315.0	97.6	87.4	97.6	87.4	97.3	87.1	8587	97.8
2001	10078.4	1315.0	87.8	87.5	87.8	87.5	87.5	87.2	7752	88.5
2002	7990.0	1315.0	69.5	84.2	68.9	84.1	69.4	84.0	6089	69.5
2003	5778.5	1315.0	49.2	78.9	49.2	78.8	50.2	78.8	4302	49.1
2004	10805.2	1315.0	94.5	80.9	91.6	80.5	93.5	80.7	8057	91.7
2005	7977.5	1315.0	68.0	79.4	68.0	79.0	69.3	79.4	6007	68.6
2006	8166.2	1315.0	69.9	78.4	69.5	78.0	70.9	78.5	6250	71.3
2007	6358.6	1315.0	87.1	79.2	53.8	75.7	55.2	76.3	4714	53.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1998 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					312	
C. Inspection, maintenance or repair combined with refuelling				1340		
D. Inspection, maintenance or repair without refuelling				96		
F. Major back-fitting, refurbishment or upgrading activities with refuelling	1128					
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			2918			25
Z. Others					38	
Subtotal	1128	0	2918	1436	350	25
Total		4046			1811	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1998 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		108
12. Reactor I&C Systems		93
15. Reactor Cooling Systems		110
Total	0	311

JP-4 MIHAMA-1

Operator: KEPCO (KANSAI ELECTRIC POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 320.0 MW(e)
Design Net Capacity: 320.0 MW(e)
Design Discharge Burnup: 31500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 854.7 GW(e).h
Energy Availability Factor: 30.3%
Load Factor: 30.5%
Operating Factor: 31.1%
Energy Unavailability Factor: 69.7%
Total Off-line Time: 6037 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	213.5	239.7	235.3	166.2	854.7
EAF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	94.6	99.9	99.9	68.1	30.3
UCF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	94.6	99.9	99.9	68.1	30.3
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.7	100.6	102.1	69.8	30.5
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	100.0	99.9	100.0	72.0	31.1
EUf (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	5.4	0.1	0.1	31.9	69.7
PUF (%)	100.0	7.1	0.0	0.0	0.0	0.0	0.0	0.4	5.4	0.1	0.1	0.0	9.5
UCLF (%)	0.0	92.9	100.0	100.1	100.0	100.0	100.0	99.6	0.0	0.0	0.0	31.9	60.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(06/11/01-07/09/04)

5. Historical Summary

Date of Construction Start: 01 Feb 1967
Date of First Criticality: 29 Jul 1970
Date of Grid Connection: 08 Aug 1970
Date of Commercial Operation: 28 Nov 1970

Lifetime Generation: 53404.0 GW(e).h
Cumulative Energy Availability Factor: 50.6%
Cumulative Load Factor: 51.4%
Cumulative Unit Capability Factor: 50.8%
Cumulative Energy Unavailability Factor: 49.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1970	337.0	320.0	100.0	100.0	100.0	100.0	71.9	71.9	1017	69.5
1971	1953.8	320.0	100.0	100.0	100.0	100.0	69.7	70.0	5977	68.2
1972	1260.0	320.0	47.8	75.9	47.4	75.7	44.8	58.4	4156	47.3
1973	945.3	320.0	47.9	67.1	47.9	66.9	33.7	50.6	4865	55.5
1974	391.8	320.0	20.9	56.0	20.9	55.9	14.0	41.8	2151	24.6
1975	0.0	320.0	0.0	45.2	0.0	45.1	0.0	33.7	0	0.0
1976	0.0	320.0	0.0	37.8	0.0	37.8	0.0	28.2	0	0.0
1977	0.0	320.0	0.0	32.6	0.0	32.5	0.0	24.3	0	0.0
1978	118.7	320.0	4.2	29.1	4.2	29.0	4.2	21.9	1059	12.1
1979	115.4	320.0	4.1	26.4	4.1	26.3	4.1	19.9	1014	11.6
1980	1012.9	320.0	36.0	27.3	36.0	27.3	36.0	21.5	4472	50.9
1981	1178.1	320.0	42.0	28.6	42.0	28.6	42.0	23.3	3931	44.9
1982	92.8	320.0	3.3	26.6	3.3	26.5	3.3	21.7	455	5.2
1983	1164.4	320.0	41.5	27.7	41.5	27.7	41.5	23.2	3731	42.6
1984	1576.6	320.0	56.0	29.7	56.0	29.7	56.1	25.5	5053	57.5
1985	2240.2	320.0	80.0	33.0	80.0	33.0	79.9	29.1	7077	80.8
1986	2707.2	320.0	96.6	36.9	96.3	36.9	96.6	33.3	8482	96.8
1987	2261.5	320.0	81.6	39.5	81.6	39.5	80.7	36.0	7150	81.6
1988	2075.4	320.0	75.4	41.5	75.4	41.5	73.8	38.1	6623	75.4
1989	1693.2	320.0	61.8	42.6	61.8	42.5	60.4	39.3	5418	61.8
1990	1938.2	320.0	66.9	43.8	66.9	43.7	69.1	40.8	6058	69.2
1991	2371.9	320.0	8.8	42.1	4.5	41.9	84.6	42.8	7615	86.9
1992	1041.1	320.0	37.2	41.9	37.2	41.7	37.0	42.6	3511	40.0
1993	1663.3	320.0	58.5	42.6	58.5	42.4	59.3	43.3	5300	60.5
1994	369.9	320.0	13.4	41.4	13.4	41.2	13.2	42.1	1160	13.2
1995	0.0	320.0	0.0	39.8	0.0	39.6	0.0	40.4	0	0.0
1996	2245.9	320.0	79.7	41.3	79.7	41.1	79.9	41.9	7186	81.8
1997	2271.5	320.0	80.8	42.7	80.8	42.6	81.0	43.3	7083	80.9
1998	2321.5	320.0	82.5	44.2	82.5	44.0	82.8	44.7	7304	83.4
1999	2530.4	320.0	90.0	45.7	90.0	45.6	90.3	46.3	8013	91.5
2000	2381.2	320.0	84.6	47.0	84.5	46.9	84.7	47.6	7439	84.7
2001	2104.4	320.0	75.0	47.9	74.9	47.8	75.1	48.5	6574	75.0
2002	2158.6	320.0	77.1	48.8	76.6	48.7	77.0	49.3	6767	77.2
2003	2880.6	320.0	99.9	50.4	99.9	50.2	102.8	51.0	8760	100.0
2004	1764.2	320.0	61.3	50.7	61.3	50.5	62.8	51.3	5389	61.4
2005	1194.9	320.0	41.4	50.4	41.4	50.3	42.6	51.1	4022	45.9
2006	2353.3	320.0	83.3	51.3	83.3	51.2	84.0	52.0	7305	83.4
2007	854.7	320.0	30.3	50.8	30.3	50.6	30.5	51.4	2723	31.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		4141			1741	
C. Inspection, maintenance or repair combined with refuelling	792			1788		
D. Inspection, maintenance or repair without refuelling				297		
E. Testing of plant systems or components				0	3	
J. Grid failure or grid unavailability						1
Z. Others		1104			86	
Subtotal	792	5245	0	2085	1830	1
Total		6037			3916	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		6
12. Reactor I&C Systems	168	7
14. Safety Systems	3357	
15. Reactor Cooling Systems	408	48
16. Steam generation systems		1515
31. Turbine and auxiliaries	208	112
32. Feedwater and Main Steam System		43
42. Electrical Power Supply Systems		0
Total	4141	1731

JP-6 MIHAMA-2

Operator: KEPCO (KANSAI ELECTRIC POWER CO.)
Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 470.0 MW(e)
Design Net Capacity: 470.0 MW(e)
Design Discharge Burnup: 33300 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2294.2 GW(e).h
Energy Availability Factor: 54.8%
Load Factor: 55.7%
Operating Factor: 54.9%
Energy Unavailability Factor: 45.2%
Total Off-line Time: 3949 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	358.3	323.6	358.1	345.9	355.1	338.5	214.7	0.0	0.0	0.0	0.0	0.0	2294.2
EAF (%)	99.9	99.9	99.9	99.9	99.9	99.9	62.2	0.0	0.0	0.1	0.0	0.0	54.8
UCF (%)	99.9	99.9	99.9	99.9	99.9	99.9	62.2	0.0	0.0	0.1	0.0	0.0	54.8
LF (%)	102.5	102.5	102.4	102.3	101.5	100.0	61.4	0.0	0.0	0.0	0.0	0.0	55.7
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	62.8	0.0	0.0	0.0	0.0	0.0	54.9
EUF (%)	0.1	0.1	0.1	0.1	0.1	0.1	37.8	100.0	100.0	99.9	100.0	100.0	45.2
PUF (%)	0.1	0.1	0.1	0.1	0.1	0.1	37.8	100.0	100.0	93.4	0.0	0.0	27.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	100.0	100.0	17.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(07/07/20-)

5. Historical Summary

Date of Construction Start: 29 May 1968
Date of First Criticality: 10 Apr 1972
Date of Grid Connection: 21 Apr 1972
Date of Commercial Operation: 25 Jul 1972

Lifetime Generation: 90506.0 GW(e).h
Cumulative Energy Availability Factor: 61.9%
Cumulative Load Factor: 62.0%
Cumulative Unit Capability Factor: 61.9%
Cumulative Energy Unavailability Factor: 38.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1972	1318.0	492.0	67.5	67.5	67.5	67.5	59.7	59.7	3212	72.7
1973	2509.3	470.0	63.3	64.8	63.3	64.8	60.9	60.5	5569	63.6
1974	3122.8	470.0	77.0	69.6	77.0	69.6	75.8	66.6	6766	77.2
1975	260.3	470.0	6.4	51.7	6.4	51.7	6.3	49.5	818	9.3
1976	2828.2	470.0	68.7	55.5	68.7	55.5	68.5	53.7	7011	79.8
1977	1648.0	470.0	40.0	52.7	40.0	52.7	40.0	51.2	3679	42.0
1978	2648.7	470.0	64.5	54.5	64.5	54.5	64.3	53.2	5852	66.8
1979	867.1	470.0	21.1	50.1	21.1	50.1	21.1	49.0	1944	22.2
1980	3032.7	470.0	73.3	52.8	73.3	52.8	73.5	51.9	6622	75.4
1981	2762.9	470.0	66.9	54.3	66.9	54.3	67.1	53.4	5982	68.3
1982	2238.9	470.0	54.2	54.3	54.2	54.3	54.4	53.5	4958	56.6
1983	1433.8	470.0	34.7	52.6	34.7	52.6	34.8	51.9	3262	37.2
1984	3937.3	470.0	96.3	56.1	96.3	56.1	95.4	55.4	8458	96.3
1985	2898.3	470.0	70.2	57.1	70.2	57.1	70.4	56.5	6219	71.0
1986	3301.5	470.0	80.2	58.7	80.0	58.7	80.2	58.1	7100	81.1
1987	2766.2	470.0	67.7	59.3	67.7	59.3	67.2	58.7	5927	67.7
1988	3223.1	470.0	77.8	60.4	77.8	60.4	78.1	59.9	6850	78.0
1989	3325.2	470.0	81.2	61.6	81.2	61.6	80.8	61.1	7112	81.2
1990	3077.1	470.0	72.7	62.2	72.7	62.2	74.7	61.8	6594	75.3
1991	447.1	470.0	10.0	59.5	10.0	59.5	10.9	59.2	950	10.8
1992	0.0	470.0	0.0	56.6	0.0	56.6	0.0	56.3	0	0.0
1993	0.0	470.0	0.0	54.0	0.0	54.0	0.0	53.7	0	0.0
1994	1186.3	470.0	29.9	52.9	29.9	52.9	28.8	52.6	2522	28.8
1995	3335.0	470.0	80.7	54.1	80.5	54.1	81.0	53.8	7138	81.5
1996	3762.4	470.0	90.6	55.6	90.5	55.6	91.1	55.3	8024	91.3
1997	3006.0	470.0	72.6	56.2	72.6	56.2	73.0	56.0	6417	73.3
1998	3396.3	470.0	82.0	57.2	82.0	57.2	82.5	57.0	7228	82.5
1999	2746.4	470.0	66.3	57.5	66.3	57.5	66.7	57.4	5821	66.4
2000	3839.7	470.0	92.5	58.8	92.5	58.8	93.0	58.6	8137	92.6
2001	2911.3	470.0	70.4	59.2	70.3	59.1	70.7	59.0	6177	70.5
2002	3611.3	470.0	87.2	60.1	87.2	60.1	87.7	60.0	7648	87.3
2003	3400.2	470.0	81.5	60.8	81.5	60.7	82.6	60.7	7182	82.0
2004	2942.3	470.0	70.2	61.1	70.2	61.0	71.3	61.0	6170	70.2
2005	3525.4	470.0	84.8	61.8	84.8	61.7	85.6	61.7	7470	85.3
2006	3110.9	470.0	75.0	62.1	75.0	62.1	75.6	62.1	6671	76.2
2007	2294.2	470.0	54.8	61.9	54.8	61.9	55.7	62.0	4811	54.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					490	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	2437	1512		2432		
D. Inspection, maintenance or repair without refuelling				87		
Z. Others					72	
Subtotal	2437	1512	0	2519	562	0
Total	3949			3081		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		49
15. Reactor Cooling Systems		3
16. Steam generation systems		381
31. Turbine and auxiliaries		25
32. Feedwater and Main Steam System		0
41. Main Generator Systems		3
42. Electrical Power Supply Systems		25
Total	0	486

JP-14 MIHAMA-3

Operator: KEPCO (KANSAI ELECTRIC POWER CO.)
Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 780.0 MW(e)
Design Net Capacity: 780.0 MW(e)
Design Discharge Burnup: 43000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4943.9 GW(e).h
Energy Availability Factor: 69.5%
Load Factor: 72.4%
Operating Factor: 70.7%
Energy Unavailability Factor: 30.5%
Total Off-line Time: 2570 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	345.6	545.0	602.6	63.6	0.0	0.0	395.8	598.8	580.3	607.7	592.4	612.1	4943.9
EAF (%)	57.5	100.0	100.0	10.9	0.0	0.0	65.8	100.0	100.0	100.0	100.0	100.0	69.5
UCF (%)	57.5	100.0	100.0	10.9	0.0	0.0	65.8	100.0	100.0	100.0	100.0	100.0	69.5
LF (%)	59.6	104.0	103.8	11.3	0.0	0.0	68.2	103.2	103.3	104.6	105.5	105.5	72.4
OF (%)	65.3	100.0	100.0	11.5	0.0	0.0	71.6	100.0	100.0	99.9	100.0	100.0	70.7
EUf (%)	42.5	0.0	0.0	89.1	100.0	100.0	34.2	0.0	0.0	0.0	0.0	0.0	30.5
PUF (%)	42.5	0.0	0.0	89.1	100.0	100.0	34.2	0.0	0.0	0.0	0.0	0.0	30.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(04/08/14-07/01/16) PERIODICAL INSPECTION AND REFUELING(07/04/04-07/07/13). TERMS AND CONDITIONS, SUCH AS SUPPLY CAPABILITY RESERVATION OF A WINTER REQUIREMENT AND OVERLAP EVASION IN PLANT, ARE SYNTHETICALLY JUDGED AFTER THE END OF THE 21ST PERIODIC INSPECTIONS, IT STOPS AS THE 22ND PERIODIC INSPECTIONS OF THE SYSTEM SOON AFTER PARALLEL, AND OUTAGE IN APRIL, 2007 - JULY IS CARRYING OUT REFUELING DURING THIS PERIOD.

5. Historical Summary

Date of Construction Start:	07 Aug 1972	Lifetime Generation:	148151.0 GW(e).h
Date of First Criticality:	28 Jan 1976	Cumulative Energy Availability Factor:	69.3%
Date of Grid Connection:	19 Feb 1976	Cumulative Load Factor:	69.7%
Date of Commercial Operation:	01 Dec 1976	Cumulative Unit Capability Factor:	69.3%
		Cumulative Energy Unavailability Factor:	30.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	493.6	780.0	85.1	85.1	85.1	85.1	85.1	85.1	744	100.0
1977	4498.5	780.0	65.8	67.4	65.8	67.4	65.8	67.3	6159	70.3
1978	4166.6	780.0	59.5	63.6	59.5	63.6	61.0	64.3	5537	63.2
1979	1697.4	780.0	24.8	51.0	24.8	51.0	24.8	51.5	2307	26.3
1980	4597.7	780.0	67.0	55.0	67.0	55.0	67.1	55.3	5964	67.9
1981	5832.9	780.0	85.2	60.9	85.2	60.9	85.4	61.2	7607	86.8
1982	5239.1	780.0	76.4	63.4	76.4	63.4	76.7	63.8	6952	79.4
1983	4818.0	780.0	70.6	64.4	70.6	64.4	70.5	64.7	6330	72.3
1984	5353.7	780.0	77.8	66.1	77.8	66.1	78.1	66.4	6906	78.6
1985	4971.9	780.0	72.6	66.8	72.6	66.8	72.8	67.1	6426	73.4
1986	6848.4	780.0	99.8	70.1	99.8	70.1	100.2	70.4	8760	100.0
1987	4822.7	780.0	71.6	70.2	71.6	70.2	70.6	70.4	6268	71.6
1988	4261.3	780.0	64.0	69.7	64.0	69.7	62.2	69.7	5625	64.0
1989	5299.7	780.0	78.0	70.3	78.0	70.3	77.6	70.3	6834	78.0
1990	6867.0	780.0	100.0	72.4	100.0	72.4	100.5	72.5	8760	100.0
1991	4246.2	780.0	59.7	71.6	59.7	71.6	62.1	71.8	5495	62.7
1992	4709.9	780.0	68.5	71.4	68.5	71.4	68.7	71.6	6095	69.4
1993	4526.6	780.0	66.4	71.1	66.1	71.1	66.2	71.3	5951	67.9
1994	6623.0	780.0	96.8	72.5	96.8	72.5	96.9	72.7	8486	96.9
1995	3389.2	780.0	49.7	71.3	49.6	71.3	49.6	71.5	4534	51.8
1996	4491.4	780.0	65.5	71.1	65.3	71.0	65.6	71.2	5760	65.6
1997	6262.8	780.0	91.2	72.0	91.2	72.0	91.7	72.2	7963	90.9
1998	5979.9	780.0	87.1	72.7	87.1	72.7	87.5	72.8	7788	88.9
1999	5795.3	780.0	84.4	73.2	84.4	73.2	84.8	73.4	7398	84.5
2000	4785.0	780.0	69.6	73.1	69.6	73.0	69.8	73.2	6117	69.6
2001	6853.7	780.0	100.0	74.1	100.0	74.1	100.3	74.3	8760	100.0
2002	5248.0	780.0	76.8	74.2	76.8	74.2	76.8	74.4	6732	76.8
2003	6111.5	780.0	87.9	74.7	87.9	74.7	89.4	74.9	7701	87.9
2004	4301.3	780.0	60.5	74.2	60.5	74.2	62.8	74.5	5319	60.6
2005	0.0	780.0	0.0	71.7	0.0	71.7	0.0	72.0	0	0.0
2006	92.1	780.0	1.4	69.3	1.4	69.3	1.3	69.6	181	2.1
2007	4943.9	780.0	69.5	69.3	69.5	69.3	72.4	69.7	6190	70.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					136	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	2570			2302		
E. Testing of plant systems or components				0	4	
Subtotal	2570	0	0	2302	148	0
Total		2570			2450	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1976 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		34
15. Reactor Cooling Systems		11
16. Steam generation systems		30
32. Feedwater and Main Steam System		56
Total	0	131

JP-15 OHI-1**Operator:** KEPCO (KANSAI ELECTRIC POWER CO.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1120.0 MW(e)
Design Net Capacity: 1120.0 MW(e)
Design Discharge Burnup: 44000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6522.9 GW(e).h
Energy Availability Factor: 65.5%
Load Factor: 66.5%
Operating Factor: 66.2%
Energy Unavailability Factor: 34.5%
Total Off-line Time: 2964 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.7	809.7	820.4	844.9	841.9	687.4	845.0	823.3	849.8	6522.9
EAF (%)	0.0	0.0	0.0	0.0	95.4	100.0	100.0	100.0	84.8	100.0	100.0	100.0	65.5
UCF (%)	0.0	0.0	0.0	-0.1	95.4	100.0	100.0	100.0	84.8	100.0	100.0	100.0	65.5
LF (%)	0.0	0.0	0.0	0.1	97.2	101.7	101.4	101.0	85.2	101.3	102.1	102.0	66.5
OF (%)	0.0	0.0	0.0	1.0	99.7	100.0	100.0	100.0	87.6	99.9	100.0	100.0	66.2
EUF (%)	100.0	100.0	100.0	100.0	4.6	0.0	0.0	0.0	15.2	0.0	0.0	0.0	34.5
PUF (%)	100.0	100.0	100.0	74.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0
UCLF (%)	0.0	0.0	0.0	25.7	1.4	0.0	0.0	0.0	15.2	0.0	0.0	0.0	3.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(06/12/22-07/05/03)

5. Historical Summary

Date of Construction Start:	26 Oct 1972	Lifetime Generation:	188251.0 GW(e).h
Date of First Criticality:	02 Dec 1977	Cumulative Energy Availability Factor:	66.0%
Date of Grid Connection:	23 Dec 1977	Cumulative Load Factor:	66.6%
Date of Commercial Operation:	27 Mar 1979	Cumulative Unit Capability Factor:	66.1%
		Cumulative Energy Unavailability Factor:	34.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	3900.2	1120.0	47.3	47.3	47.3	47.3	47.4	47.4	3701	50.4
1980	3890.5	1120.0	39.3	42.9	39.3	42.9	39.5	43.1	3635	41.4
1981	3035.4	1120.0	30.9	38.7	30.9	38.7	30.9	38.8	2938	33.5
1982	6659.8	1120.0	67.5	46.2	67.5	46.2	67.9	46.4	6076	69.4
1983	8212.6	1120.0	83.0	53.8	83.0	53.8	83.7	54.1	7282	83.1
1984	7015.1	1120.0	70.8	56.7	70.8	56.7	71.3	57.1	6292	71.6
1985	5794.1	1120.0	59.0	57.0	58.7	57.0	59.1	57.3	5217	59.6
1986	5138.8	1120.0	52.2	56.4	52.2	56.4	52.4	56.7	4664	53.2
1987	9421.7	1120.0	95.3	60.8	95.3	60.8	96.0	61.2	8430	96.2
1988	3282.4	1120.0	34.8	58.2	34.8	58.1	33.4	58.3	3053	34.8
1989	2744.9	1120.0	29.5	55.5	29.5	55.5	28.0	55.5	2587	29.5
1990	5446.5	1120.0	52.9	55.3	52.9	55.3	55.5	55.5	4919	56.2
1991	5706.3	1120.0	55.8	55.3	55.8	55.3	58.2	55.7	5160	58.9
1992	5488.2	1120.0	55.5	55.3	55.4	55.3	55.8	55.7	4957	56.4
1993	5010.3	1120.0	50.7	55.0	50.7	55.0	51.1	55.4	4535	51.8
1994	6929.9	1120.0	70.2	56.0	69.9	55.9	70.6	56.4	6202	70.8
1995	6537.9	1120.0	66.1	56.6	66.1	56.6	66.6	57.0	6010	68.6
1996	7026.3	1120.0	70.7	57.4	70.7	57.3	71.4	57.8	6305	71.8
1997	7998.8	1120.0	80.8	58.6	80.7	58.6	81.5	59.1	7080	80.8
1998	9406.5	1120.0	95.0	60.5	95.0	60.4	95.9	60.9	8359	95.4
1999	6933.7	1120.0	70.0	60.9	70.0	60.9	70.7	61.4	6136	70.0
2000	6323.6	1120.0	63.7	61.0	63.6	61.0	64.3	61.5	5668	64.5
2001	9333.1	1120.0	94.5	62.5	94.2	62.5	95.1	63.0	8273	94.4
2002	7935.8	1120.0	80.3	63.3	80.2	63.2	80.9	63.7	7038	80.3
2003	8118.7	1120.0	81.8	64.0	81.8	63.9	82.7	64.5	7142	81.5
2004	7777.0	1120.0	77.7	64.5	77.7	64.5	79.1	65.1	6825	77.7
2005	7272.5	1120.0	75.1	64.9	75.1	64.9	74.1	65.4	6510	74.3
2006	9628.3	1120.0	97.3	66.1	97.3	66.0	98.1	66.6	8530	97.4
2007	6522.9	1120.0	65.5	66.1	65.5	66.0	66.5	66.6	5796	66.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1979 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		274			326	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	2688			2383		
E. Testing of plant systems or components				49		
J. Grid failure or grid unavailability						5
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						0
Z. Others					19	
Subtotal	2688	274	0	2432	347	5
Total		2962			2784	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1979 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		1
12. Reactor I&C Systems	185	7
13. Reactor Auxiliary Systems	89	
14. Safety Systems		6
15. Reactor Cooling Systems		34
16. Steam generation systems		227
31. Turbine and auxiliaries		9
32. Feedwater and Main Steam System		12
42. Electrical Power Supply Systems		2
Total	274	298

JP-19 OHI-2

Operator: KEPCO (KANSAI ELECTRIC POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1120.0 MW(e)
Design Net Capacity: 1120.0 MW(e)
Design Discharge Burnup: 44000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7759.9 GW(e).h
Energy Availability Factor: 76.8%
Load Factor: 79.1%
Operating Factor: 77.3%
Energy Unavailability Factor: 23.2%
Total Off-line Time: 1992 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	863.0	777.3	860.5	834.0	861.6	831.0	857.6	852.1	801.1	0.0	0.0	221.7	7759.9
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.5	0.1	0.0	26.0	76.8
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.5	0.1	0.0	26.0	76.8
LF (%)	103.6	103.3	103.3	103.6	103.4	103.0	102.9	102.3	99.3	0.0	0.0	26.6	79.1
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	98.1	0.0	0.0	30.9	77.3
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	99.9	100.0	74.0	23.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	99.9	100.0	1.8	17.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.3	6.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(07/09/30-07/12/25)

5. Historical Summary

Date of Construction Start: 08 Dec 1972
Date of First Criticality: 14 Sep 1978
Date of Grid Connection: 11 Oct 1978
Date of Commercial Operation: 05 Dec 1979

Lifetime Generation: 200525.0 GW(e).h
Cumulative Energy Availability Factor: 72.1%
Cumulative Load Factor: 72.7%
Cumulative Unit Capability Factor: 72.2%
Cumulative Energy Unavailability Factor: 27.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	839.3	1120.0	100.0	100.0	100.0	100.0	100.7	100.7	744	100.0
1980	5466.4	1120.0	55.2	58.7	55.2	58.7	55.6	59.1	4976	56.6
1981	5031.7	1120.0	51.0	55.0	51.0	55.0	51.3	55.4	4668	53.3
1982	8648.6	1120.0	87.6	65.6	87.6	65.6	88.2	66.0	7877	89.9
1983	7443.8	1120.0	75.2	67.9	75.2	67.9	75.9	68.4	6670	76.1
1984	5793.5	1120.0	58.5	66.1	58.5	66.1	58.9	66.5	5208	59.3
1985	6843.0	1120.0	69.2	66.6	69.2	66.6	69.7	67.1	6260	71.5
1986	9858.9	1120.0	99.5	71.2	99.5	71.2	100.5	71.8	8760	100.0
1987	6238.1	1120.0	66.8	70.7	65.3	70.5	63.6	70.8	5789	66.1
1988	6112.3	1120.0	62.9	69.8	62.9	69.7	62.1	69.8	5525	62.9
1989	9828.0	1120.0	99.4	72.8	99.4	72.6	100.2	72.8	8707	99.4
1990	6685.7	1120.0	66.1	72.2	66.1	72.0	68.1	72.4	6069	69.3
1991	6409.5	1120.0	71.3	72.1	69.4	71.8	65.3	71.8	5903	67.4
1992	6973.3	1120.0	70.2	71.9	70.2	71.7	70.9	71.7	6178	70.3
1993	8863.9	1120.0	89.5	73.2	89.5	72.9	90.3	73.1	7903	90.2
1994	6680.0	1120.0	67.9	72.8	67.9	72.6	68.1	72.7	5929	67.7
1995	3273.5	1120.0	33.4	70.4	33.3	70.2	33.4	70.3	3060	34.9
1996	9738.2	1120.0	98.3	72.0	98.0	71.8	99.0	72.0	8662	98.6
1997	5316.5	1120.0	53.7	71.0	53.7	70.8	54.2	71.0	4753	54.3
1998	6501.3	1120.0	65.7	70.7	65.6	70.5	66.3	70.7	5760	65.8
1999	4511.1	1120.0	45.6	69.5	45.6	69.3	46.0	69.5	3994	45.6
2000	7796.8	1120.0	78.6	69.9	78.6	69.7	79.3	70.0	6987	79.5
2001	7163.5	1120.0	71.3	70.0	71.3	69.8	73.0	70.1	6302	71.9
2002	8265.6	1120.0	83.6	70.6	83.6	70.4	84.2	70.7	7326	83.6
2003	10075.6	1120.0	100.0	71.8	100.0	71.6	102.7	72.0	8760	100.0
2004	8408.3	1120.0	83.4	72.3	83.4	72.1	85.5	72.6	7324	83.4
2005	6970.4	1120.0	70.6	72.2	70.6	72.0	71.0	72.5	6139	70.1
2006	7003.7	1120.0	69.1	72.1	69.1	71.9	71.4	72.5	6085	69.5
2007	7759.9	1120.0	76.8	72.2	76.8	72.1	79.1	72.7	6768	77.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		514			326	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	1478			1952		
D. Inspection, maintenance or repair without refuelling				15		
J. Grid failure or grid unavailability						4
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						4
Z. Others					31	
Subtotal	1478	514	0	1967	365	8
Total		1992			2340	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		145
13. Reactor Auxiliary Systems		29
14. Safety Systems		0
15. Reactor Cooling Systems		10
16. Steam generation systems		118
31. Turbine and auxiliaries	172	3
32. Feedwater and Main Steam System	342	
41. Main Generator Systems		7
42. Electrical Power Supply Systems		10
Total	514	322

JP-50 OHI-3

Operator: KEPCO (KANSAI ELECTRIC POWER CO.)
Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1127.0 MW(e)
Design Net Capacity: 1127.0 MW(e)
Design Discharge Burnup: 44000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10080.1 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 102.1%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	858.3	774.2	855.5	827.6	857.8	830.5	855.0	852.5	823.5	856.3	830.4	858.5	10080.1
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	102.4	102.2	102.0	102.1	102.3	102.4	102.0	101.7	101.5	102.0	102.3	102.4	102.1
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

OPERATION WITHOUT ANY OUTAGE

5. Historical Summary

Date of Construction Start: 03 Oct 1987 **Lifetime Generation:** 135073.0 GW(e).h
Date of First Criticality: 17 May 1991 **Cumulative Energy Availability Factor:** 84.5%
Date of Grid Connection: 07 Jun 1991 **Cumulative Load Factor:** 85.3%
Date of Commercial Operation: 18 Dec 1991 **Cumulative Unit Capability Factor:** 84.5%
Cumulative Energy Unavailability Factor: 15.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1991	843.6	1127.0	100.0	100.0	100.0	100.0	100.6	100.6	744	100.0
1992	9954.7	1127.0	100.0	100.0	100.0	100.0	100.6	100.6	8784	100.0
1993	7863.7	1127.0	79.4	90.1	79.4	90.1	79.7	90.5	7025	80.2
1994	8139.1	1127.0	82.5	87.7	82.5	87.7	82.4	87.9	7265	82.9
1995	7701.7	1127.0	77.8	85.3	77.8	85.3	78.0	85.5	6887	78.6
1996	9957.4	1127.0	100.0	88.2	100.0	88.2	100.6	88.5	8784	100.0
1997	8333.0	1127.0	83.9	87.5	83.9	87.5	84.4	87.8	7385	84.3
1998	8872.7	1127.0	89.3	87.7	89.3	87.7	89.9	88.1	7867	89.8
1999	8892.3	1127.0	89.9	88.0	89.5	87.9	90.1	88.3	7875	89.9
2000	8868.9	1127.0	89.1	88.1	89.1	88.1	89.6	88.5	7824	89.1
2001	8474.7	1127.0	85.4	87.8	85.4	87.8	85.8	88.2	7481	85.4
2002	9918.7	1127.0	100.0	88.9	100.0	88.9	100.5	89.3	8760	100.0
2003	8683.2	1127.0	85.9	88.7	85.9	88.6	88.0	89.2	7525	85.9
2004	3040.2	1127.0	30.0	84.2	30.0	84.2	30.7	84.7	2634	30.0
2005	7834.0	1127.0	77.6	83.7	77.6	83.7	79.4	84.3	6968	79.5
2006	8012.3	1127.0	79.6	83.5	79.6	83.4	81.2	84.1	7001	79.9
2007	10080.1	1127.0	100.0	84.5	100.0	84.5	102.1	85.3	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1993 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling				1040	406	
Subtotal	0	0	0	1040	406	0
Total	0			1446		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1993 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		372
13. Reactor Auxiliary Systems		34
Total	0	406

JP-51 OHI-4

Operator: KEPCO (KANSAI ELECTRIC POWER CO.)
Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1127.0 MW(e)
Design Net Capacity: 1127.0 MW(e)
Design Discharge Burnup: 44000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7978.6 GW(e).h
Energy Availability Factor: 78.9%
Load Factor: 80.8%
Operating Factor: 79.2%
Energy Unavailability Factor: 21.1%
Total Off-line Time: 1826 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	860.7	777.4	860.3	832.2	151.7	0.0	259.0	856.7	828.0	860.4	832.2	860.0	7978.6
EAF (%)	100.0	100.0	100.0	100.0	17.7	0.0	30.5	100.0	100.0	100.0	100.0	100.0	78.9
UCF (%)	100.0	100.0	100.0	100.0	17.7	0.0	30.5	100.0	100.0	100.0	100.0	100.0	78.9
LF (%)	102.6	102.7	102.6	102.7	18.1	0.0	30.9	102.2	102.0	102.5	102.6	102.6	80.8
OF (%)	100.0	100.0	100.0	100.1	18.1	0.0	33.2	100.0	100.0	99.9	100.0	100.0	79.2
EUf (%)	0.0	0.0	0.0	0.0	82.3	100.0	69.5	0.0	0.0	0.0	0.0	0.0	21.1
PUf (%)	0.0	0.0	0.0	0.0	82.3	100.0	69.5	0.0	0.0	0.0	0.0	0.0	21.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(07/05/06-07/07/23)

5. Historical Summary

Date of Construction Start: 13 Jun 1988 **Lifetime Generation:** 127203.0 GW(e).h
Date of First Criticality: 28 May 1992 **Cumulative Energy Availability Factor:** 85.2%
Date of Grid Connection: 19 Jun 1992 **Cumulative Load Factor:** 86.3%
Date of Commercial Operation: 02 Feb 1993 **Cumulative Unit Capability Factor:** 85.3%
Cumulative Energy Unavailability Factor: 14.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1993	9079.7	1127.0	100.0	100.0	100.0	100.0	100.5	100.5	8016	100.0
1994	7851.5	1127.0	79.7	89.4	79.7	89.4	79.5	89.6	7063	80.6
1995	7495.1	1127.0	75.6	84.7	75.6	84.7	75.9	84.9	6695	76.4
1996	7051.1	1127.0	70.8	81.1	70.8	81.1	71.2	81.4	6221	70.8
1997	7660.2	1127.0	77.1	80.3	77.1	80.3	77.6	80.6	6756	77.1
1998	8839.4	1127.0	89.0	81.8	89.0	81.8	89.5	82.1	7835	89.4
1999	8903.4	1127.0	89.9	82.9	89.5	82.9	90.2	83.3	7872	89.9
2000	8649.8	1127.0	86.8	83.4	86.8	83.4	87.4	83.8	7629	86.9
2001	9283.6	1127.0	93.4	84.5	93.4	84.5	94.0	84.9	8179	93.4
2002	9217.1	1127.0	91.5	85.2	91.5	85.2	93.4	85.8	8017	91.5
2003	8762.6	1127.0	86.3	85.3	86.3	85.3	88.8	86.1	7557	86.3
2004	8318.2	1127.0	81.8	85.0	81.8	85.0	84.0	85.9	7186	81.8
2005	9929.0	1127.0	98.8	86.1	98.8	86.1	100.6	87.0	8657	98.8
2006	8163.9	1127.0	80.7	85.7	80.7	85.7	82.7	86.7	7087	80.9
2007	7978.6	1127.0	78.9	85.3	78.9	85.2	80.8	86.3	6934	79.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1994 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling	1826			960	228	
Z. Others					41	
Subtotal	1826	0	0	960	269	0
Total	1826			1229		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1994 to 2007 Average Hours Lost Per Year
41. Main Generator Systems		228
Total	0	228

JP-22 ONAGAWA-1**Operator:** TOHOKU (TOHOKU ELECTRIC POWER CO.,INC)**Contractor:** TOSHIBA (TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 498.0 MW(e)
Design Net Capacity: 496.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2162.2 GW(e).h
Energy Availability Factor: 49.3%
Load Factor: 49.6%
Operating Factor: 49.7%
Energy Unavailability Factor: 50.7%
Total Off-line Time: 4409 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	16.1	0.0	305.4	372.3	359.9	372.6	361.7	374.3	2162.2
EAF (%)	0.0	0.0	0.0	-0.1	4.7	0.0	82.0	100.0	100.0	100.0	100.0	100.0	49.3
UCF (%)	0.0	0.0	0.0	-0.1	4.7	0.0	82.0	100.0	100.0	100.0	100.0	100.0	49.3
LF (%)	0.0	0.0	0.0	0.0	4.3	0.0	82.4	100.5	100.4	100.4	100.9	101.0	49.6
OF (%)	0.0	0.0	0.0	0.0	7.5	0.0	83.7	100.0	100.0	99.9	100.0	100.0	49.7
EUf (%)	100.0	100.0	100.0	100.1	95.3	100.0	18.0	0.0	0.0	0.0	0.0	0.0	50.7
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.1
UCLF (%)	100.0	100.0	100.0	100.1	95.3	100.0	16.3	0.0	0.0	0.0	0.0	0.0	50.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

EXTENSION OF PERIODICAL INSPECTION(2006/4/4-2007/7/8)OPERATION AT FULL POWER IN BASE LOAD(2007/7/8-)

5. Historical Summary

Date of Construction Start:	08 Jul 1980	Lifetime Generation:	74604.0 GW(e).h
Date of First Criticality:	18 Oct 1983	Cumulative Energy Availability Factor:	69.4%
Date of Grid Connection:	18 Nov 1983	Cumulative Load Factor:	69.6%
Date of Commercial Operation:	01 Jun 1984	Cumulative Unit Capability Factor:	71.3%
		Cumulative Energy Unavailability Factor:	30.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	2519.8	496.0	98.9	98.9	98.9	98.9	98.9	98.9	5136	100.0
1985	3259.2	496.0	75.6	84.2	75.6	84.2	75.0	83.8	6681	76.3
1986	3366.6	496.0	77.9	81.8	77.9	81.8	77.5	81.4	6871	78.4
1987	3161.7	497.0	72.8	79.3	72.8	79.3	72.6	78.9	6500	74.2
1988	3410.6	496.0	78.6	79.1	78.6	79.1	78.3	78.8	6949	79.1
1989	3013.7	497.0	69.1	77.3	69.1	77.3	69.2	77.1	6177	70.5
1990	2850.7	497.0	65.6	75.5	65.6	75.5	65.5	75.3	5908	67.4
1991	3345.9	497.0	77.0	75.7	77.0	75.7	76.9	75.5	6954	79.4
1992	4120.5	497.0	94.7	78.0	94.7	77.9	94.4	77.7	8342	95.0
1993	2300.1	497.0	52.0	75.2	50.6	75.1	52.8	75.1	4666	53.3
1994	3428.8	497.0	78.7	75.6	78.6	75.4	78.8	75.5	6961	79.5
1995	2936.4	497.0	68.2	74.9	67.8	74.8	67.4	74.8	6000	68.5
1996	3727.2	498.0	85.6	75.8	85.6	75.6	85.2	75.6	7523	85.6
1997	3304.6	498.0	76.2	75.8	76.2	75.7	75.8	75.6	6708	76.6
1998	3359.5	498.0	76.9	75.9	76.9	75.8	77.0	75.7	6841	78.1
1999	4240.2	498.0	97.2	77.3	97.2	77.1	97.2	77.1	8517	97.2
2000	3689.1	498.0	84.6	77.7	84.6	77.6	84.3	77.5	7436	84.7
2001	3425.1	498.0	78.5	77.8	78.4	77.6	78.5	77.6	6873	78.5
2002	3143.2	498.0	68.5	77.3	68.5	77.1	72.1	77.3	6001	68.5
2003	1856.1	498.0	42.5	75.5	42.5	75.4	42.5	75.5	3725	42.5
2004	2998.9	498.0	68.6	75.1	68.5	75.0	68.6	75.2	6020	68.5
2005	1898.6	498.0	80.8	75.4	43.1	73.6	43.5	73.7	3799	43.4
2006	0.0	498.0	4.8	72.3	0.0	70.3	0.0	70.4	0	0.0
2007	2162.2	498.0	49.3	71.3	49.3	69.4	49.6	69.6	4351	49.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1175			369	
C. Inspection, maintenance or repair combined with refuelling				1416		
D. Inspection, maintenance or repair without refuelling				276		
E. Testing of plant systems or components		3238			282	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						4
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						161
Subtotal	0	4413	0	1692	651	165
Total		4413			2508	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
14. Safety Systems	1175	54
15. Reactor Cooling Systems		212
31. Turbine and auxiliaries		32
32. Feedwater and Main Steam System		64
42. Electrical Power Supply Systems		5
Total	1175	367

JP-54 ONAGAWA-2**Operator:** TOHOKU (TOHOKU ELECTRIC POWER CO.,INC)**Contractor:** TOSHIBA (TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 796.0 MW(e)
Design Net Capacity: 796.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5184.6 GW(e).h
Energy Availability Factor: 73.8%
Load Factor: 74.4%
Operating Factor: 74.1%
Energy Unavailability Factor: 26.2%
Total Off-line Time: 2269 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	336.4	539.7	597.1	578.2	597.7	578.0	596.3	595.3	574.9	191.0	0.0	0.0	5184.6
EAF (%)	56.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	32.3	0.0	0.0	73.8
UCF (%)	56.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	32.3	0.0	0.0	73.8
LF (%)	56.8	100.9	100.8	101.0	100.9	100.9	100.7	100.5	100.3	32.2	0.0	0.0	74.4
OF (%)	58.9	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	32.9	0.0	0.0	74.1
EUUF (%)	43.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.7	100.0	100.0	26.2
PUF (%)	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.8	100.0	100.0	21.5
UCLF (%)	41.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9	0.0	0.0	4.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

OPERATION AT FULL POWER IN BASE LOAD(2007/1/23-2007/10/10)PERIODICAL INSPECTION AND REFUELING(2007/10/15-)

5. Historical Summary

Date of Construction Start: 12 Apr 1991 **Lifetime Generation:** 65376.0 GW(e).h
Date of First Criticality: 02 Nov 1994 **Cumulative Energy Availability Factor:** 73.6%
Date of Grid Connection: 23 Dec 1994 **Cumulative Load Factor:** 73.7%
Date of Commercial Operation: 28 Jul 1995 **Cumulative Unit Capability Factor:** 76.9%
Cumulative Energy Unavailability Factor: 26.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1995	3261.4	796.0	93.4	93.4	93.4	93.4	92.8	92.8	4149	94.0
1996	5175.3	796.0	74.4	80.8	74.4	80.8	74.0	80.3	6545	74.5
1997	6931.6	796.0	99.9	88.4	99.9	88.4	99.4	87.9	8760	100.0
1998	5647.7	796.0	81.1	86.3	81.1	86.3	81.0	85.9	7185	82.0
1999	5841.2	796.0	84.2	85.9	84.2	85.9	83.8	85.5	7383	84.3
2000	5858.6	796.0	84.2	85.6	84.2	85.6	83.8	85.2	7402	84.3
2001	6521.2	796.0	94.0	86.9	94.0	86.9	93.5	86.4	8238	94.0
2002	5242.9	796.0	72.4	84.9	72.4	84.9	75.2	84.9	6368	72.7
2003	3272.4	796.0	47.3	80.5	47.2	80.5	46.9	80.5	4139	47.2
2004	7040.4	796.0	100.0	82.6	100.0	82.6	100.7	82.6	8784	100.0
2005	1877.3	796.0	64.5	80.8	26.8	77.2	26.9	77.3	2367	27.0
2006	2484.7	796.0	38.9	77.2	35.6	73.6	35.6	73.7	3188	36.4
2007	5184.6	796.0	73.8	76.9	73.8	73.6	74.4	73.7	6491	74.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1995 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		306			699	
C. Inspection, maintenance or repair combined with refuelling	1872			995		
D. Inspection, maintenance or repair without refuelling				47		
E. Testing of plant systems or components		91			7	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						276
Subtotal	1872	397	0	1042	706	276
Total		2269			2024	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1995 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		60
12. Reactor I&C Systems		141
13. Reactor Auxiliary Systems		122
15. Reactor Cooling Systems	306	288
31. Turbine and auxiliaries		26
32. Feedwater and Main Steam System		58
Total	306	695

JP-57 ONAGAWA-3**Operator:** TOHOKU (TOHOKU ELECTRIC POWER CO.,INC)**Contractor:** TOSHIBA (TOSHIBA CORPORATION)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 796.0 MW(e)
Design Net Capacity: 796.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2261.4 GW(e).h
Energy Availability Factor: 31.7%
Load Factor: 32.4%
Operating Factor: 33.0%
Energy Unavailability Factor: 68.3%
Total Off-line Time: 5873 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	611.8	552.5	230.4	534.2	168.1	0.0	0.0	0.0	0.0	0.0	4.7	159.7	2261.4
EAF (%)	100.0	100.0	37.9	92.3	28.6	0.0	0.0	0.0	0.0	0.1	0.9	26.3	31.7
UCF (%)	100.0	100.0	37.9	92.3	28.6	0.0	0.0	0.0	0.0	0.1	0.9	26.3	31.7
LF (%)	103.3	103.3	38.9	93.3	28.4	0.0	0.0	0.0	0.0	0.0	0.8	27.0	32.4
OF (%)	100.0	100.0	40.3	100.1	29.3	0.0	0.0	0.0	0.0	0.0	3.3	28.1	33.0
EUUF (%)	0.0	0.0	62.1	7.7	71.4	100.0	100.0	100.0	100.0	99.9	99.1	73.7	68.3
PUF (%)	0.0	0.0	0.0	0.0	71.4	100.0	100.0	100.0	100.0	54.8	0.0	1.7	44.3
UCLF (%)	0.0	0.0	62.1	7.8	0.0	0.0	0.0	0.0	0.0	45.1	99.1	71.9	24.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

OPERATION AT FULL POWER IN BASE LOAD(2006/11/28-2007/3/6)UNPLANNED
 INSPECTION(2007/3/7-2007/3/27)PERIODICAL INSPECTION AND
 REFUELING(2007/5/9-2007/10/18)EXTENSION OF PERIODICAL INSPECTION(2007/10/18-2007/12/25)

5. Historical Summary

Date of Construction Start: 23 Jan 1998 **Lifetime Generation:** 27174.0 GW(e).h
Date of First Criticality: 26 Apr 2001 **Cumulative Energy Availability Factor:** 65.0%
Date of Grid Connection: 30 May 2001 **Cumulative Load Factor:** 65.5%
Date of Commercial Operation: 30 Jan 2002 **Cumulative Unit Capability Factor:** 67.1%
Cumulative Energy Unavailability Factor: 35.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2002	6652.5	796.0	100.0	100.0	100.0	100.0	95.4	95.4	8064	92.1
2003	5978.2	796.0	84.7	92.3	83.7	91.9	85.7	90.6	7332	83.7
2004	5348.7	796.0	74.6	86.4	74.4	86.0	76.5	85.9	6548	74.5
2005	4381.8	796.0	72.7	83.0	61.2	79.8	62.8	80.1	5460	62.3
2006	2798.1	796.0	39.0	74.2	39.0	71.7	40.1	72.1	3476	39.7
2007	2261.4	796.0	31.7	67.1	31.7	65.0	32.4	65.5	2887	33.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2003 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1011			196	
C. Inspection, maintenance or repair combined with refuelling	3862			887	391	
D. Inspection, maintenance or repair without refuelling					678	
E. Testing of plant systems or components		1024				
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						218
Z. Others					91	
Subtotal	3862	2035	0	887	1356	218
Total		5897			2461	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2003 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems	567	
31. Turbine and auxiliaries	444	
32. Feedwater and Main Steam System		196
Total	1011	196

JP-28 SENDAI-1

Operator: KYUSHU (KYUSHU ELECTRIC POWER CO.,INC.)

Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 846.0 MW(e)
 Design Net Capacity: 846.0 MW(e)
 Design Discharge Burnup: 49000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5868.9 GW(e).h
 Energy Availability Factor: 75.2%
 Load Factor: 79.2%
 Operating Factor: 76.0%
 Energy Unavailability Factor: 24.8%
 Total Off-line Time: 2100 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	664.9	601.8	664.7	319.3	0.0	0.0	348.5	658.9	635.4	661.8	645.1	668.4	5868.9
EAF (%)	100.0	100.0	100.0	49.6	0.0	0.0	53.6	100.0	100.0	100.0	100.0	100.0	75.2
UCF (%)	100.0	100.0	100.0	49.6	0.0	0.0	53.6	100.0	100.0	100.0	100.0	100.0	75.2
LF (%)	105.6	105.9	105.6	52.5	0.0	0.0	55.4	104.7	104.3	105.0	105.9	106.2	79.2
OF (%)	100.0	100.0	100.0	50.2	0.0	0.0	62.8	100.0	100.0	99.9	100.0	100.0	76.0
EUf (%)	0.0	0.0	0.0	50.4	100.0	100.0	46.4	0.0	0.0	0.0	0.0	0.0	24.8
PUF (%)	0.0	0.0	0.0	50.4	100.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7
UCLF (%)	0.0	0.0	0.0	0.0	0.0	50.0	46.4	0.0	0.0	0.0	0.0	0.0	8.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 15 Dec 1979 Lifetime Generation: 151472.0 GW(e).h
 Date of First Criticality: 25 Aug 1983 Cumulative Energy Availability Factor: 82.2%
 Date of Grid Connection: 16 Sep 1983 Cumulative Load Factor: 83.5%
 Date of Commercial Operation: 04 Jul 1984 Cumulative Unit Capability Factor: 82.2%
 Cumulative Energy Unavailability Factor: 17.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	3775.4	846.0	100.0	100.0	100.0	100.0	101.1	101.1	4416	100.0
1985	5890.3	846.0	78.7	85.8	78.7	85.8	79.5	86.7	6964	79.5
1986	6084.0	846.0	81.4	84.0	81.4	84.0	82.1	84.9	7224	82.5
1987	6113.4	846.0	81.7	83.4	81.7	83.4	82.5	84.2	7261	82.9
1988	5683.1	846.0	75.8	81.7	75.8	81.7	76.5	82.5	6756	76.9
1989	7381.3	846.0	98.7	84.8	98.7	84.8	99.6	85.6	8641	98.6
1990	6155.0	846.0	82.3	84.4	82.3	84.4	83.1	85.2	7307	83.4
1991	5590.7	846.0	74.8	83.1	74.8	83.1	75.4	83.9	6684	76.3
1992	5713.9	846.0	76.1	82.3	76.1	82.3	76.9	83.1	6780	77.2
1993	6619.2	846.0	88.4	82.9	88.4	82.9	89.3	83.7	7753	88.5
1994	5778.3	846.0	77.2	82.4	77.2	82.4	78.0	83.2	6762	77.2
1995	5780.3	846.0	77.3	81.9	77.3	81.9	78.0	82.7	6863	78.3
1996	5185.4	846.0	69.1	80.9	69.1	80.9	69.8	81.7	6157	70.1
1997	7216.7	846.0	96.4	82.1	96.4	82.1	97.4	82.9	8449	96.4
1998	5291.2	846.0	70.6	81.3	70.6	81.3	71.4	82.1	6311	72.0
1999	6057.6	846.0	80.8	81.2	80.8	81.2	81.7	82.0	7082	80.8
2000	5654.0	846.0	75.2	80.9	75.2	80.9	76.1	81.7	6609	75.2
2001	7367.0	846.0	98.3	81.9	98.3	81.9	99.4	82.7	8614	98.3
2002	6323.0	846.0	83.7	82.0	83.7	82.0	85.3	82.8	7333	83.7
2003	6282.1	846.0	83.1	82.0	83.1	82.0	84.8	82.9	7278	83.1
2004	6080.8	846.0	80.1	81.9	80.1	81.9	81.8	82.9	7043	80.2
2005	7155.8	846.0	94.7	82.5	94.7	82.5	96.6	83.5	8305	94.8
2006	6436.6	846.0	82.9	82.5	82.9	82.5	86.9	83.7	7330	83.7
2007	5868.9	846.0	75.2	82.2	75.2	82.2	79.2	83.5	6660	76.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling	1470	637		1423	52	
Subtotal	1470	637	0	1423	52	0
Total	2107			1475		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		2
13. Reactor Auxiliary Systems		11
16. Steam generation systems		29
31. Turbine and auxiliaries		9
32. Feedwater and Main Steam System	637	
Total	637	51

JP-37 SENDAI-2

Operator: KYUSHU (KYUSHU ELECTRIC POWER CO.,INC.)

Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 846.0 MW(e)
 Design Net Capacity: 846.0 MW(e)
 Design Discharge Burnup: 49000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5989.3 GW(e).h
 Energy Availability Factor: 79.0%
 Load Factor: 80.8%
 Operating Factor: 79.9%
 Energy Unavailability Factor: 21.0%
 Total Off-line Time: 1764 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	645.4	583.2	645.2	624.6	645.3	620.7	349.9	0.0	7.2	603.2	622.1	642.3	5989.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	54.5	0.0	1.3	94.3	100.0	100.0	79.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	54.5	0.0	1.3	94.3	100.0	100.0	79.0
LF (%)	102.5	102.6	102.5	102.7	102.5	101.9	55.6	0.0	1.2	95.7	102.1	102.1	80.8
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	55.0	0.0	4.9	99.9	100.0	100.0	79.9
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	45.5	100.0	98.7	5.7	0.0	0.0	21.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	45.5	100.0	98.7	5.7	0.0	0.0	21.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 12 Oct 1981 Lifetime Generation: 137041.0 GW(e).h
 Date of First Criticality: 18 Mar 1985 Cumulative Energy Availability Factor: 83.4%
 Date of Grid Connection: 05 Apr 1985 Cumulative Load Factor: 84.6%
 Date of Commercial Operation: 28 Nov 1985 Cumulative Unit Capability Factor: 83.4%
 Cumulative Energy Unavailability Factor: 16.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	1252.9	846.0	100.0	100.0	100.0	100.0	101.2	101.2	1464	100.0
1986	5996.4	846.0	80.1	83.0	80.1	83.0	80.9	83.8	7112	81.2
1987	6080.6	846.0	81.2	82.2	81.2	82.2	82.0	83.0	7211	82.3
1988	7409.8	846.0	98.7	87.4	98.7	87.4	99.7	88.3	8665	98.6
1989	4999.4	846.0	66.8	82.5	66.8	82.5	67.5	83.3	5950	67.9
1990	6160.1	846.0	82.4	82.4	82.4	82.4	83.1	83.3	7309	83.4
1991	5665.3	846.0	75.7	81.4	75.7	81.4	76.4	82.2	6732	76.8
1992	7385.3	846.0	98.3	83.7	98.3	83.7	99.4	84.6	8639	98.3
1993	5822.0	846.0	77.7	83.0	77.7	83.0	78.6	83.8	6632	75.7
1994	5568.8	846.0	74.3	82.0	74.3	82.0	75.1	82.9	6557	74.9
1995	5658.4	846.0	75.5	81.4	75.5	81.4	76.4	82.2	6709	76.6
1996	7359.3	846.0	98.0	82.9	98.0	82.9	99.0	83.7	8617	98.1
1997	5950.3	846.0	79.4	82.6	79.4	82.6	80.3	83.5	7034	80.3
1998	5899.1	846.0	78.7	82.3	78.7	82.3	79.6	83.2	6973	79.6
1999	5658.3	846.0	75.5	81.8	75.5	81.8	76.4	82.7	6612	75.5
2000	7370.2	846.0	98.0	82.9	98.0	82.9	99.2	83.8	8614	98.1
2001	6210.2	846.0	82.9	82.9	82.9	82.9	83.8	83.8	7260	82.9
2002	6255.5	846.0	82.8	82.9	82.8	82.9	84.4	83.8	7257	82.8
2003	6348.8	846.0	83.4	82.9	83.4	82.9	85.7	83.9	7315	83.5
2004	6762.5	846.0	88.5	83.2	88.5	83.2	91.0	84.3	7774	88.5
2005	6752.8	846.0	88.9	83.5	88.9	83.5	91.1	84.6	7895	90.1
2006	6464.2	846.0	85.3	83.6	85.3	83.6	87.2	84.7	7548	86.2
2007	5989.3	846.0	79.0	83.4	79.0	83.4	80.8	84.6	6996	79.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling	1771			1380	5	
Subtotal	1771	0	0	1380	5	0
Total	1771			1385		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
32. Feedwater and Main Steam System		5
Total	0	5

JP-48 SHIKA-1

Operator: HOKURIKU (HOKURIKU ELECTRIC POWER CO.)
Contractor: HITACHI (HITACHI LTD.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 505.0 MW(e)
Design Net Capacity: 505.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 908.4 GW(e).h
Energy Availability Factor: 20.2%
Load Factor: 20.5%
Operating Factor: 20.3%
Energy Unavailability Factor: 79.8%
Total Off-line Time: 6982 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	382.9	346.2	179.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	908.4
EAF (%)	99.9	100.0	48.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	20.2
UCF (%)	99.9	100.0	48.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	20.2
LF (%)	101.9	102.0	47.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5
OF (%)	100.0	100.0	48.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3
EUUF (%)	0.1	0.0	52.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	79.8
PUF (%)	0.1	0.0	0.0	63.4	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	72.3
UCLF (%)	0.0	0.0	52.0	36.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE GENERAL INSPECTION OF SAFETY MEASURES.(BECAUSE A LOCAL CRITICALITY OCCURRED WHEN CONTROL RODS OF A SHIKA1 WERE UNEXPECTEDLY WITHDRAWN DURING A SHUTDOWN IN JUNE,1999)(3/16-

5. Historical Summary

Date of Construction Start: 01 Jul 1989 **Lifetime Generation:** 49186.0 GW(e).h
Date of First Criticality: 20 Nov 1992 **Cumulative Energy Availability Factor:** 75.9%
Date of Grid Connection: 12 Jan 1993 **Cumulative Load Factor:** 75.4%
Date of Commercial Operation: 30 Jul 1993 **Cumulative Unit Capability Factor:** 75.9%
Cumulative Energy Unavailability Factor: 24.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1993	2068.5	505.0	99.8	99.8	99.8	99.8	92.8	92.8	4130	93.5
1994	3312.4	505.0	75.0	83.3	75.0	83.3	74.9	80.9	6584	75.2
1995	3497.2	505.0	79.0	81.6	79.0	81.6	79.1	80.1	6974	79.6
1996	3454.7	505.0	77.9	80.6	77.9	80.6	77.9	79.5	6848	78.0
1997	4431.8	505.0	100.0	84.9	100.0	84.9	100.2	84.1	8760	100.0
1998	3530.6	505.0	80.0	84.0	80.0	84.0	79.8	83.3	7047	80.4
1999	3325.7	505.0	75.4	82.7	75.4	82.7	75.2	82.1	6607	75.4
2000	3763.1	505.0	84.9	83.0	84.9	83.0	84.8	82.4	7462	84.9
2001	4427.4	505.0	100.0	85.0	100.0	85.0	100.1	84.5	8760	100.0
2002	3537.1	505.0	80.0	84.4	80.0	84.4	80.0	84.0	7010	80.0
2003	1523.8	505.0	34.6	79.7	34.6	79.7	34.4	79.3	3029	34.6
2004	3534.9	505.0	78.8	79.6	78.8	79.6	79.7	79.3	6958	79.2
2005	4203.8	505.0	100.0	81.2	100.0	81.2	95.0	80.6	8226	93.9
2006	2908.1	505.0	65.3	80.1	65.3	80.1	65.7	79.5	5777	65.9
2007	908.4	505.0	20.2	75.9	20.2	75.9	20.5	75.4	1778	20.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1994 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					131	
C. Inspection, maintenance or repair combined with refuelling	4272			1539		
E. Testing of plant systems or components	2064					
H. Nuclear regulatory requirements		646				
J. Grid failure or grid unavailability						43
Subtotal	6336	646	0	1539	131	43
Total		6982			1713	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1994 to 2007 Average Hours Lost Per Year
15. Reactor Cooling Systems		67
31. Turbine and auxiliaries		11
41. Main Generator Systems		30
42. Electrical Power Supply Systems		21
Total	0	129

JP-59 SHIKA-2

Operator: HOKURIKU (HOKURIKU ELECTRIC POWER CO.)
Contractor: HITACHI (HITACHI LTD.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1304.0 MW(e)
Design Net Capacity: 1304.0 MW(e)
Design Discharge Burnup: 41000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 0.0 GW(e).h
Energy Availability Factor: 0.0%
Load Factor: 0.0%
Operating Factor: 0.0%
Energy Unavailability Factor: 100.0%
Total Off-line Time: 8760 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
UCF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNPLANNED INSPECTION(STEAM TURBINE -1/31)

5. Historical Summary

Date of Construction Start: 20 Aug 2001 **Lifetime Generation:** 6586.0 GW(e).h
Date of First Criticality: 26 May 2005 **Cumulative Energy Availability Factor:** 18.8%
Date of Grid Connection: 04 Jul 2005 **Cumulative Load Factor:** 18.8%
Date of Commercial Operation: 15 Mar 2006 **Cumulative Unit Capability Factor:** 18.8%
Cumulative Energy Unavailability Factor: 81.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2006	3953.9	1304.0	41.1	41.1	41.1	41.1	41.3	41.3	3030	41.3
2007	0.0	1304.0	0.0	18.8	0.0	18.8	0.0	18.8	0	0.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2006 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
E. Testing of plant systems or components				453		
H. Nuclear regulatory requirements		8760			2157	
Subtotal	0	8760	0	453	2157	0
Total		8760			2610	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2006 to 2007 Average Hours Lost Per Year

The reactor has not yet completed a full year of commercial operation.

JP-7 SHIMANE-1**Operator:** CHUGOKU (THE CHUGOKU ELECTRIC POWER CO.,INC.)**Contractor:** HITACHI (HITACHI LTD.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 439.0 MW(e)
Design Net Capacity: 439.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2866.6 GW(e).h
Energy Availability Factor: 73.4%
Load Factor: 74.5%
Operating Factor: 73.5%
Energy Unavailability Factor: 26.6%
Total Off-line Time: 2319 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	204.0	323.8	333.7	321.6	331.0	327.9	318.1	331.8	322.4	52.2	2866.6
EAF (%)	0.0	0.0	61.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	15.7	73.4
UCF (%)	0.0	0.0	61.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	15.7	73.4
LF (%)	0.0	0.0	62.5	102.6	102.2	101.7	101.3	100.4	100.6	101.5	102.0	16.0	74.5
OF (%)	0.0	0.0	62.6	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	16.0	73.5
EUF (%)	100.0	100.0	39.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.3	26.6
PUF (%)	100.0	100.0	39.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.3	26.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 02 Jul 1970
Date of First Criticality: 01 Jun 1973
Date of Grid Connection: 02 Dec 1973
Date of Commercial Operation: 29 Mar 1974

Lifetime Generation: 95635.0 GW(e).h
Cumulative Energy Availability Factor: 73.1%
Cumulative Load Factor: 73.2%
Cumulative Unit Capability Factor: 73.2%
Cumulative Energy Unavailability Factor: 26.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	2756.2	440.0	84.0	84.0	84.0	84.0	85.3	85.3	6387	87.0
1975	2946.1	439.0	78.7	81.1	78.7	81.1	76.6	80.6	7010	80.0
1976	2802.9	439.0	72.7	78.2	72.7	78.2	72.7	77.8	6697	76.2
1977	1879.1	439.0	48.9	70.6	48.9	70.6	48.9	70.3	4489	51.2
1978	2701.8	439.0	70.3	70.5	70.3	70.5	70.3	70.3	6394	73.0
1979	2623.6	439.0	68.4	70.1	68.4	70.1	68.2	69.9	6341	72.4
1980	2734.6	439.0	70.9	70.2	70.9	70.2	70.9	70.1	6466	73.6
1981	2293.1	439.0	57.0	68.5	57.0	68.5	59.6	68.7	5430	62.0
1982	2366.8	439.0	61.5	67.7	61.5	67.7	61.5	67.9	5499	62.8
1983	2696.1	439.0	70.1	68.0	70.1	68.0	70.1	68.1	6268	71.6
1984	2990.7	439.0	78.2	68.9	78.2	68.9	77.6	69.0	6912	78.7
1985	3790.4	439.0	100.0	71.6	99.1	71.5	98.6	71.5	8705	99.4
1986	2130.5	439.0	55.5	70.3	55.5	70.2	55.4	70.3	4903	56.0
1987	3011.2	439.0	79.4	71.0	78.6	70.8	78.3	70.8	6937	79.2
1988	2355.1	439.0	61.1	70.3	61.1	70.2	61.1	70.2	5398	61.5
1989	2616.3	439.0	68.1	70.2	68.1	70.0	68.0	70.0	5965	68.1
1990	3745.5	439.0	97.4	71.8	97.4	71.7	97.4	71.7	8565	97.8
1991	3111.3	439.0	80.9	72.3	80.9	72.2	80.9	72.2	7123	81.3
1992	2671.3	439.0	73.4	72.3	69.4	72.0	69.3	72.0	6134	69.8
1993	2549.1	439.0	66.5	72.0	66.5	71.7	66.3	71.7	5849	66.8
1994	2948.0	439.0	76.7	72.3	76.7	72.0	76.7	72.0	6733	76.9
1995	2984.6	439.0	78.1	72.5	78.1	72.3	77.6	72.2	6862	78.3
1996	2245.5	439.0	58.4	71.9	58.4	71.7	58.2	71.6	5154	58.7
1997	2923.6	439.0	76.2	72.1	76.2	71.8	76.0	71.8	6712	76.6
1998	3845.4	439.0	100.0	73.2	100.0	73.0	100.0	72.9	8760	100.0
1999	3359.3	439.0	87.4	73.8	87.4	73.5	87.4	73.5	7657	87.4
2000	1381.2	439.0	35.8	72.3	35.8	72.1	35.8	72.1	3149	35.8
2001	2844.6	439.0	74.1	72.4	74.1	72.2	74.0	72.2	6488	74.1
2002	3393.2	439.0	88.2	73.0	88.2	72.8	88.2	72.7	7730	88.2
2003	2749.0	439.0	71.4	72.9	71.4	72.7	71.5	72.7	6253	71.4
2004	3937.9	439.0	100.0	73.8	100.0	73.6	102.1	73.6	8784	100.0
2005	2382.3	439.0	60.8	73.4	60.8	73.2	61.9	73.3	5349	61.1
2006	2699.5	439.0	68.7	73.2	68.7	73.1	70.2	73.2	6025	68.8
2007	2866.6	439.0	73.4	73.2	73.4	73.1	74.5	73.2	6441	73.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					116	
C. Inspection, maintenance or repair combined with refuelling	2331			1985		
D. Inspection, maintenance or repair without refuelling				72		
J. Grid failure or grid unavailability						3
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					9	
Z. Others					11	
Subtotal	2331	0	0	2057	136	3
Total		2331			2196	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
14. Safety Systems		4
15. Reactor Cooling Systems		74
31. Turbine and auxiliaries		1
32. Feedwater and Main Steam System		36
Total	0	115

JP-41 SHIMANE-2

Operator: CHUGOKU (THE CHUGOKU ELECTRIC POWER CO.,INC.)

Contractor: HITACHI (HITACHI LTD.)

1. Station Details

Type: BWR
 Net Reference Unit Power at the beginning of 2007: 789.0 MW(e)
 Design Net Capacity: 789.0 MW(e)
 Design Discharge Burnup: 45000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5462.0 GW(e).h
 Energy Availability Factor: 79.5%
 Load Factor: 79.0%
 Operating Factor: 79.6%
 Energy Unavailability Factor: 20.5%
 Total Off-line Time: 1790 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	589.7	532.3	587.9	566.8	147.0	0.0	164.6	577.8	559.1	583.0	566.6	587.3	5462.0
EAF (%)	100.0	100.0	100.0	99.9	25.1	0.0	30.5	100.0	100.0	100.0	100.0	100.0	79.5
UCF (%)	100.0	100.0	100.0	99.9	25.1	0.0	30.5	100.0	100.0	100.0	100.0	100.0	79.5
LF (%)	100.5	100.4	100.1	99.9	25.0	0.0	28.0	98.4	98.4	99.2	99.7	100.0	79.0
OF (%)	100.0	100.0	100.0	100.1	25.7	0.0	30.5	100.0	100.0	99.9	100.0	100.0	79.6
EUUF (%)	0.0	0.0	0.0	0.1	74.9	100.0	69.5	0.0	0.0	0.0	0.0	0.0	20.5
PUF (%)	0.0	0.0	0.0	0.1	71.5	100.0	69.5	0.0	0.0	0.0	0.0	0.0	20.2
UCLF (%)	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 02 Feb 1985 Lifetime Generation: 109762.0 GW(e).h
 Date of First Criticality: 25 May 1988 Cumulative Energy Availability Factor: 82.8%
 Date of Grid Connection: 11 Jul 1988 Cumulative Load Factor: 82.6%
 Date of Commercial Operation: 10 Feb 1989 Cumulative Unit Capability Factor: 82.8%
 Cumulative Energy Unavailability Factor: 17.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	5628.8	790.0	89.2	89.2	89.2	89.2	88.8	88.8	7179	89.6
1990	5123.5	790.0	74.0	81.3	74.0	81.3	74.0	81.1	6592	75.3
1991	5544.5	790.0	80.1	80.9	80.1	80.9	80.1	80.8	7121	81.3
1992	5516.1	790.0	79.7	80.6	79.7	80.6	79.5	80.4	7072	80.5
1993	6756.9	790.0	97.8	84.1	97.8	84.1	97.6	83.9	8592	98.1
1994	5547.3	790.0	80.6	83.5	80.6	83.5	80.2	83.3	7071	80.7
1995	5363.6	790.0	77.9	82.7	77.9	82.7	77.5	82.5	6888	78.6
1996	5583.7	790.0	80.8	82.4	80.8	82.4	80.5	82.2	7166	81.6
1997	6903.2	789.0	100.0	84.4	100.0	84.4	99.9	84.2	8760	100.0
1998	5962.5	789.0	86.5	84.6	86.5	84.6	86.3	84.4	7600	86.8
1999	5758.7	789.0	83.5	84.5	83.5	84.5	83.3	84.3	7319	83.6
2000	6084.0	789.0	88.2	84.8	88.1	84.8	87.8	84.6	7747	88.2
2001	6901.0	789.0	100.0	86.0	100.0	86.0	99.8	85.8	8760	100.0
2002	6055.1	789.0	87.6	86.1	87.6	86.1	87.6	85.9	7678	87.6
2003	4836.2	789.0	70.1	85.0	70.0	85.0	70.0	84.8	6133	70.0
2004	4097.6	789.0	59.0	83.4	59.0	83.4	59.1	83.2	5202	59.2
2005	5907.5	789.0	85.6	83.5	85.4	83.5	85.5	83.3	7544	86.1
2006	5085.4	789.0	73.6	83.0	73.6	82.9	73.6	82.8	6469	73.8
2007	5462.0	789.0	79.5	82.8	79.5	82.8	79.0	82.6	6970	79.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					152	
B. Refuelling without a maintenance					6	
C. Inspection, maintenance or repair combined with refuelling	1765			1183	7	
D. Inspection, maintenance or repair without refuelling				6		
H. Nuclear regulatory requirements		25				
Z. Others					31	
Subtotal	1765	25	0	1189	196	0
Total		1790			1385	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		5
13. Reactor Auxiliary Systems		19
15. Reactor Cooling Systems		84
Total	0	108

JP-8 TAKAHAMA-1**Operator:** KEPCO (KANSAI ELECTRIC POWER CO.)**Contractor:** WH/MHI (WESTINGHOUSE ELECTRIC CORPORATION / MITSUBISHI HEAVY INDUSTRIES LTD.)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 780.0 MW(e)
Design Net Capacity: 780.0 MW(e)
Design Discharge Burnup: 43000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6012.9 GW(e).h
Energy Availability Factor: 84.2%
Load Factor: 88.0%
Operating Factor: 84.5%
Energy Unavailability Factor: 15.8%
Total Off-line Time: 1361 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	22.2	611.0	591.7	610.8	588.8	605.1	600.1	579.0	604.8	589.3	609.9	6012.9
EAF (%)	0.0	4.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.2
UCF (%)	0.0	4.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.2
LF (%)	0.0	4.2	105.3	105.5	105.3	104.8	104.3	103.4	103.1	104.1	104.9	105.1	88.0
OF (%)	0.0	8.2	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	84.5
EUF (%)	100.0	95.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8
PUF (%)	100.0	60.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2
UCLF (%)	0.0	34.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(06/11/22-07/03/01)

5. Historical Summary

Date of Construction Start: 25 Apr 1970
Date of First Criticality: 14 Mar 1974
Date of Grid Connection: 27 Mar 1974
Date of Commercial Operation: 14 Nov 1974

Lifetime Generation: 156131.0 GW(e).h
Cumulative Energy Availability Factor: 68.2%
Cumulative Load Factor: 68.9%
Cumulative Unit Capability Factor: 68.2%
Cumulative Energy Unavailability Factor: 31.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	1059.8	780.0	94.0	94.0	94.0	94.0	92.8	92.8	1376	94.0
1975	4980.4	780.0	72.8	75.9	72.8	75.9	72.9	75.7	6938	79.2
1976	3170.1	780.0	46.2	62.1	46.2	62.1	46.3	62.1	4900	55.8
1977	383.8	780.0	5.6	44.3	5.6	44.3	5.6	44.3	569	6.5
1978	2762.5	780.0	40.4	43.4	40.4	43.4	40.4	43.4	4088	46.7
1979	1648.9	780.0	24.1	39.7	24.1	39.7	24.1	39.6	2269	25.9
1980	2705.1	780.0	39.4	39.6	39.4	39.6	39.5	39.6	3604	41.0
1981	3990.2	780.0	58.3	42.2	58.3	42.2	58.4	42.2	5180	59.1
1982	3872.1	780.0	56.5	44.0	56.5	44.0	56.7	44.0	5085	58.0
1983	5716.2	780.0	83.7	48.3	83.7	48.3	83.7	48.3	7403	84.5
1984	3537.4	780.0	51.4	48.6	51.4	48.6	51.6	48.7	4586	52.2
1985	5000.8	780.0	72.8	50.8	72.8	50.8	73.2	50.8	6473	73.9
1986	5070.3	780.0	73.9	52.7	73.9	52.7	74.2	52.8	6507	74.3
1987	4701.4	780.0	70.2	54.0	70.2	54.0	68.8	54.0	6148	70.2
1988	4147.1	780.0	60.9	54.5	60.9	54.5	60.5	54.4	5351	60.9
1989	4877.3	780.0	72.0	55.6	72.0	55.6	71.4	55.6	6311	72.0
1990	6265.5	780.0	90.8	57.8	90.8	57.8	91.7	57.8	8002	91.3
1991	4795.0	780.0	68.2	58.4	68.2	58.4	70.2	58.5	6202	70.8
1992	4645.0	780.0	67.6	58.9	67.6	58.9	67.8	59.0	6051	68.9
1993	3299.7	780.0	48.4	58.4	48.4	58.4	48.3	58.5	4458	50.9
1994	4024.0	780.0	58.8	58.4	58.8	58.4	58.9	58.5	5146	58.7
1995	6585.1	780.0	96.0	60.2	96.0	60.2	96.4	60.3	8485	96.9
1996	3358.8	780.0	48.8	59.7	48.8	59.7	49.0	59.8	4331	49.3
1997	4674.4	780.0	68.1	60.0	68.1	60.0	68.4	60.1	6000	68.5
1998	6856.8	780.0	100.0	61.7	100.0	61.7	100.4	61.8	8760	100.0
1999	5704.2	780.0	84.3	62.6	83.2	62.5	83.5	62.7	7291	83.2
2000	6008.1	780.0	87.4	63.5	87.4	63.5	87.7	63.6	7716	87.8
2001	6005.8	780.0	87.6	64.4	87.6	64.4	87.9	64.5	7731	88.3
2002	6056.3	780.0	88.4	65.3	88.4	65.2	88.6	65.4	7749	88.5
2003	6247.2	780.0	87.2	66.0	87.2	66.0	91.4	66.3	7637	87.2
2004	5539.9	780.0	77.2	66.4	77.2	66.4	80.9	66.8	6785	77.2
2005	6222.5	780.0	87.1	67.1	87.1	67.0	91.1	67.5	7659	87.4
2006	6347.1	780.0	89.2	67.7	89.2	67.7	92.9	68.3	7811	89.2
2007	6012.9	780.0	84.2	68.2	84.2	68.2	88.0	68.9	7399	84.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		233			389	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	1128			1968		
D. Inspection, maintenance or repair without refuelling				209		
E. Testing of plant systems or components				0		
J. Grid failure or grid unavailability						2
Z. Others					10	
Subtotal	1128	233	0	2177	400	2
Total		1361			2579	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		7
15. Reactor Cooling Systems	233	96
16. Steam generation systems		240
31. Turbine and auxiliaries		16
32. Feedwater and Main Steam System		26
42. Electrical Power Supply Systems		0
Total	233	385

JP-13 TAKAHAMA-2

Operator: KEPCO (KANSAI ELECTRIC POWER CO.)
Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 780.0 MW(e)
Design Net Capacity: 780.0 MW(e)
Design Discharge Burnup: 43000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4521.8 GW(e).h
Energy Availability Factor: 62.5%
Load Factor: 66.2%
Operating Factor: 62.6%
Energy Unavailability Factor: 37.5%
Total Off-line Time: 3277 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	615.4	555.9	615.7	595.8	615.3	594.1	609.9	319.7	0.0	0.0	0.0	0.0	4521.8
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	52.5	0.0	0.1	0.0	0.0	62.5
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	52.5	0.0	0.1	0.0	0.0	62.5
LF (%)	106.0	106.1	106.1	106.2	106.0	105.8	105.1	55.1	0.0	0.0	0.0	0.0	66.2
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	53.1	0.0	0.0	0.0	0.0	62.6
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5	100.0	99.9	100.0	100.0	37.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5	100.0	22.6	0.0	0.0	14.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.3	100.0	100.0	23.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(07/08/17-)

5. Historical Summary

Date of Construction Start:	09 Mar 1971	Lifetime Generation:	151458.0 GW(e).h
Date of First Criticality:	20 Dec 1974	Cumulative Energy Availability Factor:	67.9%
Date of Grid Connection:	17 Jan 1975	Cumulative Load Factor:	68.9%
Date of Commercial Operation:	14 Nov 1975	Cumulative Unit Capability Factor:	68.1%
		Cumulative Energy Unavailability Factor:	32.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	1147.0	780.0	99.5	99.5	99.5	99.5	100.4	100.4	1464	100.0
1976	3728.8	780.0	54.2	60.7	54.2	60.7	54.4	61.0	6214	70.7
1977	4742.0	780.0	69.4	64.7	69.4	64.7	69.4	64.9	6429	73.4
1978	4170.3	780.0	61.0	63.5	61.0	63.5	61.0	63.7	5751	65.7
1979	1281.0	780.0	18.7	52.8	18.7	52.8	18.7	52.9	1826	20.8
1980	5751.1	780.0	83.7	58.8	83.7	58.8	83.9	58.9	7450	84.8
1981	4763.2	780.0	69.6	60.5	69.6	60.5	69.7	60.7	6198	70.8
1982	4133.9	780.0	60.3	60.5	60.3	60.5	60.5	60.6	5407	61.7
1983	3549.4	780.0	51.7	59.4	51.7	59.4	51.9	59.6	4645	53.0
1984	4503.1	780.0	65.4	60.1	65.4	60.1	65.7	60.2	5746	65.4
1985	4967.4	780.0	72.4	61.3	72.4	61.3	72.7	61.5	6466	73.8
1986	3997.8	780.0	58.4	61.0	58.4	61.0	58.5	61.2	5183	59.2
1987	4621.8	780.0	70.3	61.8	67.3	61.5	67.6	61.7	6154	70.3
1988	3071.3	780.0	45.5	60.5	45.5	60.3	44.8	60.4	4001	45.5
1989	3991.5	780.0	59.5	60.5	59.5	60.3	58.4	60.3	5213	59.5
1990	1727.9	780.0	20.8	57.9	20.8	57.7	25.3	58.0	2218	25.3
1991	2265.8	780.0	32.2	56.3	32.2	56.1	33.2	56.5	3054	34.9
1992	4873.8	780.0	70.8	57.1	70.8	57.0	71.1	57.3	6226	70.9
1993	5757.0	780.0	84.0	58.6	84.0	58.4	84.3	58.8	7426	84.8
1994	3357.3	780.0	49.3	58.1	49.3	58.0	49.1	58.3	4299	49.1
1995	4458.7	780.0	65.1	58.5	65.1	58.3	65.3	58.6	5906	67.4
1996	6709.1	780.0	97.7	60.3	97.3	60.2	97.9	60.5	8629	98.2
1997	4981.2	780.0	72.5	60.9	72.5	60.7	72.9	61.1	6306	72.0
1998	5972.9	780.0	87.0	62.0	87.0	61.9	87.4	62.2	7657	87.4
1999	5989.8	780.0	87.2	63.0	87.2	62.9	87.7	63.2	7717	88.1
2000	6849.9	780.0	99.5	64.5	99.5	64.4	100.0	64.7	8784	100.0
2001	5901.0	780.0	86.0	65.3	86.0	65.2	86.4	65.5	7572	86.4
2002	6097.7	780.0	87.0	66.1	87.0	66.0	89.2	66.4	7626	87.1
2003	5470.8	780.0	76.4	66.5	76.4	66.4	80.1	66.9	6717	76.7
2004	6346.6	780.0	89.3	67.3	88.9	67.1	92.6	67.8	7839	89.2
2005	6249.5	780.0	86.7	67.9	86.7	67.8	91.5	68.6	7625	87.0
2006	5653.4	780.0	78.3	68.2	78.3	68.1	82.7	69.0	6890	78.7
2007	4521.8	780.0	62.5	68.1	62.5	67.9	66.2	68.9	5483	62.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		2040			135	
B. Refuelling without a maintenance					6	
C. Inspection, maintenance or repair combined with refuelling	1237			2400		
D. Inspection, maintenance or repair without refuelling				10		
Z. Others					17	
Subtotal	1237	2040	0	2410	158	0
Total		3277			2568	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1976 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	2040	39
16. Steam generation systems		83
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		8
42. Electrical Power Supply Systems		1
Total	2040	133

JP-29 TAKAHAMA-3

Operator: KEPCO (KANSAI ELECTRIC POWER CO.)
Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 830.0 MW(e)
Design Net Capacity: 830.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6847.4 GW(e).h
Energy Availability Factor: 89.4%
Load Factor: 94.2%
Operating Factor: 89.4%
Energy Unavailability Factor: 10.6%
Total Off-line Time: 926 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	652.1	589.5	653.0	630.4	651.8	628.7	648.2	648.0	626.4	650.8	468.6	0.0	6847.4
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	74.2	0.0	89.4
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	74.2	0.0	89.4
LF (%)	105.6	105.7	105.7	105.6	105.5	105.2	105.0	104.9	104.8	105.3	78.4	0.0	94.2
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	74.7	0.0	89.4
EUUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8	100.0	10.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8	100.0	10.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(07/11/23-)

5. Historical Summary

Date of Construction Start: 12 Dec 1980 **Lifetime Generation:** 142755.0 GW(e).h
Date of First Criticality: 17 Apr 1984 **Cumulative Energy Availability Factor:** 83.8%
Date of Grid Connection: 09 May 1984 **Cumulative Load Factor:** 85.4%
Date of Commercial Operation: 17 Jan 1985 **Cumulative Unit Capability Factor:** 83.8%
Cumulative Energy Unavailability Factor: 16.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	6199.5	830.0	84.7	84.7	84.7	84.7	85.3	85.3	7426	84.8
1986	6833.6	830.0	93.1	88.9	93.1	88.9	94.0	89.6	8215	93.8
1987	6030.4	830.0	82.9	86.9	82.9	86.9	82.9	87.4	7265	82.9
1988	5743.2	830.0	79.1	85.0	79.1	85.0	78.8	85.2	6948	79.1
1989	5987.2	830.0	81.5	84.3	81.5	84.3	82.3	84.7	7138	81.5
1990	6775.0	830.0	91.9	85.5	91.9	85.5	93.2	86.1	8143	93.0
1991	5513.6	830.0	73.9	83.9	73.9	83.9	75.8	84.6	6641	75.8
1992	6059.9	830.0	82.2	83.7	82.2	83.7	83.1	84.4	7292	83.0
1993	5804.8	830.0	77.6	83.0	77.6	83.0	79.8	83.9	6983	79.7
1994	7361.1	830.0	100.0	84.7	100.0	84.7	101.2	85.6	8760	100.0
1995	5662.9	830.0	77.0	84.0	77.0	84.0	77.9	84.9	6809	77.7
1996	5479.3	830.0	74.2	83.2	74.2	83.2	75.2	84.1	6576	74.9
1997	6028.9	830.0	81.9	83.1	81.9	83.1	82.9	84.0	7206	82.3
1998	6853.7	830.0	93.1	83.8	93.1	83.8	94.3	84.8	8161	93.2
1999	6833.4	830.0	93.9	84.5	92.8	84.4	94.0	85.4	8131	92.8
2000	5898.9	830.0	79.9	84.2	79.9	84.1	80.9	85.1	7023	80.0
2001	6167.2	830.0	83.8	84.2	83.8	84.1	84.8	85.1	7340	83.8
2002	6463.3	830.0	87.3	84.3	87.3	84.3	88.9	85.3	7654	87.4
2003	7355.7	830.0	96.1	84.9	96.1	84.9	101.2	86.1	8421	96.1
2004	5625.1	830.0	74.1	84.4	74.1	84.4	77.2	85.7	6512	74.1
2005	5738.4	830.0	75.6	84.0	75.6	83.9	78.9	85.4	6656	76.0
2006	5702.9	830.0	75.0	83.6	75.0	83.5	78.4	85.0	6604	75.4
2007	6847.4	830.0	89.4	83.8	89.4	83.8	94.2	85.4	7834	89.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					4	
C. Inspection, maintenance or repair combined with refuelling	926			1294		
H. Nuclear regulatory requirements					17	
J. Grid failure or grid unavailability						4
Z. Others					44	
Subtotal	926	0	0	1294	65	4
Total		926			1363	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		1
13. Reactor Auxiliary Systems		3
32. Feedwater and Main Steam System		0
Total	0	4

JP-30 TAKAHAMA-4

Operator: KEPCO (KANSAI ELECTRIC POWER CO.)
Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 830.0 MW(e)
Design Net Capacity: 830.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5787.6 GW(e).h
Energy Availability Factor: 76.0%
Load Factor: 79.6%
Operating Factor: 76.3%
Energy Unavailability Factor: 24.0%
Total Off-line Time: 2072 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	647.9	585.4	648.0	257.0	0.0	0.0	463.2	642.3	621.0	646.2	627.1	649.5	5787.6
EAF (%)	100.0	100.0	100.0	40.8	0.0	0.0	72.0	100.0	100.0	100.0	100.0	100.0	76.0
UCF (%)	100.0	100.0	100.0	40.8	0.0	0.0	72.0	100.0	100.0	100.0	100.0	100.0	76.0
LF (%)	104.9	105.0	104.9	43.1	0.0	0.0	75.0	104.0	103.9	104.5	104.9	105.2	79.6
OF (%)	100.0	100.0	100.0	41.4	0.0	0.0	75.0	100.0	100.0	99.9	100.0	100.0	76.3
EUUF (%)	0.0	0.0	0.0	59.2	100.0	100.0	28.0	0.0	0.0	0.0	0.0	0.0	24.0
PUF (%)	0.0	0.0	0.0	59.2	100.0	100.0	28.0	0.0	0.0	0.0	0.0	0.0	24.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

PERIODICAL INSPECTION AND REFUELING(07/04/13-07/07/11)

5. Historical Summary

Date of Construction Start: 19 Mar 1981 **Lifetime Generation:** 141142.0 GW(e).h
Date of First Criticality: 11 Oct 1984 **Cumulative Energy Availability Factor:** 84.2%
Date of Grid Connection: 01 Nov 1984 **Cumulative Load Factor:** 85.9%
Date of Commercial Operation: 05 Jun 1985 **Cumulative Unit Capability Factor:** 84.3%
Cumulative Energy Unavailability Factor: 15.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	4314.3	830.0	100.0	100.0	100.0	100.0	101.2	101.2	5136	100.0
1986	5864.0	830.0	79.6	87.1	79.6	87.1	80.7	88.2	7073	80.7
1987	5588.5	830.0	77.0	83.2	77.0	83.2	76.9	83.8	6743	77.0
1988	6437.9	830.0	87.3	84.3	87.3	84.3	88.3	85.1	7666	87.3
1989	6802.7	830.0	93.2	86.3	93.2	86.3	93.6	86.9	8167	93.2
1990	5174.6	830.0	69.0	83.2	69.0	83.2	71.2	84.1	6233	71.2
1991	6170.1	830.0	83.1	83.2	83.1	83.2	84.9	84.2	7409	84.6
1992	6048.4	830.0	81.9	83.0	81.9	83.0	83.0	84.1	7265	82.7
1993	7210.9	830.0	97.9	84.7	97.9	84.7	99.2	85.8	8578	97.9
1994	5767.2	830.0	78.5	84.1	78.5	84.1	79.3	85.1	6861	78.3
1995	5651.8	830.0	76.7	83.4	76.7	83.4	77.7	84.4	6785	77.5
1996	5666.5	830.0	76.7	82.8	76.7	82.8	77.7	83.9	6785	77.2
1997	7367.3	830.0	100.0	84.2	100.0	84.2	101.3	85.2	8760	100.0
1998	6470.2	830.0	87.8	84.4	87.8	84.4	89.0	85.5	7727	88.2
1999	5500.3	830.0	75.8	83.8	74.6	83.8	75.6	84.8	6542	74.7
2000	6099.0	830.0	82.6	83.8	82.6	83.7	83.7	84.8	7254	82.6
2001	7364.6	830.0	100.0	84.7	100.0	84.7	101.3	85.8	8760	100.0
2002	6145.5	830.0	83.5	84.7	83.5	84.6	84.5	85.7	7316	83.5
2003	6490.2	830.0	86.0	84.7	86.0	84.7	89.3	85.9	7531	86.0
2004	5987.8	830.0	78.2	84.4	78.2	84.3	82.1	85.7	6868	78.2
2005	6633.2	830.0	87.4	84.5	87.4	84.5	91.2	86.0	7657	87.4
2006	6589.8	830.0	86.6	84.6	86.6	84.6	90.6	86.2	7612	86.9
2007	5787.6	830.0	76.0	84.3	76.0	84.2	79.6	85.9	6688	76.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling J. Grid failure or grid unavailability Z. Others	2072			1232	11	4
Subtotal	2072	0	0	1232	25	4
Total	2072			1261		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		11
Total	0	11

JP-21 TOKAI-2**Operator:** JAPCO (JAPAN ATOMIC POWER CO.)**Contractor:** GE (GENERAL ELECTRIC CO.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1060.0 MW(e)
Design Net Capacity: 1056.0 MW(e)
Design Discharge Burnup: 39500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7518.8 GW(e).h
Energy Availability Factor: 80.0%
Load Factor: 81.0%
Operating Factor: 80.5%
Energy Unavailability Factor: 20.0%
Total Off-line Time: 1712 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	409.6	617.2	183.6	800.4	773.0	796.9	796.9	770.4	797.3	773.3	800.1	7518.8
EAF (%)	0.0	56.8	77.1	23.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	80.0
UCF (%)	0.0	56.9	77.1	23.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	80.0
LF (%)	0.0	57.5	78.3	24.1	101.5	101.3	101.0	101.0	100.9	101.0	101.3	101.4	81.0
OF (%)	0.0	60.3	77.7	25.7	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	80.5
EUF (%)	100.0	43.2	22.9	76.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0
PUF (%)	100.0	43.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.8
UCLF (%)	0.0	0.1	22.9	76.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 03 Oct 1973
Date of First Criticality: 18 Jan 1978
Date of Grid Connection: 13 Mar 1978
Date of Commercial Operation: 28 Nov 1978

Lifetime Generation: 202521.0 GW(e).h
Cumulative Energy Availability Factor: 74.0%
Cumulative Load Factor: 73.6%
Cumulative Unit Capability Factor: 74.1%
Cumulative Energy Unavailability Factor: 26.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	0.0	1056.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1979	5209.5	1056.0	56.3	62.6	56.3	62.6	56.3	48.3	5481	62.6
1980	6743.2	1056.0	72.6	67.2	72.6	67.2	72.7	59.5	6597	75.1
1981	6059.1	1056.0	65.3	66.6	65.3	66.6	65.5	61.4	6037	68.9
1982	5571.6	1056.0	59.6	64.9	59.6	64.9	60.2	61.1	5338	60.9
1983	6556.6	1056.0	70.5	66.0	70.5	66.0	70.9	63.0	6327	72.2
1984	8695.2	1056.0	93.5	70.5	93.5	70.5	93.7	68.0	8240	93.8
1985	6957.5	1056.0	75.0	71.1	75.0	71.1	75.2	69.0	6625	75.6
1986	5797.6	1056.0	62.5	70.0	62.5	70.0	62.7	68.2	5508	62.9
1987	7040.5	1056.0	76.5	70.7	76.5	70.7	76.1	69.1	6776	77.4
1988	6088.4	1056.0	66.0	70.3	66.0	70.3	65.6	68.8	5872	66.8
1989	8435.0	1056.0	91.2	72.1	91.2	72.1	91.2	70.8	8006	91.4
1990	7291.6	1056.0	78.9	72.7	78.9	72.7	78.8	71.4	6948	79.3
1991	7025.3	1056.0	76.1	73.0	76.1	73.0	75.9	71.8	6716	76.7
1992	6307.7	1080.0	68.6	72.6	68.5	72.6	66.5	71.4	5990	68.2
1993	8707.2	1080.0	93.8	74.1	93.8	74.1	92.0	72.8	8252	94.2
1994	7325.8	1056.0	78.9	74.4	78.9	74.4	79.2	73.2	6938	79.2
1995	6845.0	1056.0	73.7	74.3	73.7	74.3	74.0	73.2	6488	74.1
1996	7562.1	1056.0	80.8	74.7	80.7	74.7	81.5	73.7	7169	81.6
1997	8884.5	1056.0	95.7	75.8	95.6	75.8	96.0	74.8	8404	95.9
1998	6999.4	1056.0	75.1	75.7	75.0	75.7	75.7	74.9	6642	75.8
1999	2316.1	1056.0	25.4	73.4	24.9	73.3	25.0	72.5	2228	25.4
2000	7031.6	1056.0	76.3	73.5	75.4	73.4	75.8	72.7	6626	75.4
2001	5833.2	1056.0	62.7	73.0	62.7	73.0	63.1	72.3	5641	64.4
2002	6420.1	1056.0	70.0	72.9	68.9	72.8	69.4	72.1	6061	69.2
2003	9176.5	1056.0	98.6	73.9	98.5	73.8	99.2	73.2	8635	98.6
2004	7195.4	1060.0	76.5	74.0	76.3	73.9	77.3	73.4	6723	76.5
2005	5259.5	1060.0	55.8	73.4	55.8	73.2	56.6	72.8	4914	56.1
2006	8186.9	1060.0	87.9	73.9	87.3	73.7	88.2	73.3	7704	87.9
2007	7518.8	1060.0	80.0	74.1	80.0	74.0	81.0	73.6	7048	80.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1979 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		709			331	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1032			1713		
D. Inspection, maintenance or repair without refuelling				33		
J. Grid failure or grid unavailability						4
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					21	
Subtotal	1032	709	0	1746	352	4
Total		1741			2102	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1979 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		205
13. Reactor Auxiliary Systems		5
14. Safety Systems		31
15. Reactor Cooling Systems		41
31. Turbine and auxiliaries		14
32. Feedwater and Main Steam System	709	20
42. Electrical Power Supply Systems		12
Total	709	328

JP-43 TOMARI-1**Operator:** HEPCO (HOKKAIDO ELECTRIC POWER CO.,INC.)**Contractor:** MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 550.0 MW(e)
Design Net Capacity: 550.0 MW(e)
Design Discharge Burnup: 31500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3952.5 GW(e).h
Energy Availability Factor: 80.6%
Load Factor: 82.0%
Operating Factor: 81.3%
Energy Unavailability Factor: 19.4%
Total Off-line Time: 1639 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	414.9	375.0	415.3	171.3	0.0	259.1	419.8	415.9	252.1	405.6	404.9	418.8	3952.5
EAF (%)	100.0	100.0	100.0	42.6	0.0	64.4	100.0	100.0	62.9	97.6	100.0	100.0	80.6
UCF (%)	100.0	100.0	100.0	42.6	0.0	64.4	100.0	100.0	62.9	97.6	100.0	100.0	80.6
LF (%)	101.4	101.5	101.5	43.3	0.0	65.4	102.6	101.6	63.6	99.0	102.3	102.3	82.0
OF (%)	100.0	100.0	100.0	43.3	0.0	69.0	100.0	100.0	63.5	99.9	100.0	100.0	81.3
EUAF (%)	0.0	0.0	0.0	57.4	100.0	35.6	0.0	0.0	37.1	2.4	0.0	0.0	19.4
PUF (%)	0.0	0.0	0.0	57.4	100.0	35.6	0.0	0.0	0.0	0.0	0.0	0.0	16.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.1	2.4	0.0	0.0	3.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

2 OUTAGE

(1)20070413-20070610 PERIODICAL INSPECTION AND REFUELING.(2)20070920-20070930 UNPLANNED EMERGENCY DIESEL GENERATOR TROUBLE.

5. Historical Summary

Date of Construction Start: 12 Jul 1985 **Lifetime Generation:** 77440.0 GW(e).h
Date of First Criticality: 16 Nov 1988 **Cumulative Energy Availability Factor:** 85.3%
Date of Grid Connection: 06 Dec 1988 **Cumulative Load Factor:** 86.0%
Date of Commercial Operation: 22 Jun 1989 **Cumulative Unit Capability Factor:** 85.3%
Cumulative Energy Unavailability Factor: 14.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	2802.8	550.0	99.6	99.6	99.6	99.6	99.2	99.2	5136	100.0
1990	3830.7	550.0	79.5	86.9	79.5	86.9	79.5	86.8	7092	81.0
1991	3540.4	550.0	73.5	81.7	73.5	81.7	73.5	81.6	6588	75.2
1992	3646.4	550.0	75.9	80.1	75.9	80.1	75.5	79.9	6780	77.2
1993	4795.2	550.0	100.0	84.4	100.0	84.4	99.5	84.2	8760	100.0
1994	3903.9	550.0	81.4	83.9	81.4	83.9	81.0	83.6	7208	82.3
1995	3946.3	550.0	81.9	83.6	81.9	83.6	81.9	83.4	7175	81.9
1996	3750.4	550.0	78.1	82.8	78.1	82.8	77.6	82.6	6920	78.8
1997	4795.6	550.0	100.0	84.8	100.0	84.8	99.5	84.6	8760	100.0
1998	4239.1	550.0	83.1	84.7	83.1	84.7	88.0	84.9	7373	84.2
1999	4074.6	550.0	79.7	84.2	79.7	84.2	84.6	84.9	6986	79.7
2000	4168.5	550.0	86.5	84.4	86.5	84.4	86.3	85.0	7598	86.5
2001	4804.0	550.0	100.0	85.6	100.0	85.6	99.7	86.2	8760	100.0
2002	4177.3	550.0	86.9	85.7	86.9	85.7	86.7	86.2	7614	86.9
2003	3821.7	550.0	78.7	85.2	78.7	85.2	79.3	85.8	6893	78.7
2004	3788.8	550.0	77.0	84.7	77.0	84.7	78.4	85.3	6762	77.0
2005	4818.8	550.0	98.3	85.5	98.3	85.5	100.0	86.2	8616	98.4
2006	4236.7	550.0	86.9	85.6	86.9	85.6	87.9	86.3	7643	87.2
2007	3952.5	550.0	80.6	85.3	80.6	85.3	82.0	86.0	7121	81.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1990 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		262			27	
C. Inspection, maintenance or repair combined with refuelling	1375			1136		
Z. Others					30	
Subtotal	1375	262	0	1136	57	0
Total	1637			1193		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1990 to 2007 Average Hours Lost Per Year
32. Feedwater and Main Steam System		27
42. Electrical Power Supply Systems	262	
Total	262	27

JP-44 TOMARI-2**Operator:** HEPCO (HOKKAIDO ELECTRIC POWER CO.,INC.)**Contractor:** MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 550.0 MW(e)
Design Net Capacity: 550.0 MW(e)
Design Discharge Burnup: 31500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4663.2 GW(e).h
Energy Availability Factor: 94.8%
Load Factor: 96.8%
Operating Factor: 95.2%
Energy Unavailability Factor: 5.2%
Total Off-line Time: 421 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	162.2	380.0	420.5	406.4	418.1	403.3	416.3	415.0	401.2	416.9	404.8	418.6	4663.2
EAF (%)	39.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.8
UCF (%)	39.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.8
LF (%)	39.6	102.8	102.8	102.8	102.2	101.8	101.7	101.4	101.3	101.8	102.2	102.3	96.8
OF (%)	43.4	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	95.2
EUf (%)	61.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
PUF (%)	61.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

1OUTAGE(1)20061118(20070101)-20070118 PERIODICAL INSPECTION AND REFUELING.

5. Historical Summary

Date of Construction Start: 08 May 1986 **Lifetime Generation:** 69881.0 GW(e).h
Date of First Criticality: 25 Jul 1990 **Cumulative Energy Availability Factor:** 84.5%
Date of Grid Connection: 27 Aug 1990 **Cumulative Load Factor:** 85.7%
Date of Commercial Operation: 12 Apr 1991 **Cumulative Unit Capability Factor:** 84.5%
Cumulative Energy Unavailability Factor: 15.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1991	2759.6	550.0	76.0	76.0	76.0	76.0	76.0	76.0	5076	76.9
1992	3639.6	550.0	75.5	75.7	75.5	75.7	75.3	75.6	6756	76.9
1993	3847.5	550.0	80.0	77.3	80.0	77.3	79.9	77.2	7092	81.0
1994	4511.6	550.0	93.9	81.7	93.9	81.7	93.6	81.6	8232	94.0
1995	4161.9	550.0	85.5	82.5	85.5	82.5	86.4	82.6	7567	86.4
1996	3933.6	550.0	81.5	82.3	81.5	82.3	81.4	82.4	7232	82.3
1997	3775.2	550.0	78.5	81.8	78.5	81.8	78.4	81.8	6943	79.3
1998	5071.6	550.0	100.0	84.1	100.0	84.1	105.3	84.8	8760	100.0
1999	4273.2	550.0	83.8	84.1	83.8	84.1	88.7	85.2	7344	83.8
2000	4107.5	550.0	85.1	84.2	85.1	84.2	85.0	85.2	7477	85.1
2001	3971.3	550.0	82.6	84.0	82.6	84.0	82.4	85.0	7235	82.6
2002	4516.1	550.0	93.9	84.9	93.9	84.9	93.7	85.7	8228	93.9
2003	3542.0	550.0	71.9	83.9	71.9	83.9	73.5	84.8	6300	71.9
2004	3864.7	550.0	78.1	83.4	78.1	83.4	80.0	84.4	6862	78.1
2005	4252.6	550.0	86.0	83.6	86.0	83.6	88.3	84.7	7571	86.4
2006	4316.9	550.0	87.9	83.9	87.9	83.9	89.6	85.0	7704	87.9
2007	4663.2	550.0	94.8	84.5	94.8	84.5	96.8	85.7	8339	95.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1991 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					101	
C. Inspection, maintenance or repair combined with refuelling	421			1092		
D. Inspection, maintenance or repair without refuelling				89		
Subtotal	421	0	0	1181	101	0
Total	421			1282		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1991 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		101
Total	0	101

JP-3 TSURUGA-1**Operator:** JAPCO (JAPAN ATOMIC POWER CO.)**Contractor:** GE (GENERAL ELECTRIC CO.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 340.0 MW(e)
Design Net Capacity: 341.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1267.1 GW(e).h
Energy Availability Factor: 42.5%
Load Factor: 42.5%
Operating Factor: 42.9%
Energy Unavailability Factor: 57.5%
Total Off-line Time: 5003 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	253.3	121.9	0.0	0.0	0.0	0.0	0.0	0.3	196.0	196.6	245.4	253.7	1267.1
EAF (%)	100.0	53.3	0.0	-0.1	0.0	0.0	0.0	0.2	80.1	77.7	100.0	100.0	42.5
UCF (%)	100.0	53.3	0.0	-0.1	0.0	0.0	0.0	0.2	80.7	77.8	100.0	100.0	42.6
LF (%)	100.1	53.4	0.0	0.0	0.0	0.0	0.0	0.1	80.1	77.6	100.2	100.3	42.5
OF (%)	100.0	53.6	0.0	0.0	0.0	0.0	0.0	0.8	82.6	78.9	100.0	100.0	42.9
EUF (%)	0.0	46.7	100.0	100.1	100.0	100.0	100.0	99.8	19.9	22.3	0.0	0.0	57.5
PUF (%)	0.0	46.7	100.0	100.1	100.0	100.0	100.0	0.0	0.2	0.0	0.0	0.0	45.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.9	19.1	22.2	0.0	0.0	11.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 24 Nov 1966
Date of First Criticality: 03 Oct 1969
Date of Grid Connection: 16 Nov 1969
Date of Commercial Operation: 14 Mar 1970

Lifetime Generation: 74924.0 GW(e).h
Cumulative Energy Availability Factor: 68.1%
Cumulative Load Factor: 67.5%
Cumulative Unit Capability Factor: 68.2%
Cumulative Energy Unavailability Factor: 31.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1970	1797.0	357.0	68.5	68.5	68.5	68.5	68.5	68.5	5680	77.3
1971	2122.2	357.0	72.1	70.5	72.1	70.5	67.9	68.2	6312	72.1
1972	2272.2	357.0	76.0	72.4	76.0	72.4	72.5	69.7	7031	80.0
1973	2396.8	342.0	80.0	74.3	80.0	74.3	80.0	72.3	7485	85.4
1974	1819.1	320.0	64.9	72.5	64.9	72.5	64.9	70.9	6009	68.6
1975	1004.4	321.0	35.6	66.6	35.6	66.6	35.7	65.2	3301	37.7
1976	2036.3	340.0	68.4	66.9	68.4	66.9	68.2	65.7	6676	76.0
1977	1084.0	340.0	36.4	63.0	36.4	63.0	36.4	61.9	3548	40.5
1978	2039.8	340.0	68.5	63.6	68.5	63.6	68.5	62.7	6565	74.9
1979	1818.9	321.0	64.7	63.7	64.7	63.7	64.7	62.9	5873	67.0
1980	2063.1	321.0	73.1	64.5	73.1	64.5	73.2	63.8	6669	75.9
1981	663.4	340.0	27.1	61.4	27.1	61.4	22.3	60.2	2139	24.4
1982	1614.0	340.0	59.5	61.2	59.5	61.2	54.2	59.8	5245	59.9
1983	1972.1	340.0	69.8	61.8	69.8	61.8	66.2	60.2	6464	73.8
1984	2643.1	325.0	92.1	63.8	92.1	63.8	92.4	62.3	8129	92.5
1985	1703.6	340.0	57.3	63.4	57.3	63.4	57.2	62.0	5088	58.1
1986	2286.3	340.0	77.5	64.2	77.1	64.2	76.8	62.9	6863	78.3
1987	2349.2	340.0	80.2	65.1	80.2	65.1	78.9	63.8	7052	80.5
1988	2222.9	341.0	74.8	65.7	74.8	65.6	74.2	64.4	6611	75.3
1989	2457.7	341.0	82.8	66.5	82.8	66.5	82.3	65.3	7298	83.3
1990	1959.8	341.0	65.6	66.5	65.6	66.5	65.6	65.3	5822	66.5
1991	2255.9	341.0	76.6	67.0	76.1	66.9	75.5	65.8	6742	77.0
1992	1994.1	341.0	66.9	67.0	66.7	66.9	66.6	65.8	5914	67.3
1993	2623.7	341.0	87.5	67.8	87.5	67.8	87.8	66.7	7745	88.4
1994	1507.5	341.0	50.5	67.1	50.5	67.1	50.5	66.1	4477	51.1
1995	2328.7	341.0	79.7	67.6	77.3	67.5	78.0	66.5	7027	80.2
1996	2514.2	341.0	84.0	68.2	84.0	68.1	83.9	67.2	7411	84.4
1997	1936.1	341.0	64.8	68.1	64.8	68.0	64.8	67.1	5728	65.4
1998	1870.5	341.0	62.7	67.9	62.7	67.8	62.6	66.9	5528	63.1
1999	1845.0	341.0	63.2	67.8	62.5	67.6	61.8	66.8	5542	63.3
2000	0.0	341.0	0.0	65.5	0.0	65.4	0.0	64.6	0	0.0
2001	2584.5	341.0	86.6	66.2	86.6	66.1	86.5	65.3	7594	86.7
2002	2546.6	341.0	85.5	66.8	85.3	66.7	85.3	65.9	7495	85.6
2003	2426.3	341.0	81.0	67.2	80.7	67.1	81.2	66.3	7135	81.4
2004	2535.9	341.0	84.2	67.7	84.1	67.6	84.7	66.9	7395	84.2
2005	2547.6	341.0	85.0	68.2	85.0	68.1	85.3	67.4	7568	86.4
2006	2845.0	340.0	95.1	68.9	95.0	68.8	95.5	68.2	8558	97.7
2007	1267.1	340.0	42.6	68.2	42.5	68.1	42.5	67.5	3757	42.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		293			339	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	3988	749		2087		
D. Inspection, maintenance or repair without refuelling				97		
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					10	
Subtotal	3988	1042	0	2184	349	2
Total		5030			2535	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		71
12. Reactor I&C Systems		102
14. Safety Systems		22
15. Reactor Cooling Systems	293	98
31. Turbine and auxiliaries		23
32. Feedwater and Main Steam System		5
42. Electrical Power Supply Systems		10
Total	293	331

JP-34 TSURUGA-2

Operator: JAPCO (JAPAN ATOMIC POWER CO.)
Contractor: MHI (MITSUBISHI HEAVY INDUSTRIES LTD.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1110.0 MW(e)
Design Net Capacity: 1115.0 MW(e)
Design Discharge Burnup: 48000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6065.3 GW(e).h
Energy Availability Factor: 61.2%
Load Factor: 62.4%
Operating Factor: 64.9%
Energy Unavailability Factor: 38.8%
Total Off-line Time: 3072 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	841.4	760.4	841.9	816.4	794.6	495.7	843.3	671.6	0.0	0.0	0.0	0.0	6065.3
EAF (%)	100.0	100.0	100.0	100.0	94.2	61.3	100.0	79.9	0.0	0.1	0.0	0.0	61.2
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	79.9	0.0	0.1	0.0	0.0	64.9
LF (%)	101.9	101.9	101.9	102.3	96.2	62.0	102.1	81.3	0.0	0.0	0.0	0.0	62.4
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	80.6	0.0	0.0	0.0	0.0	64.9
EUUF (%)	0.0	0.0	0.0	0.0	5.8	38.7	0.0	20.1	100.0	99.9	100.0	100.0	38.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.1	100.0	99.9	100.0	100.0	35.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	5.8	38.7	0.0	0.0	0.0	0.0	0.0	0.0	3.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 06 Nov 1982
Date of First Criticality: 28 May 1986
Date of Grid Connection: 19 Jun 1986
Date of Commercial Operation: 17 Feb 1987

Lifetime Generation: 166494.0 GW(e).h
Cumulative Energy Availability Factor: 80.9%
Cumulative Load Factor: 80.9%
Cumulative Unit Capability Factor: 81.0%
Cumulative Energy Unavailability Factor: 19.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	8498.3	1115.0	95.4	95.4	95.4	95.4	95.1	95.1	7656	95.5
1988	7939.7	1115.0	81.3	88.0	81.3	88.0	81.1	87.8	7243	82.5
1989	7507.7	1115.0	77.0	84.2	77.0	84.2	76.9	84.0	6814	77.8
1990	7201.0	1115.0	72.9	81.3	72.9	81.3	73.7	81.4	6462	73.8
1991	9259.2	1115.0	95.1	84.1	95.1	84.1	94.8	84.1	8338	95.2
1992	8118.7	1115.0	82.5	83.9	82.5	83.9	82.9	83.9	7310	83.2
1993	7844.1	1115.0	80.2	83.3	80.2	83.3	80.3	83.4	7086	80.9
1994	7814.6	1115.0	80.2	82.9	80.2	82.9	80.0	83.0	7080	80.8
1995	9220.5	1115.0	94.5	84.2	94.5	84.2	94.4	84.2	8290	94.6
1996	8092.3	1115.0	83.0	84.1	83.0	84.1	82.6	84.1	7325	83.4
1997	6522.2	1115.0	67.0	82.5	67.0	82.5	66.8	82.5	5946	67.9
1998	8534.6	1115.0	92.0	83.3	92.0	83.3	87.4	82.9	7724	88.2
1999	5131.7	1115.0	52.7	81.0	52.7	81.0	52.5	80.6	4615	52.7
2000	8993.8	1115.0	92.1	81.8	92.1	81.8	91.8	81.4	8087	92.1
2001	8072.7	1115.0	82.9	81.8	82.9	81.8	82.6	81.5	7267	83.0
2002	8695.5	1115.0	88.4	82.2	88.4	82.2	89.0	81.9	7742	88.4
2003	8460.9	1115.0	84.7	82.4	84.7	82.4	86.6	82.2	7418	84.7
2004	9447.0	1115.0	95.2	83.1	95.2	83.1	96.5	83.0	8367	95.3
2005	7693.6	1115.0	77.6	82.8	77.6	82.8	78.8	82.8	6854	78.2
2006	6250.8	1110.0	63.3	81.8	63.3	81.8	64.3	81.9	5634	64.3
2007	6065.3	1110.0	64.9	81.0	61.2	80.9	62.4	80.9	5688	64.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					349	
B. Refuelling without a maintenance					6	
C. Inspection, maintenance or repair combined with refuelling	3080			1128		
P. Fire					14	
Subtotal	3080	0	0	1128	369	0
Total		3080			1497	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		254
14. Safety Systems		28
15. Reactor Cooling Systems		20
32. Feedwater and Main Steam System		45
Total	0	347

KR-1 KORI-1

Operator: KHNP (Korea Hydro and Nuclear Power Co.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 569.0 MW(e)
Design Net Capacity: 556.0 MW(e)
Design Discharge Burnup: 42326 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2142.4 GW(e).h
Energy Availability Factor: 98.8%
Load Factor: 43.0%
Operating Factor: 42.7%
Energy Unavailability Factor: 1.2%
Total Off-line Time: 5022 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	429.9	388.4	428.5	368.9	416.3	110.5	0.0	0.0	0.0	0.0	0.0	0.0	2142.4
EAF (%)	100.0	100.0	99.8	89.0	97.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.8
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	101.5	101.6	101.2	90.1	98.3	27.0	0.0	0.0	0.0	0.0	0.0	0.0	43.0
OF (%)	100.0	100.0	100.0	89.0	98.7	28.2	0.0	0.0	0.0	0.0	0.0	0.0	42.7
EUF (%)	0.0	0.0	0.2	11.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.2	11.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

KORI UNIT 1 HAD BEEN IN STANDBY STATUS TO GET LICENSE RENEWAL FROM GOVERNMENT FOR LIFE EXTENSION FROM 2007-06-09 TO 2008-01-09

5. Historical Summary

Date of Construction Start:	01 Aug 1972	Lifetime Generation:	107465.1 GW(e).h
Date of First Criticality:	19 Jun 1977	Cumulative Energy Availability Factor:	77.7%
Date of Grid Connection:	26 Jun 1977	Cumulative Load Factor:	74.1%
Date of Commercial Operation:	29 Apr 1978	Cumulative Unit Capability Factor:	78.5%
		Cumulative Energy Unavailability Factor:	22.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	1721.9	555.0	47.0	47.0	47.0	47.0	47.0	47.0	4383	66.4
1979	2952.2	564.0	59.8	54.3	59.8	54.3	59.8	54.3	6558	74.9
1980	3258.4	564.0	79.7	63.6	79.7	63.6	65.8	58.5	6982	79.5
1981	2708.1	564.0	69.8	65.3	69.8	65.3	54.8	57.5	6092	69.5
1982	3559.2	556.0	73.1	66.9	73.1	66.9	73.1	60.8	6904	78.8
1983	3065.6	556.0	70.1	67.5	70.1	67.5	62.9	61.1	6142	70.1
1984	3236.3	556.0	67.3	67.4	67.3	67.4	66.3	61.9	6321	72.0
1985	3158.9	556.0	66.0	67.3	64.6	67.1	64.9	62.3	6364	72.6
1986	3279.5	556.0	72.8	67.9	72.8	67.7	67.3	62.8	6404	73.1
1987	4557.0	556.0	99.8	71.1	98.9	70.9	93.6	66.0	8653	98.8
1988	2221.0	556.0	50.6	69.2	50.6	69.0	45.5	64.1	4449	50.6
1989	2735.9	556.0	59.2	68.4	59.2	68.2	56.2	63.4	5256	60.0
1990	3500.1	556.0	74.6	68.9	74.6	68.7	71.9	64.1	6536	74.6
1991	4365.5	556.0	93.6	70.7	93.3	70.5	89.6	65.9	8172	93.3
1992	3640.3	556.0	76.9	71.1	76.9	70.9	74.5	66.5	6759	76.9
1993	3824.9	556.0	81.6	71.8	81.4	71.6	78.5	67.3	7131	81.4
1994	3223.4	564.0	66.2	71.4	65.8	71.2	65.2	67.1	5973	68.2
1995	3969.1	556.0	99.1	73.0	81.2	71.8	81.5	67.9	8704	99.4
1996	3748.4	556.0	78.6	73.3	76.6	72.0	76.7	68.4	6936	79.0
1997	3844.2	556.0	79.0	73.6	78.9	72.4	78.9	68.9	7080	80.8
1998	3783.7	556.0	78.7	73.8	78.7	72.7	77.7	69.4	6698	76.5
1999	4153.2	556.0	83.3	74.2	83.3	73.2	85.3	70.1	7418	84.7
2000	4514.3	556.0	89.2	74.9	89.2	73.9	92.4	71.1	7932	90.3
2001	4636.5	556.0	92.5	75.6	92.5	74.7	95.2	72.1	8144	93.0
2002	4147.0	556.0	84.0	76.0	84.0	75.0	85.1	72.6	8000	91.3
2003	4550.2	556.0	90.9	76.6	90.1	75.6	93.4	73.4	7978	91.1
2004	4637.7	556.0	92.0	77.1	92.0	76.2	95.0	74.2	8131	92.6
2005	4149.5	556.0	82.7	77.3	82.7	76.5	85.2	74.6	7304	83.4
2006	4527.3	573.0	89.7	77.8	89.7	76.9	90.2	75.2	7891	90.1
2007	2142.4	569.0	100.0	78.5	98.8	77.7	43.0	74.1	3738	42.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				1	325	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling				1249		
D. Inspection, maintenance or repair without refuelling				138		
E. Testing of plant systems or components				17	0	
J. Grid failure or grid unavailability						7
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						4
M. Governmental requirements or court decisions			4933			
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			89			
Subtotal	0	0	5022	1405	329	11
Total		5022			1745	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		8
15. Reactor Cooling Systems		27
16. Steam generation systems		77
31. Turbine and auxiliaries		25
32. Feedwater and Main Steam System		44
35. All other I&C Systems		0
41. Main Generator Systems		106
42. Electrical Power Supply Systems		34
XX. Miscellaneous Systems		2
Total	0	323

KR-2 KORI-2**Operator:** KHNP (Korea Hydro and Nuclear Power Co.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 637.0 MW(e)
Design Net Capacity: 605.0 MW(e)
Design Discharge Burnup: 36946 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5011.0 GW(e).h
Energy Availability Factor: 89.2%
Load Factor: 89.8%
Operating Factor: 90.0%
Energy Unavailability Factor: 10.8%
Total Off-line Time: 874 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	477.8	431.5	475.8	115.6	322.9	462.2	477.8	476.6	459.9	477.3	396.1	437.5	5011.0
EAF (%)	100.0	100.0	99.8	25.2	67.9	100.0	100.0	100.0	100.0	100.0	85.4	91.8	89.2
UCF (%)	100.0	100.0	100.0	25.2	67.9	100.0	100.0	100.0	100.0	100.0	85.4	91.8	89.2
LF (%)	100.8	100.8	100.4	25.2	68.1	100.8	100.8	100.6	100.3	100.6	86.4	92.3	89.8
OF (%)	100.0	100.0	100.0	28.1	72.7	100.0	100.0	100.0	100.0	99.9	85.4	93.5	90.0
EUUF (%)	0.0	0.0	0.2	74.8	32.1	0.0	0.0	0.0	0.0	0.0	14.6	8.2	10.8
PUF (%)	0.0	0.0	0.0	74.8	12.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2
UCLF (%)	0.0	0.0	0.1	0.0	19.3	0.0	0.0	0.0	0.0	0.0	14.5	8.2	3.5
XUF (%)	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 23 Dec 1977
Date of First Criticality: 09 Apr 1983
Date of Grid Connection: 22 Apr 1983
Date of Commercial Operation: 25 Jul 1983

Lifetime Generation: 113900.9 GW(e).h
Cumulative Energy Availability Factor: 85.9%
Cumulative Load Factor: 87.6%
Cumulative Unit Capability Factor: 86.0%
Cumulative Energy Unavailability Factor: 14.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	Data not provided									
1984	4086.4	605.0	76.1	76.1	76.1	76.1	76.9	76.9	6876	78.3
1985	3731.4	605.0	69.8	73.0	69.8	73.0	70.4	73.7	6641	75.8
1986	3945.2	605.0	75.2	73.7	74.8	73.6	74.4	73.9	6555	74.8
1987	4265.4	605.0	82.1	75.8	81.6	75.6	80.5	75.6	7251	82.8
1988	4504.7	605.0	82.8	77.2	82.8	77.0	84.8	77.4	7275	82.8
1989	5062.8	605.0	95.7	80.3	95.7	80.2	95.5	80.4	8387	95.7
1990	4349.9	605.0	84.3	80.9	84.3	80.7	82.1	80.7	7381	84.3
1991	4554.0	605.0	85.8	81.5	85.8	81.4	85.9	81.3	7512	85.8
1992	4517.2	605.0	85.0	81.9	85.0	81.8	85.0	81.7	7469	85.0
1993	4187.0	605.0	80.5	81.7	80.5	81.6	79.0	81.5	7048	80.5
1994	4693.9	605.0	86.5	82.2	86.5	82.1	88.6	82.1	7685	87.7
1995	5106.6	605.0	94.8	83.2	94.7	83.1	96.4	83.3	8370	95.5
1996	4673.9	605.0	86.1	83.4	86.0	83.4	87.9	83.6	7668	87.3
1997	4620.3	605.0	86.8	83.7	86.6	83.6	87.2	83.9	7639	87.2
1998	4697.6	605.0	84.9	83.7	84.9	83.7	88.6	84.2	7541	86.1
1999	4672.2	605.0	83.6	83.7	83.6	83.7	88.2	84.5	7472	85.3
2000	4914.7	605.0	90.1	84.1	90.1	84.1	92.5	84.9	7812	88.9
2001	4807.8	605.0	87.3	84.3	87.3	84.2	90.7	85.3	7650	87.3
2002	5051.2	605.0	90.6	84.6	90.6	84.6	95.3	85.8	7982	91.1
2003	4844.2	605.0	86.5	84.7	85.4	84.6	91.4	86.1	7709	88.0
2004	5501.5	605.0	97.8	85.3	97.8	85.2	103.5	86.9	8602	97.9
2005	5151.5	605.0	92.1	85.7	92.1	85.6	97.2	87.4	8080	92.2
2006	5099.2	637.0	90.8	85.9	90.8	85.8	91.4	87.5	7984	91.1
2007	5011.0	637.0	89.2	86.0	89.2	85.9	89.8	87.6	7886	90.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		284			123	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	590			886		
D. Inspection, maintenance or repair without refuelling				38		
E. Testing of plant systems or components					0	
J. Grid failure or grid unavailability						5
Subtotal	590	284	0	924	126	5
Total		874			1055	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		23
15. Reactor Cooling Systems		5
16. Steam generation systems		3
31. Turbine and auxiliaries	153	34
32. Feedwater and Main Steam System		9
35. All other I&C Systems		0
41. Main Generator Systems		45
42. Electrical Power Supply Systems	131	0
Total	284	119

KR-5 KORI-3

Operator: KHNP (Korea Hydro and Nuclear Power Co.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 964.0 MW(e)
Design Net Capacity: 895.0 MW(e)
Design Discharge Burnup: 17910 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8214.2 GW(e).h
Energy Availability Factor: 96.4%
Load Factor: 97.3%
Operating Factor: 97.1%
Energy Unavailability Factor: 3.6%
Total Off-line Time: 257 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	701.8	653.9	724.2	463.5	693.7	699.4	719.7	719.1	691.2	721.7	701.3	724.8	8214.2
EAF (%)	97.1	100.0	100.0	66.2	95.9	99.9	99.6	99.5	98.8	99.7	100.0	99.9	96.4
UCF (%)	97.1	100.0	100.0	66.2	95.9	99.9	99.6	99.5	98.8	99.7	100.0	99.9	96.4
LF (%)	97.8	100.9	101.0	66.8	96.7	100.8	100.3	100.3	99.6	100.6	101.0	101.1	97.3
OF (%)	100.0	100.0	100.0	66.7	97.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.1
EUUF (%)	2.9	0.0	0.0	33.8	4.1	0.1	0.4	0.5	1.2	0.3	0.0	0.1	3.6
PUF (%)	0.0	0.0	0.0	33.8	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1
UCLF (%)	2.9	0.0	0.0	0.0	0.1	0.1	0.4	0.5	1.2	0.3	0.0	0.1	0.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Oct 1979
Date of First Criticality: 01 Jan 1985
Date of Grid Connection: 22 Jan 1985
Date of Commercial Operation: 30 Sep 1985

Lifetime Generation: 155469.0 GW(e).h
Cumulative Energy Availability Factor: 85.4%
Cumulative Load Factor: 88.5%
Cumulative Unit Capability Factor: 85.5%
Cumulative Energy Unavailability Factor: 14.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	Data not provided									
1986	5611.7	895.0	73.3	73.3	73.3	73.3	71.6	71.6	6529	74.5
1987	5804.8	895.0	79.1	76.2	78.8	76.0	74.0	72.8	6665	76.1
1988	6119.7	895.0	79.7	77.4	79.7	77.3	77.8	74.5	7005	79.7
1989	6592.0	895.0	82.3	78.6	82.3	78.5	84.1	76.9	7206	82.3
1990	6838.1	895.0	90.4	81.0	90.4	80.9	87.2	79.0	7923	90.4
1991	5902.5	895.0	75.1	80.0	75.1	79.9	75.3	78.3	6578	75.1
1992	6746.2	895.0	83.7	80.5	83.7	80.5	85.8	79.4	7349	83.7
1993	7121.8	895.0	88.1	81.5	88.1	81.4	90.8	80.8	7721	88.1
1994	6545.3	890.0	79.3	81.2	79.2	81.2	84.0	81.2	7128	81.4
1995	6015.5	895.0	73.7	80.5	73.7	80.4	76.7	80.7	6863	78.3
1996	7939.7	895.0	95.4	81.9	95.4	81.8	101.0	82.6	8431	96.0
1997	6051.9	895.0	73.8	81.2	73.8	81.1	77.2	82.1	6503	74.2
1998	6902.5	895.0	82.9	81.3	82.8	81.3	88.0	82.6	7325	83.6
1999	7231.8	895.0	86.3	81.7	86.3	81.6	92.2	83.3	7615	86.9
2000	8094.3	895.0	95.6	82.6	95.6	82.6	103.0	84.6	8399	95.6
2001	7570.3	895.0	89.4	83.0	89.4	83.0	96.6	85.3	7881	90.0
2002	7684.8	895.0	90.9	83.5	90.9	83.5	98.0	86.1	8062	92.0
2003	8387.4	895.0	100.0	84.4	99.1	84.3	107.0	87.2	8689	99.2
2004	7312.5	895.0	86.5	84.5	86.5	84.4	93.0	87.5	7630	86.9
2005	7562.2	895.0	89.4	84.8	89.4	84.7	96.5	88.0	7885	90.0
2006	7461.8	963.0	88.3	84.9	88.3	84.9	88.5	88.0	7813	89.2
2007	8214.2	964.0	96.4	85.5	96.4	85.4	97.3	88.5	8503	97.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					94	
B. Refuelling without a maintenance					7	
C. Inspection, maintenance or repair combined with refuelling				1042		
D. Inspection, maintenance or repair without refuelling	257			15		
J. Grid failure or grid unavailability						4
L. Human factor related					3	
Subtotal	257	0	0	1057	104	4
Total		257			1165	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		17
15. Reactor Cooling Systems		2
31. Turbine and auxiliaries		16
32. Feedwater and Main Steam System		9
35. All other I&C Systems		7
41. Main Generator Systems		39
42. Electrical Power Supply Systems		0
Total	0	90

KR-6 KORI-4**Operator:** KHNP (Korea Hydro and Nuclear Power Co.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 966.0 MW(e)
Design Net Capacity: 895.0 MW(e)
Design Discharge Burnup: 18210 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7500.9 GW(e).h
Energy Availability Factor: 88.0%
Load Factor: 88.6%
Operating Factor: 90.9%
Energy Unavailability Factor: 12.0%
Total Off-line Time: 793 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	703.2	631.9	698.7	661.6	678.8	605.0	0.0	683.6	692.9	720.3	700.2	724.7	7500.9
EAF (%)	97.2	96.7	96.6	94.6	94.2	86.6	0.0	94.4	98.9	99.4	99.7	99.9	88.0
UCF (%)	97.2	96.7	96.6	94.6	94.2	86.6	0.0	94.4	98.9	99.4	99.7	99.9	88.0
LF (%)	97.8	97.3	97.2	95.1	94.5	87.0	0.0	95.1	99.6	100.2	100.7	100.8	88.6
OF (%)	100.0	100.0	100.0	100.0	100.0	95.8	0.0	97.4	100.0	100.0	100.0	100.0	90.9
EUF (%)	2.8	3.3	3.4	5.4	5.8	13.4	100.0	5.6	1.1	0.6	0.3	0.1	12.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	2.5	100.0	4.9	0.0	0.0	0.0	0.0	9.1
UCLF (%)	2.8	3.3	3.4	5.4	5.8	10.9	0.0	0.7	1.1	0.6	0.3	0.1	2.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Apr 1980 **Lifetime Generation:** 154898.1 GW(e).h
Date of First Criticality: 26 Oct 1985 **Cumulative Energy Availability Factor:** 86.8%
Date of Grid Connection: 15 Nov 1985 **Cumulative Load Factor:** 90.1%
Date of Commercial Operation: 29 Apr 1986 **Cumulative Unit Capability Factor:** 87.0%
Cumulative Energy Unavailability Factor: 13.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	Data not provided									
1987	5860.8	895.0	78.3	78.3	78.0	78.0	74.8	74.8	6707	76.6
1988	5909.1	895.0	80.7	79.5	79.8	78.9	75.2	75.0	7006	79.8
1989	6177.4	895.0	77.2	78.7	77.2	78.3	78.8	76.2	6763	77.2
1990	6230.0	895.0	81.5	79.4	81.5	79.1	79.5	77.0	7140	81.5
1991	6353.0	895.0	80.4	79.6	80.0	79.3	81.0	77.8	7011	80.0
1992	6652.3	895.0	82.7	80.1	82.7	79.9	84.6	79.0	7266	82.7
1993	6835.9	895.0	85.1	80.9	85.1	80.6	87.2	80.1	7456	85.1
1994	7455.1	890.0	90.0	82.0	90.0	81.8	95.6	82.1	8160	93.2
1995	6950.6	890.0	89.3	82.8	89.3	82.6	89.2	82.9	7824	89.3
1996	6678.4	895.0	80.0	82.5	80.0	82.4	84.9	83.1	7147	81.4
1997	7014.2	895.0	84.4	82.7	84.4	82.5	89.5	83.6	7450	85.0
1998	8433.7	895.0	100.0	84.1	100.0	84.0	107.6	85.6	8760	100.0
1999	7129.0	895.0	84.6	84.2	84.6	84.0	90.9	86.0	7451	85.1
2000	7334.4	895.0	86.2	84.3	86.2	84.2	93.3	86.6	7578	86.3
2001	7615.1	895.0	90.0	84.7	90.0	84.6	97.1	87.3	7929	90.5
2002	8495.5	895.0	100.0	85.6	100.0	85.5	108.4	88.6	8760	100.0
2003	7597.0	895.0	90.5	85.9	89.6	85.8	96.9	89.1	7913	90.3
2004	7378.6	895.0	86.8	86.0	86.8	85.8	93.9	89.3	7669	87.3
2005	8397.2	895.0	99.2	86.7	99.2	86.5	107.1	90.3	8695	99.3
2006	7520.4	967.0	90.7	86.9	90.7	86.8	88.8	90.2	7824	89.3
2007	7500.9	966.0	88.0	87.0	88.0	86.8	88.6	90.1	7967	90.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		16			35	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	777			971		
D. Inspection, maintenance or repair without refuelling				26		
E. Testing of plant systems or components					0	
J. Grid failure or grid unavailability						4
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						5
Subtotal	777	16	0	997	36	9
Total		793			1042	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
15. Reactor Cooling Systems		4
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries	16	10
32. Feedwater and Main Steam System		7
41. Main Generator Systems		0
42. Electrical Power Supply Systems		10
Total	16	31

KR-9 ULCHIN-1

Operator: KHNP (Korea Hydro and Nuclear Power Co.)
Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 940.0 MW(e)
Design Net Capacity: 920.0 MW(e)
Design Discharge Burnup: 42500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7262.2 GW(e).h
Energy Availability Factor: 88.0%
Load Factor: 88.2%
Operating Factor: 88.4%
Energy Unavailability Factor: 12.0%
Total Off-line Time: 1013 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	703.5	630.9	702.9	679.3	701.7	679.2	699.8	698.0	151.1	237.9	677.8	700.1	7262.2
EAF (%)	100.0	99.5	100.0	99.9	100.0	100.0	100.0	100.0	22.4	34.0	100.0	100.0	88.0
UCF (%)	100.0	99.5	100.0	99.9	100.0	100.0	100.0	100.0	22.4	34.0	100.0	100.0	88.0
LF (%)	100.6	99.9	100.5	100.4	100.3	100.4	100.1	99.8	22.3	34.0	100.1	100.1	88.2
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	24.7	36.7	100.0	100.0	88.4
EUUF (%)	0.0	0.5	0.0	0.1	0.0	0.0	0.0	0.0	77.6	66.0	0.0	0.0	12.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.6	66.0	0.0	0.0	12.0
UCLF (%)	0.0	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 26 Jan 1983
Date of First Criticality: 25 Feb 1988
Date of Grid Connection: 07 Apr 1988
Date of Commercial Operation: 10 Sep 1988

Lifetime Generation: 133480.7 GW(e).h
Cumulative Energy Availability Factor: 85.5%
Cumulative Load Factor: 85.8%
Cumulative Unit Capability Factor: 85.8%
Cumulative Energy Unavailability Factor: 14.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	Data not provided									
1989	5205.4	920.0	66.4	66.4	66.4	66.4	64.6	64.6	5821	66.4
1990	6166.2	920.0	81.7	74.1	81.7	74.1	76.5	70.6	7156	81.7
1991	7244.3	920.0	91.0	79.7	91.0	79.7	89.9	77.0	7970	91.0
1992	7020.8	920.0	87.4	81.6	87.4	81.6	86.9	79.5	7675	87.4
1993	6977.6	920.0	87.3	82.8	87.3	82.8	86.6	80.9	7651	87.3
1994	6878.5	890.0	82.0	82.6	82.0	82.6	88.2	82.1	7293	83.3
1995	7153.8	920.0	85.7	83.1	85.7	83.1	88.8	83.0	7698	87.9
1996	7113.7	920.0	85.6	83.4	85.4	83.4	88.0	83.7	7631	86.9
1997	6801.0	920.0	83.7	83.4	82.3	83.3	84.4	83.7	7323	83.6
1998	7643.0	920.0	94.1	84.5	91.4	84.1	94.8	84.9	8256	94.2
1999	7161.6	920.0	86.1	84.7	86.1	84.3	88.9	85.2	7639	87.2
2000	7230.8	920.0	86.8	84.8	86.3	84.4	89.5	85.6	7736	88.1
2001	7022.3	920.0	85.1	84.9	84.5	84.4	87.1	85.7	7483	85.4
2002	5462.4	920.0	76.0	84.2	76.0	83.8	67.8	84.4	6052	69.1
2003	6371.6	920.0	85.2	84.3	85.2	83.9	79.1	84.1	7446	85.0
2004	7420.1	920.0	89.5	84.6	89.3	84.3	91.8	84.5	7970	90.7
2005	8245.0	920.0	99.9	85.5	99.8	85.2	102.3	85.6	8760	100.0
2006	7212.8	939.0	88.1	85.7	87.5	85.3	87.7	85.7	7769	88.7
2007	7262.2	940.0	88.0	85.8	88.0	85.5	88.2	85.8	7747	88.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				135	173	
B. Refuelling without a maintenance					11	
C. Inspection, maintenance or repair combined with refuelling	1013			868		
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						5
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						0
Subtotal	1013	0	0	1003	184	5
Total		1013			1192	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
15. Reactor Cooling Systems		3
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		3
32. Feedwater and Main Steam System		6
41. Main Generator Systems		234
42. Electrical Power Supply Systems		8
Total	0	254

KR-10 ULCHIN-2

Operator: KHNP (Korea Hydro and Nuclear Power Co.)
Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 937.0 MW(e)
Design Net Capacity: 920.0 MW(e)
Design Discharge Burnup: 42500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7391.6 GW(e).h
Energy Availability Factor: 90.0%
Load Factor: 90.1%
Operating Factor: 90.7%
Energy Unavailability Factor: 10.0%
Total Off-line Time: 814 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	695.2	627.9	695.3	647.4	0.0	656.5	661.5	698.6	631.3	698.0	678.3	701.8	7391.6
EAF (%)	100.0	100.0	100.0	96.3	0.6	96.8	94.6	100.0	93.8	100.0	100.0	100.0	90.0
UCF (%)	100.0	100.0	100.0	96.3	0.6	96.8	94.6	100.0	93.8	100.0	100.0	100.0	90.0
LF (%)	99.7	99.7	99.7	96.1	0.0	97.3	94.9	100.2	93.6	100.0	100.5	100.7	90.1
OF (%)	100.0	100.0	100.0	98.2	0.1	100.0	96.6	100.0	95.6	99.9	100.0	100.0	90.7
EUf (%)	0.0	0.0	0.0	3.7	99.4	3.2	5.4	0.0	6.2	0.0	0.0	0.0	10.0
PUF (%)	0.0	0.0	0.0	3.7	99.4	3.2	0.0	0.0	0.0	0.0	0.0	0.0	9.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	6.2	0.0	0.0	0.0	1.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 05 Jul 1983
Date of First Criticality: 25 Feb 1989
Date of Grid Connection: 14 Apr 1989
Date of Commercial Operation: 30 Sep 1989

Lifetime Generation: 129236.6 GW(e).h
Cumulative Energy Availability Factor: 86.8%
Cumulative Load Factor: 88.3%
Cumulative Unit Capability Factor: 87.0%
Cumulative Energy Unavailability Factor: 13.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	Data not provided									
1990	5547.3	920.0	73.0	73.0	73.0	73.0	68.8	68.8	6395	73.0
1991	6671.2	920.0	86.8	79.9	86.8	79.9	82.8	75.8	7603	86.8
1992	7076.9	920.0	87.5	82.4	87.5	82.4	87.6	79.7	7686	87.5
1993	7230.2	920.0	87.8	83.8	87.8	83.8	89.7	82.2	7693	87.8
1994	6889.7	890.0	81.5	83.3	81.5	83.3	88.4	83.4	7315	83.5
1995	7810.3	920.0	93.4	85.0	93.4	85.0	96.9	85.7	8223	93.9
1996	7696.4	920.0	91.3	85.9	91.0	85.9	95.2	87.1	8151	92.8
1997	7055.2	920.0	86.0	85.9	84.3	85.7	87.5	87.1	7534	86.0
1998	7388.9	920.0	88.5	86.2	88.3	86.0	91.7	87.6	7947	90.7
1999	7815.2	920.0	94.6	87.1	94.5	86.8	97.0	88.6	8748	99.9
2000	6836.8	920.0	82.5	86.6	82.3	86.4	84.6	88.2	7330	83.4
2001	7268.6	920.0	90.2	86.9	89.2	86.7	90.2	88.4	7848	89.6
2002	6485.8	920.0	78.3	86.3	78.3	86.0	80.5	87.8	6939	79.2
2003	7253.8	920.0	87.1	86.3	87.1	86.1	90.0	87.9	7686	87.7
2004	7253.7	920.0	88.6	86.5	88.6	86.3	89.8	88.0	7888	89.8
2005	6582.4	920.0	80.8	86.1	80.7	85.9	81.7	87.6	7218	82.4
2006	7882.5	937.0	97.0	86.8	96.7	86.6	96.0	88.1	8510	97.1
2007	7391.6	937.0	90.0	87.0	90.0	86.8	90.1	88.3	7946	90.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		25			125	
C. Inspection, maintenance or repair combined with refuelling	758	32		901		
D. Inspection, maintenance or repair without refuelling				68		
E. Testing of plant systems or components					2	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						8
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						0
Subtotal	758	57	0	969	127	8
Total		815			1104	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		64
32. Feedwater and Main Steam System		0
41. Main Generator Systems		57
42. Electrical Power Supply Systems	25	2
Total	25	123

KR-13 ULCHIN-3

Operator: KHNP (Korea Hydro and Nuclear Power Co.)

Contractor: DHICKOPC (DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA POWER ENGINEERING COMPAN

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 995.0 MW(e)
Design Net Capacity: 960.0 MW(e)
Design Discharge Burnup: 45800 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7901.9 GW(e).h
Energy Availability Factor: 90.3%
Load Factor: 90.7%
Operating Factor: 91.0%
Energy Unavailability Factor: 9.7%
Total Off-line Time: 790 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	740.9	115.0	465.5	710.7	744.7	720.3	743.0	742.1	717.8	740.7	718.3	743.1	7901.9
EAF (%)	100.0	17.1	62.6	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3
UCF (%)	100.0	17.1	62.6	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3
LF (%)	100.1	17.2	62.9	99.2	100.6	100.5	100.4	100.2	100.2	100.1	100.3	100.4	90.7
OF (%)	100.0	19.3	66.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.0
EUf (%)	0.0	82.9	37.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7
PUf (%)	0.0	82.9	37.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5
UCLF (%)	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 21 Jul 1993 **Lifetime Generation:** 73932.0 GW(e).h
Date of First Criticality: 21 Dec 1997 **Cumulative Energy Availability Factor:** 90.6%
Date of Grid Connection: 06 Jan 1998 **Cumulative Load Factor:** 90.2%
Date of Commercial Operation: 11 Aug 1998 **Cumulative Unit Capability Factor:** 90.8%
Cumulative Energy Unavailability Factor: 9.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1998	3495.9	960.0	100.0	100.0	100.0	100.0	99.2	99.2	3589	97.7
1999	6918.0	960.0	81.4	86.9	79.7	85.7	82.3	87.3	7149	81.6
2000	7489.1	960.0	87.0	87.0	87.0	86.2	88.8	87.9	7734	88.0
2001	7922.2	960.0	91.3	88.2	91.3	87.7	94.2	89.7	8025	91.6
2002	7031.3	960.0	89.0	88.4	89.0	88.0	83.6	88.4	7824	89.3
2003	7984.3	960.0	99.6	90.4	99.6	90.1	94.9	89.6	8758	100.0
2004	7187.6	960.0	90.0	90.4	90.0	90.1	85.2	88.9	7986	90.9
2005	7651.7	960.0	87.7	90.0	87.6	89.8	91.0	89.2	7834	89.4
2006	8425.9	994.0	96.6	90.8	96.6	90.6	96.8	90.1	8501	97.0
2007	7901.9	995.0	90.3	90.8	90.3	90.6	90.7	90.2	7970	91.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1999 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling	789			648	57	
Subtotal	789	0	0	648	57	0
Total	789			705		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1999 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		24
32. Feedwater and Main Steam System		3
41. Main Generator Systems		28
Total	0	55

KR-14 ULCHIN-4

Operator: KHNP (Korea Hydro and Nuclear Power Co.)

Contractor: DHICKOPC (DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA POWER ENGINEERING COMPAN

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 992.0 MW(e)
Design Net Capacity: 960.0 MW(e)
Design Discharge Burnup: 46603 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7912.9 GW(e).h
Energy Availability Factor: 90.3%
Load Factor: 91.1%
Operating Factor: 91.3%
Energy Unavailability Factor: 9.7%
Total Off-line Time: 762 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	745.8	671.7	743.0	719.5	711.0	644.3	742.0	741.4	717.6	115.0	616.6	744.9	7912.9
EAF (%)	100.0	100.0	100.0	100.0	95.6	89.3	100.0	100.0	100.0	15.4	85.2	100.0	90.3
UCF (%)	100.0	100.0	100.0	100.0	100.0	92.4	100.0	100.0	100.0	15.4	85.2	100.0	91.0
LF (%)	101.1	100.8	100.7	100.7	96.3	90.2	100.5	100.5	100.5	15.6	86.3	100.9	91.1
OF (%)	100.0	100.0	100.0	100.0	95.6	93.5	100.0	100.0	100.0	17.5	90.6	100.0	91.3
EUf (%)	0.0	0.0	0.0	0.0	4.4	10.7	0.0	0.0	0.0	84.6	14.8	0.0	9.7
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.6	11.4	0.0	8.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	0.0	3.5	0.0	0.9
XUF (%)	0.0	0.0	0.0	0.0	4.4	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Nov 1993
Date of First Criticality: 14 Dec 1998
Date of Grid Connection: 28 Dec 1998
Date of Commercial Operation: 31 Dec 1999

Lifetime Generation: 62434.8 GW(e).h
Cumulative Energy Availability Factor: 89.6%
Cumulative Load Factor: 92.0%
Cumulative Unit Capability Factor: 89.7%
Cumulative Energy Unavailability Factor: 10.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1999	Data not provided									
2000	7042.5	960.0	81.3	81.3	81.3	81.3	83.5	83.5	7229	82.3
2001	7732.3	960.0	90.0	85.6	89.9	85.6	91.9	87.7	7880	90.0
2002	7311.3	960.0	84.0	85.1	83.8	85.0	86.9	87.5	7448	85.0
2003	7922.5	960.0	91.6	86.7	91.6	86.7	94.2	89.1	8081	92.2
2004	8623.1	960.0	98.7	89.1	98.7	89.1	102.3	91.8	8700	99.0
2005	8003.0	960.0	91.5	89.5	91.3	89.4	95.2	92.3	8085	92.3
2006	7886.2	993.0	89.8	89.6	89.8	89.5	90.7	92.1	7938	90.6
2007	7912.9	992.0	91.0	89.7	90.3	89.6	91.1	92.0	7998	91.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2000 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		55			33	
C. Inspection, maintenance or repair combined with refuelling	669			716		
L. Human factor related					1	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			40			
Subtotal	669	55	40	716	34	0
Total		764			750	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2000 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		11
31. Turbine and auxiliaries	15	
32. Feedwater and Main Steam System		7
41. Main Generator Systems	40	5
42. Electrical Power Supply Systems		9
Total	55	32

KR-19 ULCHIN-5

Operator: KHNP (Korea Hydro and Nuclear Power Co.)

Contractor: DHICKOPC (DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA POWER ENGINEERING COMPAN

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 995.0 MW(e)
Design Net Capacity: 960.0 MW(e)
Design Discharge Burnup: 38723 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8025.9 GW(e).h
Energy Availability Factor: 91.9%
Load Factor: 92.1%
Operating Factor: 92.6%
Energy Unavailability Factor: 8.1%
Total Off-line Time: 645 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	719.2	670.9	742.9	718.8	742.5	716.2	738.4	738.7	713.8	738.0	358.6	427.8	8025.9
EAF (%)	97.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	49.8	55.8	91.9
UCF (%)	97.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	49.8	55.8	91.9
LF (%)	97.2	100.3	100.4	100.3	100.3	100.0	99.7	99.8	99.6	99.7	50.1	57.8	92.1
OF (%)	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	51.4	62.2	92.6
EUUF (%)	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.2	44.2	8.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.2	44.2	7.9
UCLF (%)	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Oct 1999 **Lifetime Generation:** 26870.7 GW(e).h
Date of First Criticality: 28 Nov 2003 **Cumulative Energy Availability Factor:** 90.1%
Date of Grid Connection: 18 Dec 2003 **Cumulative Load Factor:** 89.4%
Date of Commercial Operation: 29 Jul 2004 **Cumulative Unit Capability Factor:** 90.1%
Cumulative Energy Unavailability Factor: 9.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2004	3648.4	960.0	98.2	98.2	98.2	98.2	86.0	86.0	3669	83.1
2005	7321.6	960.0	83.8	88.6	83.8	88.6	87.1	86.7	7409	84.6
2006	7882.8	994.0	90.6	89.4	90.6	89.4	90.5	88.3	7925	90.5
2007	8025.9	995.0	91.9	90.1	91.9	90.1	92.1	89.4	8115	92.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2004 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		14			64	
C. Inspection, maintenance or repair combined with refuelling	631			500		
Subtotal	631	14	0	500	64	0
Total	645			564		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2004 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		17
12. Reactor I&C Systems		47
35. All other I&C Systems	14	
Total	14	64

KR-20 ULCHIN-6

Operator: KHNP (Korea Hydro and Nuclear Power Co.)

Contractor: DHICKOPC (DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA POWER ENGINEERING COMPAN

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 994.0 MW(e)
Design Net Capacity: 960.0 MW(e)
Design Discharge Burnup: 38829 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7911.3 GW(e).h
Energy Availability Factor: 90.9%
Load Factor: 90.9%
Operating Factor: 91.6%
Energy Unavailability Factor: 9.1%
Total Off-line Time: 738 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	738.8	667.1	738.3	715.8	713.5	17.9	679.6	732.5	714.0	738.4	716.7	738.9	7911.3
EAF (%)	100.0	100.0	100.0	100.0	96.0	1.9	92.3	99.2	100.0	100.0	100.0	100.0	90.9
UCF (%)	100.0	100.0	100.0	100.0	96.0	1.9	100.0	100.0	100.0	100.0	100.0	100.0	91.6
LF (%)	99.9	99.9	99.8	100.0	96.5	2.5	91.9	99.0	99.8	99.8	100.1	99.9	90.9
OF (%)	100.0	100.0	100.0	100.0	97.6	6.8	93.4	100.0	100.0	100.0	100.0	100.0	91.6
EUUF (%)	0.0	0.0	0.0	0.0	4.0	98.1	7.7	0.8	0.0	0.0	0.0	0.0	9.1
PUF (%)	0.0	0.0	0.0	0.0	4.0	98.1	0.0	0.0	0.0	0.0	0.0	0.0	8.4
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.8	0.0	0.0	0.0	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 29 Sep 2000 **Lifetime Generation:** 21324.7 GW(e).h
Date of First Criticality: 16 Dec 2004 **Cumulative Energy Availability Factor:** 91.0%
Date of Grid Connection: 07 Jan 2005 **Cumulative Load Factor:** 91.3%
Date of Commercial Operation: 01 Jun 2005 **Cumulative Unit Capability Factor:** 91.2%
Cumulative Energy Unavailability Factor: 9.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2005	5048.0	960.0	98.7	98.7	98.7	98.7	102.4	102.4	5081	98.9
2006	7409.9	991.0	86.7	91.0	86.7	91.0	85.4	91.5	7543	86.1
2007	7911.3	994.0	91.6	91.2	90.9	91.0	90.9	91.3	8022	91.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2005 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure						
C. Inspection, maintenance or repair combined with refuelling	689			379	44	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			50			
Subtotal	689	0	50	379	44	0
Total	739			423		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2005 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		18
41. Main Generator Systems		26
Total	0	44

KR-3 WOLSONG-1

Operator: KHNP (Korea Hydro and Nuclear Power Co.)
Contractor: AECL (ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 578.0 MW(e)
Design Net Capacity: 629.0 MW(e)
Design Discharge Burnup: 7500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4721.9 GW(e).h
Energy Availability Factor: 88.3%
Load Factor: 93.3%
Operating Factor: 90.8%
Energy Unavailability Factor: 11.7%
Total Off-line Time: 805 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	442.9	359.0	443.8	430.6	442.2	427.1	441.4	443.0	423.2	441.4	427.3	0.0	4721.9
EAF (%)	97.7	87.6	97.5	97.7	97.2	97.1	97.1	97.4	97.1	97.2	96.9	0.0	88.3
UCF (%)	97.7	87.6	97.6	97.7	97.2	97.1	97.1	97.4	97.1	97.2	96.9	0.1	88.3
LF (%)	103.0	92.4	103.2	103.6	102.8	102.6	102.6	103.0	101.7	102.5	102.7	0.0	93.3
OF (%)	100.0	90.9	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	0.0	90.8
EUUF (%)	2.3	12.4	2.5	2.3	2.8	2.9	2.9	2.6	2.9	2.8	3.1	100.0	11.7
PUF (%)	1.6	1.6	1.8	1.7	2.0	2.2	2.1	2.0	2.2	2.0	2.4	100.0	10.3
UCLF (%)	0.7	10.8	0.7	0.6	0.8	0.7	0.8	0.7	0.7	0.8	0.7	0.0	1.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

90% POWER OPERATION DUE TO CORE AGING EFFECT

5. Historical Summary

Date of Construction Start: 30 Oct 1977 **Lifetime Generation:** 118174.2 GW(e).h
Date of First Criticality: 21 Nov 1982 **Cumulative Energy Availability Factor:** 83.8%
Date of Grid Connection: 31 Dec 1982 **Cumulative Load Factor:** 86.7%
Date of Commercial Operation: 22 Apr 1983 **Cumulative Unit Capability Factor:** 84.2%
Cumulative Energy Unavailability Factor: 16.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	2507.4	628.0	60.4	60.4	60.4	60.4	60.5	60.5	5095	77.2
1984	3693.2	629.0	66.8	64.1	66.8	64.1	66.8	64.1	6202	70.6
1985	5246.5	629.0	95.7	75.6	94.0	74.9	95.2	75.4	8277	94.5
1986	4420.4	629.0	80.9	77.0	80.8	76.5	80.2	76.7	7079	80.8
1987	5155.8	629.0	94.4	80.7	93.9	80.2	93.6	80.2	8185	93.4
1988	4415.3	629.0	80.1	80.6	80.1	80.1	79.9	80.2	7033	80.1
1989	5053.2	629.0	68.8	78.8	68.8	78.5	91.7	81.9	8036	91.7
1990	4770.3	629.0	86.0	79.7	86.0	79.4	86.6	82.5	7532	86.0
1991	5062.0	629.0	90.5	81.0	90.5	80.7	91.9	83.6	7927	90.5
1992	4843.3	629.0	85.5	81.4	85.5	81.2	87.7	84.0	7510	85.5
1993	5611.3	629.0	99.0	83.1	99.0	82.8	101.8	85.6	8671	99.0
1994	4583.1	629.0	80.5	82.8	80.4	82.6	83.2	85.4	7150	81.6
1995	4647.1	629.0	80.9	82.7	80.9	82.5	84.3	85.3	7266	82.9
1996	4508.2	629.0	78.5	82.4	78.0	82.2	81.6	85.1	7029	80.0
1997	5689.6	629.0	99.6	83.6	99.6	83.3	103.3	86.3	8732	99.7
1998	4360.4	629.0	76.5	83.1	76.5	82.9	79.1	85.9	6730	76.8
1999	4613.0	629.0	80.7	83.0	80.7	82.8	83.7	85.7	7087	80.9
2000	4511.6	629.0	79.0	82.7	79.0	82.6	81.7	85.5	6993	79.6
2001	4622.0	629.0	81.3	82.7	81.3	82.5	83.9	85.4	7153	81.7
2002	5516.2	629.0	97.2	83.4	97.1	83.2	100.1	86.2	8543	97.5
2003	4980.0	629.0	88.1	83.6	88.1	83.5	90.4	86.4	7715	88.1
2004	5027.5	629.0	89.4	83.9	88.2	83.7	91.0	86.6	7855	89.4
2005	4296.3	629.0	82.5	83.8	75.9	83.3	78.0	86.2	7261	82.9
2006	4627.6	578.0	90.2	84.1	90.2	83.6	91.4	86.4	7998	91.3
2007	4721.9	578.0	88.3	84.2	88.3	83.8	93.3	86.7	7955	90.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		61			88	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	744			668		
D. Inspection, maintenance or repair without refuelling				364		
E. Testing of plant systems or components				4		
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						6
L. Human factor related					3	
Subtotal	744	61	0	1036	94	8
Total		805			1138	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		40
13. Reactor Auxiliary Systems		5
14. Safety Systems		4
15. Reactor Cooling Systems		12
16. Steam generation systems		1
31. Turbine and auxiliaries	61	7
32. Feedwater and Main Steam System		9
41. Main Generator Systems		1
42. Electrical Power Supply Systems		3
Total	61	82

KR-4 WOLSONG-2

Operator: KHNP (Korea Hydro and Nuclear Power Co.)

Contractor: AECL/DHI (ATOMIC ENERGY OF CANADA LTD./DOOSAN HEAVY INDUSTRY & CONSTRUCTION)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 683.0 MW(e)
Design Net Capacity: 650.0 MW(e)
Design Discharge Burnup: 7500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5618.8 GW(e).h
Energy Availability Factor: 90.6%
Load Factor: 93.9%
Operating Factor: 90.7%
Energy Unavailability Factor: 9.4%
Total Off-line Time: 812 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	529.1	478.4	46.7	408.5	530.9	511.2	524.6	525.3	501.5	522.8	511.1	528.7	5618.8
EAF (%)	100.0	100.0	8.8	79.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.6
UCF (%)	100.0	100.0	8.8	79.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.6
LF (%)	104.1	104.2	9.2	83.1	104.5	104.0	103.2	103.4	102.0	102.9	103.9	104.0	93.9
OF (%)	100.0	100.0	9.3	81.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.7
EUF (%)	0.0	0.0	91.2	20.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4
PUF (%)	0.0	0.0	91.2	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4
UCLF (%)	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Sep 1992 **Lifetime Generation:** 57675.6 GW(e).h
Date of First Criticality: 29 Jan 1997 **Cumulative Energy Availability Factor:** 90.9%
Date of Grid Connection: 01 Apr 1997 **Cumulative Load Factor:** 94.6%
Date of Commercial Operation: 01 Jul 1997 **Cumulative Unit Capability Factor:** 91.0%
Cumulative Energy Unavailability Factor: 9.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1997	2804.3	650.0	94.7	94.7	94.7	94.7	97.7	97.7	4199	95.1
1998	4788.7	650.0	81.0	85.6	81.0	85.6	84.1	88.7	7144	81.6
1999	5211.8	650.0	88.1	86.6	88.1	86.6	91.5	89.8	7754	88.5
2000	5346.8	650.0	91.5	88.0	91.5	88.0	93.6	90.9	7843	89.3
2001	5585.4	650.0	93.0	89.1	92.8	89.1	98.1	92.5	8188	93.5
2002	5266.0	650.0	87.7	88.8	87.7	88.8	92.5	92.5	7717	88.1
2003	5480.6	650.0	91.2	89.2	91.2	89.2	96.3	93.1	8015	91.5
2004	5465.5	650.0	90.9	89.4	90.9	89.4	95.7	93.4	8015	91.2
2005	5641.3	650.0	93.9	90.0	93.9	89.9	99.1	94.1	8243	94.1
2006	5975.8	684.0	99.3	91.0	99.3	91.0	99.7	94.7	8711	99.4
2007	5618.8	683.0	90.6	91.0	90.6	90.9	93.9	94.6	7948	90.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1997 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					27	
C. Inspection, maintenance or repair combined with refuelling	812			313		
D. Inspection, maintenance or repair without refuelling				332		
J. Grid failure or grid unavailability						6
Subtotal	812	0	0	645	27	6
Total		812			678	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1997 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		6
16. Steam generation systems		4
31. Turbine and auxiliaries		4
32. Feedwater and Main Steam System		8
41. Main Generator Systems		2
42. Electrical Power Supply Systems		1
Total	0	25

KR-15 WOLSONG-3**Operator:** KHNP (Korea Hydro and Nuclear Power Co.)**Contractor:** AECL/DHI (ATOMIC ENERGY OF CANADA LTD./DOOSAN HEAVY INDUSTRY & CONSTRUCTION)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 681.0 MW(e)
Design Net Capacity: 650.0 MW(e)
Design Discharge Burnup: 7296 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5826.6 GW(e).h
Energy Availability Factor: 93.8%
Load Factor: 97.7%
Operating Factor: 94.1%
Energy Unavailability Factor: 6.2%
Total Off-line Time: 521 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	528.3	439.4	528.0	511.2	182.7	512.2	526.7	527.5	502.5	524.5	512.5	531.1	5826.6
EAF (%)	100.0	92.0	100.0	100.0	34.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.8
UCF (%)	100.0	92.0	100.0	100.0	34.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.8
LF (%)	104.3	96.0	104.2	104.3	36.1	104.5	103.9	104.1	102.5	103.5	104.5	104.8	97.7
OF (%)	100.0	93.6	100.0	100.0	35.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.1
EUf (%)	0.0	8.0	0.0	0.0	66.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2
PUf (%)	0.0	0.0	0.0	0.0	66.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6
UCLF (%)	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 17 Mar 1994 **Lifetime Generation:** 52611.4 GW(e).h
Date of First Criticality: 19 Feb 1998 **Cumulative Energy Availability Factor:** 92.4%
Date of Grid Connection: 25 Mar 1998 **Cumulative Load Factor:** 95.0%
Date of Commercial Operation: 01 Jul 1998 **Cumulative Unit Capability Factor:** 92.4%
Cumulative Energy Unavailability Factor: 7.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1998	2839.3	650.0	96.1	96.1	96.1	96.1	98.9	98.9	4257	96.4
1999	4696.7	650.0	80.2	85.6	80.2	85.6	82.5	88.0	7008	80.0
2000	5925.2	650.0	99.9	91.3	99.9	91.3	103.8	94.3	8784	100.0
2001	4923.9	650.0	85.3	89.6	85.3	89.6	86.5	92.1	7409	84.6
2002	5043.3	650.0	91.8	90.1	91.8	90.1	88.6	91.3	8083	92.3
2003	5579.5	650.0	93.1	90.6	93.1	90.6	98.0	92.5	8176	93.3
2004	5540.3	650.0	92.5	90.9	92.2	90.9	97.0	93.2	8152	92.8
2005	5997.9	650.0	100.0	92.1	100.0	92.1	105.3	94.8	8760	100.0
2006	5617.8	682.0	93.4	92.3	93.4	92.3	94.0	94.7	8205	93.7
2007	5826.6	681.0	93.8	92.4	93.8	92.4	97.7	95.0	8239	94.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1999 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		43			27	
C. Inspection, maintenance or repair combined with refuelling	476			362		
D. Inspection, maintenance or repair without refuelling				218		
J. Grid failure or grid unavailability						1
Subtotal	476	43	0	580	27	1
Total		519			608	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1999 to 2007 Average Hours Lost Per Year
16. Steam generation systems		0
21. Fuel Handling and Storage Facilities	43	
35. All other I&C Systems		27
Total	43	27

KR-16 WOLSONG-4**Operator:** KHNP (Korea Hydro and Nuclear Power Co.)**Contractor:** AECL/DHI (ATOMIC ENERGY OF CANADA LTD./DOOSAN HEAVY INDUSTRY & CONSTRUCTION)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 685.0 MW(e)
Design Net Capacity: 650.0 MW(e)
Design Discharge Burnup: 7296 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5770.4 GW(e).h
Energy Availability Factor: 92.8%
Load Factor: 96.2%
Operating Factor: 93.1%
Energy Unavailability Factor: 7.2%
Total Off-line Time: 603 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	209.5	390.2	530.2	513.4	530.1	511.1	525.7	526.6	466.8	524.2	512.3	530.3	5770.4
EAF (%)	39.3	81.4	100.0	100.0	100.0	100.0	100.0	100.0	92.5	100.0	100.0	100.0	92.8
UCF (%)	39.3	81.4	100.0	100.0	100.0	100.0	100.0	100.0	92.5	100.0	100.0	100.0	92.8
LF (%)	41.1	84.8	104.0	104.2	104.0	103.6	103.1	103.3	94.6	102.7	103.9	104.0	96.2
OF (%)	39.9	83.5	100.0	100.1	100.0	100.0	100.0	100.0	93.8	99.9	100.0	100.0	93.1
EUF (%)	60.7	18.6	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	7.2
PUF (%)	60.7	18.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 22 Jul 1994
Date of First Criticality: 10 Apr 1999
Date of Grid Connection: 21 May 1999
Date of Commercial Operation: 01 Oct 1999

Lifetime Generation: 46533.2 GW(e).h
Cumulative Energy Availability Factor: 93.7%
Cumulative Load Factor: 97.7%
Cumulative Unit Capability Factor: 93.7%
Cumulative Energy Unavailability Factor: 6.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1999	1489.2	650.0	99.9	99.9	99.9	99.9	103.8	103.8	2208	100.0
2000	5423.3	650.0	91.4	93.1	91.4	93.1	95.0	96.7	8033	91.5
2001	5493.2	650.0	92.6	92.9	92.6	92.9	96.5	96.6	8110	92.6
2002	5448.1	650.0	90.8	92.2	90.8	92.2	95.7	96.3	7971	91.0
2003	5601.9	650.0	93.5	92.5	93.5	92.5	98.4	96.8	8225	93.9
2004	5620.9	650.0	93.2	92.6	93.2	92.6	98.4	97.1	8209	93.5
2005	5657.9	650.0	93.8	92.8	93.8	92.8	99.4	97.5	8254	94.2
2006	6028.3	685.0	100.0	93.9	100.0	93.9	100.5	97.9	8760	100.0
2007	5770.4	685.0	92.8	93.7	92.8	93.7	96.2	97.7	8157	93.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2000 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		49			0	
C. Inspection, maintenance or repair combined with refuelling	558			174		
D. Inspection, maintenance or repair without refuelling				295		
Subtotal	558	49	0	469	0	0
Total	607			469		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2000 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems	49	
31. Turbine and auxiliaries		0
Total	49	0

KR-7 YONGGWANG-1

Operator: KHNP (Korea Hydro and Nuclear Power Co.)
Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 942.0 MW(e)
Design Net Capacity: 900.0 MW(e)
Design Discharge Burnup: 18190 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6466.5 GW(e).h
Energy Availability Factor: 77.3%
Load Factor: 78.4%
Operating Factor: 78.3%
Energy Unavailability Factor: 22.7%
Total Off-line Time: 1905 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	713.9	409.8	71.8	688.6	705.9	677.5	697.0	689.8	298.6	94.4	697.1	722.1	6466.5
EAF (%)	100.0	63.5	10.1	100.0	100.0	99.1	98.8	97.8	44.3	13.3	100.0	100.0	77.3
UCF (%)	100.0	63.5	10.1	100.0	100.0	100.0	100.0	100.0	44.3	13.3	100.0	100.0	77.6
LF (%)	101.9	64.7	10.2	101.5	100.7	99.9	99.5	98.4	44.0	13.5	102.8	103.0	78.4
OF (%)	100.0	63.5	12.2	100.0	100.0	100.0	100.0	100.0	46.7	16.3	100.0	100.0	78.3
EUUF (%)	0.0	36.5	89.9	0.0	0.0	0.9	1.2	2.2	55.7	86.7	0.0	0.0	22.7
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.7	86.7	0.0	0.0	11.9
UCLF (%)	0.0	36.5	89.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.8	1.2	2.2	0.0	0.0	0.0	0.0	0.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 04 Jun 1981
Date of First Criticality: 31 Jan 1986
Date of Grid Connection: 05 Mar 1986
Date of Commercial Operation: 25 Aug 1986

Lifetime Generation: 151196.9 GW(e).h
Cumulative Energy Availability Factor: 86.9%
Cumulative Load Factor: 89.1%
Cumulative Unit Capability Factor: 86.9%
Cumulative Energy Unavailability Factor: 13.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	2467.9	900.0	95.8	95.8	95.6	95.6	74.7	74.7	2928	79.7
1987	5973.9	900.0	78.8	83.8	78.8	83.7	75.8	75.4	6870	78.4
1988	6199.6	900.0	77.9	81.4	77.9	81.3	78.4	76.7	6844	77.9
1989	6451.8	900.0	81.5	81.4	81.5	81.4	81.8	78.2	7136	81.5
1990	6897.5	900.0	85.7	82.4	85.7	82.3	87.5	80.3	7507	85.7
1991	6695.6	900.0	84.3	82.7	84.3	82.7	84.9	81.1	7383	84.3
1992	6947.3	900.0	86.5	83.3	86.5	83.3	87.9	82.2	7600	86.5
1993	6724.0	900.0	86.8	83.8	86.8	83.8	85.3	82.6	7603	86.8
1994	8230.1	890.0	99.4	85.6	99.4	85.6	105.6	85.3	8751	99.9
1995	6094.6	900.0	74.9	84.5	74.9	84.5	77.3	84.5	6781	77.4
1996	6755.5	900.0	81.4	84.2	81.3	84.2	85.5	84.6	7255	82.6
1997	8236.1	900.0	99.4	85.5	99.4	85.5	104.5	86.3	8741	99.8
1998	7104.5	900.0	85.5	85.5	85.5	85.5	90.1	86.6	7599	86.7
1999	6730.0	900.0	81.1	85.2	81.1	85.2	85.4	86.5	7242	82.7
2000	7215.1	900.0	87.5	85.3	87.5	85.3	91.3	86.8	7696	87.6
2001	8346.4	900.0	99.9	86.3	99.9	86.3	105.9	88.1	8760	100.0
2002	7419.0	900.0	88.8	86.4	88.8	86.4	94.1	88.4	7867	89.8
2003	7074.4	900.0	86.3	86.4	86.3	86.4	89.7	88.5	7593	86.7
2004	7207.2	900.0	86.7	86.5	86.7	86.4	91.2	88.7	7688	87.5
2005	8302.9	900.0	100.0	87.1	100.0	87.1	105.3	89.5	8760	100.0
2006	7545.1	945.0	91.1	87.3	91.1	87.3	91.1	89.6	8030	91.7
2007	6466.5	942.0	77.6	86.9	77.3	86.9	78.4	89.1	6855	78.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		898			26	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1007			943		
D. Inspection, maintenance or repair without refuelling				7		
H. Nuclear regulatory requirements					7	
J. Grid failure or grid unavailability					0	
Subtotal	1007	898	0	950	33	0
Total		1905			983	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		8
15. Reactor Cooling Systems		2
16. Steam generation systems		0
17. Safety I&C Systems (excluding reactor I&C)		4
31. Turbine and auxiliaries		3
32. Feedwater and Main Steam System		3
41. Main Generator Systems	898	0
42. Electrical Power Supply Systems		2
XX. Miscellaneous Systems		0
Total	898	22

KR-8 YONGGWANG-2**Operator:** KHNP (Korea Hydro and Nuclear Power Co.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 936.0 MW(e)
Design Net Capacity: 900.0 MW(e)
Design Discharge Burnup: 17960 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7030.1 GW(e).h
Energy Availability Factor: 84.4%
Load Factor: 85.7%
Operating Factor: 85.9%
Energy Unavailability Factor: 15.6%
Total Off-line Time: 1237 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	707.5	639.1	707.4	120.7	74.4	639.5	704.4	697.8	676.4	690.4	655.4	717.1	7030.1
EAF (%)	100.0	100.0	100.0	17.7	10.7	93.5	100.0	99.4	99.2	97.4	95.1	100.0	84.4
UCF (%)	100.0	100.0	100.0	17.7	10.7	93.5	100.0	100.0	100.0	100.0	100.0	100.0	85.1
LF (%)	101.6	101.6	101.6	17.9	10.7	94.9	101.2	100.2	100.4	99.1	97.3	103.0	85.7
OF (%)	100.0	100.0	100.0	20.0	15.6	95.4	100.0	100.0	100.0	100.0	100.0	100.0	85.9
EUF (%)	0.0	0.0	0.0	82.3	89.3	6.5	0.0	0.6	0.8	2.6	4.9	0.0	15.6
PUF (%)	0.0	0.0	0.0	82.3	89.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4
UCLF (%)	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.8	2.6	4.9	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Dec 1981 **Lifetime Generation:** 142276.5 GW(e).h
Date of First Criticality: 15 Oct 1986 **Cumulative Energy Availability Factor:** 85.3%
Date of Grid Connection: 11 Nov 1986 **Cumulative Load Factor:** 87.4%
Date of Commercial Operation: 10 Jun 1987 **Cumulative Unit Capability Factor:** 85.3%
Cumulative Energy Unavailability Factor: 14.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	4297.0	900.0	98.1	98.1	98.1	98.1	97.0	97.0	4826	98.1
1988	6280.9	900.0	80.6	86.9	80.6	86.9	79.4	85.8	7085	80.7
1989	5703.2	900.0	73.6	81.7	73.6	81.7	72.3	80.5	6446	73.6
1990	5964.5	900.0	77.1	80.4	77.1	80.4	75.7	79.2	6757	77.1
1991	6715.0	900.0	84.9	81.4	84.9	81.4	85.2	80.5	7433	84.9
1992	6434.6	900.0	82.6	81.6	82.6	81.6	81.4	80.6	7259	82.6
1993	6930.5	900.0	85.8	82.3	85.7	82.2	87.9	81.7	7506	85.7
1994	7132.9	890.0	85.5	82.7	85.5	82.7	91.5	83.0	7687	87.8
1995	6036.5	900.0	74.2	81.7	74.2	81.7	76.6	82.3	6696	76.4
1996	7656.1	900.0	91.6	82.7	91.6	82.7	96.8	83.8	8189	93.2
1997	6657.3	900.0	81.2	82.6	81.2	82.6	84.4	83.9	7453	85.1
1998	6010.4	900.0	74.5	81.9	74.4	81.9	76.2	83.2	6583	75.1
1999	6718.9	900.0	82.1	81.9	82.1	81.9	85.2	83.4	7301	83.3
2000	7144.1	900.0	87.1	82.3	87.1	82.3	90.4	83.9	7753	88.3
2001	7169.7	900.0	87.1	82.6	87.1	82.6	90.9	84.4	7726	88.2
2002	8194.2	900.0	99.9	83.7	99.6	83.7	103.9	85.6	8744	99.8
2003	7413.3	900.0	89.7	84.1	89.6	84.1	94.0	86.1	7931	90.5
2004	7242.9	900.0	87.5	84.3	87.5	84.3	91.6	86.4	7764	88.4
2005	7302.4	900.0	88.6	84.5	88.6	84.5	92.6	86.8	7881	90.0
2006	8195.7	939.0	100.0	85.3	99.9	85.3	99.6	87.5	8719	99.5
2007	7030.1	936.0	85.1	85.3	84.4	85.3	85.7	87.4	7523	85.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		33		1	45	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	1204			978		
D. Inspection, maintenance or repair without refuelling				98		
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						0
Subtotal	1204	33	0	1077	49	1
Total		1237			1127	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		1
15. Reactor Cooling Systems		2
16. Steam generation systems		8
31. Turbine and auxiliaries	33	1
32. Feedwater and Main Steam System		5
35. All other I&C Systems		0
41. Main Generator Systems		18
42. Electrical Power Supply Systems		8
Total	33	43

KR-11 YONGGWANG-3**Operator:** KHNP (Korea Hydro and Nuclear Power Co.)**Contractor:** DHICKAEC (DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA ATOMICENERGY RESEARCH INS**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 987.0 MW(e)
Design Net Capacity: 960.0 MW(e)
Design Discharge Burnup: 42700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7778.3 GW(e).h
Energy Availability Factor: 90.2%
Load Factor: 90.0%
Operating Factor: 90.4%
Energy Unavailability Factor: 9.8%
Total Off-line Time: 844 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	743.2	672.4	745.9	721.4	545.2	23.3	735.3	731.2	706.1	719.9	689.5	745.1	7778.3
EAF (%)	100.0	100.0	100.0	100.0	70.1	19.3	99.8	100.0	99.1	97.3	96.1	100.0	90.2
UCF (%)	100.0	100.0	100.0	100.0	70.1	19.3	99.8	100.0	100.0	100.0	100.0	100.0	90.8
LF (%)	101.2	101.4	101.6	101.5	74.2	3.3	100.1	99.6	99.4	98.0	97.0	101.5	90.0
OF (%)	100.0	100.0	100.0	100.0	75.1	8.5	100.0	100.0	100.0	100.0	100.0	100.0	90.4
EUf (%)	0.0	0.0	0.0	0.0	29.9	80.7	0.2	0.0	0.9	2.7	3.9	0.0	9.8
PUf (%)	0.0	0.0	0.0	0.0	29.9	80.7	0.2	0.0	0.0	0.0	0.0	0.0	9.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.7	3.9	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 23 Dec 1989
Date of First Criticality: 13 Oct 1994
Date of Grid Connection: 30 Oct 1994
Date of Commercial Operation: 31 Mar 1995

Lifetime Generation: 97828.5 GW(e).h
Cumulative Energy Availability Factor: 89.3%
Cumulative Load Factor: 91.0%
Cumulative Unit Capability Factor: 89.3%
Cumulative Energy Unavailability Factor: 10.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1995	6430.3	950.0	99.3	99.3	99.3	99.3	92.2	92.2	6573	89.5
1996	6366.2	950.0	74.0	85.5	74.0	85.5	76.3	83.5	6589	75.0
1997	7229.6	950.0	84.0	85.0	84.0	85.0	86.9	84.7	7443	85.0
1998	7400.8	950.0	85.5	85.1	85.5	85.1	88.9	85.8	7566	86.4
1999	7395.3	950.0	86.7	85.4	86.7	85.4	88.9	86.4	7678	87.6
2000	7262.0	950.0	85.6	85.5	85.6	85.5	87.0	86.5	7568	86.2
2001	8629.1	950.0	100.0	87.6	100.0	87.6	103.7	89.0	8760	100.0
2002	7658.2	950.0	89.1	87.8	89.1	87.8	92.0	89.4	7831	89.4
2003	7818.1	950.0	90.1	88.0	90.1	88.0	93.9	89.9	7971	91.0
2004	7654.7	950.0	90.4	88.3	90.3	88.3	91.7	90.1	7801	88.8
2005	8675.6	950.0	100.0	89.4	100.0	89.4	104.2	91.4	8760	100.0
2006	7556.8	985.0	87.4	89.2	87.3	89.2	87.6	91.1	7800	89.0
2007	7778.3	987.0	90.8	89.3	90.2	89.3	90.0	91.0	7916	90.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1995 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					14	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	844			796		
D. Inspection, maintenance or repair without refuelling				9		
E. Testing of plant systems or components					0	
Subtotal	844	0	0	805	14	0
Total	844			819		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1995 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		2
31. Turbine and auxiliaries		3
32. Feedwater and Main Steam System		3
35. All other I&C Systems		1
41. Main Generator Systems		0
42. Electrical Power Supply Systems		2
Total	0	11

KR-12 YONGGWANG-4

Operator: KHNP (Korea Hydro and Nuclear Power Co.)

Contractor: DHICKAEC (DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA ATOMICENERGY RESEARCH INS

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 987.0 MW(e)
Design Net Capacity: 960.0 MW(e)
Design Discharge Burnup: 42700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7651.1 GW(e).h
Energy Availability Factor: 87.8%
Load Factor: 88.5%
Operating Factor: 88.9%
Energy Unavailability Factor: 12.2%
Total Off-line Time: 970 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	64.6	330.4	745.6	719.5	741.8	714.1	737.0	732.5	706.7	724.0	689.9	745.0	7651.1
EAF (%)	8.9	49.4	100.0	100.0	100.0	100.0	100.0	100.0	99.0	97.8	96.0	100.0	87.8
UCF (%)	8.9	49.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.4
LF (%)	8.8	49.8	101.5	101.2	101.0	100.5	100.4	99.7	99.4	98.6	97.1	101.5	88.5
OF (%)	10.6	54.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.9
EUUF (%)	91.1	50.6	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.2	4.0	0.0	12.2
PUF (%)	91.1	50.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.2	4.0	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 26 May 1990 **Lifetime Generation:** 92417.9 GW(e).h
Date of First Criticality: 07 Jul 1995 **Cumulative Energy Availability Factor:** 89.3%
Date of Grid Connection: 18 Jul 1995 **Cumulative Load Factor:** 91.9%
Date of Commercial Operation: 01 Jan 1996 **Cumulative Unit Capability Factor:** 89.3%
Cumulative Energy Unavailability Factor: 10.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1996	7197.5	950.0	83.5	83.5	83.5	83.5	86.3	86.3	7565	86.1
1997	6767.7	950.0	78.8	81.1	78.8	81.1	81.3	83.8	7125	81.3
1998	8427.3	950.0	97.1	86.5	97.1	86.5	101.3	89.6	8591	98.1
1999	7627.9	950.0	89.0	87.1	89.0	87.1	91.7	90.1	7883	90.0
2000	7252.3	950.0	84.6	86.6	84.6	86.6	86.9	89.5	7441	84.7
2001	7237.2	950.0	84.8	86.3	84.8	86.3	87.0	89.1	7424	84.7
2002	7653.5	950.0	88.7	86.6	88.7	86.6	92.0	89.5	7808	89.1
2003	8576.8	950.0	98.7	88.1	98.7	88.1	103.1	91.2	8652	98.8
2004	7624.9	950.0	88.3	88.2	88.3	88.2	91.4	91.2	7782	88.6
2005	7755.0	950.0	89.8	88.3	89.8	88.3	93.2	91.4	7879	89.9
2006	8646.2	988.0	100.0	89.4	100.0	89.4	99.9	92.2	8760	100.0
2007	7651.1	987.0	88.4	89.3	87.8	89.3	88.5	91.9	7790	88.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1996 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					31	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	970			758		
Subtotal	970	0	0	758	31	0
Total	970			789		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1996 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		6
31. Turbine and auxiliaries		3
32. Feedwater and Main Steam System		2
41. Main Generator Systems		9
42. Electrical Power Supply Systems		8
Total	0	28

KR-17 YONGGWANG-5**Operator:** KHNP (Korea Hydro and Nuclear Power Co.)**Contractor:** DHICKOPC (DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA POWER ENGINEERING COMPAN**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 990.0 MW(e)
Design Net Capacity: 960.0 MW(e)
Design Discharge Burnup: 13820 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8601.7 GW(e).h
Energy Availability Factor: 99.1%
Load Factor: 99.2%
Operating Factor: 99.6%
Energy Unavailability Factor: 0.9%
Total Off-line Time: 35 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	742.4	670.3	742.2	717.9	739.4	712.0	732.8	718.2	708.0	733.0	651.6	733.8	8601.7
EAF (%)	100.0	100.0	100.0	100.0	99.9	100.0	99.9	98.2	99.9	99.9	91.7	99.8	99.1
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	99.9	98.2	99.9	99.9	91.8	99.8	99.1
LF (%)	100.8	100.8	100.8	100.7	100.4	99.9	99.5	97.5	99.3	99.5	91.4	99.6	99.2
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.1	100.0	99.6
EUF (%)	0.0	0.0	0.0	0.0	0.1	0.0	0.1	1.8	0.1	0.1	8.3	0.2	0.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.8	0.2	0.1	8.3	0.2	0.9
XUF (%)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 29 Jun 1997 **Lifetime Generation:** 41507.6 GW(e).h
Date of First Criticality: 24 Nov 2001 **Cumulative Energy Availability Factor:** 85.2%
Date of Grid Connection: 19 Dec 2001 **Cumulative Load Factor:** 87.4%
Date of Commercial Operation: 21 May 2002 **Cumulative Unit Capability Factor:** 85.2%
Cumulative Energy Unavailability Factor: 14.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2002	5006.8	950.0	98.7	98.7	98.7	98.7	102.6	102.6	5095	99.2
2003	6694.4	950.0	77.1	85.1	77.1	85.1	80.4	88.6	6856	78.3
2004	5524.5	950.0	63.3	76.7	63.3	76.7	66.2	79.9	5611	63.9
2005	7748.4	950.0	89.0	80.1	88.8	80.1	93.1	83.6	7873	89.9
2006	7688.3	987.0	88.8	82.1	88.8	82.0	88.9	84.8	7859	89.7
2007	8601.7	990.0	99.1	85.2	99.1	85.2	99.2	87.4	8725	99.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2002 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					48	
C. Inspection, maintenance or repair combined with refuelling				1035		
D. Inspection, maintenance or repair without refuelling				66		
E. Testing of plant systems or components		35				
Subtotal	0	35	0	1101	48	0
Total		35			1149	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2002 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		10
16. Steam generation systems		31
Total	0	41

KR-18 YONGGWANG-6**Operator:** KHNP (Korea Hydro and Nuclear Power Co.)**Contractor:** DHICKOPC (DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA POWER ENGINEERING COMPAN**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 993.0 MW(e)
Design Net Capacity: 960.0 MW(e)
Design Discharge Burnup: 13450 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7859.2 GW(e).h
Energy Availability Factor: 90.1%
Load Factor: 90.3%
Operating Factor: 90.8%
Energy Unavailability Factor: 9.9%
Total Off-line Time: 803 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	743.6	672.1	743.7	719.0	739.6	353.0	257.4	733.9	698.1	740.6	716.3	742.1	7859.2
EAF (%)	100.0	100.0	100.0	100.0	99.8	49.8	35.2	99.8	97.8	100.0	99.8	100.0	90.1
UCF (%)	100.0	100.0	100.0	100.0	100.0	49.8	35.2	99.8	100.0	100.0	100.0	100.0	90.4
LF (%)	100.6	100.7	100.7	100.7	100.1	49.4	34.8	99.3	97.6	100.1	100.2	100.4	90.3
OF (%)	100.0	100.0	100.0	100.1	100.0	51.4	39.1	100.0	100.0	99.9	100.0	100.0	90.8
EUF (%)	0.0	0.0	0.0	0.0	0.2	50.2	64.8	0.2	2.2	0.0	0.2	0.0	9.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	50.2	64.8	0.0	0.0	0.0	0.0	0.0	9.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	2.2	0.0	0.2	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 20 Nov 1997 **Lifetime Generation:** 37770.3 GW(e).h
Date of First Criticality: 01 Sep 2002 **Cumulative Energy Availability Factor:** 86.4%
Date of Grid Connection: 16 Sep 2002 **Cumulative Load Factor:** 87.3%
Date of Commercial Operation: 24 Dec 2002 **Cumulative Unit Capability Factor:** 86.5%
Cumulative Energy Unavailability Factor: 13.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2002	Data not provided									
2003	7652.2	950.0	88.2	88.2	88.2	88.2	92.0	92.0	7728	88.2
2004	6354.5	950.0	72.8	80.5	72.8	80.5	76.1	84.0	6449	73.4
2005	7137.1	950.0	89.1	83.4	88.8	83.2	85.8	84.6	7906	90.3
2006	7988.6	993.0	91.5	85.5	91.5	85.4	91.8	86.5	8064	92.1
2007	7859.2	993.0	90.4	86.5	90.1	86.4	90.3	87.3	7957	90.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2003 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure C. Inspection, maintenance or repair combined with refuelling R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)	803			961	21	0
Subtotal	803	0	0	961	21	0
Total	803			982		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2003 to 2007 Average Hours Lost Per Year
17. Safety I&C Systems (excluding reactor I&C)		14
41. Main Generator Systems		7
Total	0	21

LT-47 IGNALINA-2**Operator:** INPP (IGNALINA NUCLEAR POWER PLANT)**Contractor:** MAEP (MINATOMENERGOPROM, MINISTRY OF NUCLEAR POWER AND INDUSTRY)**1. Station Details**

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 1185.0 MW(e)
Design Net Capacity: 1500.0 MW(e)
Design Discharge Burnup: 23000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9074.8 GW(e).h
Energy Availability Factor: 83.8%
Load Factor: 87.4%
Operating Factor: 88.4%
Energy Unavailability Factor: 16.2%
Total Off-line Time: 1014 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	821.3	840.3	935.8	905.9	875.5	878.2	860.3	285.0	50.3	884.8	804.5	932.9	9074.8
EAF (%)	92.3	100.0	100.0	100.0	94.6	100.0	94.6	32.3	5.9	95.9	90.7	100.0	83.8
UCF (%)	92.4	100.0	100.0	100.0	94.6	100.0	94.6	32.3	5.9	95.9	90.7	100.0	83.8
LF (%)	93.2	105.5	106.1	106.3	99.3	102.9	97.6	32.3	5.9	100.2	94.3	105.8	87.4
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	57.4	12.5	99.9	90.7	100.0	88.4
EUUF (%)	7.7	0.0	0.0	0.0	5.4	0.0	5.4	67.7	94.1	4.1	9.3	0.0	16.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	5.4	67.7	79.9	4.1	0.0	0.0	13.1
UCLF (%)	7.7	0.0	0.0	0.0	5.4	0.0	0.0	0.0	14.2	0.0	9.3	0.0	3.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

MOST OF THE TIME CAPACITY OF UNIT 2 WAS 1240 MWE INSTEAD OF 1185MWE (INSTALLED CAPACITY)

5. Historical Summary

Date of Construction Start: 01 Jan 1978 **Lifetime Generation:** 136028.0 GW(e).h
Date of First Criticality: 01 Dec 1986 **Cumulative Energy Availability Factor:** 63.7%
Date of Grid Connection: 20 Aug 1987 **Cumulative Load Factor:** 61.7%
Date of Commercial Operation: 20 Aug 1987 **Cumulative Unit Capability Factor:** 73.8%
Cumulative Energy Unavailability Factor: 36.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	2520.3	1316.0	100.0	100.0	100.0	100.0	52.2	52.2	2949	91.7
1988	7141.5	1380.0	69.7	78.3	69.7	78.3	58.9	57.0	6213	70.7
1989	7125.8	1380.0	71.2	75.4	58.0	69.9	58.9	57.8	6259	71.4
1990	8250.7	1380.0	68.3	73.3	68.3	69.4	68.3	60.9	7296	83.3
1991	8802.1	1380.0	73.2	73.3	73.0	70.2	72.8	63.6	7602	86.8
1992	6693.3	1380.0	71.3	72.9	71.3	70.4	55.4	62.1	5977	68.2
1993	5675.9	1185.0	49.0	69.6	38.2	66.0	54.7	61.1	5801	66.2
1994	3167.4	1185.0	76.2	70.4	30.5	61.7	30.5	57.4	4556	52.0
1995	5610.9	1185.0	75.8	71.0	54.1	60.9	54.1	57.0	6431	73.4
1996	6918.9	1185.0	75.8	71.5	66.5	61.4	66.5	57.9	6778	77.2
1997	6453.5	1185.0	77.9	72.0	77.7	62.9	62.2	58.3	6941	79.2
1998	8174.8	1185.0	89.7	73.5	78.6	64.2	78.8	60.0	7967	90.9
1999	4926.5	1185.0	73.8	73.5	47.5	62.9	47.5	59.0	6777	77.4
2000	3873.0	1185.0	77.6	73.8	37.2	61.1	37.2	57.5	4890	55.7
2001	4867.4	1185.0	68.8	73.5	46.9	60.2	46.9	56.8	4971	56.7
2002	7411.3	1185.0	78.4	73.8	70.9	60.8	71.4	57.7	6980	79.7
2003	7461.9	1185.0	74.6	73.8	71.5	61.5	71.9	58.5	7156	81.7
2004	4703.0	1185.0	48.0	72.4	48.0	60.7	45.2	57.8	4673	53.2
2005	9544.1	1185.0	89.3	73.3	89.3	62.2	91.9	59.6	7826	89.3
2006	7944.6	1185.0	73.5	73.3	73.5	62.8	76.5	60.4	7526	85.9
2007	9074.8	1185.0	83.8	73.8	83.8	63.7	87.4	61.7	7746	88.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		169			153	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling				176		
D. Inspection, maintenance or repair without refuelling	845			1413		
E. Testing of plant systems or components				1		
J. Grid failure or grid unavailability						13
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					45	106
L. Human factor related						96
Subtotal	845	169	0	1590	201	215
Total		1014			2006	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	67	8
12. Reactor I&C Systems		6
13. Reactor Auxiliary Systems		10
14. Safety Systems		15
15. Reactor Cooling Systems	102	58
16. Steam generation systems		8
32. Feedwater and Main Steam System		5
41. Main Generator Systems		2
42. Electrical Power Supply Systems		9
XX. Miscellaneous Systems		1
Total	169	122

MX-1 LAGUNA VERDE-1

Operator: CFE (COMISION FEDERAL DE ELECTRICIDAD)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 680.0 MW(e)
Design Net Capacity: 654.0 MW(e)
Design Discharge Burnup: 35000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5027.2 GW(e).h
Energy Availability Factor: 89.4%
Load Factor: 84.4%
Operating Factor: 90.9%
Energy Unavailability Factor: 10.6%
Total Off-line Time: 797 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	485.0	424.1	24.1	400.4	477.2	460.2	474.7	463.1	409.9	471.6	461.8	475.0	5027.2
EAF (%)	99.0	97.2	6.0	85.4	99.4	99.9	99.8	98.6	90.7	99.4	99.4	99.6	89.4
UCF (%)	99.3	98.8	6.3	85.4	99.4	99.9	99.8	99.0	90.7	99.4	99.4	99.6	89.6
LF (%)	95.9	92.8	4.8	81.9	94.3	94.0	93.8	91.5	83.7	93.1	94.3	93.9	84.4
OF (%)	100.0	100.0	11.3	88.6	100.0	100.0	100.0	100.0	92.5	99.9	100.0	100.0	90.9
EUF (%)	1.0	2.8	94.0	14.6	0.6	0.1	0.2	1.4	9.3	0.6	0.6	0.4	10.6
PUF (%)	0.3	0.1	91.4	0.9	0.0	0.1	0.2	0.5	8.8	0.2	0.0	0.4	8.7
UCLF (%)	0.3	1.1	2.3	13.8	0.6	0.0	0.0	0.5	0.5	0.4	0.6	0.0	1.7
XUF (%)	0.4	1.7	0.3	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE LAGUNA VERDE NPP UNIT 1 STARTED THE YEAR AT 99%, WITH PROBLEM WITH BANDS TO EQUIPMENT 1NMA-AC-001A. JANUARY 15TH, 2007; 11:05 HOURS. UNIT POWER REDUCED TO 70%, BY A HOTSPOT ON ELECTRICAL SWITCHYARD BLADE A3199 OF THE LINE A-3190. JANUARY 20TH, 2007; 07:40 HOURS. EASTER DIVISION OF POWER CONTROL CENTER (CENACE) REQUESTS A DOWN POWER TO 70% BOTH UNITS TO REMOVE A HOT SPOT ON 400 KV LINES. TOTAL LOSS OF 1,900.37 MWH. FEBRUARY 05TH; 2007; 23:00 HOURS. UNIT COASTDOWN BEGINS. FEBRUARY 27TH; 2007; 22:50 HOURS. SUPPRESSION POWER TO TEST FUEL TO 66%. MARCH 07TH; 2007; 02:28 HOURS. TWELFTH REFUELING OUTAGE WITH A LENGTH OF 27.48 DAYS. TOTAL LOSS OF POWER OF 464,692.23 MWH. APRIL 21ST, 2007; 21:30 HOURS. SHUTDOWN DUE TO OIL LEAKAGE ON HPU-"B". TOTAL LOSS OF 67,323.42 MWH. SEPTEMBER 28TH, 2007; 00:36 HOURS. PLANNED OUTAGE TO REPAIR FOR RECIRCULATION PUMP (1-RRC-P-001B) SEAL. LOSS EQUIVALENT TO 42,869.9 MWH.

5. Historical Summary

Date of Construction Start:	01 Oct 1976	Lifetime Generation:	78506.1 GW(e).h
Date of First Criticality:	08 Nov 1988	Cumulative Energy Availability Factor:	81.8%
Date of Grid Connection:	13 Apr 1989	Cumulative Load Factor:	78.0%
Date of Commercial Operation:	29 Jul 1990	Cumulative Unit Capability Factor:	82.5%
		Cumulative Energy Unavailability Factor:	18.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1990	2227.9	640.0	79.7	79.7	79.7	79.7	78.8	78.8	3955	89.6
1991	4062.1	640.0	74.4	76.2	74.4	76.2	72.5	74.6	7022	80.2
1992	3746.4	654.0	70.4	73.9	70.4	73.9	65.2	70.8	7024	80.0
1993	4724.4	654.0	90.6	78.7	90.6	78.7	82.5	74.2	7851	89.6
1994	4062.0	628.0	77.8	78.5	73.8	77.6	73.8	74.1	7095	81.0
1995	4154.1	628.0	78.1	78.4	75.5	77.3	75.5	74.3	7128	81.4
1996	3442.3	655.0	68.8	76.9	68.8	75.9	59.8	72.1	6628	75.5
1997	5218.8	615.0	96.0	79.4	95.9	78.5	96.9	75.2	8577	97.9
1998	4412.5	655.0	82.2	79.7	81.7	78.9	76.9	75.4	7359	84.0
1999	4451.0	670.0	82.8	80.0	81.5	79.1	75.8	75.5	7466	85.2
2000	4577.6	645.0	80.6	80.1	80.3	79.3	80.8	76.0	7409	84.3
2001	4144.3	645.0	74.9	79.6	73.2	78.7	73.3	75.8	6808	77.7
2002	4196.3	680.0	76.4	79.4	75.8	78.5	70.4	75.3	6876	78.5
2003	5415.4	680.0	97.9	80.8	97.6	80.0	90.9	76.5	8642	98.7
2004	4168.9	680.0	75.9	80.5	75.2	79.6	69.8	76.0	6818	77.6
2005	5007.8	680.0	88.8	81.0	88.2	80.2	84.1	76.6	7884	90.0
2006	5529.7	680.0	97.5	82.1	97.5	81.3	92.8	77.6	8624	98.4
2007	5027.2	680.0	89.6	82.5	89.4	81.8	84.4	78.0	7963	90.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		122		80	353	
B. Refuelling without a maintenance				37	11	
C. Inspection, maintenance or repair combined with refuelling	659			665	29	
D. Inspection, maintenance or repair without refuelling	72			131		
E. Testing of plant systems or components				106	7	
J. Grid failure or grid unavailability					9	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					26	
Z. Others					28	
Subtotal	731	122	0	1019	463	0
Total		853			1482	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		7
12. Reactor I&C Systems	122	20
13. Reactor Auxiliary Systems		154
14. Safety Systems		8
15. Reactor Cooling Systems		35
17. Safety I&C Systems (excluding reactor I&C)		4
31. Turbine and auxiliaries		67
32. Feedwater and Main Steam System		82
35. All other I&C Systems		34
42. Electrical Power Supply Systems		18
Total	122	429

MX-2 LAGUNA VERDE-2

Operator: CFE (COMISION FEDERAL DE ELECTRICIDAD)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 680.0 MW(e)
Design Net Capacity: 654.0 MW(e)
Design Discharge Burnup: 35000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4920.2 GW(e).h
Energy Availability Factor: 89.9%
Load Factor: 82.6%
Operating Factor: 91.5%
Energy Unavailability Factor: 10.1%
Total Off-line Time: 747 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	426.9	423.1	472.8	450.1	459.2	414.3	463.1	456.1	439.1	135.5	327.7	452.2	4920.2
EAF (%)	90.5	98.8	99.8	99.8	99.5	93.7	99.3	99.0	98.2	32.3	74.6	94.9	89.9
UCF (%)	91.2	98.8	99.8	99.9	99.5	93.7	99.3	99.5	98.3	33.1	74.6	94.9	90.1
LF (%)	84.4	92.6	93.5	92.1	90.8	84.6	91.5	90.2	89.7	26.7	66.9	89.4	82.6
OF (%)	94.5	100.0	100.0	100.1	100.0	95.8	100.0	100.0	100.0	34.4	77.8	96.2	91.5
EUf (%)	9.5	1.2	0.2	0.2	0.5	6.3	0.7	1.0	1.8	67.7	25.4	5.1	10.1
PUF (%)	0.3	1.2	0.2	0.2	0.2	0.2	0.7	0.5	1.2	66.9	24.6	0.0	8.1
UCLF (%)	8.5	0.0	0.1	0.0	0.4	6.0	0.0	0.0	0.5	0.1	0.8	5.1	1.8
XUF (%)	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	0.8	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE LAGUNA VERDE NPP UNIT 2 STARTED THE YEAR OPERATING AT FULL RATED POWER. JANUARY 02ND 2007; 16:55 HOURS, SHUTDOWN TO REPAIR FAILURE DUE TO UNAVAILABILITY ON VALVE 2B22-RV-13R. THE LOSS IS EQUIVALENT TO 40,030.58 MWH. JUNE 12TH 2007; 02:51 HOURS, UNPLANNED OUTAGE TO REPAIR LEAK ON VALVE 2E51-MV-8341 IN DRYWELL. THE LOSS IS EQUIVALENT TO 29,447.39 MWH. SEPTEMBER 25TH, 2007; 17:00 HOURS. UNIT COASTDOWN BEGINS PRIOR TO 9TH REFUELING OUTAGE. OCTOBER 11TH 2007; 16:00 HOURS, THE 9TH REFUELING STARTED ON OCTOBER 11TH 16:00 HOURS 2007, AND IT WAS PLANNED TO LAST FOR ABOUT 30 DAYS AND THE REAL LENGTH WAS 26.97 DAYS. DECEMBER 20TH, 2007; 11:04 HOURS. MANUAL SCRAM TO THE REACTOR BY LOW VACUUM ON MAIN CONDENSER AND ALARM BY LOW FLOW ON STEAM ENGINE TO THE OFF GAS EJECTORS SYSTEM. LOSS EQUIVALENT TO 23,556.41 MWH.

5. Historical Summary

Date of Construction Start: 01 Jun 1977 **Lifetime Generation:** 59052.6 GW(e).h
Date of First Criticality: 06 Sep 1994 **Cumulative Energy Availability Factor:** 83.6%
Date of Grid Connection: 11 Nov 1994 **Cumulative Load Factor:** 79.3%
Date of Commercial Operation: 10 Apr 1995 **Cumulative Unit Capability Factor:** 84.3%
Cumulative Energy Unavailability Factor: 16.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1995	3379.4	628.0	85.9	85.9	84.5	84.5	84.5	84.5	5687	89.3
1996	3668.4	619.0	71.7	77.7	71.0	76.7	67.5	74.7	6657	75.8
1997	4805.5	627.0	89.0	81.9	88.9	81.2	87.5	79.4	7897	90.1
1998	4411.9	655.0	85.6	82.9	83.0	81.7	76.9	78.7	7609	86.9
1999	5110.6	668.0	93.3	85.2	92.3	84.0	87.3	80.6	8459	96.6
2000	3339.1	645.0	58.6	80.5	56.6	79.2	58.9	76.8	5865	66.8
2001	4228.1	645.0	74.8	79.6	74.7	78.5	74.8	76.5	6952	79.4
2002	5161.0	680.0	91.5	81.3	91.5	80.3	86.6	77.9	8273	94.4
2003	4604.8	680.0	82.5	81.4	82.1	80.5	77.3	77.8	7359	84.0
2004	4578.2	680.0	83.8	81.7	83.0	80.8	76.6	77.7	7449	84.8
2005	5310.3	680.0	96.9	83.1	96.5	82.3	89.1	78.8	8611	98.3
2006	4870.2	680.0	90.3	83.8	90.2	83.0	81.8	79.0	8003	91.4
2007	4920.2	680.0	90.1	84.3	89.9	83.6	82.6	79.3	8013	91.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1995 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		134			186	
B. Refuelling without a maintenance				48	3	
C. Inspection, maintenance or repair combined with refuelling	647			683		
D. Inspection, maintenance or repair without refuelling				24		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					85	
Z. Others					6	
Subtotal	647	134	0	755	280	0
Total		781			1035	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1995 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		14
12. Reactor I&C Systems		22
13. Reactor Auxiliary Systems	66	8
14. Safety Systems		3
15. Reactor Cooling Systems		1
16. Steam generation systems		4
31. Turbine and auxiliaries	27	30
32. Feedwater and Main Steam System	40	20
33. Circulating Water System		11
35. All other I&C Systems		1
41. Main Generator Systems		29
42. Electrical Power Supply Systems		32
Total	133	175

NL-2 BORSSELE

Operator: EPZ (N.V. ELEKTRICITEITS-PRODUKTIEMAATSCHAPPIJ ZUID-NEDERLAND)

Contractor: S/KWU (SIEMENS/KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 482.0 MW(e)
Design Net Capacity: 450.0 MW(e)
Design Discharge Burnup: 39000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3993.9 GW(e).h
Energy Availability Factor: 95.1%
Load Factor: 94.6%
Operating Factor: 95.3%
Energy Unavailability Factor: 4.9%
Total Off-line Time: 414 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	361.1	326.4	360.6	348.0	356.5	341.2	352.1	333.9	148.1	356.5	348.1	361.4	3993.9
EAF (%)	99.7	99.9	99.9	100.0	100.0	99.9	100.0	96.4	45.0	100.0	100.0	100.0	95.1
UCF (%)	100.0	99.9	99.9	100.0	100.0	99.9	100.0	96.5	46.0	100.0	100.0	100.0	95.2
LF (%)	100.7	100.8	100.6	100.4	99.4	98.3	98.2	93.1	42.7	99.3	100.3	100.8	94.6
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	96.4	46.3	99.9	100.0	100.0	95.3
EUF (%)	0.3	0.1	0.1	0.0	0.0	0.1	0.0	3.6	55.0	0.0	0.0	0.0	4.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.4	0.0	0.0	0.0	4.0
UCLF (%)	0.0	0.1	0.1	0.0	0.0	0.1	0.0	3.6	5.6	0.0	0.0	0.0	0.8
XUF (%)	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

ALL TIME PRODUCTION RECORD DUE TO NEW TURBINE AND NEW WATER SEPARATORS

5. Historical Summary

Date of Construction Start:	01 Jul 1969	Lifetime Generation:	112407.5 GW(e).h
Date of First Criticality:	20 Jun 1973	Cumulative Energy Availability Factor:	84.1%
Date of Grid Connection:	04 Jul 1973	Cumulative Load Factor:	83.0%
Date of Commercial Operation:	26 Oct 1973	Cumulative Unit Capability Factor:	84.5%
		Cumulative Energy Unavailability Factor:	15.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	485.9	448.0	49.2	49.2	49.2	49.2	49.2	49.2	1103	50.0
1974	2993.7	477.0	71.6	67.4	71.6	67.4	71.6	67.4	6840	78.1
1975	2776.9	447.0	70.8	68.9	70.8	68.9	70.9	68.9	6494	74.1
1976	3274.4	450.0	82.8	73.1	82.8	73.1	82.8	73.1	7521	85.6
1977	3142.4	450.0	80.4	74.8	80.4	74.8	79.7	74.7	7318	83.5
1978	3424.1	445.0	88.4	77.3	88.4	77.3	87.8	77.1	7997	91.3
1979	2900.0	445.0	83.5	78.3	83.5	78.3	74.4	76.7	6785	77.5
1980	3593.0	447.0	92.9	80.3	92.9	80.3	91.5	78.7	8496	96.7
1981	3048.3	447.0	78.8	80.1	78.8	80.1	77.8	78.6	7094	81.0
1982	3315.9	452.0	83.9	80.5	83.9	80.5	83.7	79.2	7489	85.5
1983	3050.0	452.0	76.9	80.2	76.9	80.2	77.0	79.0	6959	79.4
1984	3062.0	452.0	76.6	79.8	76.6	79.8	77.1	78.8	6895	78.5
1985	3261.2	452.0	83.3	80.1	81.9	80.0	82.4	79.1	7299	83.3
1986	3574.0	452.0	91.6	81.0	89.9	80.8	90.3	79.9	8053	91.9
1987	2950.9	452.0	76.6	80.7	74.2	80.3	74.5	79.6	6756	77.1
1988	3032.6	452.0	76.2	80.4	76.2	80.0	76.4	79.3	6763	77.0
1989	3421.9	481.0	87.8	80.9	87.8	80.5	81.2	79.5	7711	88.0
1990	2885.9	481.0	75.6	80.6	75.6	80.2	68.5	78.8	6636	75.8
1991	2728.5	452.0	69.3	79.9	69.2	79.6	68.9	78.3	6221	71.0
1992	2830.3	452.0	82.9	80.1	80.6	79.7	71.3	77.9	6412	73.0
1993	3328.2	452.0	84.3	80.3	83.6	79.9	84.1	78.2	7376	84.2
1994	3322.0	452.0	84.8	80.5	84.1	80.1	83.9	78.5	7489	85.5
1995	3386.8	452.0	87.1	80.8	86.8	80.4	85.5	78.8	7654	87.4
1996	3520.3	452.0	88.3	81.1	88.2	80.7	88.7	79.2	7978	90.8
1997	Data not provided									
1998	"									
1999	3604.2	449.0	94.2	81.7	94.2	81.3	91.6	79.7	8363	95.5
2000	3699.0	449.0	93.9	82.1	93.1	81.7	93.8	80.3	8262	94.1
2001	3746.7	449.0	94.6	82.6	94.6	82.2	95.3	80.8	8404	95.9
2002	3686.9	450.0	93.8	83.0	93.4	82.6	93.5	81.3	8284	94.6
2003	3788.3	450.0	95.3	83.4	95.3	83.1	96.1	81.8	8431	96.2
2004	3604.7	450.0	91.1	83.7	91.1	83.3	91.2	82.1	8073	91.9
2005	3771.9	450.0	95.9	84.1	95.5	83.7	95.7	82.6	8430	96.2
2006	3272.6	450.0	85.7	84.2	84.6	83.8	82.5	82.6	7542	86.1
2007	3993.9	482.0	95.2	84.5	95.1	84.1	94.6	83.0	8346	95.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1973 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		66			145	
B. Refuelling without a maintenance				30	1	
C. Inspection, maintenance or repair combined with refuelling	348			732	17	
D. Inspection, maintenance or repair without refuelling				49		
E. Testing of plant systems or components					15	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				29		
J. Grid failure or grid unavailability					1	3
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	3	5
Subtotal	348	66	0	840	182	8
Total		414			1030	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1973 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems		4
14. Safety Systems		14
15. Reactor Cooling Systems		19
16. Steam generation systems		39
31. Turbine and auxiliaries		19
32. Feedwater and Main Steam System	26	31
33. Circulating Water System		2
41. Main Generator Systems		0
42. Electrical Power Supply Systems		11
XX. Miscellaneous Systems	40	
Total	66	143

PK-2 CHASNUPP 1

Operator: PAEC (PAKISTAN ATOMIC ENERGY COMMISSION)
Contractor: CNNC (CHINA NATIONAL NUCLEAR CORPORATION)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 300.0 MW(e)
Design Net Capacity: 300.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1949.1 GW(e).h
Energy Availability Factor: 75.2%
Load Factor: 74.2%
Operating Factor: 76.1%
Energy Unavailability Factor: 24.8%
Total Off-line Time: 2091 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	181.5	102.7	0.0	0.0	183.6	200.6	214.6	214.2	210.5	210.6	206.9	224.0	1949.1
EAF (%)	80.8	50.6	0.0	0.0	81.8	96.1	99.0	96.4	98.1	99.8	97.7	99.8	75.2
UCF (%)	80.8	51.2	0.0	0.0	81.8	96.8	100.0	97.7	98.3	99.8	97.7	99.8	75.6
LF (%)	81.3	50.9	0.0	0.0	82.2	92.9	96.1	96.0	97.4	94.3	95.8	100.4	74.2
OF (%)	82.4	51.2	0.0	0.0	88.2	95.1	98.3	100.0	100.0	95.7	100.0	100.0	76.1
EUF (%)	19.2	49.4	100.0	100.0	18.2	3.9	1.0	3.6	1.9	0.2	2.3	0.2	24.8
PUF (%)	0.3	48.8	100.0	40.3	6.4	0.5	0.0	2.3	1.7	0.2	2.0	0.2	16.7
UCLF (%)	18.9	0.0	0.0	59.7	11.8	2.7	0.0	0.0	0.0	0.0	0.3	0.0	7.8
XUF (%)	0.0	0.7	0.0	0.0	0.0	0.7	1.0	1.3	0.2	0.0	0.0	0.0	0.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

REFUELING OUTAGE-4 WAS SUCCESSFULLY COMPLETED DURING THE YEAR.

5. Historical Summary

Date of Construction Start: 01 Aug 1993 **Lifetime Generation:** 13861.9 GW(e).h
Date of First Criticality: 03 May 2000 **Cumulative Energy Availability Factor:** 71.8%
Date of Grid Connection: 13 Jun 2000 **Cumulative Load Factor:** 71.3%
Date of Commercial Operation: 15 Sep 2000 **Cumulative Unit Capability Factor:** 72.7%
Cumulative Energy Unavailability Factor: 28.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2000	529.2	300.0	72.2	72.2	72.2	72.2	68.7	68.7	1860	72.4
2001	1581.8	300.0	62.4	64.7	60.1	62.8	60.2	62.1	5918	67.6
2002	1356.0	300.0	53.7	59.9	52.2	58.2	51.6	57.5	4790	54.7
2003	1809.8	300.0	68.9	62.6	68.9	61.4	68.9	61.0	6879	78.5
2004	1750.7	300.0	68.1	63.9	66.4	62.6	66.4	62.2	5949	67.7
2005	2155.2	300.0	81.9	67.3	81.9	66.2	82.0	66.0	7458	85.1
2006	2532.9	300.0	98.2	72.2	98.2	71.3	96.4	70.8	8569	97.8
2007	1949.1	300.0	75.6	72.7	75.2	71.8	74.2	71.3	6669	76.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2000 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		663			703	
C. Inspection, maintenance or repair combined with refuelling	1362			625		
D. Inspection, maintenance or repair without refuelling				72		
E. Testing of plant systems or components				9	3	
H. Nuclear regulatory requirements				67		
J. Grid failure or grid unavailability			65		7	159
L. Human factor related					13	
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)						39
Z. Others					58	
Subtotal	1362	663	65	773	784	198
Total		2090			1755	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2000 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	476	
12. Reactor I&C Systems	41	24
14. Safety Systems		105
15. Reactor Cooling Systems	117	166
16. Steam generation systems	29	
31. Turbine and auxiliaries		90
32. Feedwater and Main Steam System		56
33. Circulating Water System		13
35. All other I&C Systems		6
41. Main Generator Systems		0
42. Electrical Power Supply Systems		240
Total	663	700

PK-1 KANUPP

Operator: PAEC (PAKISTAN ATOMIC ENERGY COMMISSION)

Contractor: CGE (CANADIAN GENERAL ELECTRIC)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 125.0 MW(e)
Design Net Capacity: 125.0 MW(e)
Design Discharge Burnup: 8650 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 359.5 GW(e).h
Energy Availability Factor: 50.9%
Load Factor: 32.8%
Operating Factor: 68.4%
Energy Unavailability Factor: 49.1%
Total Off-line Time: 2771 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	6.2	27.2	26.0	40.2	5.9	40.3	39.5	42.7	30.4	21.7	53.0	26.3	359.5
EAF (%)	86.7	32.3	47.0	44.7	6.3	63.0	64.7	61.4	54.1	23.3	58.9	67.0	50.9
UCF (%)	86.7	32.3	47.0	44.7	6.3	63.0	64.7	61.4	54.1	23.3	58.9	67.0	50.9
LF (%)	6.6	32.3	28.0	44.7	6.3	44.8	42.5	45.9	33.8	23.3	58.9	28.3	32.8
OF (%)	20.0	100.0	76.5	94.7	12.1	81.8	77.8	84.5	69.0	47.8	100.0	61.4	68.4
EUF (%)	13.3	67.7	53.0	55.3	93.7	37.0	35.3	38.6	45.9	76.7	41.1	33.0	49.1
PUF (%)	13.3	67.7	48.4	50.2	5.8	37.0	35.3	38.6	35.3	24.5	41.1	33.0	35.5
UCLF (%)	0.0	0.0	4.6	5.2	87.9	0.0	0.0	0.0	10.6	52.2	0.0	0.0	13.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

AFTER COMPLETION OF SAFETY UPGRADES THE PLANT WAS INITIALLY OPERATED AT 50 MWE. THE POWER WAS RAISED TO 90 MWE GRADUALLY DURING 2007. KANUPP HAS GENERATED 360 MILLION UNITS (NET) OF ELECTRICITY DURING THE REPORTING PERIOD.

5. Historical Summary

Date of Construction Start: 01 Aug 1966
Date of First Criticality: 01 Aug 1971
Date of Grid Connection: 18 Oct 1971
Date of Commercial Operation: 07 Dec 1972

Lifetime Generation: 10352.0 GW(e).h
Cumulative Energy Availability Factor: 28.1%
Cumulative Load Factor: 26.8%
Cumulative Unit Capability Factor: 29.3%
Cumulative Energy Unavailability Factor: 71.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1972	39.4	137.0	38.7	38.7	38.7	38.7	38.7	38.7	597	80.2
1973	394.8	126.0	42.6	42.2	35.6	35.9	35.8	36.0	6197	70.7
1974	583.9	126.0	52.7	47.3	52.7	43.9	52.9	44.1	6749	77.0
1975	494.9	126.0	44.8	46.5	44.8	44.2	44.8	44.3	6375	72.8
1976	487.3	137.0	40.5	44.9	40.5	43.3	40.5	43.3	6026	68.6
1977	339.4	126.0	30.7	42.2	30.7	40.8	30.7	40.9	5290	60.4
1978	228.4	125.0	20.9	38.8	20.9	37.6	20.9	37.7	4473	51.1
1979	29.6	125.0	2.7	33.8	2.7	32.8	2.7	32.8	802	9.2
1980	67.9	125.0	6.2	30.4	6.2	29.6	6.2	29.6	2427	27.6
1981	192.2	125.0	17.5	29.0	17.5	28.3	17.6	28.3	5379	61.4
1982	70.9	125.0	6.5	26.8	6.5	26.1	6.5	26.2	1801	20.6
1983	194.0	125.0	17.7	26.0	17.7	25.4	17.7	25.4	4754	54.3
1984	290.7	137.0	26.9	26.1	24.9	25.3	24.2	25.3	5592	63.7
1985	262.0	137.0	22.7	25.8	21.8	25.0	21.8	25.0	3895	44.5
1986	476.2	125.0	44.0	27.1	43.5	26.3	43.5	26.3	7211	82.3
1987	274.8	125.0	25.6	27.0	25.1	26.2	25.1	26.2	4541	51.8
1988	171.4	125.0	16.2	26.3	15.6	25.6	15.6	25.6	2962	33.7
1989	60.9	125.0	5.6	25.1	5.6	24.4	5.6	24.4	1145	13.1
1990	375.9	125.0	34.3	25.6	34.3	25.0	34.3	25.0	5331	60.9
1991	370.3	125.0	34.8	26.1	33.8	25.4	33.8	25.4	6126	69.9
1992	499.7	125.0	45.5	27.0	45.5	26.4	45.5	26.4	6396	72.8
1993	369.6	125.0	35.8	27.5	33.8	26.8	33.8	26.7	4620	52.7
1994	523.6	125.0	53.6	28.6	47.8	27.7	47.8	27.7	7518	85.8
1995	461.0	125.0	44.0	29.3	42.1	28.3	42.1	28.3	7520	85.8
1996	310.9	125.0	32.6	29.4	28.3	28.3	28.3	28.3	5291	60.2
1997	386.1	125.0	36.8	29.7	35.3	28.6	35.3	28.6	6391	73.0
1998	353.4	125.0	31.3	29.8	29.7	28.6	32.3	28.7	4799	54.8
1999	69.0	125.0	11.9	29.1	11.9	28.0	6.3	27.9	1046	11.9
2000	368.3	125.0	34.6	29.3	33.5	28.2	33.5	28.1	5078	57.8
2001	399.5	125.0	45.1	29.8	36.5	28.5	36.5	28.4	6049	69.1
2002	444.0	125.0	41.3	30.2	40.5	28.9	40.5	28.8	6601	75.4
2003	0.0	125.0	0.0	29.3	0.0	28.0	0.0	27.9	0	0.0
2004	183.0	125.0	25.5	29.1	24.7	27.9	16.7	27.5	6467	73.6
2005	253.6	125.0	37.7	29.4	37.7	28.2	23.2	27.4	6633	75.7
2006	15.0	125.0	4.6	28.7	4.6	27.5	1.4	26.6	408	4.7
2007	359.5	125.0	50.9	29.3	50.9	28.1	32.8	26.8	5989	68.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1197			1085	
B. Refuelling without a maintenance					63	
C. Inspection, maintenance or repair combined with refuelling				218		
D. Inspection, maintenance or repair without refuelling				1578		
E. Testing of plant systems or components				0		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				293		
J. Grid failure or grid unavailability			1573			134
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				4	104	12
Subtotal	0	1197	1573	2093	1252	146
Total		2770			3491	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	37	11
12. Reactor I&C Systems		118
13. Reactor Auxiliary Systems		115
14. Safety Systems		17
15. Reactor Cooling Systems		186
16. Steam generation systems	506	33
17. Safety I&C Systems (excluding reactor I&C)		0
21. Fuel Handling and Storage Facilities	654	24
31. Turbine and auxiliaries		25
32. Feedwater and Main Steam System		192
33. Circulating Water System		31
41. Main Generator Systems		5
42. Electrical Power Supply Systems		132
XX. Miscellaneous Systems		5
Total	1197	894

RO-1 CERNAVODA-1**Operator:** SNN (SOCIETATEA NATIONALA NUCLEARELECTRICA S.A.)**Contractor:** AECL (ATOMIC ENERGY OF CANADA LTD.)**1. Station Details**

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 655.0 MW(e)
Design Net Capacity: 650.0 MW(e)
Design Discharge Burnup: 7100 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5518.3 GW(e).h
Energy Availability Factor: 96.5%
Load Factor: 96.2%
Operating Factor: 97.3%
Energy Unavailability Factor: 3.5%
Total Off-line Time: 233 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	487.1	439.9	487.0	472.6	482.6	460.6	472.6	472.3	312.8	476.0	470.6	484.2	5518.3
EAF (%)	99.9	100.0	99.9	99.9	99.9	98.8	98.2	97.7	66.3	97.5	99.9	99.7	96.5
UCF (%)	100.0	100.0	99.9	99.9	99.9	99.9	99.9	99.6	68.7	97.5	99.9	100.0	97.1
LF (%)	99.9	99.9	99.9	100.4	99.0	97.7	97.0	96.9	66.3	97.6	99.8	99.4	96.2
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	69.2	98.5	100.0	100.0	97.3
EUUF (%)	0.1	0.0	0.1	0.1	0.1	1.2	1.8	2.3	33.7	2.5	0.1	0.3	3.5
PUF (%)	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	30.1	0.1	0.1	0.1	2.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.3	2.4	0.0	0.0	0.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	1.1	1.7	1.9	2.4	0.0	0.0	0.3	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE UNIT WAS OPERATED AT FULL POWER IN BASE LOAD MODE. A PLANNED OUTAGE HAS SCHEDULED FOR A DURATION OF 10 DAYS; THE MOST IMPORTANT MAINTENANCE PERFORMED WERE: -REPAIRS OF POWER TRANSFORMER 5114-TO2(REPLACEMENT OF D OIL)-REPAIRS OF VALVES 3331-PCV 24/25 -REPAIRS OF VALVES 3331-LCV 14/15

5. Historical Summary

Date of Construction Start: 01 Jul 1982 **Lifetime Generation:** 56553.9 GW(e).h
Date of First Criticality: 16 Apr 1996 **Cumulative Energy Availability Factor:** 87.6%
Date of Grid Connection: 11 Jul 1996 **Cumulative Load Factor:** 87.9%
Date of Commercial Operation: 02 Dec 1996 **Cumulative Unit Capability Factor:** 88.7%
Cumulative Energy Unavailability Factor: 12.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1996	461.9	647.0	94.4	94.4	94.4	94.4	99.6	99.6	719	100.0
1997	4953.3	646.0	87.3	87.9	86.7	87.3	87.5	88.4	7753	88.5
1998	4908.7	655.0	85.8	86.9	85.2	86.3	85.5	87.0	7585	86.6
1999	4813.0	654.0	83.8	85.9	83.5	85.4	83.9	86.0	7389	84.3
2000	5053.4	655.0	87.9	86.4	87.6	85.9	87.8	86.5	7791	88.7
2001	5049.9	655.0	88.2	86.7	87.5	86.2	88.0	86.8	7717	88.1
2002	5106.2	655.0	89.1	87.1	88.7	86.6	89.0	87.1	7854	89.7
2003	4541.4	655.0	86.7	87.1	78.7	85.5	79.1	86.0	7024	80.2
2004	5142.3	655.0	89.4	87.3	89.1	86.0	89.4	86.4	7892	89.8
2005	5113.0	655.0	89.6	87.6	89.3	86.3	89.1	86.7	7878	89.9
2006	5178.0	655.0	90.8	87.9	90.3	86.7	90.2	87.1	7987	91.2
2007	5518.3	655.0	97.1	88.7	96.5	87.6	96.2	87.9	8527	97.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1997 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		18			241	
B. Refuelling without a maintenance					11	
D. Inspection, maintenance or repair without refuelling	213			621		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					22	4
L. Human factor related					13	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						57
Subtotal	213	18	0	621	287	61
Total		231			969	

7. Equipment Related Full Outages, Analysis by System

System	2007	1997 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		58
13. Reactor Auxiliary Systems		16
14. Safety Systems		3
31. Turbine and auxiliaries	18	69
32. Feedwater and Main Steam System		29
33. Circulating Water System		0
41. Main Generator Systems		3
42. Electrical Power Supply Systems		9
XX. Miscellaneous Systems		32
Total	18	219

RO-2 CERNAVODA-2

Operator: SNN (SOCIETATEA NATIONALA NUCLEARELECTRICA S.A.)
Contractor: AECL (ATOMIC ENERGY OF CANADA LTD.)

1. Station Details

Type: PHWR
Net Reference Unit Power at the beginning of 2007: 650.0 MW(e)
Design Net Capacity: 650.0 MW(e)
Design Discharge Burnup: 7100 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1182.8 GW(e).h
Energy Availability Factor: 95.4%
Load Factor: 82.4%
Operating Factor: 83.6%
Energy Unavailability Factor: 4.6%
Total Off-line Time: 363 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h										295.6	402.8	484.5	1182.8
EAFF (%)										100.0	85.9	99.9	95.4
UCF (%)										100.0	85.9	100.0	95.4
LF (%)										61.0	86.1	100.2	82.4
OF (%)										62.7	88.2	100.0	83.6
EUF (%)										0.0	14.1	0.1	4.6
PUF (%)										0.0	0.1	0.1	0.0
UCLF (%)										0.0	14.0	0.0	4.6
XUF (%)										0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

IN 2007 WAS DONE SUCCESFULLY COMMISSIONING WORKS AND TESTS AND FINALLY THE UNIT 2 WAS DECLARED IN COMMERCIAL OPERATION FROM NOVEMBER 1ST. THE UNIT 2 WAS CONNECTED TO THE NATIONAL GRID, FOR THE FIRST TIME, ON AUGUST THE 7TH.DURING COMMISSIONING PHASE C PERIOD (FROM FIRST CONNECTION TO THE NATIONAL GRID UNTIL NOVEMBER 1ST WHEN THE UNIT WAS DECLARED IN COMMERCIAL OPERATION THE UNIT 2 HAS SUPPLIED TO THE GRID 672957 MWH.

5. Historical Summary

Date of Construction Start: 01 Jul 1983
Date of First Criticality: 06 May 2007
Date of Grid Connection: 07 Aug 2007
Date of Commercial Operation: 31 Oct 2007

Lifetime Generation: 1560.2 GW(e).h
Cumulative Energy Availability Factor: 95.4%
Cumulative Load Factor: 82.4%
Cumulative Unit Capability Factor: 95.4%
Cumulative Energy Unavailability Factor: 4.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2007	1182.8	650.0	95.4	95.4	95.4	95.4	82.4	82.4	1846	83.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2007 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External

The reactor has not yet completed a full year of commercial operation.

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2007 to 2007 Average Hours Lost Per Year

The reactor has not yet completed a full year of commercial operation.

RU-96 BALAKOVO-1

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7397.3 GW(e).h
Energy Availability Factor: 86.5%
Load Factor: 88.9%
Operating Factor: 88.3%
Energy Unavailability Factor: 13.5%
Total Off-line Time: 1029 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	670.1	617.3	718.8	706.9	722.3	683.4	423.1	0.0	687.3	733.8	708.9	725.3	7397.3
EAF (%)	92.3	93.9	98.4	100.0	99.8	99.1	60.0	0.2	98.2	100.0	100.0	99.1	86.5
UCF (%)	96.0	99.1	100.0	100.0	100.0	100.0	64.8	0.2	98.3	100.0	100.0	100.0	88.0
LF (%)	94.8	96.7	101.7	103.5	102.2	99.9	59.9	0.0	100.5	103.7	103.6	102.6	88.9
OF (%)	96.2	100.0	99.9	100.1	100.0	100.0	64.8	0.7	100.0	100.0	100.0	100.0	88.3
EUF (%)	7.7	6.1	1.6	0.0	0.2	0.9	40.0	99.8	1.8	0.0	0.0	0.9	13.5
PUF (%)	0.0	0.9	0.0	0.0	0.0	0.0	35.2	99.8	1.8	0.0	0.0	0.0	11.7
UCLF (%)	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
XUF (%)	3.7	5.2	1.6	0.0	0.2	0.9	4.8	0.0	0.1	0.0	0.0	0.9	1.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 145106 MWH. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.07.21 TO 07.08.31. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION

5. Historical Summary

Date of Construction Start: 01 Dec 1980
Date of First Criticality: 12 Dec 1985
Date of Grid Connection: 28 Dec 1985
Date of Commercial Operation: 23 May 1986

Lifetime Generation: 115611.0 GW(e).h
Cumulative Energy Availability Factor: 66.2%
Cumulative Load Factor: 63.4%
Cumulative Unit Capability Factor: 68.9%
Cumulative Energy Unavailability Factor: 33.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	3675.6	950.0	66.3	66.3	66.3	66.3	65.8	65.8	4171	70.9
1987	4703.7	1000.0	57.4	60.8	57.4	60.8	53.7	58.4	5302	60.5
1988	6476.9	950.0	80.9	68.2	80.9	68.2	77.6	65.5	7207	82.0
1989	4473.9	950.0	56.4	65.0	56.3	65.0	53.8	62.3	5141	58.7
1990	739.1	950.0	9.1	53.2	9.1	53.2	8.9	51.0	887	10.1
1991	4951.6	950.0	60.2	54.4	59.8	54.4	59.5	52.5	5780	66.0
1992	6352.3	950.0	76.4	57.7	76.3	57.6	76.1	56.0	7666	87.3
1993	3326.1	950.0	46.1	56.2	39.9	55.3	40.0	53.9	4230	48.3
1994	1759.5	950.0	77.3	58.6	77.3	57.9	21.1	50.2	2307	26.3
1995	2018.0	950.0	28.6	55.5	28.6	54.8	24.2	47.5	4810	54.9
1996	4872.5	950.0	86.5	58.4	59.0	55.2	58.4	48.5	5913	67.3
1997	4729.0	950.0	60.4	58.6	57.2	55.4	56.8	49.2	5818	66.4
1998	4329.8	950.0	55.8	58.4	52.2	55.1	52.0	49.5	5671	64.7
1999	5141.3	950.0	65.6	58.9	62.1	55.7	61.8	50.4	6337	72.3
2000	7247.4	950.0	87.5	60.8	86.5	57.8	86.8	52.8	7705	87.7
2001	7407.9	950.0	91.6	62.8	88.2	59.7	89.0	55.1	8041	91.8
2002	6785.7	950.0	86.5	64.2	80.5	60.9	81.5	56.7	7501	85.6
2003	7032.2	950.0	84.7	65.4	83.1	62.2	84.5	58.3	7460	85.2
2004	6626.4	950.0	78.2	66.1	78.0	63.0	79.4	59.4	6901	78.6
2005	7312.7	950.0	86.6	67.1	86.2	64.2	87.9	60.9	7638	87.2
2006	7277.0	950.0	85.5	68.0	85.2	65.2	87.4	62.1	7517	85.8
2007	7397.3	950.0	88.0	68.9	86.5	66.2	88.9	63.4	7731	88.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		28			450	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling	1001			1324	17	
D. Inspection, maintenance or repair without refuelling				416		
E. Testing of plant systems or components				1	1	
G. Major back-fitting, refurbishment or upgrading activities without refuelling						111
J. Grid failure or grid unavailability						218
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					35	1
L. Human factor related					0	
Subtotal	1001	28	0	1741	515	330
Total		1029			2586	

7. Equipment Related Full Outages, Analysis by System

System	2007	1986 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems	28	1
13. Reactor Auxiliary Systems		2
15. Reactor Cooling Systems		11
16. Steam generation systems		126
17. Safety I&C Systems (excluding reactor I&C)		5
31. Turbine and auxiliaries		68
32. Feedwater and Main Steam System		14
33. Circulating Water System		1
35. All other I&C Systems		12
41. Main Generator Systems		132
42. Electrical Power Supply Systems		31
XX. Miscellaneous Systems		2
Total	28	405

RU-97 BALAKOVO-2

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6657.2 GW(e).h
Energy Availability Factor: 78.7%
Load Factor: 80.0%
Operating Factor: 83.6%
Energy Unavailability Factor: 21.3%
Total Off-line Time: 1433 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	733.4	633.2	576.0	581.9	700.0	689.7	714.9	607.1	0.0	25.3	708.4	687.3	6657.2
EAF (%)	99.9	97.3	81.7	84.3	97.5	98.8	99.9	86.0	0.0	5.1	100.0	94.9	78.7
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0	0.0	5.1	100.0	100.0	83.5
LF (%)	103.8	99.2	81.5	85.2	99.0	100.8	101.1	85.9	0.0	3.6	103.6	97.2	80.0
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	97.0	0.0	7.2	100.0	100.0	83.6
EUUF (%)	0.1	2.7	18.3	15.7	2.5	1.2	0.1	14.0	100.0	94.9	0.0	5.1	21.3
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	100.0	94.9	0.0	0.0	16.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.1	2.7	18.3	15.7	2.5	1.2	0.1	11.0	0.0	0.0	0.0	5.1	4.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, APRIL, MAY, JUNE, JULY, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 79992 MWH. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.08.31 TO 07.10.29. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Aug 1981 **Lifetime Generation:** 105765.0 GW(e).h
Date of First Criticality: 02 Oct 1987 **Cumulative Energy Availability Factor:** 64.3%
Date of Grid Connection: 08 Oct 1987 **Cumulative Load Factor:** 62.9%
Date of Commercial Operation: 18 Jan 1988 **Cumulative Unit Capability Factor:** 68.1%
Cumulative Energy Unavailability Factor: 35.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	5978.4	950.0	76.9	76.9	76.9	76.9	71.6	71.6	6928	78.9
1989	6703.6	950.0	84.8	80.9	84.8	80.8	80.6	76.1	7626	87.1
1990	5476.7	950.0	66.5	76.1	66.3	76.0	65.8	72.7	6165	70.4
1991	4308.4	950.0	51.5	69.9	51.2	69.8	51.8	67.4	4845	55.3
1992	5958.2	950.0	70.6	70.1	70.6	70.0	71.4	68.2	6601	75.1
1993	3776.2	950.0	47.0	66.2	44.3	65.7	45.4	64.4	4147	47.3
1994	4778.5	950.0	83.5	68.7	73.1	66.7	57.4	63.4	8020	91.6
1995	2204.8	950.0	30.1	63.9	30.1	62.2	26.5	58.8	3261	37.2
1996	2227.3	950.0	26.7	59.7	26.7	58.2	26.7	55.2	2604	29.6
1997	4015.9	950.0	63.9	60.2	55.7	58.0	48.3	54.5	6158	70.3
1998	3293.8	950.0	51.0	59.3	40.2	56.4	39.6	53.2	4984	56.9
1999	2927.1	950.0	40.3	57.7	35.4	54.6	35.2	51.7	3942	45.0
2000	5730.1	950.0	83.2	59.7	68.9	55.7	68.7	53.0	7646	87.0
2001	6678.8	950.0	83.9	61.4	79.9	57.4	80.3	54.9	7415	84.6
2002	6756.5	950.0	84.4	63.0	80.4	59.0	81.2	56.7	7408	84.6
2003	6171.8	950.0	74.0	63.7	72.7	59.8	74.2	57.8	6467	73.8
2004	7010.4	950.0	85.0	64.9	82.4	61.2	84.0	59.3	7514	85.5
2005	6948.9	950.0	86.9	66.1	82.5	62.3	83.5	60.7	7688	87.8
2006	7237.5	950.0	87.4	67.2	84.6	63.5	87.0	62.0	7710	88.0
2007	6657.2	950.0	83.5	68.1	78.7	64.3	80.0	62.9	7327	83.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					477	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling	1433			1665	136	
D. Inspection, maintenance or repair without refuelling				149		
J. Grid failure or grid unavailability						10
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					21	
Subtotal	1433	0	0	1814	639	10
Total	1433			2463		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		8
15. Reactor Cooling Systems		10
16. Steam generation systems		398
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries		1
32. Feedwater and Main Steam System		24
35. All other I&C Systems		4
41. Main Generator Systems		24
42. Electrical Power Supply Systems		1
Total	0	473

RU-98 BALAKOVO-3

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7407.1 GW(e).h
Energy Availability Factor: 87.6%
Load Factor: 89.0%
Operating Factor: 91.9%
Energy Unavailability Factor: 12.4%
Total Off-line Time: 710 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	40.4	659.1	627.6	669.1	638.6	675.8	699.9	701.3	692.5	708.4	583.3	711.0	7407.1
EAF (%)	7.1	99.9	88.2	96.1	89.6	97.9	98.4	98.5	99.7	97.1	83.3	97.4	87.6
UCF (%)	11.0	100.0	100.0	100.0	92.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.8
LF (%)	5.7	103.2	88.8	98.0	90.3	98.8	99.0	99.2	101.2	100.1	85.3	100.6	89.0
OF (%)	11.0	100.0	99.9	100.1	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.9
EUF (%)	92.9	0.1	11.8	3.9	10.4	2.1	1.6	1.5	0.3	2.9	16.7	2.6	12.4
PUF (%)	89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
UCLF (%)	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
XUF (%)	3.9	0.1	11.8	3.9	3.1	2.1	1.6	1.5	0.3	2.9	16.7	2.6	4.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN FEBRUARY, MARCH, APRIL, MAY, JUNE, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 82016 MWH. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.01.01 TO 07.01.28. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Nov 1982 **Lifetime Generation:** 106994.0 GW(e).h
Date of First Criticality: 16 Dec 1988 **Cumulative Energy Availability Factor:** 69.7%
Date of Grid Connection: 25 Dec 1988 **Cumulative Load Factor:** 67.8%
Date of Commercial Operation: 08 Apr 1989 **Cumulative Unit Capability Factor:** 74.5%
Cumulative Energy Unavailability Factor: 30.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	5483.4	950.0	88.4	88.4	88.4	88.4	87.4	87.4	6015	91.1
1990	5718.7	950.0	68.0	76.8	67.8	76.7	68.7	76.8	6696	76.4
1991	5403.4	950.0	67.1	73.3	64.2	72.1	64.9	72.5	6124	69.9
1992	5545.4	950.0	66.4	71.4	64.8	70.2	66.4	70.9	6202	70.6
1993	4378.6	950.0	61.6	69.4	52.7	66.5	52.6	67.0	5461	62.3
1994	3340.1	950.0	70.7	69.6	70.7	67.2	40.1	62.4	5389	61.5
1995	2674.7	950.0	53.1	67.2	47.5	64.3	32.1	57.9	5511	62.9
1996	5315.4	950.0	75.9	68.3	64.3	64.3	63.7	58.6	7085	80.7
1997	2058.8	950.0	38.8	64.9	25.3	59.9	24.7	54.8	3395	38.8
1998	5348.5	950.0	73.0	65.8	64.4	60.3	64.3	55.7	7136	81.5
1999	5458.0	950.0	72.0	66.3	65.6	60.8	65.6	56.7	6552	74.8
2000	6482.9	950.0	82.0	67.7	77.2	62.2	77.7	58.4	7327	83.4
2001	6050.7	950.0	78.6	68.5	72.1	63.0	72.7	59.6	6927	79.1
2002	6926.3	950.0	85.3	69.8	82.0	64.4	83.2	61.3	7478	85.4
2003	7016.1	950.0	85.1	70.8	83.2	65.6	84.3	62.8	7471	85.3
2004	7227.8	950.0	86.4	71.8	85.1	66.9	86.6	64.4	7607	86.6
2005	6244.4	950.0	79.9	72.3	74.5	67.3	75.0	65.0	7060	80.6
2006	7741.8	950.0	95.3	73.6	91.4	68.7	93.0	66.6	8354	95.4
2007	7407.1	950.0	91.8	74.5	87.6	69.7	89.0	67.8	8050	91.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		48			106	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	662			1469	34	
D. Inspection, maintenance or repair without refuelling				282		
E. Testing of plant systems or components					1	
J. Grid failure or grid unavailability						76
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					3	
Subtotal	662	48	0	1751	152	76
Total		710			1979	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		34
13. Reactor Auxiliary Systems		0
15. Reactor Cooling Systems		1
31. Turbine and auxiliaries		12
32. Feedwater and Main Steam System		8
33. Circulating Water System		10
35. All other I&C Systems		6
41. Main Generator Systems		6
42. Electrical Power Supply Systems	48	15
Total	48	92

RU-99 BALAKOVO-4

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7153.3 GW(e).h
Energy Availability Factor: 84.7%
Load Factor: 86.0%
Operating Factor: 88.9%
Energy Unavailability Factor: 15.3%
Total Off-line Time: 973 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	668.6	640.5	635.0	610.7	694.1	653.4	710.2	702.4	691.2	714.2	213.7	219.3	7153.3
EAF (%)	92.8	97.3	88.6	87.6	95.8	94.2	99.6	98.8	99.7	99.2	31.8	31.5	84.7
UCF (%)	98.7	100.0	100.0	100.0	95.8	100.0	100.0	100.0	100.0	100.0	36.9	31.5	88.5
LF (%)	94.6	100.3	89.8	89.4	98.2	95.5	100.5	99.4	101.1	100.9	31.2	31.0	86.0
OF (%)	100.0	100.0	99.9	100.1	96.0	100.0	100.0	100.0	100.0	100.0	36.9	34.3	88.9
EUF (%)	7.2	2.7	11.4	12.4	4.2	5.8	0.4	1.2	0.3	0.8	68.2	68.5	15.3
PUF (%)	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.1	68.5	11.1
UCLF (%)	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
XUF (%)	5.9	2.7	11.4	12.4	0.0	5.8	0.4	1.2	0.3	0.8	5.2	0.0	3.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, SEPTEMBER, OCTOBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 66963 MWH. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.11.12 TO 07.12.21. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Apr 1984 **Lifetime Generation:** 87825.0 GW(e).h
Date of First Criticality: 24 Mar 1993 **Cumulative Energy Availability Factor:** 73.1%
Date of Grid Connection: 12 May 1993 **Cumulative Load Factor:** 72.1%
Date of Commercial Operation: 22 Dec 1993 **Cumulative Unit Capability Factor:** 79.2%
Cumulative Energy Unavailability Factor: 26.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1993	423.2	950.0	60.0	60.0	60.0	60.0	59.9	59.9	480	64.5
1994	3828.5	950.0	69.5	68.8	48.5	49.4	46.0	47.1	4604	52.6
1995	5610.0	950.0	88.7	78.3	86.5	67.1	67.4	56.8	8760	100.0
1996	4545.5	950.0	59.9	72.3	55.5	63.4	54.5	56.1	6652	75.7
1997	4637.7	950.0	71.3	72.1	59.6	62.4	55.7	56.0	6637	75.8
1998	5042.5	950.0	71.3	71.9	60.9	62.1	60.6	56.9	6936	79.2
1999	5803.9	950.0	77.5	72.9	69.6	63.4	69.7	59.0	7268	83.0
2000	6665.9	950.0	81.0	74.0	78.9	65.6	79.9	62.0	7216	82.1
2001	6578.1	950.0	83.9	75.2	78.3	67.1	79.0	64.1	7354	83.9
2002	6292.9	950.0	77.3	75.5	72.8	67.8	75.6	65.3	6723	76.7
2003	7223.8	950.0	85.8	76.5	84.6	69.4	86.8	67.5	7541	86.1
2004	7022.9	950.0	85.4	77.3	82.5	70.6	84.2	69.0	7540	85.8
2005	6938.3	950.0	87.6	78.1	82.1	71.6	83.4	70.2	7699	87.9
2006	6805.4	950.0	82.2	78.4	79.6	72.2	81.8	71.1	7230	82.5
2007	7153.3	950.0	88.5	79.2	84.7	73.1	86.0	72.1	7787	88.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1994 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		29			10	
C. Inspection, maintenance or repair combined with refuelling	943			1376		
D. Inspection, maintenance or repair without refuelling				23		
J. Grid failure or grid unavailability						24
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						119
Subtotal	943	29	0	1399	10	143
Total	972			1552		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1994 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		1
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		2
35. All other I&C Systems		2
41. Main Generator Systems		0
42. Electrical Power Supply Systems	29	0
Total	29	7

RU-21 BELOYARSKY-3 (BN-600)

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: FBR
Net Reference Unit Power at the beginning of 2007: 560.0 MW(e)
Design Net Capacity: 560.0 MW(e)
Design Discharge Burnup: 100000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3798.4 GW(e).h
Energy Availability Factor: 77.5%
Load Factor: 77.4%
Operating Factor: 80.9%
Energy Unavailability Factor: 22.5%
Total Off-line Time: 1671 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	418.3	374.9	242.4	0.0	152.0	369.4	395.7	413.7	365.3	247.5	404.2	414.9	3798.4
EAF (%)	99.9	99.4	58.8	-0.1	37.5	90.8	95.3	99.6	90.5	59.9	100.0	99.7	77.5
UCF (%)	100.0	100.0	58.8	-0.1	37.5	90.8	95.8	100.0	91.0	60.9	100.0	100.0	77.8
LF (%)	100.4	99.6	58.2	0.0	36.5	91.6	95.0	99.3	90.6	59.3	100.3	99.6	77.4
OF (%)	100.0	100.0	59.9	0.0	58.2	100.0	100.0	100.0	92.1	61.6	100.0	100.0	80.9
EUF (%)	0.1	0.6	41.2	100.1	62.5	9.2	4.7	0.4	9.5	40.1	0.0	0.3	22.5
PUF (%)	0.0	0.0	41.2	100.1	62.5	9.2	0.0	0.0	9.0	39.1	0.0	0.0	21.8
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.4
XUF (%)	0.1	0.6	0.0	0.0	0.0	0.0	0.5	0.4	0.5	1.0	0.0	0.3	0.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE RUSSIA'S FEDERAL ENERGY COMMISSION. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY - MARCH, JUNE - DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 13520 MWH. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.03.19 TO 07.05.13. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start:	01 Jan 1969	Lifetime Generation:	96920.0 GW(e).h
Date of First Criticality:	26 Feb 1980	Cumulative Energy Availability Factor:	73.7%
Date of Grid Connection:	08 Apr 1980	Cumulative Load Factor:	73.4%
Date of Commercial Operation:	01 Nov 1981	Cumulative Unit Capability Factor:	74.4%
		Cumulative Energy Unavailability Factor:	26.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981			Data not provided							
1982	2771.0	560.0	59.3	59.3	59.3	59.3	56.5	56.5	5555	63.4
1983	3545.2	560.0	73.4	66.3	72.7	66.0	72.3	64.4	6737	76.9
1984	3584.1	560.0	73.2	68.6	73.2	68.4	73.1	67.3	6848	78.2
1985	3561.8	560.0	72.9	69.7	72.9	69.5	72.6	68.6	6544	74.7
1986	3600.7	560.0	74.3	70.6	73.8	70.4	73.4	69.6	6818	77.8
1987	3895.0	600.0	75.9	71.5	75.9	71.4	74.1	70.4	6714	76.6
1988	3762.2	560.0	77.0	72.3	77.0	72.1	76.5	71.2	6810	77.5
1989	3694.4	560.0	77.0	72.9	77.0	72.7	75.3	71.7	6800	77.6
1990	3198.0	560.0	66.6	72.2	65.9	72.0	65.2	71.0	6627	75.7
1991	3394.0	560.0	63.6	71.3	63.6	71.1	69.2	70.8	6631	75.7
1992	4095.0	560.0	83.1	72.4	82.8	72.2	83.3	72.0	7449	84.8
1993	3914.9	560.0	79.6	73.0	79.5	72.8	79.8	72.6	7065	80.7
1994	3810.7	560.0	78.9	73.4	78.8	73.3	77.7	73.0	6977	79.6
1995	3413.3	560.0	72.3	73.4	70.7	73.1	69.6	72.8	6953	79.4
1996	3722.3	560.0	78.1	73.7	76.3	73.3	75.7	72.9	7010	79.8
1997	3545.8	560.0	74.6	73.7	73.0	73.3	72.3	72.9	6596	75.3
1998	2335.3	560.0	49.2	72.3	47.7	71.8	47.6	71.4	4385	50.1
1999	3721.0	560.0	78.0	72.6	76.2	72.0	75.9	71.7	6972	79.6
2000	3565.8	560.0	75.5	72.8	72.5	72.0	72.5	71.7	6820	77.6
2001	3891.1	560.0	80.7	73.2	79.9	72.4	79.3	72.1	7214	82.4
2002	3774.4	560.0	79.3	73.4	77.3	72.7	76.9	72.3	7069	80.7
2003	3693.3	560.0	76.8	73.6	75.7	72.8	75.3	72.5	6836	78.0
2004	3927.6	560.0	80.8	73.9	80.0	73.1	79.8	72.8	7185	81.8
2005	3802.7	560.0	78.8	74.1	77.8	73.3	77.5	73.0	6977	79.6
2006	3844.9	560.0	79.0	74.3	78.4	73.5	78.4	73.2	7001	79.9
2007	3798.4	560.0	77.8	74.4	77.5	73.7	77.4	73.4	7089	80.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					181	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	1328			1213		
D. Inspection, maintenance or repair without refuelling	343			484	6	
H. Nuclear regulatory requirements						0
J. Grid failure or grid unavailability						4
Subtotal	1671	0	0	1697	188	4
Total		1671			1889	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		18
15. Reactor Cooling Systems		43
21. Fuel Handling and Storage Facilities		5
32. Feedwater and Main Steam System		2
35. All other I&C Systems		6
42. Electrical Power Supply Systems		1
Total	0	75

RU-141 BILIBINO-1

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 11.0 MW(e)
Design Net Capacity: 11.0 MW(e)
Design Discharge Burnup: 3000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 28.4 GW(e).h
Energy Availability Factor: 40.7%
Load Factor: 29.5%
Operating Factor: 81.7%
Energy Unavailability Factor: 59.3%
Total Off-line Time: 1606 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	2.4	0.0	0.0	2.3	2.4	2.3	2.9	1.9	3.1	3.6	3.9	3.6	28.4
EAF (%)	41.6	5.5	7.4	39.3	41.9	42.9	50.6	36.4	51.4	55.3	59.2	54.8	40.7
UCF (%)	100.0	8.0	13.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	85.6
LF (%)	29.1	0.0	0.0	29.0	29.7	29.3	35.8	22.7	39.3	44.3	49.4	43.5	29.5
OF (%)	100.0	3.7	9.3	100.1	100.0	100.0	100.0	68.1	94.6	99.9	100.0	98.9	81.7
EUF (%)	58.4	94.5	92.6	60.7	58.1	57.1	49.4	63.6	48.6	44.7	40.8	45.2	59.3
PUF (%)	0.0	92.0	86.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	14.4
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	58.4	2.5	6.0	60.7	58.1	57.1	49.4	63.6	48.6	44.7	40.8	45.0	44.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BILIBINO NPP IS OPERATING IN THE LOAD FOLLOWING MODE AGREED WITH THE FEDERAL SERVICE FOR TARIFFS OF RUSSIA. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.02.02 TO 07.03.29. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start:	01 Jan 1970	Lifetime Generation:	1793.0 GW(e).h
Date of First Criticality:	11 Dec 1973	Cumulative Energy Availability Factor:	68.8%
Date of Grid Connection:	12 Jan 1974	Cumulative Load Factor:	57.7%
Date of Commercial Operation:	01 Apr 1974	Cumulative Unit Capability Factor:	80.4%
		Cumulative Energy Unavailability Factor:	31.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	45.3	10.0	88.0	88.0	88.0	88.0	68.7	68.7	5846	88.6
1975	56.5	10.0	80.2	83.6	74.4	80.2	64.5	66.3	7105	81.1
1976	55.5	10.0	90.9	86.2	83.7	81.5	63.2	65.2	7830	89.1
1977	43.7	10.0	81.4	85.0	70.4	78.5	49.9	61.1	6846	78.2
1978	53.8	10.0	91.3	86.3	91.3	81.2	61.5	61.2	7466	85.2
1979	64.8	10.0	81.2	85.4	76.0	80.3	74.0	63.4	7574	86.5
1980	59.4	10.0	81.8	84.9	74.1	79.4	67.6	64.0	8065	91.8
1981	50.7	10.0	82.0	84.5	72.7	78.5	57.9	63.2	7260	82.9
1982	72.3	10.0	85.0	84.6	85.0	79.3	82.5	65.4	7627	87.1
1983	69.9	10.0	88.7	85.0	83.3	79.7	79.8	66.9	7810	89.2
1984	77.9	10.0	88.9	85.3	88.0	80.5	88.7	68.9	7854	89.4
1985	77.7	10.0	91.2	85.8	88.4	81.1	88.7	70.6	8025	91.6
1986	73.2	10.0	86.1	85.9	83.2	81.3	83.5	71.6	7603	86.8
1987	76.7	12.0	81.3	85.5	81.3	81.3	73.0	71.7	7117	81.2
1988	79.6	11.0	90.3	85.8	90.3	82.0	82.4	72.5	7895	89.9
1989	70.9	11.0	90.0	86.1	90.0	82.5	73.5	72.6	7841	89.5
1990	76.6	11.0	85.1	86.0	85.1	82.7	79.5	73.0	7397	84.4
1991	71.6	11.0	78.6	85.6	78.6	82.4	74.3	73.1	6802	77.6
1992	67.1	11.0	85.8	85.6	85.8	82.6	69.4	72.9	7477	85.1
1993	53.2	11.0	86.3	85.7	62.7	81.6	55.2	72.0	7492	85.5
1994	49.6	11.0	86.9	85.7	86.9	81.8	51.5	70.9	7501	85.6
1995	26.6	11.0	41.6	83.6	41.6	79.9	27.6	68.8	3624	41.4
1996	29.6	11.0	54.1	82.2	54.1	78.7	30.7	67.1	4572	52.0
1997	35.2	11.0	56.5	81.1	56.5	77.7	36.6	65.7	4877	55.7
1998	55.5	11.0	96.3	81.7	67.0	77.3	57.6	65.4	8414	96.1
1999	33.4	11.0	54.9	80.7	40.3	75.8	34.7	64.1	4779	54.6
2000	58.8	11.0	87.4	80.9	68.1	75.5	60.8	64.0	7616	86.7
2001	45.9	11.0	72.9	80.6	55.0	74.7	47.6	63.4	6393	73.0
2002	49.6	11.0	84.5	80.8	60.0	74.2	51.5	63.0	7375	84.2
2003	25.8	11.0	55.8	79.9	34.1	72.8	26.8	61.7	4805	54.9
2004	34.6	11.0	85.2	80.1	46.6	71.9	35.8	60.8	7434	84.6
2005	26.2	11.0	79.8	80.1	38.5	70.8	27.2	59.7	6904	78.8
2006	23.9	11.0	84.3	80.2	36.3	69.7	24.8	58.6	7162	81.8
2007	28.4	11.0	85.6	80.4	40.7	68.8	29.5	57.7	7154	81.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					72	
C. Inspection, maintenance or repair combined with refuelling	1322			1167		
D. Inspection, maintenance or repair without refuelling				389	18	
E. Testing of plant systems or components	8			2		
J. Grid failure or grid unavailability				2	0	39
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			276	8	10	
S. Fuel management limitation (including high flux tilt, stretch out or coast-down operation)					2	
Subtotal	1330	0	276	1568	102	39
Total		1606			1709	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		0
13. Reactor Auxiliary Systems		5
14. Safety Systems		1
15. Reactor Cooling Systems		2
31. Turbine and auxiliaries		24
32. Feedwater and Main Steam System		10
33. Circulating Water System		5
35. All other I&C Systems		2
41. Main Generator Systems		16
42. Electrical Power Supply Systems		1
Total	0	68

RU-142 BILIBINO-2

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 11.0 MW(e)
Design Net Capacity: 11.0 MW(e)
Design Discharge Burnup: 3000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 26.4 GW(e).h
Energy Availability Factor: 39.9%
Load Factor: 27.4%
Operating Factor: 85.4%
Energy Unavailability Factor: 60.1%
Total Off-line Time: 1282 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	1.4	2.1	2.4	0.0	0.0	1.4	3.1	2.7	3.0	3.2	3.4	3.5	26.4
EAF (%)	33.0	42.6	43.1	9.9	8.8	34.0	52.7	48.5	50.9	49.1	52.8	53.2	39.9
UCF (%)	98.8	100.0	100.0	20.4	22.5	100.0	100.0	100.0	99.0	100.0	100.0	100.0	86.7
LF (%)	17.5	29.0	29.9	0.0	0.0	17.6	37.8	33.2	38.1	39.5	43.2	42.6	27.4
OF (%)	92.6	100.0	100.0	16.7	18.8	100.0	100.0	100.0	96.8	99.9	100.0	100.0	85.4
EUF (%)	67.0	57.4	56.9	90.1	91.2	66.0	47.3	51.5	49.1	50.9	47.2	46.8	60.1
PUF (%)	1.2	0.0	0.0	79.6	77.5	0.0	0.0	0.0	1.0	0.0	0.0	0.0	13.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	65.8	57.4	56.9	10.5	13.7	66.0	47.3	51.5	48.0	50.9	47.2	46.8	46.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BILIBINO NPP IS OPERATING IN THE LOAD FOLLOWING MODE AGREED WITH THE FEDERAL SERVICE FOR TARIFFS OF RUSSIA. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.04.06. TO 07.05.26. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Jan 1970
Date of First Criticality: 07 Dec 1974
Date of Grid Connection: 30 Dec 1974
Date of Commercial Operation: 01 Feb 1975

Lifetime Generation: 1722.0 GW(e).h
Cumulative Energy Availability Factor: 69.1%
Cumulative Load Factor: 56.7%
Cumulative Unit Capability Factor: 81.5%
Cumulative Energy Unavailability Factor: 30.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	62.6	10.0	94.7	94.7	89.0	89.0	78.1	78.1	7226	90.1
1976	66.1	10.0	89.4	91.9	83.7	86.2	75.3	76.6	7901	89.9
1977	57.0	10.0	90.5	91.4	81.3	84.5	65.1	72.7	7865	89.8
1978	60.6	10.0	94.8	92.3	94.8	87.2	69.2	71.8	7929	90.5
1979	69.9	10.0	92.9	92.4	88.2	87.4	79.7	73.4	8170	93.3
1980	44.0	10.0	62.7	87.4	59.8	82.7	50.1	69.5	5666	64.5
1981	41.4	10.0	73.1	85.3	70.4	80.9	47.2	66.3	6520	74.4
1982	63.9	10.0	79.2	84.6	79.2	80.7	73.0	67.1	7028	80.2
1983	73.8	10.0	90.1	85.2	86.9	81.4	84.2	69.0	7880	90.0
1984	77.6	10.0	89.3	85.6	88.5	82.1	88.4	71.0	7891	89.8
1985	78.0	10.0	90.3	86.0	88.6	82.7	89.0	72.6	7940	90.6
1986	76.3	10.0	87.0	86.1	84.7	82.9	87.1	73.8	7679	87.7
1987	88.4	12.0	89.1	86.4	89.1	83.4	84.1	74.8	7794	89.0
1988	75.1	11.0	90.8	86.7	90.8	84.0	77.7	75.0	7927	90.2
1989	74.8	11.0	91.4	87.1	91.4	84.5	77.6	75.2	7943	90.7
1990	72.6	11.0	84.6	86.9	84.6	84.5	75.4	75.2	7274	83.0
1991	57.8	11.0	64.9	85.5	64.9	83.3	60.0	74.3	4821	55.0
1992	68.2	11.0	89.9	85.8	89.9	83.7	70.6	74.0	7857	89.4
1993	52.4	11.0	81.9	85.6	62.2	82.5	54.4	72.9	7072	80.7
1994	47.8	11.0	78.7	85.2	77.3	82.2	49.6	71.7	6763	77.2
1995	45.4	11.0	99.2	85.9	97.2	83.0	47.2	70.5	8677	99.1
1996	16.8	11.0	33.5	83.4	33.5	80.6	17.4	67.9	2894	32.9
1997	44.1	11.0	92.7	83.8	87.7	80.9	45.8	66.9	8050	91.9
1998	18.2	11.0	42.9	82.0	23.3	78.4	18.8	64.8	3727	42.5
1999	54.2	11.0	84.7	82.1	64.1	77.8	56.2	64.5	7355	84.0
2000	48.5	11.0	78.2	82.0	56.3	77.0	50.2	63.9	6656	75.8
2001	56.7	11.0	85.2	82.1	65.8	76.5	58.9	63.7	7439	84.9
2002	30.0	11.0	66.4	81.5	38.4	75.1	31.2	62.5	5744	65.6
2003	33.3	11.0	82.2	81.6	44.5	74.0	34.5	61.5	7162	81.8
2004	17.9	11.0	70.3	81.2	27.2	72.4	18.5	60.0	5851	66.6
2005	25.3	11.0	84.9	81.3	38.2	71.3	26.3	58.9	7351	83.9
2006	20.3	11.0	84.2	81.4	32.7	70.0	21.1	57.7	7248	82.7
2007	26.4	11.0	86.7	81.5	39.9	69.1	27.4	56.7	7478	85.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					131	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	1204			1307	90	
D. Inspection, maintenance or repair without refuelling				143		
E. Testing of plant systems or components	78			3		
J. Grid failure or grid unavailability					0	17
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				6		
Subtotal	1282	0	0	1459	225	17
Total	1282			1701		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		77
12. Reactor I&C Systems		2
14. Safety Systems		0
15. Reactor Cooling Systems		7
31. Turbine and auxiliaries		22
32. Feedwater and Main Steam System		9
33. Circulating Water System		0
41. Main Generator Systems		7
Total	0	124

RU-143 BILIBINO-3

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 11.0 MW(e)
Design Net Capacity: 11.0 MW(e)
Design Discharge Burnup: 3000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 27.5 GW(e).h
Energy Availability Factor: 38.6%
Load Factor: 28.5%
Operating Factor: 82.8%
Energy Unavailability Factor: 61.4%
Total Off-line Time: 1503 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	2.0	3.1	4.6	2.0	2.9	0.1	0.0	1.4	2.5	2.8	3.6	2.5	27.5
EAF (%)	36.1	51.1	65.4	36.1	46.0	10.4	4.5	30.7	43.2	45.3	54.4	41.2	38.6
UCF (%)	98.6	100.0	100.0	100.0	100.0	26.9	4.6	99.6	100.0	100.0	100.0	100.0	85.7
LF (%)	25.0	41.3	55.7	24.7	36.0	1.5	0.0	16.6	31.7	34.3	45.2	30.8	28.5
OF (%)	95.3	100.0	100.0	100.1	100.0	23.5	0.0	76.7	100.0	99.9	100.0	100.0	82.8
EUF (%)	63.9	48.9	34.6	63.9	54.0	89.6	95.5	69.3	56.8	54.7	45.6	58.8	61.4
PUF (%)	1.4	0.0	0.0	0.0	0.0	73.1	95.5	0.4	0.0	0.0	0.0	0.0	14.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	62.5	48.9	34.6	63.9	54.0	16.5	0.0	68.9	56.8	54.7	45.6	58.8	47.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BILIBINO NPP IS OPERATING IN THE LOAD FOLLOWING MODE AGREED WITH THE FEDERAL SERVICE FOR TARIFFS OF RUSSIA. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.06.08 TO 07.08.01.

RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Jan 1970
Date of First Criticality: 06 Dec 1975
Date of Grid Connection: 22 Dec 1975
Date of Commercial Operation: 01 Feb 1976

Lifetime Generation: 1723.0 GW(e).h
Cumulative Energy Availability Factor: 68.3%
Cumulative Load Factor: 58.7%
Cumulative Unit Capability Factor: 80.9%
Cumulative Energy Unavailability Factor: 31.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	50.0	10.0	90.5	90.5	83.3	83.3	62.2	62.2	6222	77.4
1977	46.5	10.0	92.8	91.7	78.2	80.7	53.1	57.4	7533	86.0
1978	61.9	10.0	86.2	89.9	86.2	82.6	70.6	62.0	7514	85.8
1979	62.1	10.0	88.9	89.6	82.5	82.5	70.9	64.2	7837	89.5
1980	79.4	10.0	92.2	90.1	91.0	84.3	90.4	69.6	8130	92.6
1981	89.8	10.0	96.6	91.2	96.6	86.4	102.5	75.1	8480	96.8
1982	79.3	10.0	94.8	91.8	94.8	87.6	90.6	77.4	8323	95.0
1983	72.8	10.0	88.8	91.4	85.3	87.3	83.1	78.1	7782	88.8
1984	76.5	10.0	89.1	91.1	87.4	87.3	87.1	79.1	7876	89.7
1985	69.8	10.0	80.3	90.1	78.5	86.4	79.7	79.2	7119	81.3
1986	77.1	10.0	91.0	90.1	87.7	86.5	88.0	80.0	8001	91.3
1987	89.1	12.0	89.1	90.0	89.1	86.8	84.7	80.4	7801	89.1
1988	76.7	11.0	89.5	90.0	89.5	87.0	79.4	80.4	7815	89.0
1989	74.3	11.0	89.5	89.9	89.1	87.2	77.1	80.1	7756	88.5
1990	73.7	11.0	92.0	90.1	91.1	87.4	76.5	79.9	8024	91.6
1991	66.2	11.0	78.1	89.3	76.6	86.7	68.7	79.1	6749	77.0
1992	70.9	11.0	79.7	88.7	79.7	86.3	73.4	78.8	7727	88.0
1993	52.6	11.0	83.2	88.4	61.5	84.8	54.6	77.3	7218	82.4
1994	44.7	11.0	73.7	87.6	72.0	84.1	46.4	75.6	6342	72.4
1995	17.3	11.0	38.2	85.0	34.9	81.5	17.9	72.6	3293	37.6
1996	52.6	11.0	82.3	84.8	82.3	81.6	54.5	71.7	7142	81.3
1997	25.8	11.0	42.9	82.8	42.9	79.7	26.8	69.5	3769	43.0
1998	23.2	11.0	49.1	81.3	29.1	77.4	24.0	67.5	4200	47.9
1999	51.4	11.0	75.9	81.1	59.9	76.7	53.4	66.9	6607	75.4
2000	45.2	11.0	86.8	81.3	54.8	75.8	46.8	66.0	7569	86.2
2001	53.9	11.0	84.9	81.4	63.0	75.2	56.0	65.6	7383	84.3
2002	30.7	11.0	71.5	81.1	39.4	73.9	31.9	64.3	6250	71.3
2003	35.4	11.0	81.5	81.1	46.7	72.9	36.8	63.3	7097	81.0
2004	31.1	11.0	85.8	81.2	42.0	71.8	32.2	62.2	7166	81.6
2005	20.4	11.0	71.1	80.9	30.9	70.4	21.1	60.8	6102	69.7
2006	26.3	11.0	76.7	80.8	36.9	69.2	27.2	59.7	6542	74.7
2007	27.5	11.0	85.7	80.9	38.6	68.3	28.5	58.7	7257	82.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					63	
C. Inspection, maintenance or repair combined with refuelling	1298			1220		
D. Inspection, maintenance or repair without refuelling				354		
E. Testing of plant systems or components	35			5		
J. Grid failure or grid unavailability					1	48
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			164	15	1	8
Subtotal	1333	0	164	1594	65	56
Total		1497			1715	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1976 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		1
15. Reactor Cooling Systems		18
31. Turbine and auxiliaries		14
32. Feedwater and Main Steam System		9
33. Circulating Water System		0
Total	0	42

RU-144 BILIBINO-4

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 11.0 MW(e)
Design Net Capacity: 11.0 MW(e)
Design Discharge Burnup: 3000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 19.6 GW(e).h
Energy Availability Factor: 30.9%
Load Factor: 20.3%
Operating Factor: 68.3%
Energy Unavailability Factor: 69.1%
Total Off-line Time: 2777 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	4.3	2.9	3.3	2.2	1.8	0.9	0.5	0.6	0.0	0.0	0.5	2.5	19.6
EAF (%)	62.9	49.4	51.8	39.0	34.9	25.0	20.9	19.3	4.5	4.7	16.8	42.2	30.9
UCF (%)	100.0	100.0	99.7	100.0	100.0	100.0	100.0	75.4	4.6	4.7	34.5	100.0	76.5
LF (%)	52.9	39.0	40.3	27.3	22.5	11.2	6.2	7.9	0.0	0.0	6.1	30.9	20.3
OF (%)	100.0	100.0	99.1	100.1	88.3	71.8	68.4	61.4	0.0	0.0	31.4	100.0	68.3
EUF (%)	37.1	50.6	48.2	61.0	65.1	75.0	79.1	80.7	95.5	95.3	83.2	57.8	69.1
PUF (%)	0.0	0.0	0.3	0.0	0.0	0.0	0.0	24.6	95.5	95.3	65.5	0.0	23.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	37.1	50.6	47.9	61.0	65.1	75.0	79.1	56.1	0.0	0.0	17.7	57.8	45.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

BILIBINO NPP IS OPERATING IN THE LOAD FOLLOWING MODE AGREED WITH THE FEDERAL SERVICE FOR TARIFFS OF RUSSIA. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.08.24 TO 07.11.21.
 RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Jan 1970
Date of First Criticality: 12 Dec 1976
Date of Grid Connection: 27 Dec 1976
Date of Commercial Operation: 01 Jan 1977

Lifetime Generation: 1601.0 GW(e).h
Cumulative Energy Availability Factor: 66.3%
Cumulative Load Factor: 57.2%
Cumulative Unit Capability Factor: 78.5%
Cumulative Energy Unavailability Factor: 33.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	52.6	10.0	93.6	93.6	82.9	82.9	60.1	60.1	7392	84.4
1978	58.3	10.0	91.1	92.3	91.1	87.0	66.6	63.3	7827	89.3
1979	74.5	10.0	85.5	90.0	83.9	85.9	85.0	70.5	7552	86.2
1980	77.6	10.0	94.8	91.2	92.9	87.7	88.4	75.0	8347	95.0
1981	78.3	10.0	87.7	90.5	86.6	87.5	89.3	77.9	7734	88.3
1982	77.6	10.0	90.7	90.6	90.7	88.0	88.6	79.7	7976	91.1
1983	75.5	10.0	90.0	90.5	86.9	87.9	86.2	80.6	7923	90.4
1984	79.0	10.0	87.6	90.1	86.8	87.7	89.9	81.8	7744	88.2
1985	81.2	10.0	90.3	90.1	89.5	87.9	92.7	83.0	7919	90.4
1986	74.5	10.0	79.9	89.1	79.8	87.1	85.1	83.2	7083	80.9
1987	95.5	12.0	93.3	89.6	93.3	87.8	90.9	84.0	8154	93.1
1988	75.8	11.0	87.3	89.4	87.3	87.7	78.5	83.5	7617	86.7
1989	71.4	11.0	93.2	89.7	93.2	88.2	74.1	82.7	7853	89.6
1990	75.3	11.0	87.2	89.5	86.4	88.0	78.1	82.4	7588	86.6
1991	61.3	11.0	71.4	88.2	69.9	86.8	63.6	81.1	6139	70.1
1992	69.8	11.0	87.8	88.2	87.8	86.8	72.3	80.5	7756	88.3
1993	56.0	11.0	80.2	87.7	64.4	85.4	58.1	79.1	6918	79.0
1994	38.5	11.0	62.0	86.2	61.8	84.1	39.9	76.8	5266	60.1
1995	29.9	11.0	63.9	85.0	62.7	82.9	31.0	74.3	5083	58.0
1996	35.2	11.0	59.1	83.6	59.1	81.7	36.4	72.3	5109	58.2
1997	15.1	11.0	37.0	81.3	28.4	79.0	15.7	69.5	2490	28.4
1998	37.3	11.0	63.1	80.5	44.5	77.4	38.7	68.1	5510	62.9
1999	28.7	11.0	46.7	78.9	34.8	75.5	29.8	66.4	3993	45.6
2000	55.8	11.0	88.7	79.4	64.2	75.0	57.8	66.0	7740	88.1
2001	35.4	11.0	68.0	78.9	43.2	73.7	36.8	64.8	5931	67.7
2002	33.1	11.0	73.8	78.7	46.3	72.6	34.4	63.6	6419	73.3
2003	24.5	11.0	67.5	78.3	34.0	71.1	25.4	62.1	5849	66.8
2004	26.1	11.0	83.9	78.5	36.7	69.8	27.0	60.8	7303	83.1
2005	24.9	11.0	84.3	78.7	36.3	68.7	25.9	59.6	7300	83.3
2006	25.2	11.0	76.9	78.6	36.4	67.6	26.2	58.4	6626	75.6
2007	19.6	11.0	76.5	78.5	30.9	66.3	20.3	57.2	5983	68.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					59	
C. Inspection, maintenance or repair combined with refuelling	2150			1370		
D. Inspection, maintenance or repair without refuelling				446		
E. Testing of plant systems or components	7			7		
J. Grid failure or grid unavailability						75
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			620		1	
L. Human factor related		0				
Subtotal	2157	0	620	1823	60	75
Total		2777			1958	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		14
13. Reactor Auxiliary Systems		8
15. Reactor Cooling Systems		1
31. Turbine and auxiliaries		4
32. Feedwater and Main Steam System		6
33. Circulating Water System		5
41. Main Generator Systems		18
Total	0	56

RU-30 KALININ-1

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7150.4 GW(e).h
Energy Availability Factor: 84.0%
Load Factor: 85.9%
Operating Factor: 85.5%
Energy Unavailability Factor: 16.0%
Total Off-line Time: 1269 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	693.9	646.2	639.5	544.9	727.4	690.1	718.2	544.4	0.0	475.9	721.5	748.5	7150.4
EAF (%)	96.9	99.2	89.8	78.1	100.0	99.9	100.0	77.3	0.0	66.9	100.0	100.0	84.0
UCF (%)	100.0	100.0	100.0	78.1	100.0	99.9	100.0	77.4	0.0	66.9	100.0	100.0	85.2
LF (%)	98.2	101.2	90.5	79.8	102.9	100.9	101.6	77.0	0.0	67.2	105.5	105.9	85.9
OF (%)	100.0	100.0	99.9	78.9	100.0	100.0	100.0	78.6	0.0	68.2	100.0	100.0	85.5
EUF (%)	3.1	0.8	10.2	21.9	0.0	0.1	0.0	22.7	100.0	33.1	0.0	0.0	16.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.9	100.0	33.1	0.0	0.0	12.9
UCLF (%)	0.0	0.0	0.0	21.9	0.0	0.1	0.0	0.7	0.0	0.0	0.0	0.0	1.9
XUF (%)	3.1	0.8	10.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 135156 MWH. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.08.25 TO 07.10.10. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start:	01 Feb 1977	Lifetime Generation:	138508.0 GW(e).h
Date of First Criticality:	10 Apr 1984	Cumulative Energy Availability Factor:	71.4%
Date of Grid Connection:	09 May 1984	Cumulative Load Factor:	72.1%
Date of Commercial Operation:	12 Jun 1985	Cumulative Unit Capability Factor:	72.4%
		Cumulative Energy Unavailability Factor:	28.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	2799.6	950.0	58.3	58.3	58.3	58.3	57.4	57.4	3101	60.4
1986	5297.7	950.0	62.8	61.2	62.8	61.2	63.7	61.3	5946	67.9
1987	6842.5	1000.0	78.7	68.2	78.7	68.2	78.1	68.0	6972	79.6
1988	5891.6	950.0	70.1	68.7	70.1	68.7	70.6	68.7	6187	70.4
1989	6129.7	950.0	71.9	69.4	71.9	69.4	73.7	69.8	6396	73.0
1990	5192.3	950.0	61.6	68.0	61.5	68.0	62.4	68.5	5435	62.0
1991	6482.7	950.0	78.1	69.5	77.1	69.4	77.9	69.9	7161	81.7
1992	6781.4	950.0	80.4	70.9	80.3	70.8	81.3	71.4	7388	84.1
1993	4927.2	950.0	66.6	70.4	59.4	69.5	59.2	70.0	6133	70.0
1994	4437.6	950.0	54.4	68.8	54.1	67.9	53.3	68.3	5440	62.1
1995	4699.0	950.0	57.0	67.7	56.8	66.8	56.5	67.1	6265	71.5
1996	4431.7	950.0	53.3	66.4	53.2	65.7	53.1	65.9	5628	64.1
1997	5197.1	950.0	65.0	66.3	63.2	65.5	62.4	65.7	6195	70.7
1998	6101.0	950.0	73.3	66.8	73.0	66.0	73.3	66.2	6937	79.2
1999	5775.1	950.0	73.1	67.3	69.3	66.3	69.4	66.4	6589	75.2
2000	6289.7	950.0	76.8	67.9	75.0	66.8	75.4	67.0	6784	77.2
2001	6627.5	950.0	79.4	68.6	78.2	67.5	79.6	67.8	7020	80.1
2002	7248.4	950.0	86.1	69.6	84.7	68.5	87.1	68.9	7568	86.4
2003	7155.9	950.0	83.7	70.3	83.1	69.3	86.0	69.8	7408	84.6
2004	6937.0	950.0	81.5	70.9	80.7	69.8	83.1	70.5	7179	81.7
2005	6836.3	950.0	81.5	71.4	80.4	70.3	82.1	71.0	7219	82.4
2006	6743.6	950.0	80.6	71.8	79.5	70.8	81.0	71.5	7112	81.2
2007	7150.4	950.0	85.2	72.4	84.0	71.4	85.9	72.1	7491	85.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		153			274	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling	1116			1551	47	
D. Inspection, maintenance or repair without refuelling				109		
E. Testing of plant systems or components					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					55	
L. Human factor related		0			1	
Subtotal	1116	153	0	1660	383	0
Total		1269			2043	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		12
12. Reactor I&C Systems		13
15. Reactor Cooling Systems		3
16. Steam generation systems	153	38
17. Safety I&C Systems (excluding reactor I&C)		5
31. Turbine and auxiliaries		36
32. Feedwater and Main Steam System		27
35. All other I&C Systems		8
41. Main Generator Systems		113
42. Electrical Power Supply Systems		9
Total	153	264

RU-31 KALININ-2

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7231.4 GW(e).h
Energy Availability Factor: 84.2%
Load Factor: 86.9%
Operating Factor: 86.1%
Energy Unavailability Factor: 15.8%
Total Off-line Time: 1221 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	692.3	655.3	635.3	712.9	725.9	513.4	0.0	401.5	711.4	740.9	694.6	748.1	7231.4
EAF (%)	96.2	99.3	88.9	99.8	99.5	73.9	0.0	57.7	100.0	100.0	97.3	100.0	84.2
UCF (%)	99.4	100.0	100.0	100.0	100.0	73.9	0.0	57.7	100.0	100.0	97.3	100.0	85.5
LF (%)	98.0	102.6	89.9	104.4	102.7	75.1	0.0	56.8	104.0	104.7	101.6	105.8	86.9
OF (%)	100.0	100.0	99.9	100.1	100.0	74.3	0.0	60.8	100.0	100.0	100.0	100.0	86.1
EUF (%)	3.8	0.7	11.1	0.2	0.5	26.1	100.0	42.3	0.0	0.0	2.7	0.0	15.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	26.1	100.0	33.8	0.0	0.0	0.0	0.0	13.5
UCLF (%)	0.6	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0	0.0	2.7	0.0	1.0
XUF (%)	3.1	0.7	11.1	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 198573 MWH. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.06.23 TO 07.08.10. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Feb 1982
Date of First Criticality: 25 Nov 1986
Date of Grid Connection: 03 Dec 1986
Date of Commercial Operation: 03 Mar 1987

Lifetime Generation: 126848.0 GW(e).h
Cumulative Energy Availability Factor: 71.1%
Cumulative Load Factor: 72.7%
Cumulative Unit Capability Factor: 74.3%
Cumulative Energy Unavailability Factor: 28.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	5815.1	1000.0	86.3	86.3	86.3	86.3	79.2	79.2	6460	88.0
1988	5829.4	950.0	71.7	78.5	71.7	78.5	69.9	74.2	6446	73.4
1989	6580.5	950.0	78.5	78.5	78.5	78.5	79.1	75.9	7034	80.3
1990	6788.2	950.0	79.5	78.7	79.5	78.7	81.6	77.4	7083	80.9
1991	4729.7	950.0	49.8	72.8	49.8	72.8	56.8	73.2	5154	58.8
1992	5496.3	950.0	65.7	71.6	65.7	71.6	65.9	71.9	6145	70.0
1993	5862.3	950.0	56.5	69.4	51.9	68.7	70.4	71.7	7078	80.8
1994	4463.8	950.0	54.9	67.6	54.9	67.0	53.6	69.4	6989	79.8
1995	5769.7	950.0	72.4	68.1	69.5	67.3	69.3	69.4	7283	83.1
1996	4595.2	950.0	78.4	69.1	56.0	66.1	55.1	68.0	7501	85.4
1997	3880.6	950.0	62.7	68.6	47.3	64.4	46.6	66.0	6117	69.8
1998	4946.7	950.0	60.0	67.8	59.7	64.0	59.4	65.4	6839	78.1
1999	6379.3	950.0	80.0	68.8	76.2	64.9	76.7	66.3	7155	81.7
2000	6418.7	950.0	83.6	69.8	76.3	65.8	76.9	67.1	7441	84.7
2001	6709.0	950.0	80.0	70.5	79.2	66.7	80.6	68.0	7070	80.7
2002	7003.4	950.0	85.8	71.5	82.7	67.7	84.2	69.0	7554	86.2
2003	7329.5	950.0	85.9	72.3	85.3	68.7	88.1	70.1	7541	86.1
2004	7398.2	950.0	87.1	73.2	86.7	69.7	88.7	71.2	7674	87.4
2005	6116.3	950.0	73.6	73.2	72.1	69.8	73.5	71.3	6476	73.9
2006	7074.9	950.0	84.3	73.7	82.7	70.5	85.0	72.0	7400	84.5
2007	7231.4	950.0	85.5	74.3	84.2	71.1	86.9	72.7	7539	86.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		55			225	
B. Refuelling without a maintenance					14	
C. Inspection, maintenance or repair combined with refuelling	1166			1324	10	
D. Inspection, maintenance or repair without refuelling				93		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					4	
Z. Others					1	
Subtotal	1166	55	0	1417	254	0
Total		1221			1671	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		5
12. Reactor I&C Systems		28
15. Reactor Cooling Systems		41
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		44
32. Feedwater and Main Steam System	55	4
35. All other I&C Systems		10
41. Main Generator Systems		72
42. Electrical Power Supply Systems		2
XX. Miscellaneous Systems		2
Total	55	210

RU-36 KALININ-3

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7185.2 GW(e).h
Energy Availability Factor: 85.0%
Load Factor: 86.3%
Operating Factor: 85.7%
Energy Unavailability Factor: 15.0%
Total Off-line Time: 1255 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	715.8	654.9	717.4	702.4	0.0	202.6	708.8	706.4	635.9	727.1	695.3	718.7	7185.2
EAF (%)	99.8	98.8	99.3	99.3	0.2	31.4	100.0	99.9	91.7	100.0	100.0	100.0	85.0
UCF (%)	100.0	98.8	100.0	100.0	0.2	36.3	100.0	100.0	91.7	100.0	100.0	100.0	85.5
LF (%)	101.3	102.6	101.5	102.8	0.0	29.6	100.3	99.9	93.0	102.7	101.7	101.7	86.3
OF (%)	100.0	100.0	99.9	100.1	0.4	36.3	100.0	100.0	92.4	100.0	100.0	100.0	85.7
EUf (%)	0.2	1.2	0.7	0.7	99.8	68.6	0.0	0.1	8.3	0.0	0.0	0.0	15.0
PUf (%)	0.0	0.0	0.0	0.0	99.8	63.3	0.0	0.0	0.0	0.0	0.0	0.0	13.7
UCLF (%)	0.0	1.2	0.0	0.0	0.0	0.4	0.0	0.0	8.4	0.0	0.0	0.0	0.8
XUF (%)	0.2	0.0	0.7	0.7	0.0	5.0	0.0	0.1	0.0	0.0	0.0	0.0	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, JUNE, JULY, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 119426 MWH. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.05.01 TO 07.06.20. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Oct 1985 **Lifetime Generation:** 17818.0 GW(e).h
Date of First Criticality: 25 Nov 2004 **Cumulative Energy Availability Factor:** 81.5%
Date of Grid Connection: 16 Dec 2004 **Cumulative Load Factor:** 82.5%
Date of Commercial Operation: 08 Nov 2005 **Cumulative Unit Capability Factor:** 81.9%
Cumulative Energy Unavailability Factor: 18.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2005	1402.5	950.0	100.0	100.0	100.0	100.0	100.8	100.8	1464	100.0
2006	6287.2	950.0	75.2	78.7	74.9	78.5	75.5	79.2	6692	76.4
2007	7185.2	950.0	85.5	81.9	85.0	81.5	86.3	82.5	7505	85.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2006 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		58			163	
C. Inspection, maintenance or repair combined with refuelling	1197			777	88	
L. Human factor related					4	
Subtotal	1197	58	0	777	255	0
Total		1255			1032	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2006 to 2007 Average Hours Lost Per Year
15. Reactor Cooling Systems		38
16. Steam generation systems	55	
31. Turbine and auxiliaries		41
32. Feedwater and Main Steam System		54
33. Circulating Water System		7
41. Main Generator Systems	3	14
42. Electrical Power Supply Systems		7
Total	58	161

RU-12 KOLA-1

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 411.0 MW(e)
Design Net Capacity: 411.0 MW(e)
Design Discharge Burnup: 28600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2658.0 GW(e).h
Energy Availability Factor: 74.4%
Load Factor: 73.8%
Operating Factor: 88.4%
Energy Unavailability Factor: 25.6%
Total Off-line Time: 1020 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	149.9	185.7	217.7	253.5	307.3	238.5	27.6	96.8	284.5	293.0	293.7	309.7	2658.0
EAF (%)	51.7	68.4	72.4	86.1	100.0	81.4	9.7	33.1	96.5	96.1	99.4	100.0	74.4
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	38.7	54.8	100.0	100.0	100.0	100.0	91.0
LF (%)	49.0	67.2	71.2	85.8	100.5	80.6	9.0	31.7	96.1	95.7	99.3	101.3	73.8
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	19.9	43.0	100.0	100.0	100.0	100.0	88.4
EUF (%)	48.3	31.6	27.6	13.9	0.0	18.6	90.3	66.9	3.5	3.9	0.6	0.0	25.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	61.3	45.2	0.0	0.0	0.0	0.0	9.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	48.3	31.6	27.6	13.9	0.0	18.6	29.0	21.7	3.5	3.9	0.6	0.0	16.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN AUGUST. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 4990 MWH. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.07.13 TO 07.08.14. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 18 May 1969
Date of First Criticality: 26 Jun 1973
Date of Grid Connection: 29 Jun 1973
Date of Commercial Operation: 28 Dec 1973

Lifetime Generation: 80864.0 GW(e).h
Cumulative Energy Availability Factor: 69.5%
Cumulative Load Factor: 65.3%
Cumulative Unit Capability Factor: 76.6%
Cumulative Energy Unavailability Factor: 30.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	232.3	411.0	100.0	100.0	100.0	100.0	76.0	76.0	744	100.0
1974	1990.1	411.0	79.2	80.9	79.2	80.8	55.3	56.9	8463	96.6
1975	1015.8	411.0	50.9	66.5	50.9	66.5	28.2	43.1	5426	61.9
1976	2421.7	411.0	74.2	69.0	74.1	68.9	67.1	50.9	8247	93.9
1977	2101.1	411.0	76.4	70.8	76.4	70.8	58.4	52.7	7462	85.2
1978	2978.8	411.0	82.6	73.1	82.6	73.1	82.7	58.6	8074	92.2
1979	2435.6	411.0	64.6	71.7	64.6	71.7	67.6	60.1	6232	71.1
1980	3466.4	411.0	91.1	74.5	90.9	74.4	96.0	65.2	8072	91.9
1981	2870.8	411.0	81.0	75.3	80.9	75.2	79.7	67.0	7448	85.0
1982	2848.1	411.0	85.5	76.4	85.5	76.4	79.1	68.3	7875	89.9
1983	3217.4	411.0	88.3	77.6	88.2	77.5	89.4	70.4	7884	90.0
1984	3112.0	411.0	84.9	78.2	84.9	78.2	86.2	71.8	8060	91.8
1985	2388.8	411.0	67.0	77.3	67.0	77.3	66.3	71.4	6001	68.5
1986	2805.8	411.0	85.1	77.9	85.1	77.9	77.9	71.9	8074	92.2
1987	3268.2	440.0	86.0	78.5	86.0	78.5	84.8	72.9	7972	91.0
1988	2925.0	411.0	82.7	78.8	82.7	78.8	81.0	73.4	7482	85.2
1989	2675.5	411.0	76.2	78.6	75.4	78.6	74.3	73.5	6731	76.8
1990	2735.5	411.0	76.0	78.5	76.0	78.4	76.0	73.6	6838	78.1
1991	2773.1	411.0	77.3	78.4	77.3	78.3	77.0	73.8	6965	79.5
1992	2271.4	411.0	63.7	77.6	63.4	77.6	62.9	73.2	6651	75.7
1993	1992.6	411.0	59.6	76.7	56.1	76.5	55.3	72.3	5663	64.6
1994	1971.6	411.0	58.6	75.9	56.5	75.6	54.8	71.5	5359	61.2
1995	1581.4	411.0	62.2	75.3	62.2	75.0	43.9	70.3	5398	61.6
1996	1410.0	411.0	47.4	74.1	46.4	73.7	39.1	68.9	4466	50.8
1997	2404.1	411.0	88.5	74.7	88.5	74.3	66.8	68.8	7942	90.7
1998	1291.7	411.0	59.3	74.1	37.7	72.9	35.9	67.5	5658	64.6
1999	2028.5	411.0	86.6	74.5	58.0	72.3	56.3	67.1	7355	84.0
2000	1298.8	411.0	84.1	74.9	37.2	71.0	36.0	65.9	4643	52.9
2001	2243.2	411.0	81.6	75.1	63.3	70.7	62.3	65.8	7098	81.0
2002	1841.5	411.0	68.9	74.9	51.7	70.1	51.1	65.3	5660	64.6
2003	2164.0	411.0	75.5	74.9	60.4	69.8	60.1	65.1	6444	73.6
2004	2440.5	411.0	83.6	75.2	68.2	69.7	67.6	65.2	7326	83.4
2005	2151.7	411.0	90.6	75.7	60.6	69.4	59.8	65.0	6901	78.8
2006	2338.7	411.0	89.9	76.1	66.0	69.3	65.0	65.0	7661	87.5
2007	2658.0	411.0	91.0	76.6	74.4	69.5	73.8	65.3	7740	88.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					60	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	792			1333	3	
D. Inspection, maintenance or repair without refuelling				186		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				76		
G. Major back-fitting, refurbishment or upgrading activities without refuelling						6
J. Grid failure or grid unavailability			228			174
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					12	2
Subtotal	792	0	228	1595	76	182
Total		1020			1853	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems		4
15. Reactor Cooling Systems		16
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		8
35. All other I&C Systems		1
42. Electrical Power Supply Systems		1
Total	0	37

RU-13 KOLA-2

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 411.0 MW(e)
Design Net Capacity: 411.0 MW(e)
Design Discharge Burnup: 28600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2508.9 GW(e).h
Energy Availability Factor: 70.1%
Load Factor: 69.7%
Operating Factor: 85.3%
Energy Unavailability Factor: 29.9%
Total Off-line Time: 1286 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	135.8	190.4	273.4	219.5	269.8	285.0	217.8	169.7	0.0	154.9	296.3	296.2	2508.9
EAF (%)	46.9	69.7	89.6	74.7	88.3	96.2	72.1	56.0	0.0	51.1	99.7	96.6	70.1
UCF (%)	98.7	100.0	100.0	100.0	100.0	100.0	100.0	67.8	0.0	62.0	100.0	100.0	85.7
LF (%)	44.4	68.9	89.4	74.3	88.2	96.3	71.2	55.5	0.0	50.6	100.1	96.9	69.7
OF (%)	94.5	100.0	99.9	100.1	100.0	100.0	100.0	66.9	0.0	62.6	100.0	100.0	85.3
EUF (%)	53.1	30.3	10.4	25.3	11.7	3.8	27.9	44.0	100.0	48.9	0.3	3.4	29.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.3	100.0	37.4	0.0	0.0	14.1
UCLF (%)	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.2
XUF (%)	51.8	30.3	10.4	25.3	11.7	3.8	27.9	11.7	0.0	10.9	0.3	3.4	15.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE.
 THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.08.22 TO 07.10.12. RADIONUCLIDES
 CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF
 AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 18 May 1969
Date of First Criticality: 30 Nov 1974
Date of Grid Connection: 08 Dec 1974
Date of Commercial Operation: 21 Feb 1975

Lifetime Generation: 78376.0 GW(e).h
Cumulative Energy Availability Factor: 70.1%
Cumulative Load Factor: 66.1%
Cumulative Unit Capability Factor: 76.3%
Cumulative Energy Unavailability Factor: 29.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	1325.2	411.0	88.2	88.2	88.2	88.2	40.2	40.2	6040	75.3
1976	1943.1	411.0	70.8	79.1	70.8	79.1	53.8	47.3	7083	80.6
1977	2627.2	411.0	77.1	78.4	76.9	78.4	73.0	56.1	7038	80.3
1978	2982.5	411.0	82.7	79.5	82.7	79.5	82.8	62.9	7576	86.5
1979	3057.6	411.0	83.5	80.3	82.4	80.1	84.9	67.4	7663	87.5
1980	3266.9	411.0	86.0	81.3	85.8	81.0	90.5	71.3	7966	90.7
1981	3146.7	411.0	87.8	82.2	87.8	82.0	87.4	73.6	8225	93.9
1982	2463.0	411.0	71.2	80.8	71.2	80.7	68.4	73.0	6742	77.0
1983	3072.6	411.0	85.3	81.3	85.3	81.2	85.3	74.4	7963	90.9
1984	3034.5	411.0	86.8	81.9	86.8	81.7	84.1	75.3	8079	92.0
1985	3055.6	411.0	84.9	82.2	84.9	82.0	84.9	76.2	7872	89.9
1986	2844.2	411.0	79.8	82.0	79.7	81.8	79.0	76.5	7405	84.5
1987	3345.4	440.0	89.6	82.6	89.6	82.5	86.8	77.3	7900	90.2
1988	2873.3	411.0	80.5	82.4	80.5	82.3	79.6	77.5	7451	84.8
1989	2707.3	411.0	78.0	82.1	74.8	81.8	75.2	77.3	6859	78.3
1990	2610.9	411.0	72.9	81.6	72.7	81.3	72.5	77.0	6751	77.1
1991	2701.9	411.0	75.4	81.2	75.3	80.9	75.0	76.9	6983	79.7
1992	2133.0	411.0	61.8	80.1	61.8	79.8	59.1	75.9	5871	66.8
1993	2138.8	411.0	65.7	79.4	60.7	78.8	59.4	75.0	6377	72.8
1994	398.6	411.0	16.7	76.2	16.7	75.7	11.1	71.8	1466	16.7
1995	2205.8	411.0	93.6	77.1	93.6	76.6	61.3	71.3	6846	78.2
1996	1946.2	411.0	66.3	76.6	65.5	76.1	53.9	70.5	6243	71.1
1997	1157.9	411.0	53.4	75.6	40.6	74.5	32.2	68.9	3955	45.1
1998	2655.6	411.0	83.6	75.9	74.5	74.5	73.8	69.1	8029	91.7
1999	1272.6	411.0	49.0	74.8	36.3	73.0	35.3	67.7	4423	50.5
2000	2430.5	411.0	83.4	75.2	68.2	72.8	67.3	67.7	7626	86.8
2001	1722.3	411.0	84.7	75.5	49.1	71.9	47.8	67.0	6574	75.0
2002	1738.7	411.0	83.2	75.8	48.7	71.1	48.3	66.3	5564	63.5
2003	1866.1	411.0	66.4	75.5	52.0	70.4	51.8	65.8	5459	62.3
2004	1787.1	411.0	73.8	75.4	49.9	69.8	49.5	65.3	5731	65.2
2005	2889.2	411.0	84.2	75.7	78.6	70.0	80.2	65.7	7379	84.2
2006	2640.1	411.0	85.7	76.0	72.0	70.1	73.3	66.0	7597	86.7
2007	2508.9	411.0	85.7	76.3	70.1	70.1	69.7	66.1	7474	85.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		20			88	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1239			1384		
D. Inspection, maintenance or repair without refuelling				75		
E. Testing of plant systems or components				9		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				148		
J. Grid failure or grid unavailability			27			181
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	26
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)					0	
Subtotal	1239	20	27	1616	88	207
Total		1286			1911	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		51
12. Reactor I&C Systems		1
13. Reactor Auxiliary Systems		3
14. Safety Systems		2
15. Reactor Cooling Systems		22
16. Steam generation systems		4
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		0
32. Feedwater and Main Steam System		0
35. All other I&C Systems		0
41. Main Generator Systems		0
42. Electrical Power Supply Systems	20	0
Total	20	83

RU-32 KOLA-3**Operator:** REA (ROSENERGOATOM, Concern)**Contractor:** FAEA (Federal Atomic Energy Agency)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 411.0 MW(e)
Design Net Capacity: 411.0 MW(e)
Design Discharge Burnup: 28600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1815.3 GW(e).h
Energy Availability Factor: 50.7%
Load Factor: 50.4%
Operating Factor: 74.3%
Energy Unavailability Factor: 49.3%
Total Off-line Time: 2254 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	297.8	267.1	154.3	0.0	0.0	51.6	152.4	145.0	219.0	208.5	100.7	218.9	1815.3
EAF (%)	95.7	96.0	51.5	-0.1	0.0	18.7	50.8	48.6	74.1	68.3	35.0	71.8	50.7
UCF (%)	100.0	100.0	100.0	9.9	3.2	96.5	100.0	100.0	100.0	100.0	96.6	88.7	82.9
LF (%)	97.4	96.7	50.5	0.0	0.0	17.4	49.8	47.4	74.0	68.1	34.0	71.6	50.4
OF (%)	100.0	100.0	99.9	0.3	0.0	38.1	100.0	100.0	100.0	100.0	51.9	100.0	74.3
EUF (%)	4.3	4.0	48.5	100.1	100.0	81.3	49.2	51.4	25.9	31.7	65.0	28.2	49.3
PUF (%)	0.0	0.0	0.0	90.1	96.8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	15.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	3.4	11.3	1.3
XUF (%)	4.3	4.0	48.5	9.9	3.2	77.8	49.2	51.4	25.9	31.7	61.6	16.9	32.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE.
 THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.04.04 TO 07.05.29. RADIONUCLIDES
 CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF
 AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Apr 1977
Date of First Criticality: 07 Feb 1981
Date of Grid Connection: 24 Mar 1981
Date of Commercial Operation: 03 Dec 1982

Lifetime Generation: 67001.0 GW(e).h
Cumulative Energy Availability Factor: 73.9%
Cumulative Load Factor: 71.5%
Cumulative Unit Capability Factor: 82.8%
Cumulative Energy Unavailability Factor: 26.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1982	301.9	411.0	99.4	99.4	99.3	99.3	98.7	98.7	744	100.0
1983	2459.9	411.0	72.0	74.1	72.0	74.1	68.3	70.7	6818	77.8
1984	2830.7	411.0	82.7	78.3	82.7	78.2	78.4	74.4	7610	86.6
1985	2972.6	411.0	86.8	81.0	86.7	81.0	82.6	77.0	7814	89.2
1986	2627.3	411.0	74.1	79.3	74.1	79.3	73.0	76.0	7244	82.7
1987	2837.8	440.0	74.8	78.4	74.8	78.4	73.6	75.5	7024	80.2
1988	2933.2	411.0	81.5	78.9	81.4	78.9	81.2	76.5	7913	90.1
1989	3186.7	411.0	90.5	80.5	87.8	80.1	88.5	78.2	8047	91.9
1990	3256.9	411.0	89.8	81.6	89.7	81.3	90.5	79.7	8022	91.6
1991	2935.2	411.0	79.8	81.4	79.8	81.1	81.5	79.9	7188	82.1
1992	2806.4	411.0	87.9	82.1	87.8	81.8	77.7	79.7	7396	84.2
1993	2548.0	411.0	81.9	82.1	70.5	80.8	70.8	78.9	6833	78.0
1994	2466.0	411.0	70.9	81.2	70.8	79.9	68.5	78.0	6373	72.8
1995	2526.1	411.0	81.0	81.1	80.6	80.0	70.2	77.4	7083	80.9
1996	2327.3	411.0	79.8	81.0	79.8	80.0	64.5	76.5	6928	78.9
1997	2340.5	411.0	78.5	80.9	75.0	79.7	65.0	75.7	7114	81.2
1998	2006.3	411.0	86.3	81.2	56.3	78.2	55.7	74.5	6705	76.5
1999	2140.6	411.0	72.6	80.7	59.9	77.1	59.5	73.6	7040	80.4
2000	2244.7	411.0	87.9	81.1	62.5	76.3	62.2	73.0	7731	88.0
2001	2543.3	411.0	85.3	81.3	70.6	76.0	70.6	72.9	7057	80.6
2002	2742.4	411.0	91.4	81.8	75.9	76.0	76.2	73.0	7909	90.3
2003	2740.7	411.0	83.7	81.9	75.6	76.0	76.1	73.2	7335	83.7
2004	2816.8	411.0	88.1	82.2	77.4	76.1	78.0	73.4	7688	87.5
2005	2059.4	411.0	88.5	82.5	57.6	75.3	57.2	72.7	7672	87.6
2006	2294.6	411.0	90.0	82.8	64.0	74.8	63.7	72.3	7436	84.9
2007	1815.3	411.0	82.9	82.8	50.7	73.9	50.4	71.5	6506	74.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		2			74	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1344			1020		
D. Inspection, maintenance or repair without refuelling				92		
E. Testing of plant systems or components				15	0	
J. Grid failure or grid unavailability			908		15	105
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					4	7
L. Human factor related					1	
Subtotal	1344	2	908	1127	94	112
Total		2254			1333	

7. Equipment Related Full Outages, Analysis by System

System	2007	1982 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		7
12. Reactor I&C Systems		34
15. Reactor Cooling Systems		10
16. Steam generation systems		8
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		0
32. Feedwater and Main Steam System	2	7
42. Electrical Power Supply Systems		5
XX. Miscellaneous Systems		0
Total	2	71

RU-33 KOLA-4

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 411.0 MW(e)
Design Net Capacity: 411.0 MW(e)
Design Discharge Burnup: 28600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2584.1 GW(e).h
Energy Availability Factor: 71.5%
Load Factor: 71.8%
Operating Factor: 87.2%
Energy Unavailability Factor: 28.5%
Total Off-line Time: 1120 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	300.0	189.6	312.0	275.8	189.5	0.0	94.7	243.0	288.5	290.8	234.0	166.2	2584.1
EAF (%)	96.4	68.8	100.0	92.4	62.4	0.1	32.6	79.3	96.7	94.4	79.0	55.3	71.5
UCF (%)	100.0	100.0	100.0	100.0	100.0	6.7	69.9	100.0	100.0	100.0	100.0	100.0	89.8
LF (%)	98.1	68.7	102.0	93.3	62.0	0.0	31.0	79.5	97.5	95.0	79.1	54.3	71.8
OF (%)	100.0	73.5	99.9	100.1	100.0	0.3	69.9	100.0	100.0	100.0	100.0	100.0	87.2
EUF (%)	3.6	31.2	0.0	7.6	37.6	99.9	67.4	20.7	3.3	5.6	21.0	44.7	28.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	93.3	30.1	0.0	0.0	0.0	0.0	0.0	10.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	3.6	31.2	0.0	7.6	37.6	6.6	37.3	20.7	3.3	5.6	21.0	44.7	18.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN MARCH. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 3145 MWH. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.06.03 TO 07.07.06. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Aug 1976
Date of First Criticality: 07 Oct 1984
Date of Grid Connection: 11 Oct 1984
Date of Commercial Operation: 06 Dec 1984

Lifetime Generation: 59149.0 GW(e).h
Cumulative Energy Availability Factor: 72.8%
Cumulative Load Factor: 71.2%
Cumulative Unit Capability Factor: 81.9%
Cumulative Energy Unavailability Factor: 27.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	168.5	411.0	100.0	100.0	100.0	100.0	55.1	55.1	730	98.1
1985	2585.8	411.0	78.2	79.9	78.2	79.9	71.8	70.5	7751	88.5
1986	2690.2	411.0	72.4	76.3	72.4	76.3	74.7	72.5	7230	82.5
1987	3341.2	440.0	85.5	79.4	85.5	79.4	86.7	77.3	7861	89.7
1988	3124.2	411.0	85.0	80.7	84.9	80.7	86.5	79.6	7762	88.4
1989	3111.5	411.0	87.6	82.1	85.8	81.7	86.4	80.9	7793	89.0
1990	2930.4	411.0	80.3	81.8	80.2	81.5	81.4	81.0	7142	81.5
1991	2790.5	411.0	76.7	81.1	76.7	80.8	77.5	80.5	7429	84.8
1992	2764.9	411.0	80.5	81.0	80.0	80.7	76.6	80.0	7253	82.6
1993	2827.0	411.0	92.4	82.2	79.0	80.5	78.5	79.8	8247	94.1
1994	1939.8	411.0	62.7	80.3	55.8	78.1	53.9	77.3	5915	67.5
1995	2288.8	411.0	73.8	79.7	73.8	77.7	63.6	76.1	7022	80.2
1996	2537.7	411.0	84.1	80.1	84.1	78.2	70.3	75.6	7792	88.7
1997	2271.7	411.0	76.2	79.8	74.6	78.0	63.1	74.6	6848	78.2
1998	1927.6	411.0	69.4	79.1	49.2	75.9	53.5	73.1	6336	72.3
1999	2567.5	411.0	82.0	79.3	71.2	75.6	71.3	73.0	7193	82.1
2000	2177.5	411.0	86.3	79.7	60.4	74.7	60.3	72.2	7096	80.8
2001	2447.1	411.0	87.4	80.1	68.0	74.3	68.0	72.0	7149	81.6
2002	2601.7	411.0	79.7	80.1	71.5	74.1	72.3	72.0	7281	83.1
2003	2480.8	411.0	90.9	80.7	68.7	73.8	68.9	71.8	6663	76.1
2004	2391.6	411.0	86.8	81.0	66.4	73.5	66.2	71.6	7863	89.5
2005	2231.7	411.0	90.2	81.4	62.1	72.9	62.0	71.1	7879	89.9
2006	2573.1	411.0	84.1	81.5	71.3	72.9	71.5	71.1	7217	82.4
2007	2584.1	411.0	89.8	81.9	71.5	72.8	71.8	71.2	7640	87.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					59	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	813			1049	25	
D. Inspection, maintenance or repair without refuelling	83			88		
E. Testing of plant systems or components				7		
J. Grid failure or grid unavailability			224			150
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	0
Subtotal	896	0	224	1144	85	150
Total		1120			1379	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		3
12. Reactor I&C Systems		12
14. Safety Systems		3
15. Reactor Cooling Systems		6
16. Steam generation systems		8
17. Safety I&C Systems (excluding reactor I&C)		0
32. Feedwater and Main Steam System		8
42. Electrical Power Supply Systems		18
Total	0	58

RU-17 KURSK-1

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 10000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6736.2 GW(e).h
Energy Availability Factor: 82.8%
Load Factor: 83.1%
Operating Factor: 87.6%
Energy Unavailability Factor: 17.2%
Total Off-line Time: 1090 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	691.2	627.7	662.7	344.4	653.7	213.3	200.0	635.1	644.9	681.4	680.4	701.4	6736.2
EAF (%)	98.4	99.2	95.5	53.4	95.0	33.2	30.5	92.5	96.7	98.7	100.0	100.0	82.8
UCF (%)	100.0	100.0	100.0	100.0	100.0	36.8	32.4	100.0	99.9	99.9	100.0	100.0	89.1
LF (%)	100.4	101.0	96.3	51.8	95.0	32.0	29.1	92.3	96.8	98.9	102.2	101.9	83.1
OF (%)	100.0	100.0	99.9	75.9	100.0	39.4	35.5	100.0	100.0	100.0	100.0	100.0	87.6
EUF (%)	1.6	0.8	4.5	46.6	5.0	66.8	69.5	7.5	3.3	1.3	0.0	0.0	17.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	63.2	0.0	0.0	0.1	0.1	0.0	0.0	5.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	67.6	0.0	0.0	0.0	0.0	0.0	5.7
XUF (%)	1.6	0.8	4.5	46.6	5.0	3.6	1.9	7.5	3.2	1.2	0.0	0.0	6.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 49251 MWH. THE UNIT WAS IN THE ROUTINE MAINTENANCE OUTAGE FROM 07.06.10 TO 07.06.29 INVOLVING PARTIAL FUEL CHANNEL REPLACEMENT. ONE UNIT SHUTDOWN OCCURRED DUE TO PERSONNEL ERRORS. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Jun 1972
Date of First Criticality: 25 Oct 1976
Date of Grid Connection: 19 Dec 1976
Date of Commercial Operation: 12 Oct 1977

Lifetime Generation: 145439.0 GW(e).h
Cumulative Energy Availability Factor: 59.0%
Cumulative Load Factor: 58.7%
Cumulative Unit Capability Factor: 61.0%
Cumulative Energy Unavailability Factor: 41.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	1458.9	925.0	79.1	79.1	79.1	79.1	71.4	71.4	1897	85.9
1978	5058.1	925.0	63.0	66.2	63.0	66.2	62.4	64.2	7573	86.4
1979	5930.2	925.0	73.9	69.7	73.1	69.3	73.2	68.2	7528	85.9
1980	6477.7	925.0	79.9	72.8	79.7	72.5	79.7	71.8	7669	87.3
1981	6132.8	925.0	76.4	73.7	76.4	73.4	75.7	72.7	7885	90.0
1982	7010.4	925.0	85.7	75.9	85.7	75.7	86.5	75.3	7788	88.9
1983	6720.3	925.0	82.2	76.9	82.2	76.8	82.9	76.5	7456	85.1
1984	6660.0	925.0	81.4	77.6	81.4	77.4	82.0	77.3	7369	83.9
1985	6346.8	925.0	76.9	77.5	76.8	77.3	78.3	77.4	7186	82.0
1986	5675.8	925.0	69.2	76.6	69.2	76.5	70.0	76.6	6598	75.3
1987	7022.7	1000.0	82.6	77.2	82.6	77.1	80.2	77.0	7407	84.6
1988	6638.0	925.0	81.7	77.6	81.7	77.5	81.7	77.4	7350	83.7
1989	5745.4	925.0	68.3	76.9	68.3	76.8	70.9	76.9	6582	75.1
1990	5090.5	925.0	65.7	76.0	65.7	75.9	62.8	75.8	6817	77.8
1991	4163.1	925.0	53.5	74.4	52.5	74.3	51.4	74.1	7038	80.3
1992	3669.2	925.0	46.3	72.6	46.3	72.5	45.2	72.2	6103	69.5
1993	4809.4	925.0	91.6	73.8	61.8	71.8	59.4	71.4	8145	93.0
1994	1560.6	925.0	20.6	70.7	19.8	68.8	19.3	68.4	2686	30.7
1995	0.0	925.0	0.0	66.8	0.0	65.1	0.0	64.7	0	0.0
1996	0.0	925.0	0.0	63.4	0.0	61.7	0.0	61.3	0	0.0
1997	27.8	925.0	0.5	60.3	0.5	58.7	0.3	58.3	61	0.7
1998	4508.6	925.0	59.3	60.2	57.4	58.6	55.6	58.2	7845	89.6
1999	4557.0	925.0	58.7	60.2	57.6	58.6	56.2	58.1	7464	85.2
2000	3449.7	925.0	44.3	59.5	43.6	57.9	42.5	57.5	5531	63.0
2001	1296.1	925.0	16.6	57.7	16.4	56.2	16.0	55.8	2042	23.3
2002	2462.7	925.0	32.5	56.7	30.8	55.2	30.4	54.8	3439	39.3
2003	6452.7	925.0	80.2	57.6	78.9	56.1	79.6	55.7	7262	82.9
2004	6601.3	925.0	83.0	58.6	81.1	57.0	81.2	56.6	7363	83.8
2005	6220.0	925.0	83.0	59.4	77.0	57.7	76.8	57.3	7651	87.3
2006	5837.7	925.0	78.4	60.1	72.2	58.2	72.0	57.8	7089	80.9
2007	6736.2	925.0	89.1	61.0	82.8	59.0	83.1	58.7	7670	87.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		421			56	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	436			536	1	
D. Inspection, maintenance or repair without refuelling				1763	15	
E. Testing of plant systems or components				5		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				167		
H. Nuclear regulatory requirements					12	
J. Grid failure or grid unavailability			174		0	
L. Human factor related		59				
Z. Others					4	
Subtotal	436	480	174	2471	90	0
Total		1090			2561	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems	421	6
13. Reactor Auxiliary Systems		1
15. Reactor Cooling Systems		15
16. Steam generation systems		3
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries		3
32. Feedwater and Main Steam System		2
35. All other I&C Systems		1
41. Main Generator Systems		1
42. Electrical Power Supply Systems		6
Total	421	41

RU-22 KURSK-2

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 10000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5728.7 GW(e).h
Energy Availability Factor: 69.5%
Load Factor: 70.7%
Operating Factor: 70.9%
Energy Unavailability Factor: 30.5%
Total Off-line Time: 2553 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	332.3	696.5	584.0	658.9	673.9	668.1	699.9	696.2	718.8	5728.7
EAF (%)	0.0	0.0	0.1	50.2	99.5	87.8	95.5	97.6	99.3	99.6	100.0	99.3	69.5
UCF (%)	0.0	0.0	0.1	50.5	100.0	89.0	96.4	100.0	100.0	99.7	100.0	99.3	70.0
LF (%)	0.0	0.0	0.0	50.0	101.2	87.7	95.7	97.9	100.3	101.6	104.5	104.4	70.7
OF (%)	0.0	0.0	0.0	54.1	100.0	91.3	100.0	100.0	100.0	100.0	100.0	100.0	70.9
EUf (%)	100.0	100.0	99.9	49.8	0.5	12.2	4.5	2.4	0.7	0.4	0.0	0.7	30.5
PUf (%)	100.0	100.0	99.9	49.5	0.0	1.0	0.1	0.0	0.0	0.0	0.0	0.0	28.8
UCLF (%)	0.0	0.0	0.0	0.0	0.0	10.1	3.5	0.0	0.0	0.3	0.0	0.7	1.2
XUF (%)	0.0	0.0	0.0	0.3	0.5	1.1	0.9	2.4	0.7	0.1	0.0	0.0	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN APRIL, MAY, JUNE, JULY, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 81062 MWH. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.01.01 TO 07.04.14 INVOLVING PARTIAL FUEL CHANNEL REPLACEMENT. ONE UNIT SHUTDOWN OCCURRED DUE TO PERSONNEL ERRORS. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start:	01 Jan 1973	Lifetime Generation:	141871.0 GW(e).h
Date of First Criticality:	16 Dec 1978	Cumulative Energy Availability Factor:	61.5%
Date of Grid Connection:	28 Jan 1979	Cumulative Load Factor:	61.0%
Date of Commercial Operation:	17 Aug 1979	Cumulative Unit Capability Factor:	64.1%
		Cumulative Energy Unavailability Factor:	38.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	2303.9	925.0	67.7	67.7	67.7	67.7	67.8	67.8	3070	83.6
1980	6404.3	925.0	79.0	75.7	78.4	75.3	78.8	75.6	7658	87.2
1981	6385.9	925.0	78.7	76.9	78.7	76.7	78.8	76.9	7874	89.9
1982	5875.8	925.0	71.1	75.2	71.1	75.1	72.5	75.6	6443	73.6
1983	5707.6	925.0	70.1	74.1	70.1	73.9	70.4	74.5	7104	81.1
1984	6326.5	925.0	77.1	74.6	77.1	74.5	77.9	75.1	7219	82.2
1985	6459.9	925.0	79.4	75.4	79.4	75.3	79.7	75.8	7598	86.7
1986	5617.3	925.0	69.1	74.5	69.1	74.4	69.3	74.9	6575	75.1
1987	7196.7	1000.0	83.3	75.6	83.3	75.6	82.2	75.9	7539	86.1
1988	5725.7	925.0	73.9	75.5	73.9	75.4	70.5	75.3	6609	75.2
1989	6164.2	925.0	74.9	75.4	74.9	75.3	76.1	75.4	6797	77.6
1990	4789.7	925.0	62.2	74.3	62.2	74.2	59.1	73.9	6874	78.5
1991	4376.0	925.0	56.3	72.8	55.3	72.7	54.0	72.4	7361	84.0
1992	2158.4	925.0	27.2	69.4	27.2	69.3	26.6	69.0	3552	40.4
1993	4438.2	925.0	85.0	70.5	57.1	68.5	54.8	68.0	7432	84.8
1994	4212.2	925.0	55.3	69.5	53.5	67.5	52.0	66.9	7385	84.3
1995	4745.4	925.0	90.8	70.8	59.8	67.0	58.6	66.4	7708	88.0
1996	4196.1	925.0	52.8	69.8	52.7	66.2	51.6	65.6	7099	80.8
1997	4354.3	925.0	55.3	69.0	54.9	65.6	53.7	65.0	7076	80.8
1998	1685.1	925.0	21.7	66.6	21.3	63.3	20.8	62.7	2805	32.0
1999	3708.1	925.0	48.0	65.7	46.8	62.5	45.8	61.9	6066	69.2
2000	3668.1	925.0	48.9	64.9	46.2	61.8	45.1	61.1	6211	70.7
2001	4768.1	925.0	61.1	64.7	60.1	61.7	58.8	61.0	7667	87.5
2002	3027.8	925.0	38.3	63.6	38.1	60.7	37.4	60.0	4770	54.5
2003	3756.2	925.0	47.1	62.9	46.4	60.1	46.4	59.4	5834	66.6
2004	3692.1	925.0	45.1	62.2	45.0	59.5	45.4	58.9	4318	49.2
2005	6896.6	925.0	87.5	63.2	84.7	60.5	85.1	59.9	7782	88.8
2006	6574.4	925.0	82.9	63.9	80.3	61.2	81.1	60.6	7320	83.6
2007	5728.7	925.0	70.0	64.1	69.5	61.5	70.7	61.0	6207	70.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1979 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					108	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	2490			817		
D. Inspection, maintenance or repair without refuelling				890	20	
E. Testing of plant systems or components				5		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				142		
J. Grid failure or grid unavailability					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					41	
L. Human factor related		64				
Subtotal	2490	64	0	1854	172	0
Total		2554			2026	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1979 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		56
12. Reactor I&C Systems		10
13. Reactor Auxiliary Systems		6
14. Safety Systems		2
15. Reactor Cooling Systems		15
16. Steam generation systems		4
17. Safety I&C Systems (excluding reactor I&C)		2
32. Feedwater and Main Steam System		4
41. Main Generator Systems		2
42. Electrical Power Supply Systems		1
Total	0	102

RU-38 KURSK-3

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 10000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5765.3 GW(e).h
Energy Availability Factor: 71.1%
Load Factor: 71.1%
Operating Factor: 74.6%
Energy Unavailability Factor: 28.9%
Total Off-line Time: 2225 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	677.5	626.3	527.2	641.1	319.0	621.2	665.2	664.1	668.4	355.3	0.0	0.0	5765.3
EAF (%)	97.1	99.4	77.6	95.6	47.1	93.5	96.8	96.7	99.5	52.4	0.0	0.0	71.1
UCF (%)	100.0	100.0	91.0	100.0	47.1	98.1	99.0	100.0	100.0	52.5	0.0	0.0	73.7
LF (%)	98.4	100.8	76.6	96.4	46.4	93.3	96.7	96.5	100.4	51.6	0.0	0.0	71.1
OF (%)	100.0	100.0	91.7	100.1	53.5	100.0	100.0	100.0	100.0	52.5	0.0	0.0	74.6
EUF (%)	2.9	0.6	22.4	4.4	52.9	6.5	3.2	3.3	0.5	47.6	100.0	100.0	28.9
PUF (%)	0.0	0.0	0.0	0.0	52.9	1.9	0.1	0.0	0.0	47.5	100.0	100.0	25.4
UCLF (%)	0.0	0.0	9.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.8
XUF (%)	2.9	0.6	13.4	4.4	0.0	4.5	2.3	3.3	0.5	0.1	0.0	0.0	2.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, SEPTEMBER, OCTOBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 32740 MWH. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.10.17 TO 07.12.31. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION

5. Historical Summary

Date of Construction Start:	01 Apr 1978	Lifetime Generation:	139611.0 GW(e).h
Date of First Criticality:	09 Aug 1983	Cumulative Energy Availability Factor:	72.2%
Date of Grid Connection:	17 Oct 1983	Cumulative Load Factor:	71.4%
Date of Commercial Operation:	30 Mar 1984	Cumulative Unit Capability Factor:	73.5%
		Cumulative Energy Unavailability Factor:	27.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	4811.2	925.0	75.0	75.0	75.0	75.0	70.8	70.8	5800	79.0
1985	6260.8	925.0	77.9	76.6	77.6	76.4	77.3	74.3	7250	82.8
1986	4810.8	925.0	60.4	70.9	60.0	70.6	59.4	69.1	6269	71.6
1987	5458.9	1000.0	69.0	70.4	66.4	69.5	62.3	67.2	6185	70.6
1988	6693.6	925.0	83.6	73.1	83.6	72.4	82.4	70.3	7471	85.1
1989	5900.5	925.0	74.3	73.3	74.3	72.7	72.8	70.7	7200	82.2
1990	6889.4	925.0	86.5	75.2	86.5	74.7	85.0	72.8	8096	92.4
1991	5139.0	925.0	63.4	73.7	63.2	73.2	63.4	71.6	5704	65.1
1992	6630.5	925.0	82.1	74.7	82.1	74.2	81.6	72.7	8126	92.5
1993	5562.3	925.0	71.2	74.3	70.3	73.8	68.6	72.3	6438	73.5
1994	5077.9	925.0	73.6	74.2	66.7	73.2	62.7	71.4	6495	74.1
1995	5318.1	925.0	65.7	73.5	65.4	72.5	65.6	70.9	5974	68.2
1996	6739.3	925.0	82.9	74.3	82.7	73.3	82.9	71.9	7383	84.1
1997	6548.7	925.0	82.5	74.8	81.6	73.9	80.8	72.5	7325	83.6
1998	4528.3	925.0	60.3	73.9	56.5	72.7	55.9	71.4	5405	61.7
1999	6006.9	925.0	75.3	74.0	74.3	72.8	74.1	71.6	6749	77.0
2000	6382.3	925.0	78.8	74.2	78.3	73.2	78.5	72.0	7415	84.4
2001	3535.2	925.0	44.7	72.6	43.5	71.5	43.6	70.4	3948	45.1
2002	6699.8	925.0	88.2	73.4	85.1	72.2	82.7	71.1	7788	88.9
2003	5100.6	925.0	62.2	72.9	61.8	71.7	62.9	70.6	5469	62.4
2004	6894.2	925.0	86.3	73.5	84.3	72.3	84.8	71.3	7660	87.2
2005	4987.1	925.0	63.5	73.1	61.3	71.8	61.5	70.9	5598	63.9
2006	6711.2	925.0	83.4	73.5	81.9	72.3	82.8	71.4	7353	83.9
2007	5765.3	925.0	73.7	73.5	71.1	72.2	71.1	71.4	6535	74.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		61			142	
C. Inspection, maintenance or repair combined with refuelling	346			1089		
D. Inspection, maintenance or repair without refuelling	1818			725		
J. Grid failure or grid unavailability					1	2
Subtotal	2164	61	0	1814	143	2
Total		2225			1959	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		23
12. Reactor I&C Systems		5
13. Reactor Auxiliary Systems		4
14. Safety Systems		16
15. Reactor Cooling Systems		64
17. Safety I&C Systems (excluding reactor I&C)		4
31. Turbine and auxiliaries		3
32. Feedwater and Main Steam System		9
41. Main Generator Systems		1
42. Electrical Power Supply Systems	61	2
Total	61	131

RU-39 KURSK-4

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 10000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7426.5 GW(e).h
Energy Availability Factor: 91.2%
Load Factor: 91.7%
Operating Factor: 94.7%
Energy Unavailability Factor: 8.8%
Total Off-line Time: 462 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	667.4	632.4	623.1	656.0	670.2	625.8	664.9	651.5	650.5	226.9	658.5	699.1	7426.5
EAF (%)	95.9	99.9	90.7	98.1	97.4	93.9	96.4	94.8	97.5	34.3	97.6	99.9	91.2
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	35.1	97.6	99.9	94.3
LF (%)	97.0	101.7	90.5	98.6	97.4	94.0	96.6	94.7	97.7	32.9	98.9	101.6	91.7
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	100.0	38.0	100.0	100.0	94.7
EUF (%)	4.1	0.1	9.3	1.9	2.6	6.1	3.6	5.2	2.5	65.7	2.4	0.1	8.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.9	0.2	0.1	5.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.2
XUF (%)	4.1	0.1	9.3	1.9	2.6	6.1	3.6	5.2	2.5	0.8	0.0	0.0	3.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 35674 MWH. THE UNIT WAS IN THE ROUTINE MAINTENANCE OUTAGE FROM 07.10.11 TO 07.10.30. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start:	01 May 1981	Lifetime Generation:	135657.0 GW(e).h
Date of First Criticality:	31 Oct 1985	Cumulative Energy Availability Factor:	75.9%
Date of Grid Connection:	02 Dec 1985	Cumulative Load Factor:	76.0%
Date of Commercial Operation:	05 Feb 1986	Cumulative Unit Capability Factor:	77.2%
		Cumulative Energy Unavailability Factor:	24.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	5952.3	925.0	80.8	80.8	80.4	80.4	80.3	80.3	7059	88.1
1987	6167.7	1000.0	72.4	76.3	72.3	76.0	70.4	74.9	6704	76.5
1988	6653.0	925.0	81.7	78.1	81.7	77.9	81.9	77.3	7390	84.1
1989	6131.8	925.0	76.0	77.6	76.0	77.4	75.7	76.9	6954	79.4
1990	6050.0	925.0	73.7	76.8	73.6	76.7	74.7	76.4	6922	79.0
1991	7356.1	925.0	92.5	79.4	90.3	78.9	90.8	78.8	8469	96.7
1992	6117.4	925.0	75.4	78.9	75.4	78.4	75.3	78.3	7324	83.4
1993	5638.3	925.0	71.7	78.0	71.0	77.5	69.6	77.2	6439	73.5
1994	5369.4	925.0	71.5	77.3	67.0	76.3	66.3	76.0	6255	71.4
1995	6207.5	925.0	78.6	77.4	77.0	76.4	76.6	76.1	7001	79.9
1996	6590.2	925.0	81.4	77.8	80.2	76.7	81.1	76.5	7373	83.9
1997	5971.7	925.0	73.9	77.4	73.1	76.4	73.7	76.3	6664	76.1
1998	6641.4	925.0	86.7	78.1	82.3	76.9	82.0	76.7	7751	88.5
1999	5895.4	925.0	74.2	77.9	72.8	76.6	72.8	76.4	6595	75.3
2000	6778.8	925.0	83.5	78.2	82.8	77.0	83.4	76.9	7423	84.5
2001	6671.6	925.0	82.2	78.5	81.5	77.3	82.3	77.2	7281	83.1
2002	5531.0	925.0	68.3	77.9	67.6	76.7	68.3	76.7	6094	69.6
2003	6233.4	925.0	77.3	77.8	75.8	76.7	76.9	76.7	6802	77.6
2004	5422.9	925.0	68.0	77.3	66.7	76.1	66.7	76.2	6005	68.4
2005	7081.1	925.0	89.4	77.9	87.1	76.7	87.4	76.8	7858	89.7
2006	3636.4	925.0	44.8	76.4	44.2	75.2	44.9	75.2	4115	47.0
2007	7426.5	925.0	94.3	77.2	91.2	75.9	91.7	76.0	8298	94.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					54	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	462			929		
D. Inspection, maintenance or repair without refuelling				640		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				124		
J. Grid failure or grid unavailability					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					9	
Subtotal	462	0	0	1693	68	0
Total		462			1761	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		1
15. Reactor Cooling Systems		14
32. Feedwater and Main Steam System		10
42. Electrical Power Supply Systems		25
Total	0	52

RU-15 LENINGRAD-1

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 22000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7538.3 GW(e).h
Energy Availability Factor: 92.0%
Load Factor: 93.0%
Operating Factor: 94.8%
Energy Unavailability Factor: 8.0%
Total Off-line Time: 454 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	662.9	624.7	691.5	678.8	686.6	171.1	579.8	680.3	676.2	699.6	679.8	707.1	7538.3
EAF (%)	96.3	99.6	99.4	100.0	99.0	26.5	84.9	99.0	99.8	99.5	99.4	99.7	92.0
UCF (%)	100.0	99.7	99.6	100.0	99.8	30.0	89.0	99.4	99.8	99.6	99.4	100.0	93.1
LF (%)	96.3	100.5	100.5	102.1	99.8	25.7	84.2	98.9	101.5	101.5	102.1	102.8	93.0
OF (%)	100.0	100.0	99.9	100.1	100.0	36.9	100.0	100.0	100.0	100.0	100.0	100.0	94.8
EUF (%)	3.7	0.4	0.6	0.0	1.0	73.5	15.1	1.0	0.2	0.5	0.6	0.3	8.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	63.3	1.3	0.0	0.0	0.0	0.0	0.0	5.3
UCLF (%)	0.0	0.3	0.4	0.0	0.2	6.7	9.8	0.7	0.2	0.4	0.6	0.0	1.6
XUF (%)	3.7	0.1	0.2	0.0	0.8	3.5	4.0	0.4	0.0	0.1	0.0	0.3	1.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 105865 MWH. THE UNIT WAS IN THE ROUTINE MAINTENANCE OUTAGE FROM 07.06.11 TO 07.06.30. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start:	01 Mar 1970	Lifetime Generation:	188343.0 GW(e).h
Date of First Criticality:	12 Sep 1973	Cumulative Energy Availability Factor:	69.5%
Date of Grid Connection:	21 Dec 1973	Cumulative Load Factor:	69.1%
Date of Commercial Operation:	01 Nov 1974	Cumulative Unit Capability Factor:	70.2%
		Cumulative Energy Unavailability Factor:	30.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	1022.6	925.0	76.5	76.5	76.5	76.5	75.5	75.5	1378	94.1
1975	3998.9	925.0	50.6	54.3	50.6	54.3	49.4	53.1	6661	76.0
1976	4098.2	925.0	51.5	53.0	51.5	53.0	50.4	51.9	6137	69.9
1977	5941.8	925.0	74.1	59.7	74.1	59.7	73.3	58.6	8192	93.5
1978	5413.7	925.0	67.3	61.5	67.3	61.5	66.8	60.6	6735	76.9
1979	6322.0	925.0	78.7	64.8	78.7	64.8	78.0	64.0	7973	91.0
1980	5542.1	925.0	68.5	65.4	68.3	65.4	68.2	64.7	6574	74.8
1981	6414.7	925.0	79.8	67.4	79.5	67.4	79.2	66.7	8018	91.5
1982	5709.6	925.0	70.8	67.8	70.8	67.8	70.5	67.1	6665	76.1
1983	7164.8	925.0	88.0	70.0	87.5	69.9	88.4	69.5	7803	89.1
1984	6650.1	925.0	82.0	71.2	81.7	71.1	81.8	70.7	7321	83.3
1985	7008.1	925.0	86.5	72.6	86.3	72.5	86.5	72.1	8059	92.0
1986	5924.1	925.0	73.3	72.6	73.3	72.5	73.1	72.2	6677	76.2
1987	8113.0	1000.0	93.5	74.3	92.7	74.2	92.6	73.8	8255	94.2
1988	6620.3	925.0	81.7	74.9	81.7	74.7	81.5	74.4	7519	85.6
1989	4577.0	925.0	56.4	73.6	56.0	73.5	56.5	73.2	4993	57.0
1990	0.0	925.0	0.0	69.1	0.0	69.0	0.0	68.7	0	0.0
1991	3934.0	925.0	49.9	68.0	49.9	67.8	48.5	67.5	6385	72.9
1992	7191.6	925.0	88.6	69.1	88.1	69.0	88.5	68.7	7995	91.0
1993	6520.4	925.0	83.5	69.9	81.7	69.6	80.5	69.3	7354	83.9
1994	5531.2	925.0	77.7	70.3	77.6	70.0	68.3	69.3	6956	79.4
1995	0.0	925.0	0.0	67.0	0.0	66.7	0.0	66.0	0	0.0
1996	3852.8	925.0	47.6	66.1	47.5	65.9	47.4	65.2	4454	50.7
1997	6872.4	925.0	88.6	67.1	86.1	66.7	84.8	66.0	7785	88.9
1998	5630.3	925.0	69.8	67.2	68.8	66.8	69.5	66.1	6220	71.0
1999	6637.9	925.0	81.8	67.7	81.3	67.4	81.9	66.8	7431	84.8
2000	6317.8	925.0	78.5	68.2	77.2	67.8	77.8	67.2	7069	80.5
2001	7097.8	925.0	89.2	68.9	87.4	68.5	87.6	67.9	7923	90.4
2002	5824.6	925.0	72.4	69.1	71.2	68.6	71.9	68.1	7104	81.1
2003	7446.3	925.0	95.0	69.9	92.2	69.4	91.9	68.9	8495	97.0
2004	1328.5	925.0	18.2	68.2	16.7	67.6	16.4	67.2	1715	19.5
2005	7145.4	925.0	93.5	69.0	88.5	68.3	88.2	67.8	8255	94.2
2006	6802.1	925.0	83.9	69.5	83.9	68.8	83.9	68.3	7651	87.3
2007	7538.3	925.0	93.1	70.2	92.0	69.5	93.0	69.1	8306	94.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					109	
B. Refuelling without a maintenance					7	
C. Inspection, maintenance or repair combined with refuelling	454			1004		
D. Inspection, maintenance or repair without refuelling				710	0	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				7		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				199		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					6	
Subtotal	454	0	0	1920	122	0
Total	454			2042		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		18
14. Safety Systems		7
15. Reactor Cooling Systems		34
17. Safety I&C Systems (excluding reactor I&C)		1
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		4
35. All other I&C Systems		2
41. Main Generator Systems		2
42. Electrical Power Supply Systems		3
Total	0	74

RU-16 LENINGRAD-2

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 22000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6461.4 GW(e).h
Energy Availability Factor: 79.0%
Load Factor: 79.7%
Operating Factor: 80.8%
Energy Unavailability Factor: 21.0%
Total Off-line Time: 1683 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	661.7	614.8	691.2	671.4	698.6	557.2	663.5	15.6	0.0	508.7	676.0	702.8	6461.4
EAF (%)	95.8	98.6	99.2	98.9	100.0	84.2	96.7	3.1	0.0	73.6	99.5	98.9	79.0
UCF (%)	99.6	99.3	99.7	98.9	100.0	88.5	99.9	3.1	0.0	73.6	99.5	100.0	80.1
LF (%)	96.1	98.9	100.4	101.0	101.5	83.7	96.4	2.3	0.0	73.8	101.5	102.1	79.7
OF (%)	100.0	100.0	99.9	100.1	100.0	90.1	100.0	3.4	0.0	76.8	100.0	100.0	80.8
EUF (%)	4.2	1.4	0.8	1.1	0.0	15.8	3.3	96.9	100.0	26.4	0.5	1.1	21.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.9	100.0	18.4	0.0	0.0	18.0
UCLF (%)	0.4	0.7	0.3	1.1	0.0	11.5	0.2	0.0	0.0	8.0	0.5	0.0	1.9
XUF (%)	3.8	0.8	0.6	0.0	0.0	4.3	3.1	0.1	0.0	0.0	0.0	1.1	1.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 75585 MWH. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.08.02 TO 07.10.06. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Jun 1970
Date of First Criticality: 06 May 1975
Date of Grid Connection: 11 Jul 1975
Date of Commercial Operation: 11 Feb 1976

Lifetime Generation: 180468.0 GW(e).h
Cumulative Energy Availability Factor: 69.1%
Cumulative Load Factor: 68.9%
Cumulative Unit Capability Factor: 70.0%
Cumulative Energy Unavailability Factor: 30.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	4873.3	925.0	67.9	67.9	67.9	67.9	65.5	65.5	6910	85.9
1977	5413.7	925.0	67.2	67.5	67.1	67.5	66.8	66.2	7337	83.8
1978	6310.8	925.0	78.8	71.4	78.8	71.3	77.9	70.2	8008	91.4
1979	5633.7	925.0	70.1	71.0	70.1	71.0	69.5	70.0	6954	79.4
1980	6351.8	925.0	78.8	72.6	78.6	72.6	78.2	71.7	7960	90.6
1981	5177.2	925.0	62.0	70.8	62.0	70.8	63.9	70.4	6057	69.1
1982	7266.8	925.0	90.4	73.7	89.9	73.5	89.7	73.2	8125	92.8
1983	6790.8	925.0	84.2	75.0	83.6	74.8	83.8	74.5	7479	85.4
1984	7145.9	925.0	87.6	76.4	87.4	76.2	87.9	76.0	7881	89.7
1985	5962.6	925.0	74.4	76.2	74.3	76.0	73.6	75.8	6604	75.4
1986	7152.3	925.0	88.4	77.3	88.1	77.1	88.3	76.9	7914	90.3
1987	7228.2	1000.0	83.7	77.9	83.0	77.7	82.5	77.4	7513	85.8
1988	6814.9	925.0	83.6	78.3	83.6	78.1	83.9	77.9	7417	84.4
1989	6111.5	925.0	75.8	78.2	75.6	77.9	75.4	77.7	7102	81.1
1990	5998.3	925.0	75.5	78.0	75.3	77.8	74.0	77.5	8125	92.8
1991	4410.8	925.0	56.4	76.6	56.3	76.4	54.4	76.1	7204	82.2
1992	0.0	925.0	0.0	72.1	0.0	71.9	0.0	71.6	0	0.0
1993	0.0	925.0	0.0	68.1	0.0	67.9	0.0	67.6	0	0.0
1994	164.1	925.0	2.3	64.6	2.3	64.5	2.0	64.1	660	7.5
1995	6812.0	925.0	93.4	66.1	86.2	65.6	84.1	65.1	8280	94.5
1996	7244.9	925.0	89.4	67.2	89.1	66.7	89.2	66.3	7922	90.2
1997	6587.1	925.0	83.1	67.9	82.6	67.4	81.3	67.0	7342	83.8
1998	5916.7	925.0	73.4	68.2	72.5	67.6	73.0	67.2	6643	75.8
1999	6557.8	925.0	80.6	68.7	80.2	68.1	80.9	67.8	7299	83.3
2000	7252.5	925.0	90.1	69.5	88.6	69.0	89.3	68.7	7972	90.8
2001	7073.5	925.0	88.5	70.3	86.6	69.6	87.3	69.4	7904	90.2
2002	7024.9	925.0	88.7	70.9	86.6	70.3	86.7	70.0	7961	90.9
2003	7134.4	925.0	90.9	71.7	88.0	70.9	88.0	70.7	8298	94.7
2004	6711.5	925.0	86.4	72.2	82.9	71.3	82.6	71.1	7832	89.2
2005	3763.2	925.0	50.1	71.4	46.6	70.5	46.4	70.3	4557	52.0
2006	1461.4	925.0	18.1	69.7	18.1	68.8	18.0	68.6	1760	20.1
2007	6461.4	925.0	80.1	70.0	79.0	69.1	79.7	68.9	7077	80.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		71			79	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	1612			666		
D. Inspection, maintenance or repair without refuelling				999	9	
E. Testing of plant systems or components				3	1	
G. Major back-fitting, refurbishment or upgrading activities without refuelling				344		
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Subtotal	1612	71	0	2012	92	1
Total		1683			2105	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1976 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		8
12. Reactor I&C Systems		7
13. Reactor Auxiliary Systems		6
15. Reactor Cooling Systems		18
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries		5
32. Feedwater and Main Steam System	71	
35. All other I&C Systems		1
42. Electrical Power Supply Systems		4
Total	71	52

RU-34 LENINGRAD-3

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 22000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3756.0 GW(e).h
Energy Availability Factor: 47.0%
Load Factor: 46.4%
Operating Factor: 55.0%
Energy Unavailability Factor: 53.0%
Total Off-line Time: 3940 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	674.6	622.6	636.0	659.6	365.6	490.2	307.3	0.0	0.0	0.0	0.0	0.0	3756.0
EAF (%)	98.3	99.9	93.2	98.8	56.1	75.8	47.2	0.0	0.0	0.0	0.0	0.0	47.0
UCF (%)	98.7	100.0	100.0	100.0	99.7	100.0	54.6	0.0	0.0	0.0	0.0	0.0	54.1
LF (%)	98.0	100.2	92.4	99.2	53.1	73.6	44.7	0.0	0.0	0.0	0.0	0.0	46.4
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	64.1	0.0	0.0	0.0	0.0	0.0	55.0
EUF (%)	1.7	0.1	6.8	1.2	43.9	24.2	52.8	100.0	100.0	100.0	100.0	100.0	53.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	45.4	100.0	100.0	100.0	100.0	100.0	45.8
UCLF (%)	1.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
XUF (%)	0.4	0.1	6.8	1.2	43.7	24.2	7.4	0.0	0.0	0.0	0.0	0.0	7.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, JUNE, JULY. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 28400 MWH. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.07.20 TO 07.12.31. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Dec 1973
Date of First Criticality: 17 Sep 1979
Date of Grid Connection: 07 Dec 1979
Date of Commercial Operation: 29 Jun 1980

Lifetime Generation: 155601.0 GW(e).h
Cumulative Energy Availability Factor: 69.5%
Cumulative Load Factor: 68.4%
Cumulative Unit Capability Factor: 70.7%
Cumulative Energy Unavailability Factor: 30.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	3623.6	925.0	77.4	77.4	77.4	77.4	76.3	76.3	4488	87.4
1981	6553.6	925.0	81.7	80.1	81.3	79.9	80.9	79.2	7528	85.9
1982	6413.3	925.0	80.8	80.4	80.3	80.0	79.1	79.2	7448	85.0
1983	5708.4	925.0	71.3	77.8	70.9	77.5	70.4	76.7	6809	77.7
1984	7214.9	925.0	89.8	80.4	89.2	80.1	88.8	79.4	8060	91.8
1985	6831.9	925.0	85.4	81.3	84.9	80.9	84.3	80.3	7835	89.4
1986	6890.9	925.0	86.4	82.1	85.9	81.7	85.0	81.0	7935	90.6
1987	6010.3	1000.0	70.4	80.5	69.4	79.9	68.6	79.2	6362	72.6
1988	6951.7	925.0	86.5	81.2	86.5	80.7	85.6	80.0	7885	89.8
1989	6938.1	925.0	86.2	81.7	85.9	81.2	85.6	80.6	7455	85.1
1990	7531.9	925.0	93.0	82.7	92.4	82.3	93.0	81.7	8280	94.5
1991	6506.6	925.0	80.6	82.6	80.6	82.1	80.3	81.6	7197	82.2
1992	5516.6	925.0	68.5	81.4	68.4	81.0	67.9	80.5	6122	69.7
1993	7143.8	925.0	90.1	82.1	88.9	81.6	88.2	81.1	7966	90.9
1994	6631.8	925.0	92.4	82.8	91.0	82.3	81.8	81.1	8135	92.9
1995	3586.0	925.0	49.4	80.7	46.5	80.0	44.3	78.8	4332	49.5
1996	0.0	925.0	0.0	75.8	0.0	75.2	0.0	74.0	0	0.0
1997	0.0	925.0	0.0	71.5	0.0	70.9	0.0	69.8	0	0.0
1998	1386.5	925.0	17.5	68.6	17.4	68.1	17.1	67.0	1610	18.4
1999	7853.1	925.0	99.7	70.2	97.1	69.5	96.9	68.5	8701	99.3
2000	6352.8	925.0	79.6	70.7	78.2	70.0	78.2	69.0	7169	81.6
2001	6173.5	925.0	78.9	71.0	76.6	70.3	76.2	69.3	7007	80.0
2002	2514.7	925.0	33.6	69.4	31.9	68.6	31.0	67.7	3332	38.0
2003	6729.2	925.0	86.6	70.1	84.5	69.2	83.0	68.3	8100	92.5
2004	6909.1	925.0	90.9	71.0	86.5	69.9	85.0	69.0	8426	95.9
2005	4447.3	925.0	61.5	70.6	61.1	69.6	54.9	68.4	5397	61.6
2006	7332.1	925.0	89.9	71.3	89.9	70.4	90.5	69.3	8274	94.5
2007	3756.0	925.0	54.1	70.7	47.0	69.5	46.4	68.4	4820	55.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					55	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	3939			425		
D. Inspection, maintenance or repair without refuelling				1362		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				187		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				114		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	7
Subtotal	3939	0	0	2088	59	7
Total		3939			2154	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		11
14. Safety Systems		1
15. Reactor Cooling Systems		8
17. Safety I&C Systems (excluding reactor I&C)		8
31. Turbine and auxiliaries		6
32. Feedwater and Main Steam System		1
41. Main Generator Systems		3
42. Electrical Power Supply Systems		12
Total	0	50

RU-35 LENINGRAD-4

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 22000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4827.4 GW(e).h
Energy Availability Factor: 59.7%
Load Factor: 59.6%
Operating Factor: 65.2%
Energy Unavailability Factor: 40.3%
Total Off-line Time: 3047 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	437.7	561.6	427.0	677.3	670.9	664.1	683.0	705.8	4827.4
EAF (%)	0.0	0.0	0.1	1.1	65.9	85.9	64.0	99.5	100.0	95.8	100.0	100.0	59.7
UCF (%)	0.0	0.0	0.1	3.6	100.0	100.0	73.8	99.9	100.0	95.8	100.0	100.0	64.8
LF (%)	0.0	0.0	0.0	0.0	63.6	84.3	62.0	98.4	100.7	96.4	102.5	102.6	59.6
OF (%)	0.0	0.0	0.0	3.1	100.0	100.0	74.5	100.0	100.0	100.0	100.0	100.0	65.2
EUF (%)	100.0	100.0	99.9	98.9	34.1	14.1	36.0	0.5	0.0	4.2	0.0	0.0	40.3
PUF (%)	100.0	100.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.9
UCLF (%)	0.0	0.0	91.1	96.4	0.0	0.0	26.2	0.1	0.0	4.2	0.0	0.0	18.2
XUF (%)	0.0	0.0	0.0	2.4	34.1	14.1	9.8	0.4	0.0	0.0	0.0	0.0	5.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, AUGUST. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 72453 MWH. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.01.01 TO 07.03.03. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

Historical Summary

Date of Construction Start:	01 Feb 1975	Lifetime Generation:	153350.0 GW(e).h
Date of First Criticality:	29 Dec 1980	Cumulative Energy Availability Factor:	71.7%
Date of Grid Connection:	09 Feb 1981	Cumulative Load Factor:	70.7%
Date of Commercial Operation:	29 Aug 1981	Cumulative Unit Capability Factor:	73.0%
		Cumulative Energy Unavailability Factor:	28.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	2582.8	925.0	76.9	76.9	76.9	76.9	76.0	76.0	3169	86.3
1982	6715.2	925.0	83.7	81.7	83.6	81.6	82.9	80.8	7609	86.9
1983	6844.2	925.0	86.1	83.5	85.3	83.1	84.5	82.3	8159	93.1
1984	6126.3	925.0	74.9	81.0	74.4	80.6	75.4	80.3	6803	77.4
1985	7335.3	925.0	91.2	83.3	90.9	82.9	90.5	82.6	8309	94.9
1986	7060.9	925.0	88.7	84.3	87.6	83.8	87.1	83.5	7826	89.3
1987	7319.2	1000.0	85.0	84.4	84.1	83.9	83.6	83.5	7530	86.0
1988	6050.4	925.0	74.8	83.1	74.8	82.6	74.5	82.3	6667	75.9
1989	7409.7	925.0	91.9	84.2	91.5	83.7	91.4	83.3	8185	93.4
1990	7762.6	925.0	96.1	85.4	95.4	84.9	95.8	84.7	8588	98.0
1991	6130.7	925.0	76.8	84.6	76.1	84.1	75.7	83.8	6870	78.4
1992	5618.1	925.0	70.8	83.4	70.3	82.9	69.2	82.5	6617	75.3
1993	6735.7	925.0	87.6	83.7	85.3	83.1	83.1	82.6	7762	88.6
1994	6167.1	925.0	83.2	83.7	82.1	83.0	76.1	82.1	7340	83.8
1995	6141.0	925.0	86.1	83.9	83.0	83.0	75.8	81.7	7270	83.0
1996	7079.7	925.0	88.8	84.2	88.3	83.3	87.1	82.0	8048	91.6
1997	7644.7	925.0	98.2	85.0	95.9	84.1	94.3	82.8	8760	100.0
1998	3682.0	925.0	47.3	82.9	46.0	81.9	45.4	80.6	4341	49.6
1999	0.0	925.0	0.0	78.4	0.0	77.5	0.0	76.3	0	0.0
2000	0.0	925.0	0.0	74.4	0.0	73.5	0.0	72.4	0	0.0
2001	3585.7	925.0	45.5	73.0	44.6	72.1	44.3	71.0	4387	50.1
2002	7528.5	925.0	97.6	74.1	93.9	73.1	92.9	72.0	8760	100.0
2003	1957.2	925.0	26.0	72.0	24.7	71.0	24.2	69.9	2399	27.4
2004	7232.2	925.0	92.3	72.8	89.6	71.8	89.0	70.7	8243	93.8
2005	6730.1	925.0	89.3	73.5	83.8	72.3	83.0	71.2	7838	89.5
2006	5611.9	925.0	69.4	73.3	69.4	72.1	69.3	71.1	6197	70.7
2007	4827.4	925.0	64.8	73.0	59.7	71.7	59.6	70.7	5713	65.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		190			41	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling				1280		
D. Inspection, maintenance or repair without refuelling				311		
E. Testing of plant systems or components					0	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				235		
G. Major back-fitting, refurbishment or upgrading activities without refuelling	1464	1393		94		
J. Grid failure or grid unavailability					2	11
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					28	1
S. Fuel management limitation (including high flux tilt, stretch out or coast-down operation)					0	
Subtotal	1464	1583	0	1920	71	12
Total		3047			2003	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		1
12. Reactor I&C Systems		2
15. Reactor Cooling Systems		21
16. Steam generation systems		2
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		5
41. Main Generator Systems		2
42. Electrical Power Supply Systems	190	2
Total	190	37

RU-9 NOVOVORONEZH-3

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 385.0 MW(e)
Design Net Capacity: 385.0 MW(e)
Design Discharge Burnup: 28600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1713.5 GW(e).h
Energy Availability Factor: 52.3%
Load Factor: 50.8%
Operating Factor: 70.2%
Energy Unavailability Factor: 47.7%
Total Off-line Time: 2607 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	206.2	177.3	176.8	154.4	104.7	0.0	0.0	4.8	226.6	249.9	167.3	245.6	1713.5
EAF (%)	73.8	70.6	64.4	58.5	38.4	0.4	0.4	3.6	83.2	88.0	90.2	59.1	52.3
UCF (%)	73.8	70.6	64.4	58.5	38.4	0.4	0.4	3.6	83.6	88.7	90.2	59.1	52.4
LF (%)	72.0	68.5	61.7	55.8	36.6	0.0	0.0	1.7	81.7	87.1	60.3	85.7	50.8
OF (%)	100.0	100.0	99.9	100.1	67.9	0.0	0.0	6.6	100.0	100.0	71.0	100.0	70.2
EUF (%)	26.2	29.4	35.6	41.5	61.6	99.6	99.6	96.4	16.8	12.0	9.8	40.9	47.7
PUF (%)	0.0	0.0	0.0	0.0	54.8	99.6	0.0	0.0	0.0	0.0	0.0	27.8	15.2
UCLF (%)	26.2	29.4	35.6	41.5	6.8	0.0	99.7	96.4	16.4	11.3	9.8	13.1	32.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.05.22 TO 07.06.30. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Jul 1967
Date of First Criticality: 22 Dec 1971
Date of Grid Connection: 27 Dec 1971
Date of Commercial Operation: 29 Jun 1972

Lifetime Generation: 85635.0 GW(e).h
Cumulative Energy Availability Factor: 71.4%
Cumulative Load Factor: 70.6%
Cumulative Unit Capability Factor: 72.1%
Cumulative Energy Unavailability Factor: 28.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1972	1319.4	385.0	76.7	76.7	76.7	76.7	66.7	66.7	4397	85.6
1973	1877.2	385.0	57.9	64.8	57.9	64.8	55.7	59.7	7114	81.2
1974	2630.0	385.0	79.0	70.3	79.0	70.3	78.0	66.8	7990	91.2
1975	1967.9	385.0	58.0	66.9	58.0	66.9	58.4	64.4	6695	76.4
1976	2221.4	385.0	66.6	66.8	66.6	66.8	65.7	64.7	7534	85.8
1977	2786.3	385.0	82.1	69.6	82.1	69.6	82.6	67.9	7851	89.6
1978	2903.8	385.0	85.8	72.0	85.8	72.0	86.1	70.7	7962	90.9
1979	2632.9	385.0	77.9	72.8	77.9	72.8	78.1	71.7	7477	85.4
1980	2844.6	385.0	84.2	74.1	84.2	74.1	84.3	73.1	8246	94.1
1981	2827.2	385.0	84.0	75.1	84.0	75.1	83.8	74.2	7934	90.6
1982	2770.5	385.0	82.6	75.8	82.6	75.8	82.1	75.0	8037	91.7
1983	2470.0	385.0	74.1	75.7	74.1	75.7	73.2	74.8	7158	81.7
1984	3056.5	385.0	89.8	76.8	89.8	76.8	90.4	76.1	8185	93.2
1985	3003.8	385.0	88.9	77.7	88.9	77.7	89.1	77.0	8195	93.6
1986	2705.5	385.0	80.5	77.9	80.5	77.9	80.2	77.3	8048	91.9
1987	2321.9	417.0	66.5	77.1	66.5	77.1	63.6	76.3	6361	72.6
1988	2906.1	385.0	91.0	77.9	91.0	77.9	85.9	76.9	8110	92.3
1989	1984.6	385.0	66.0	77.3	66.0	77.3	58.8	75.9	6040	68.9
1990	2767.4	385.0	85.6	77.7	84.4	77.7	82.1	76.2	8611	98.3
1991	1614.0	385.0	49.2	76.3	48.7	76.2	47.9	74.8	5176	59.1
1992	2580.4	385.0	76.9	76.3	76.2	76.2	76.3	74.8	6991	79.6
1993	1810.5	385.0	53.8	75.3	53.0	75.1	53.7	73.9	4991	57.0
1994	2714.6	385.0	82.0	75.6	79.1	75.3	80.5	74.1	7300	83.3
1995	1364.0	385.0	41.3	74.1	40.6	73.8	40.4	72.7	3945	45.0
1996	1947.0	385.0	58.8	73.5	57.1	73.1	57.6	72.1	5510	62.7
1997	2624.0	385.0	79.7	73.7	77.4	73.3	77.8	72.3	7075	80.8
1998	2535.6	385.0	76.4	73.8	74.3	73.3	75.2	72.4	6822	77.9
1999	1919.3	385.0	61.4	73.4	57.1	72.8	56.9	71.9	5669	64.7
2000	2621.5	385.0	79.8	73.6	77.2	72.9	77.5	72.1	7131	81.2
2001	1293.4	385.0	38.5	72.4	38.2	71.7	38.3	70.9	3529	40.3
2002	2431.9	385.0	72.6	72.4	71.9	71.7	72.1	71.0	6415	73.2
2003	2335.0	385.0	69.6	72.3	68.9	71.7	69.2	70.9	6236	71.2
2004	2313.6	385.0	71.3	72.3	69.7	71.6	68.4	70.8	7282	82.9
2005	2472.1	385.0	75.7	72.4	74.2	71.7	73.3	70.9	7233	82.6
2006	2684.0	385.0	82.5	72.7	80.1	71.9	79.6	71.2	7621	87.0
2007	1713.5	385.0	52.4	72.1	52.3	71.4	50.8	70.6	6153	70.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1452			120	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	959			1445		
D. Inspection, maintenance or repair without refuelling	196			138		
J. Grid failure or grid unavailability						1
S. Fuel management limitation (including high flux tilt, stretch out or coast-down operation)					5	
Z. Others					6	
Subtotal	1155	1452	0	1583	131	1
Total		2607			1715	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	13	1
12. Reactor I&C Systems		14
15. Reactor Cooling Systems		1
16. Steam generation systems	1439	63
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		11
35. All other I&C Systems		0
42. Electrical Power Supply Systems		1
Total	1452	93

RU-11 NOVOVORONEZH-4

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 385.0 MW(e)
Design Net Capacity: 385.0 MW(e)
Design Discharge Burnup: 28600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2290.3 GW(e).h
Energy Availability Factor: 67.9%
Load Factor: 67.9%
Operating Factor: 74.1%
Energy Unavailability Factor: 32.1%
Total Off-line Time: 2272 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	295.1	268.8	196.6	258.5	260.3	247.4	249.7	239.4	92.8	0.0	0.0	181.7	2290.3
EAF (%)	99.8	100.0	70.0	93.5	91.3	90.2	88.5	85.2	34.7	0.4	0.4	62.2	67.9
UCF (%)	99.9	100.0	70.0	93.5	93.3	92.5	91.9	90.8	36.2	0.4	0.4	62.2	69.1
LF (%)	103.0	103.9	68.6	93.4	90.9	89.3	87.2	83.6	33.5	0.0	0.0	63.4	67.9
OF (%)	100.0	100.0	82.7	100.1	100.0	100.0	100.0	100.0	41.1	0.0	0.0	65.7	74.1
EUF (%)	0.2	0.0	30.0	6.5	8.7	9.8	11.5	14.8	65.3	99.6	99.6	37.8	32.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.2	99.6	99.6	3.2	21.8
UCLF (%)	0.2	0.0	30.0	6.5	6.7	7.5	8.1	9.2	4.6	0.0	0.0	34.6	9.1
XUF (%)	0.0	0.0	0.0	0.0	2.0	2.3	3.4	5.6	1.5	0.0	0.0	0.0	1.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 22524 MWH. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.09.13 TO 07.12.01. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start:	01 Jul 1967	Lifetime Generation:	90875.0 GW(e).h
Date of First Criticality:	25 Dec 1972	Cumulative Energy Availability Factor:	77.4%
Date of Grid Connection:	28 Dec 1972	Cumulative Load Factor:	76.9%
Date of Commercial Operation:	24 Mar 1973	Cumulative Unit Capability Factor:	78.8%
		Cumulative Energy Unavailability Factor:	22.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	2360.2	385.0	85.8	85.8	85.8	85.8	83.5	83.5	6838	93.1
1974	2411.8	385.0	71.3	77.9	71.3	77.9	71.5	77.0	7159	81.7
1975	2644.9	385.0	75.6	77.1	75.6	77.1	78.4	77.5	7950	90.8
1976	2924.1	385.0	84.5	79.0	84.5	79.0	86.5	79.8	7963	90.7
1977	2822.9	385.0	81.3	79.5	81.3	79.5	83.7	80.6	7637	87.2
1978	2658.5	385.0	78.2	79.3	78.2	79.3	78.8	80.3	7388	84.3
1979	2442.2	385.0	72.4	78.3	72.4	78.3	72.4	79.2	6888	78.6
1980	2842.9	385.0	84.1	79.0	84.1	79.0	84.1	79.8	7690	87.5
1981	3019.9	385.0	90.0	80.3	90.0	80.3	89.6	80.9	8278	94.5
1982	2797.5	385.0	83.9	80.6	83.9	80.6	82.9	81.1	8278	94.5
1983	2950.3	385.0	89.2	81.4	89.2	81.4	87.5	81.7	8216	93.8
1984	2974.1	385.0	87.9	82.0	87.9	82.0	87.9	82.2	7982	90.9
1985	3097.9	385.0	91.3	82.7	91.3	82.7	91.9	83.0	8250	94.2
1986	2792.2	385.0	82.6	82.7	82.6	82.7	82.8	83.0	7688	87.8
1987	3262.7	417.0	91.7	83.3	91.7	83.3	89.3	83.4	8252	94.2
1988	2529.4	385.0	80.0	83.1	80.0	83.1	74.8	82.9	7152	81.4
1989	2710.3	385.0	90.2	83.5	90.2	83.5	80.4	82.7	8357	95.4
1990	2244.7	385.0	70.5	82.8	69.6	82.8	66.6	81.8	6622	75.6
1991	1827.6	385.0	58.2	81.5	58.0	81.5	54.2	80.4	5540	63.2
1992	2853.4	385.0	87.3	81.8	82.4	81.5	84.4	80.6	8163	92.9
1993	2613.7	385.0	79.7	81.7	76.6	81.3	77.5	80.4	7204	82.2
1994	1954.3	385.0	66.9	81.0	56.6	80.1	57.9	79.4	6033	68.9
1995	2120.0	385.0	65.5	80.4	62.2	79.4	62.9	78.7	5818	66.4
1996	3080.3	385.0	93.8	80.9	90.4	79.8	91.1	79.2	8362	95.2
1997	2235.5	385.0	70.3	80.5	67.0	79.3	66.3	78.7	6690	76.4
1998	2714.9	385.0	83.2	80.6	80.2	79.3	80.5	78.7	7366	84.1
1999	1791.5	385.0	54.9	79.6	53.2	78.4	53.1	77.8	4927	56.2
2000	2474.3	385.0	74.6	79.5	73.1	78.2	73.2	77.6	6784	77.2
2001	2656.0	385.0	80.7	79.5	79.2	78.2	78.8	77.7	7173	81.9
2002	2184.8	385.0	65.4	79.0	64.2	77.8	64.8	77.2	5857	66.9
2003	2583.1	385.0	78.8	79.0	76.8	77.7	76.6	77.2	6950	79.3
2004	2714.0	385.0	83.7	79.2	80.8	77.8	80.3	77.3	7685	87.5
2005	2433.4	385.0	75.3	79.1	73.1	77.7	72.2	77.2	7228	82.5
2006	2575.1	385.0	81.3	79.1	76.5	77.6	76.4	77.1	7636	87.2
2007	2290.3	385.0	69.1	78.8	67.9	77.4	67.9	76.9	6488	74.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1973 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		359			51	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	1913			1053		
D. Inspection, maintenance or repair without refuelling				126		
E. Testing of plant systems or components				16		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				77		
J. Grid failure or grid unavailability						6
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				2	18	
S. Fuel management limitation (including high flux tilt, stretch out or coast-down operation)					11	
Subtotal	1913	359	0	1274	82	6
Total		2272			1362	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1973 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	344	
12. Reactor I&C Systems		14
15. Reactor Cooling Systems		1
16. Steam generation systems		22
31. Turbine and auxiliaries	15	
32. Feedwater and Main Steam System		11
Total	359	48

RU-20 NOVORONEZH-5

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6556.3 GW(e).h
Energy Availability Factor: 78.5%
Load Factor: 78.8%
Operating Factor: 81.5%
Energy Unavailability Factor: 21.5%
Total Off-line Time: 1620 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	710.6	645.2	578.6	654.4	692.0	657.2	248.7	0.0	432.1	719.0	662.3	556.3	6556.3
EAF (%)	99.5	100.0	81.8	95.0	97.8	96.0	36.1	0.0	63.7	100.0	96.0	79.1	78.5
UCF (%)	99.5	100.0	81.8	100.0	100.0	99.0	42.2	0.0	63.7	100.0	96.1	79.1	79.8
LF (%)	100.5	101.1	81.9	95.8	97.9	96.1	35.2	0.0	63.2	101.6	96.8	78.7	78.8
OF (%)	100.0	100.0	82.8	100.1	100.0	100.0	42.6	0.0	71.0	100.0	100.0	84.8	81.5
EUF (%)	0.5	0.0	18.2	5.0	2.2	4.0	63.9	100.0	36.3	0.0	4.0	20.9	21.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	57.8	87.1	0.0	0.0	0.0	0.0	12.3
UCLF (%)	0.5	0.0	18.2	0.0	0.0	1.0	0.0	12.9	36.3	0.0	3.9	20.9	7.9
XUF (%)	0.0	0.0	0.0	5.0	2.2	3.0	6.0	0.0	0.0	0.0	0.1	0.0	1.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 36196 MWH. THE UNIT WAS IN THE INTERMEDIATE MAINTENANCE OUTAGE FROM 07.07.14 TO 07.08.27. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start:	01 Mar 1974	Lifetime Generation:	132718.0 GW(e).h
Date of First Criticality:	30 Apr 1980	Cumulative Energy Availability Factor:	62.0%
Date of Grid Connection:	31 May 1980	Cumulative Load Factor:	61.7%
Date of Commercial Operation:	20 Feb 1981	Cumulative Unit Capability Factor:	63.0%
		Cumulative Energy Unavailability Factor:	38.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	4254.5	950.0	56.4	56.4	56.4	56.4	55.9	55.9	6213	77.5
1982	5042.8	950.0	60.9	58.7	60.9	58.7	60.6	58.3	6631	75.7
1983	6607.5	950.0	79.5	65.9	79.5	65.9	79.4	65.6	7716	88.1
1984	6979.6	950.0	83.4	70.4	83.4	70.4	83.6	70.2	7742	88.1
1985	6894.3	950.0	83.1	73.0	83.1	73.0	82.8	72.8	7979	91.1
1986	5523.8	950.0	66.0	71.8	65.9	71.8	66.4	71.7	6806	77.7
1987	7052.7	1000.0	81.8	73.3	81.8	73.3	80.5	73.0	7399	84.5
1988	3017.8	950.0	36.5	68.7	36.5	68.7	36.2	68.4	3439	39.2
1989	3308.9	950.0	40.9	65.6	40.9	65.6	39.8	65.2	3778	43.1
1990	3913.3	950.0	47.7	63.8	47.6	63.8	47.0	63.4	4715	53.8
1991	5878.2	950.0	71.5	64.5	71.5	64.5	70.6	64.0	6996	79.9
1992	3752.8	950.0	45.9	62.9	45.7	62.9	45.0	62.4	5244	59.7
1993	5935.4	950.0	73.8	63.8	72.6	63.6	71.3	63.1	7448	85.0
1994	2281.9	950.0	33.2	61.6	28.9	61.2	27.4	60.6	4288	48.9
1995	4753.7	950.0	63.9	61.7	57.5	60.9	57.1	60.3	6670	76.1
1996	3861.8	950.0	46.7	60.8	46.7	60.0	46.3	59.5	4759	54.2
1997	5949.3	950.0	71.7	61.4	71.4	60.7	71.5	60.2	6854	78.2
1998	3771.8	950.0	45.5	60.5	44.9	59.8	45.3	59.3	4457	50.9
1999	4845.4	950.0	61.2	60.6	58.7	59.8	58.2	59.3	6062	69.2
2000	5278.6	950.0	65.6	60.8	63.5	59.9	63.3	59.5	6479	73.8
2001	5984.6	950.0	73.2	61.4	72.3	60.5	71.9	60.1	7508	85.7
2002	6762.2	950.0	83.1	62.4	80.7	61.4	81.3	61.0	7430	84.8
2003	6951.2	950.0	84.5	63.4	83.1	62.4	83.5	62.0	7507	85.7
2004	3610.6	950.0	43.6	62.5	43.1	61.6	43.3	61.2	4032	45.9
2005	2544.3	950.0	31.4	61.3	30.6	60.3	30.6	60.0	2861	32.7
2006	7264.4	950.0	87.8	62.3	86.7	61.4	87.3	61.1	7762	88.6
2007	6556.3	950.0	79.8	63.0	78.5	62.0	78.8	61.7	7140	81.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		544			841	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	1076			1214		
D. Inspection, maintenance or repair without refuelling				572		
Subtotal	1076	544	0	1786	842	0
Total		1620			2628	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		357
12. Reactor I&C Systems	113	22
13. Reactor Auxiliary Systems	127	3
14. Safety Systems		3
15. Reactor Cooling Systems	162	54
16. Steam generation systems	142	283
31. Turbine and auxiliaries		6
32. Feedwater and Main Steam System		20
35. All other I&C Systems		3
41. Main Generator Systems		73
42. Electrical Power Supply Systems		4
XX. Miscellaneous Systems		9
Total	544	837

RU-23 SMOLENSK-1

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 22200 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6569.7 GW(e).h
Energy Availability Factor: 80.3%
Load Factor: 81.1%
Operating Factor: 81.5%
Energy Unavailability Factor: 19.7%
Total Off-line Time: 1622 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	445.5	675.3	691.4	653.2	667.7	675.8	673.4	703.1	681.9	702.5	6569.7
EAF (%)	0.0	0.0	65.8	99.8	99.3	97.9	98.2	96.9	100.0	100.0	100.0	100.0	80.3
UCF (%)	0.0	0.0	66.4	100.0	100.0	99.3	100.0	98.8	100.0	100.0	100.0	100.0	80.8
LF (%)	0.0	0.0	64.7	101.5	100.5	98.1	97.0	98.2	101.1	102.0	102.4	102.1	81.1
OF (%)	0.0	0.0	72.2	100.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	81.5
EUf (%)	100.0	100.0	34.2	0.2	0.7	2.1	1.8	3.1	0.0	0.0	0.0	0.0	19.7
PUf (%)	100.0	100.0	33.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.7	0.0	1.2	0.0	0.0	0.0	0.0	0.2
XUF (%)	0.0	0.0	0.6	0.2	0.7	1.4	1.8	1.9	0.0	0.0	0.0	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE RUSSIA'S FEDERAL ENERGY COMMISSION. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN MARCH - MAY, SEPTEMBER - DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 55212 MWH. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.01.01 TO 07.03.09 INVOLVING PARTIAL FUEL CHANNEL REPLACEMENT. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start:	01 Oct 1975	Lifetime Generation:	142078.0 GW(e).h
Date of First Criticality:	10 Sep 1982	Cumulative Energy Availability Factor:	71.2%
Date of Grid Connection:	09 Dec 1982	Cumulative Load Factor:	70.7%
Date of Commercial Operation:	30 Sep 1983	Cumulative Unit Capability Factor:	73.7%
		Cumulative Energy Unavailability Factor:	28.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	2275.4	925.0	99.7	99.7	99.7	99.7	84.0	84.0	2547	87.0
1984	6921.4	925.0	84.2	88.1	84.2	88.1	85.2	84.9	7830	89.1
1985	5850.2	925.0	74.9	82.4	72.4	81.4	72.2	79.5	6806	77.7
1986	3039.8	925.0	37.8	69.1	37.8	68.3	37.5	66.9	3472	39.6
1987	7445.8	1000.0	86.7	73.4	86.7	72.8	85.0	71.3	7620	87.0
1988	6695.6	925.0	81.9	75.0	81.9	74.5	82.4	73.4	7288	83.0
1989	6506.5	925.0	79.7	75.7	79.3	75.3	80.3	74.4	7177	81.9
1990	6227.8	925.0	76.6	75.8	76.1	75.4	76.9	74.8	6851	78.2
1991	6693.9	925.0	81.3	76.5	81.3	76.1	82.6	75.7	7252	82.8
1992	6849.4	925.0	83.7	77.2	83.7	76.9	84.3	76.6	7563	86.1
1993	6290.6	925.0	78.4	77.3	78.0	77.0	77.6	76.7	6993	79.8
1994	4217.8	925.0	71.0	76.8	57.8	75.3	52.1	74.6	6286	71.8
1995	5002.5	925.0	77.3	76.8	63.0	74.3	61.7	73.5	6390	72.9
1996	5666.4	925.0	71.7	76.5	71.6	74.1	69.7	73.2	6604	75.2
1997	4674.5	925.0	59.1	75.3	57.8	73.0	57.7	72.2	5366	61.3
1998	3554.1	925.0	58.8	74.2	45.0	71.2	43.9	70.3	5411	61.8
1999	6478.9	925.0	83.5	74.8	80.1	71.7	80.0	70.9	7417	84.7
2000	5228.5	925.0	64.4	74.2	63.8	71.3	64.3	70.5	5738	65.3
2001	5165.1	925.0	67.4	73.8	63.2	70.8	63.7	70.2	5940	67.8
2002	6866.7	925.0	85.1	74.4	83.7	71.5	84.7	70.9	7587	86.6
2003	6711.8	925.0	84.4	74.9	82.9	72.0	82.8	71.5	7533	86.0
2004	2337.1	925.0	29.1	72.7	28.5	70.0	28.8	69.5	2592	29.5
2005	7354.1	925.0	94.7	73.7	90.6	70.9	90.7	70.4	8414	96.0
2006	5417.1	925.0	67.1	73.4	67.1	70.8	66.9	70.3	6021	68.7
2007	6569.7	925.0	80.8	73.7	80.3	71.2	81.1	70.7	7138	81.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		0			75	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling				1020		
D. Inspection, maintenance or repair without refuelling				441		
G. Major back-fitting, refurbishment or upgrading activities without refuelling	1622			357		18
J. Grid failure or grid unavailability						7
Subtotal	1622	0	0	1818	75	25
Total		1622			1918	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		17
12. Reactor I&C Systems		17
13. Reactor Auxiliary Systems		12
14. Safety Systems		9
15. Reactor Cooling Systems	0	
17. Safety I&C Systems (excluding reactor I&C)		2
32. Feedwater and Main Steam System		12
42. Electrical Power Supply Systems		0
Total	0	69

RU-24 SMOLENSK-2

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 22200 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4096.4 GW(e).h
Energy Availability Factor: 49.7%
Load Factor: 50.6%
Operating Factor: 55.7%
Energy Unavailability Factor: 50.3%
Total Off-line Time: 3882 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	673.5	627.6	389.5	0.0	0.0	0.0	0.0	32.2	278.3	684.6	704.2	706.5	4096.4
EAF (%)	97.0	99.6	57.5	-0.1	0.0	0.0	0.0	7.2	44.0	95.9	100.0	98.2	49.7
UCF (%)	99.1	100.0	65.4	-0.1	0.0	0.0	0.0	7.5	44.4	95.9	100.0	99.7	50.8
LF (%)	97.9	101.0	56.6	0.0	0.0	0.0	0.0	4.7	41.8	99.3	105.7	102.7	50.6
OF (%)	100.0	100.0	68.3	0.0	0.0	0.0	0.0	15.6	87.4	100.0	100.0	100.0	55.7
EUF (%)	3.0	0.4	42.5	100.1	100.0	100.0	100.0	92.8	56.0	4.1	0.0	1.8	50.3
PUF (%)	0.0	0.0	34.6	100.1	100.0	100.0	100.0	92.5	45.2	0.0	0.0	0.0	47.9
UCLF (%)	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	4.1	0.0	0.3	1.3
XUF (%)	2.1	0.4	7.9	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.0	1.6	1.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE RUSSIA'S FEDERAL ENERGY COMMISSION. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY - MARCH, OCTOBER - DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 82539 MWH. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.03.22 TO 07.08.27 INVOLVING PARTIAL FUEL CHANNEL REPLACEMENT. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start:	01 Jun 1976	Lifetime Generation:	133151.0 GW(e).h
Date of First Criticality:	09 Apr 1985	Cumulative Energy Availability Factor:	72.8%
Date of Grid Connection:	31 May 1985	Cumulative Load Factor:	72.7%
Date of Commercial Operation:	02 Jul 1985	Cumulative Unit Capability Factor:	75.6%
		Cumulative Energy Unavailability Factor:	27.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	3308.1	925.0	90.6	90.6	81.3	81.3	81.0	81.0	4059	91.9
1986	6667.3	925.0	82.6	85.3	82.6	82.2	82.3	81.8	7442	85.0
1987	6364.9	1000.0	74.5	80.8	74.5	79.0	72.7	78.0	6707	76.6
1988	6757.2	925.0	83.6	81.5	83.5	80.2	83.2	79.4	7594	86.5
1989	6627.3	925.0	81.9	81.6	81.5	80.5	81.8	80.0	7336	83.7
1990	6710.6	925.0	83.0	81.9	82.5	80.9	82.8	80.5	7453	85.1
1991	5796.7	925.0	71.4	80.3	71.4	79.4	71.5	79.1	6495	74.1
1992	6731.6	925.0	83.9	80.7	82.6	79.8	82.9	79.6	7472	85.1
1993	6634.1	925.0	84.9	81.2	82.7	80.2	81.9	79.9	7492	85.5
1994	5259.8	925.0	80.2	81.1	66.6	78.8	64.9	78.3	7044	80.4
1995	5337.4	925.0	80.3	81.1	66.8	77.6	65.9	77.1	6738	76.9
1996	6127.7	925.0	79.1	80.9	77.8	77.6	75.4	77.0	7010	79.8
1997	4991.0	925.0	61.7	79.4	61.6	76.4	61.6	75.8	5642	64.4
1998	5297.0	925.0	73.9	79.0	65.6	75.6	65.4	75.0	6576	75.1
1999	5362.5	925.0	69.1	78.3	66.0	74.9	66.2	74.4	6090	69.5
2000	6566.1	925.0	80.5	78.4	80.1	75.3	80.8	74.8	7108	80.9
2001	6457.6	925.0	81.0	78.6	79.0	75.5	79.7	75.1	7537	86.0
2002	3431.1	925.0	43.6	76.6	41.7	73.6	42.3	73.2	3890	44.4
2003	6438.6	925.0	81.4	76.9	79.1	73.9	79.5	73.6	7734	88.3
2004	7480.1	925.0	93.7	77.7	90.9	74.7	92.1	74.5	8312	94.6
2005	3053.4	925.0	41.7	76.0	37.7	72.9	37.7	72.7	3734	42.6
2006	7623.9	925.0	93.1	76.8	93.1	73.9	94.1	73.7	8306	94.8
2007	4096.4	925.0	50.8	75.6	49.7	72.8	50.6	72.7	4878	55.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		91			59	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling				836		
D. Inspection, maintenance or repair without refuelling				418		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				209		
G. Major back-fitting, refurbishment or upgrading activities without refuelling	3791			218		15
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					2	
Subtotal	3791	91	0	1681	64	17
Total		3882			1762	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		11
15. Reactor Cooling Systems		21
16. Steam generation systems		2
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries	91	1
42. Electrical Power Supply Systems		15
Total	91	52

RU-67 SMOLENSK-3

Operator: REA (ROSENERGOATOM, Concern)

Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: LWGR
Net Reference Unit Power at the beginning of 2007: 925.0 MW(e)
Design Net Capacity: 925.0 MW(e)
Design Discharge Burnup: 22200 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7566.3 GW(e).h
Energy Availability Factor: 92.5%
Load Factor: 93.4%
Operating Factor: 94.1%
Energy Unavailability Factor: 7.5%
Total Off-line Time: 513 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	667.4	628.5	657.7	668.0	687.0	628.7	682.7	626.3	297.1	616.3	690.6	715.9	7566.3
EAF (%)	96.5	99.6	95.8	99.8	99.5	94.4	98.8	91.5	45.4	87.9	100.0	100.0	92.5
UCF (%)	100.0	100.0	99.3	100.0	100.0	94.4	98.8	91.6	45.4	87.9	100.0	100.0	93.2
LF (%)	97.0	101.1	95.6	100.4	99.8	94.4	99.2	91.0	44.6	89.4	103.7	104.0	93.4
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	92.7	46.7	89.9	100.0	100.0	94.1
EUf (%)	3.5	0.4	4.2	0.2	0.5	5.6	1.2	8.5	54.6	12.1	0.0	0.0	7.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.6	11.2	0.0	0.0	5.4
UCLF (%)	0.0	0.0	0.7	0.0	0.0	5.6	1.2	8.4	0.0	0.8	0.0	0.0	1.4
XUF (%)	3.5	0.4	3.6	0.2	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE RUSSIA'S FEDERAL ENERGY COMMISSION. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY - DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 108074 MWH. THE UNIT WAS IN THE ROUTINE MAINTENANCE OUTAGE FROM 07.09.14 TO 07.10.04. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 May 1984 **Lifetime Generation:** 113607.0 GW(e).h
Date of First Criticality: 01 Dec 1989 **Cumulative Energy Availability Factor:** 79.2%
Date of Grid Connection: 17 Jan 1990 **Cumulative Load Factor:** 79.2%
Date of Commercial Operation: 12 Oct 1990 **Cumulative Unit Capability Factor:** 82.0%
Cumulative Energy Unavailability Factor: 20.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1990	2066.9	925.0	99.1	99.1	99.1	99.1	101.2	101.2	2208	100.0
1991	6561.7	925.0	80.9	84.5	80.9	84.5	81.0	85.0	7338	83.8
1992	6866.6	925.0	83.9	84.3	83.9	84.3	84.5	84.8	7515	85.6
1993	6596.0	925.0	82.6	83.8	81.4	83.4	81.4	83.8	7419	84.7
1994	5513.7	925.0	82.3	83.4	72.5	80.8	68.0	80.1	6701	76.5
1995	5091.0	925.0	78.2	82.4	63.2	77.5	62.8	76.8	5844	66.7
1996	6496.6	925.0	82.2	82.4	80.8	78.0	80.0	77.3	7268	82.7
1997	5559.3	925.0	69.3	80.6	69.3	76.8	68.6	76.1	6469	73.8
1998	4575.9	925.0	68.9	79.2	57.5	74.5	56.5	73.7	6162	70.3
1999	6411.0	925.0	79.3	79.2	78.2	74.9	79.1	74.3	7063	80.6
2000	6970.5	925.0	84.7	79.7	84.6	75.8	85.8	75.4	7542	85.9
2001	6951.7	925.0	87.3	80.4	85.4	76.7	85.8	76.3	7823	89.3
2002	7204.9	925.0	88.7	81.1	87.7	77.6	88.9	77.4	7831	89.4
2003	7038.2	925.0	87.1	81.5	86.3	78.2	86.9	78.1	7697	87.9
2004	7085.7	925.0	87.9	82.0	86.9	78.8	87.2	78.7	7765	88.4
2005	7303.7	925.0	93.1	82.7	90.4	79.6	90.1	79.5	8192	93.5
2006	4943.0	925.0	60.7	81.3	60.7	78.4	61.0	78.3	5631	64.3
2007	7566.3	925.0	93.2	82.0	92.5	79.2	93.4	79.2	8247	94.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1990 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		54			60	
C. Inspection, maintenance or repair combined with refuelling				762		
D. Inspection, maintenance or repair without refuelling	459			413		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				173		89
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					29	
Subtotal	459	54	0	1348	89	89
Total		513			1526	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1990 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		10
13. Reactor Auxiliary Systems		6
21. Fuel Handling and Storage Facilities		20
35. All other I&C Systems		6
41. Main Generator Systems		3
42. Electrical Power Supply Systems	54	7
99. No System Code		7
Total	54	59

RU-59 VOLGODONSK-1

Operator: REA (ROSENERGOATOM, Concern)
Contractor: FAEA (Federal Atomic Energy Agency)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7309.4 GW(e).h
Energy Availability Factor: 85.3%
Load Factor: 87.8%
Operating Factor: 86.0%
Energy Unavailability Factor: 14.7%
Total Off-line Time: 1224 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	710.8	658.1	720.4	363.5	0.0	539.8	719.7	710.0	700.1	743.9	698.2	745.0	7309.4
EAF (%)	98.1	100.0	99.9	53.0	0.0	79.0	100.0	99.1	98.7	100.0	96.8	99.8	85.3
UCF (%)	100.0	100.0	99.9	53.4	0.0	79.0	100.0	99.1	98.7	100.0	96.8	99.9	85.5
LF (%)	100.6	103.1	101.9	53.2	0.0	78.9	101.8	100.5	102.4	105.1	102.1	105.4	87.8
OF (%)	100.0	100.0	99.9	53.7	0.0	84.2	100.0	99.1	99.4	100.0	97.1	100.0	86.0
EUF (%)	1.9	0.0	0.1	47.0	100.0	21.0	0.0	0.9	1.3	0.0	3.2	0.2	14.7
PUF (%)	0.0	0.0	0.0	46.6	100.0	21.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0
UCLF (%)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.9	1.3	0.0	3.2	0.2	0.5
XUF (%)	1.9	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RUSSIAN NPPS ARE OPERATING IN THE BASELOAD MODE AGREED WITH THE FEDERAL TARIFFS SERVICE. UNIT OPERATION AT POWER LEVEL ABOVE INSTALLED CAPACITY TOOK PLACE IN JANUARY, FEBRUARY, MARCH, APRIL, JUNE, JULY, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER. ADDITIONAL ELECTRICITY GENERATION AMOUNTED TO 191199 MWH. THE UNIT WAS IN THE OVERHAUL OUTAGE FROM 07.04.17 TO 07.06.05. RADIONUCLIDES CONTENT IN THE MONITORED ENVIRONMENTAL OBJECTS IN THE PLANT VICINITY WAS ON THE LEVEL OF AVERAGE BACKGROUND VALUES TYPICAL FOR THE EUROPEAN PART OF THE RUSSIAN FEDERATION.

5. Historical Summary

Date of Construction Start: 01 Sep 1981 **Lifetime Generation:** 47319.0 GW(e).h
Date of First Criticality: 23 Feb 2001 **Cumulative Energy Availability Factor:** 84.7%
Date of Grid Connection: 30 Mar 2001 **Cumulative Load Factor:** 86.8%
Date of Commercial Operation: 25 Dec 2001 **Cumulative Unit Capability Factor:** 85.4%
Cumulative Energy Unavailability Factor: 15.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2001			Data not provided							
2002	7176.2	950.0	85.5	85.5	84.1	84.1	86.2	86.2	7543	86.1
2003	6973.9	950.0	82.6	84.0	81.3	82.7	83.8	85.0	7154	81.7
2004	7439.3	950.0	88.0	85.3	87.8	84.4	89.1	86.4	7766	88.4
2005	7232.9	950.0	86.9	85.7	85.9	84.8	86.9	86.5	7628	87.1
2006	7216.4	950.0	84.2	85.4	83.8	84.6	86.7	86.6	7386	84.3
2007	7309.4	950.0	85.5	85.4	85.3	84.7	87.8	86.8	7536	86.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2002 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		21			103	
C. Inspection, maintenance or repair combined with refuelling	1192			938		
L. Human factor related		11				
Subtotal	1192	32	0	938	103	0
Total		1224			1041	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2002 to 2007 Average Hours Lost Per Year
17. Safety I&C Systems (excluding reactor I&C)		5
31. Turbine and auxiliaries		3
33. Circulating Water System		6
41. Main Generator Systems		85
42. Electrical Power Supply Systems	21	2
Total	21	101

SK-3 BOHUNICE-2

Operator: JAVYS (JADROVA VYRADOVACIA SPOLOCNOST)

Contractor: AEE (ATOMENERGOEXPORT)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 408.0 MW(e)
Design Net Capacity: 408.0 MW(e)
Design Discharge Burnup: 35000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2743.4 GW(e).h
Energy Availability Factor: 81.0%
Load Factor: 76.8%
Operating Factor: 84.6%
Energy Unavailability Factor: 19.0%
Total Off-line Time: 1353 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	287.5	258.7	296.8	278.9	280.4	270.1	281.3	268.9	257.6	85.2	0.0	177.9	2743.4
EAF (%)	99.5	97.6	99.4	97.5	96.4	95.9	96.0	91.4	93.6	29.8	0.0	74.9	81.0
UCF (%)	100.0	98.0	100.0	98.9	99.0	100.0	100.0	95.5	100.0	38.9	0.0	74.9	83.7
LF (%)	94.7	94.4	97.8	94.9	92.4	91.9	92.7	88.6	87.7	28.1	0.0	58.6	76.8
OF (%)	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	39.2	0.0	75.8	84.6
EUF (%)	0.5	2.4	0.6	2.5	3.6	4.1	4.0	8.6	6.4	70.2	100.0	25.1	19.0
PUF (%)	0.0	0.0	0.0	0.0	1.0	0.0	0.0	2.8	0.0	61.1	100.0	25.1	15.9
UCLF (%)	0.0	2.0	0.0	1.2	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.4
XUF (%)	0.5	0.3	0.6	1.3	2.6	4.1	4.0	4.1	6.4	9.1	0.0	0.0	2.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE OPERATION OF THE BOHUNICE NUCLEAR POWER PLANT UNIT 2 WAS SAFE AND RELIABLE. BOHUNICE-2 UNIT PROVIDED SUPPORT SERVICES (ANCILLARY SERVICES) - NAMELY PRIMARY FREQUENCY CONTROL AND TERTIARY ACTIVE POWER CONTROL DURING THE YEAR.

5. Historical Summary

Date of Construction Start: 24 Apr 1972
Date of First Criticality: 15 Mar 1980
Date of Grid Connection: 26 Mar 1980
Date of Commercial Operation: 01 Jan 1981

Lifetime Generation: 73681.6 GW(e).h
Cumulative Energy Availability Factor: 75.2%
Cumulative Load Factor: 74.3%
Cumulative Unit Capability Factor: 77.3%
Cumulative Energy Unavailability Factor: 24.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	2524.9	382.0	72.9	72.9	72.9	72.9	75.5	75.5	7325	83.6
1982	2657.3	398.0	77.4	75.2	77.4	75.2	76.2	75.8	6878	78.5
1983	2946.6	398.0	84.8	78.4	84.8	78.4	84.5	78.8	7610	86.9
1984	2782.6	408.0	76.2	77.9	76.2	77.9	77.6	78.5	7304	83.2
1985	2444.7	408.0	72.6	76.8	72.3	76.7	68.4	76.4	6656	76.0
1986	2833.0	408.0	80.3	77.4	80.3	77.3	79.3	76.9	7482	85.4
1987	2902.4	408.0	86.8	78.7	82.9	78.1	81.2	77.5	7833	89.4
1988	2947.5	408.0	84.2	79.4	84.0	78.9	82.2	78.1	7757	88.3
1989	2637.8	408.0	73.8	78.8	73.6	78.3	73.8	77.6	6831	78.0
1990	2683.0	408.0	76.7	78.6	76.1	78.1	75.1	77.4	6939	79.2
1991	2583.5	408.0	72.6	78.0	72.1	77.5	72.3	76.9	6673	76.2
1992	2704.5	408.0	73.8	77.7	70.3	76.9	75.5	76.8	6774	77.1
1993	2057.4	408.0	59.3	76.2	57.6	75.4	57.6	75.3	5433	62.0
1994	2761.8	405.0	80.8	76.6	77.7	75.6	77.8	75.5	7371	84.1
1995	2989.5	408.0	83.7	77.0	79.8	75.9	83.6	76.0	6929	79.1
1996	2712.6	436.0	74.7	76.9	72.3	75.6	70.8	75.7	6705	76.3
1997	2321.0	408.0	62.8	76.1	60.4	74.7	64.9	75.0	5698	65.0
1998	1839.2	408.0	53.9	74.8	52.3	73.5	51.5	73.7	4886	55.8
1999	2278.3	408.0	68.0	74.5	63.9	73.0	63.7	73.2	6125	69.9
2000	2527.5	408.0	76.3	74.6	71.1	72.9	70.5	73.1	6715	76.4
2001	2899.3	408.0	88.3	75.2	81.8	73.3	81.1	73.5	7793	89.0
2002	2855.1	408.0	87.7	75.8	84.2	73.8	79.9	73.7	7713	88.0
2003	2614.9	408.0	80.0	76.0	76.6	73.9	73.2	73.7	7081	80.8
2004	2861.8	408.0	88.0	76.5	84.5	74.4	79.9	74.0	7977	90.8
2005	2821.6	408.0	85.2	76.8	82.7	74.7	78.9	74.2	7482	85.4
2006	2706.9	408.0	83.7	77.1	81.4	75.0	75.7	74.2	8037	91.7
2007	2743.4	408.0	83.7	77.3	81.0	75.2	76.8	74.3	7407	84.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					64	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	1352			1264		
D. Inspection, maintenance or repair without refuelling				291		
E. Testing of plant systems or components				4		
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	
Subtotal	1352	0	0	1559	65	1
Total		1352			1625	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		11
12. Reactor I&C Systems		1
13. Reactor Auxiliary Systems		14
14. Safety Systems		0
15. Reactor Cooling Systems		1
16. Steam generation systems		4
17. Safety I&C Systems (excluding reactor I&C)		13
31. Turbine and auxiliaries		1
32. Feedwater and Main Steam System		5
35. All other I&C Systems		1
42. Electrical Power Supply Systems		7
Total	0	58

SK-13 BOHUNICE-3

Operator: SE,plc (Slovenské elektrárne, a.s.)

Contractor: SKODA (SKODA CONCERN NUCLEAR POWER PLANT WORKS)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 408.0 MW(e)
 Design Net Capacity: 420.0 MW(e)
 Design Discharge Burnup: 35000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2432.6 GW(e).h
 Energy Availability Factor: 71.6%
 Load Factor: 68.1%
 Operating Factor: 76.3%
 Energy Unavailability Factor: 28.4%
 Total Off-line Time: 2073 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	270.8	244.2	274.5	265.7	277.1	261.0	162.6	0.0	0.0	111.8	278.3	286.7	2432.6
EAF (%)	95.2	95.1	95.9	94.8	94.8	94.5	55.5	0.0	0.5	38.7	98.1	98.1	71.6
UCF (%)	98.1	98.0	99.1	99.5	99.9	98.3	58.2	0.0	0.5	39.5	99.2	98.3	73.8
LF (%)	89.2	89.1	90.4	90.6	91.3	88.8	53.6	0.0	0.0	36.8	94.7	94.5	68.1
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	71.1	0.0	0.8	46.3	100.0	100.0	76.3
EUF (%)	4.8	4.9	4.1	5.2	5.2	5.5	44.5	100.0	99.5	61.3	1.9	1.9	28.4
PUF (%)	1.9	1.8	0.9	0.5	0.1	1.7	41.8	100.0	88.4	5.9	0.8	0.0	20.4
UCLF (%)	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	11.1	54.6	0.0	1.7	5.7
XUF (%)	2.9	2.9	3.2	4.7	5.1	3.8	2.6	0.0	0.0	0.9	1.1	0.2	2.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

INCONSISTENCIES IN ENERGY GENERATED ACCORDING ENERGY LOSSES TABLE ARE CAUSED BY ANCILLARY SERVICES.

5. Historical Summary

Date of Construction Start: 01 Dec 1976 Lifetime Generation: 63062.0 GW(e).h
 Date of First Criticality: 07 Aug 1984 Cumulative Energy Availability Factor: 77.2%
 Date of Grid Connection: 20 Aug 1984 Cumulative Load Factor: 75.3%
 Date of Commercial Operation: 14 Feb 1985 Cumulative Unit Capability Factor: 80.6%
 Cumulative Energy Unavailability Factor: 22.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	2435.0	408.0	76.8	76.8	76.8	76.8	74.5	74.5	6322	78.9
1986	2674.1	408.0	75.4	76.1	75.4	76.1	74.8	74.6	7089	80.9
1987	1997.4	408.0	55.5	69.0	53.7	68.4	55.9	68.2	5181	59.1
1988	2866.9	408.0	80.2	71.9	79.9	71.3	80.0	71.2	7329	83.4
1989	2992.3	408.0	85.0	74.6	84.1	73.9	83.7	73.8	7633	87.1
1990	2829.1	408.0	80.5	75.6	79.2	74.8	79.2	74.7	7376	84.2
1991	2585.6	408.0	74.2	75.4	71.9	74.4	72.3	74.3	6717	76.7
1992	3140.7	408.0	83.9	76.4	82.8	75.5	87.6	76.0	7528	85.7
1993	2973.1	408.0	86.5	77.6	83.2	76.3	83.2	76.8	7721	88.1
1994	2806.8	405.0	84.0	78.2	79.1	76.6	79.1	77.1	7423	84.7
1995	2536.7	408.0	78.1	78.2	70.1	76.0	71.0	76.5	6440	73.5
1996	3045.9	436.0	85.6	78.9	82.5	76.6	79.5	76.8	7504	85.4
1997	3096.4	440.0	87.7	79.6	84.0	77.2	80.3	77.1	7711	88.0
1998	2804.6	408.0	85.3	80.0	81.8	77.5	78.5	77.2	7571	86.4
1999	2468.5	408.0	76.5	79.8	69.7	77.0	69.1	76.6	6620	75.6
2000	2806.7	408.0	87.9	80.3	79.8	77.2	78.3	76.7	7776	88.5
2001	2687.0	408.0	86.6	80.7	76.5	77.1	75.2	76.6	7680	87.7
2002	2690.7	408.0	87.4	81.0	83.9	77.5	75.3	76.6	7711	88.0
2003	2485.0	408.0	78.3	80.9	75.5	77.4	69.5	76.2	6908	78.9
2004	2564.5	408.0	82.0	80.9	79.0	77.5	71.6	76.0	7228	82.3
2005	2587.7	408.0	79.4	80.9	76.7	77.5	72.4	75.8	7034	80.3
2006	2582.6	408.0	80.7	80.9	78.4	77.5	72.3	75.6	7106	81.1
2007	2432.6	408.0	73.8	80.6	71.6	77.2	68.1	75.3	6687	76.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		480			64	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1593			1258		
D. Inspection, maintenance or repair without refuelling				142		
J. Grid failure or grid unavailability						8
Subtotal	1593	480	0	1400	64	8
Total		2073			1472	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems		5
14. Safety Systems		1
15. Reactor Cooling Systems		16
16. Steam generation systems	480	15
17. Safety I&C Systems (excluding reactor I&C)		1
32. Feedwater and Main Steam System		11
33. Circulating Water System		1
41. Main Generator Systems		0
42. Electrical Power Supply Systems		7
Total	480	61

SK-14 BOHUNICE-4

Operator: SE,plc (Slovenské elektrárne, a.s.)

Contractor: SKODA (SKODA CONCERN NUCLEAR POWER PLANT WORKS)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 408.0 MW(e)
 Design Net Capacity: 408.0 MW(e)
 Design Discharge Burnup: 35000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2648.5 GW(e).h
 Energy Availability Factor: 78.0%
 Load Factor: 74.1%
 Operating Factor: 80.5%
 Energy Unavailability Factor: 22.0%
 Total Off-line Time: 1707 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	273.1	231.6	275.2	267.5	149.9	0.0	109.5	221.7	280.2	285.8	274.9	278.9	2648.5
EAF (%)	95.5	89.6	96.0	95.2	51.1	0.0	37.2	75.3	99.1	98.7	98.9	99.5	78.0
UCF (%)	98.1	92.1	99.1	99.5	54.7	0.0	38.5	77.1	100.0	100.0	100.0	100.0	79.9
LF (%)	90.0	84.5	90.7	91.2	49.4	0.0	36.1	73.0	95.4	94.0	93.6	91.9	74.1
OF (%)	100.0	94.6	99.9	100.1	54.8	0.0	39.0	78.4	100.0	100.0	100.0	100.0	80.5
EUF (%)	4.5	10.4	4.0	4.8	48.9	100.0	62.8	24.7	0.9	1.3	1.1	0.5	22.0
PUF (%)	1.9	1.7	0.9	0.5	45.3	100.0	61.5	0.4	0.0	0.0	0.0	0.0	17.7
UCLF (%)	0.0	6.2	0.0	0.0	0.0	0.0	0.0	22.5	0.0	0.0	0.0	0.0	2.4
XUF (%)	2.6	2.5	3.0	4.4	3.5	0.0	1.3	1.8	0.9	1.3	1.1	0.5	1.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Dec 1976 Lifetime Generation: 62068.4 GW(e).h
 Date of First Criticality: 02 Aug 1985 Cumulative Energy Availability Factor: 79.1%
 Date of Grid Connection: 09 Aug 1985 Cumulative Load Factor: 77.1%
 Date of Commercial Operation: 18 Dec 1985 Cumulative Unit Capability Factor: 82.4%
 Cumulative Energy Unavailability Factor: 20.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	298.1	408.0	100.0	100.0	100.0	100.0	98.2	98.2	744	100.0
1986	2887.9	408.0	81.0	82.5	81.0	82.5	80.8	82.2	7294	83.3
1987	3084.7	408.0	86.6	84.5	86.1	84.2	86.3	84.2	7783	88.8
1988	2786.5	408.0	78.0	82.4	77.8	82.1	77.7	82.1	7248	82.5
1989	2827.7	408.0	80.0	81.8	79.2	81.4	79.1	81.3	7548	86.2
1990	2873.8	408.0	82.0	81.8	80.7	81.3	80.4	81.2	7427	84.8
1991	2850.5	408.0	82.9	82.0	80.4	81.1	79.8	80.9	7438	84.9
1992	2711.9	408.0	73.3	80.8	70.4	79.6	75.7	80.2	6714	76.4
1993	2847.6	408.0	82.6	81.0	79.7	79.6	79.7	80.1	7341	83.8
1994	2791.4	405.0	83.9	81.3	78.7	79.5	78.7	80.0	7389	84.3
1995	2823.7	408.0	88.5	82.0	79.3	79.5	79.0	79.9	7211	82.3
1996	2834.9	436.0	79.2	81.8	76.1	79.2	74.0	79.3	6953	79.2
1997	2953.5	440.0	84.7	82.0	80.2	79.3	76.6	79.1	7469	85.3
1998	2822.4	408.0	85.7	82.3	82.4	79.5	79.0	79.1	7525	85.9
1999	2656.5	408.0	81.7	82.2	75.1	79.2	74.3	78.7	7283	83.1
2000	2431.9	408.0	76.3	81.9	68.9	78.5	67.9	78.0	6791	77.3
2001	2793.3	408.0	86.7	82.2	79.2	78.6	78.2	78.0	7721	88.1
2002	2823.2	408.0	87.9	82.5	85.0	78.9	79.0	78.1	7742	88.4
2003	2814.9	408.0	87.8	82.8	84.4	79.2	78.8	78.1	7737	88.3
2004	2390.9	408.0	77.0	82.5	74.4	79.0	66.7	77.5	6786	77.3
2005	2841.0	408.0	87.3	82.7	84.3	79.2	79.5	77.6	7671	87.6
2006	2489.3	408.0	79.3	82.5	77.0	79.1	69.6	77.2	7035	80.3
2007	2648.5	408.0	79.9	82.4	78.0	79.1	74.1	77.1	7053	80.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		197			43	
C. Inspection, maintenance or repair combined with refuelling	1510			1161		
D. Inspection, maintenance or repair without refuelling				64		
E. Testing of plant systems or components				0		
J. Grid failure or grid unavailability						0
L. Human factor related					0	
Subtotal	1510	197	0	1225	43	0
Total		1707			1268	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	36	5
15. Reactor Cooling Systems		0
16. Steam generation systems	161	25
17. Safety I&C Systems (excluding reactor I&C)		4
32. Feedwater and Main Steam System		4
33. Circulating Water System		0
35. All other I&C Systems		0
42. Electrical Power Supply Systems		0
XX. Miscellaneous Systems		1
Total	197	39

SK-6 MOCHOVCE-1

Operator: SE,plc (Slovenské elektrárne, a.s.)

Contractor: SKODA (SKODA CONCERN NUCLEAR POWER PLANT WORKS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 405.0 MW(e)
Design Net Capacity: 387.0 MW(e)
Design Discharge Burnup: 31000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3142.7 GW(e).h
Energy Availability Factor: 89.2%
Load Factor: 88.6%
Operating Factor: 90.8%
Energy Unavailability Factor: 10.8%
Total Off-line Time: 806 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	290.3	264.0	271.5	0.0	254.1	289.8	297.6	300.4	287.8	300.5	289.2	297.6	3142.7
EAF (%)	100.0	99.7	92.0	-0.1	84.3	99.7	99.3	99.5	100.0	99.5	99.0	96.6	89.2
UCF (%)	100.0	99.7	99.6	-0.1	84.9	100.0	100.0	100.0	100.0	99.5	99.0	96.6	90.0
LF (%)	96.3	97.0	90.1	0.0	84.3	99.4	98.8	99.7	98.7	99.6	99.2	98.8	88.6
OF (%)	100.0	100.0	99.9	0.0	88.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.8
EUF (%)	0.0	0.3	8.0	100.1	15.7	0.3	0.7	0.5	0.0	0.5	1.0	3.4	10.8
PUF (%)	0.0	0.3	0.4	93.5	3.6	0.0	0.0	0.0	0.0	0.5	0.9	0.4	8.2
UCLF (%)	0.0	0.0	0.0	6.7	11.6	0.0	0.0	0.0	0.0	0.0	0.1	2.9	1.8
XUF (%)	0.0	0.0	7.6	0.0	0.6	0.3	0.7	0.5	0.0	0.0	0.0	0.0	0.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

FIRST UNIT OF MOCHOVCE NPP WAS OPERATED AT FULL POWER IN A BASE LOAD MODE. A LOAD-FOLLOWING HAS BEEN REQUIRED BY DISPATCHER FOR A PERIOD. UNIT PROVIDES GRID SUPPORTING SERVICES FOR LOAD FOLLOWING - SECONDARY POWER CONTROL FOR GRID ADJUSTMENT AND TERTIARY POWER CONTROL. OVER THE REPORTING PERIOD THERE WAS NOT ANY FORCED UNPLANNED POWER REDUCING AND SHUT-DOWN. THE ONLY LOAD REDUCTION THAT COULD BE DEFERRED, BUT HAD TO BE PERFORMED WAS REPAIR OF UNTIGHT HP PART OF TG11. THROUGHOUT THE YEAR THERE WAS THE UNEXPECTED DELAY OF TWO PLANNED OUTAGES: 1G08 AND OF CONDENSER TIGHTNESS CONTROL. NO REACTOR SCRAMS OCCURRED DURING THE YEAR. OTHER FACTORS AFFECTING ENERGY GENERATION OVER THE REPORTING PERIOD WERE LIMITATIONS DUE TO FUEL MANAGEMENT AND ENVIRONMENTAL CONDITIONS (COOLING WATER TEMPERATURE LIMITS).

5. Historical Summary

Date of Construction Start: 01 Oct 1983 **Lifetime Generation:** 26193.0 GW(e).h
Date of First Criticality: 09 Jun 1998 **Cumulative Energy Availability Factor:** 81.2%
Date of Grid Connection: 04 Jul 1998 **Cumulative Load Factor:** 79.3%
Date of Commercial Operation: 29 Oct 1998 **Cumulative Unit Capability Factor:** 84.2%
Cumulative Energy Unavailability Factor: 18.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1998	784.8	408.0	97.9	97.9	96.7	96.7	87.1	87.1	2189	99.1
1999	2376.1	404.0	70.4	76.0	65.8	72.1	67.1	71.2	6397	73.0
2000	2816.9	404.0	90.0	82.2	79.4	75.3	79.4	74.8	8311	94.6
2001	2423.6	404.0	75.0	80.0	68.1	73.1	68.5	72.9	6648	75.9
2002	2914.8	405.0	86.3	81.5	83.3	75.5	82.2	75.1	7628	87.1
2003	2796.6	405.0	83.0	81.8	82.3	76.8	78.8	75.8	7324	83.6
2004	2996.0	405.0	88.6	82.8	88.1	78.6	84.2	77.1	7801	88.8
2005	2712.6	405.0	80.8	82.6	80.3	78.9	76.5	77.0	7128	81.4
2006	3059.7	405.0	90.7	83.5	90.0	80.2	86.2	78.2	7977	91.1
2007	3142.7	405.0	90.0	84.2	89.2	81.2	88.6	79.3	7954	90.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1998 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		134			60	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	672			941		
D. Inspection, maintenance or repair without refuelling				41		
H. Nuclear regulatory requirements				28		
J. Grid failure or grid unavailability						4
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					7	
L. Human factor related					1	
Subtotal	672	134	0	1010	71	4
Total		806			1085	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1998 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		38
12. Reactor I&C Systems		6
14. Safety Systems	134	
16. Steam generation systems		1
17. Safety I&C Systems (excluding reactor I&C)		4
41. Main Generator Systems		1
42. Electrical Power Supply Systems		8
Total	134	58

SK-7 MOCHOVCE-2**Operator:** SE,plc (Slovenské elektrárne, a.s.)**Contractor:** SKODA (SKODA CONCERN NUCLEAR POWER PLANT WORKS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 405.0 MW(e)
Design Net Capacity: 387.0 MW(e)
Design Discharge Burnup: 31000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3191.3 GW(e).h
Energy Availability Factor: 90.8%
Load Factor: 90.0%
Operating Factor: 92.3%
Energy Unavailability Factor: 9.2%
Total Off-line Time: 678 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	296.8	271.8	300.4	294.3	282.6	278.4	281.0	286.2	129.3	179.6	285.2	305.8	3191.3
EAF (%)	100.0	100.0	99.8	100.0	95.1	95.9	99.6	99.2	44.5	59.6	96.7	100.0	90.8
UCF (%)	100.0	100.0	99.9	100.0	95.6	97.4	99.9	100.0	46.3	59.6	96.7	100.0	91.3
LF (%)	98.5	99.9	99.7	101.1	93.8	95.5	93.3	95.0	44.3	59.5	97.8	101.5	90.0
OF (%)	100.0	100.0	99.9	100.1	97.4	100.0	100.0	100.0	46.8	65.2	97.6	100.0	92.3
EUUF (%)	0.0	0.0	0.2	0.0	4.9	4.1	0.5	0.8	55.5	40.4	3.3	0.0	9.2
PUF (%)	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	53.7	31.7	0.3	0.0	7.4
UCLF (%)	0.0	0.0	0.1	0.0	1.9	2.6	0.1	0.0	0.0	8.7	3.1	0.0	1.4
XUF (%)	0.0	0.0	0.1	0.0	0.4	1.5	0.4	0.8	1.7	0.0	0.0	0.0	0.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

SECOND UNIT OF NPP MOCHOVCE WAS OPERATED LARGELY AT FULL POWER IN A BASE LOAD MODE. A LOAD-FOLLOWING HAS BEEN REQUIRED BY DISPATCHER FOR A PERIOD. UNIT PROVIDES GRID SUPPORTING SERVICES FOR LOAD FOLLOWING - SECONDARY POWER CONTROL FOR GRID ADJUSTMENT AND TERTIARY POWER CONTROL. OVER THE REPORTING PERIOD THERE WERE A FEW HOURS OF UNPLANNED POWER DECREASE (I.E. HIGH VIBRATION OF GENERATOR'S EXCITER, UNTIGHTNESS OF ROTOR'S HYDROGEN COOLING SYSTEM, LEAKAGE AT THE 5.-TH STEAM EXTRACTION PIPE OF TG21 ...). THROUGHOUT THE YEAR THERE OCCURRED TWICE A TRANSFORMER 2BBT02 PROTECTION'S FALSE ACTUATION AND BOTH TG WERE DISCONNECTED FROM THE GRID. A DELAY OF GENERAL OVERHAUL HAD PLACE DUE TO UNPLANNED INTEGRITY CONTROL OF NUCLEAR FUEL (SIPPING). NO REACTOR SCRAMS OCCURRED DURING THE YEAR. OTHER FACTORS AFFECTING ENERGY GENERATION OVER THE REPORTING PERIOD WERE LIMITATIONS DUE TO FUEL MANAGEMENT AND ENVIRONMENTAL CONDITIONS (COOLING WATER TEMPERATURE LIMITS).

5. Historical Summary

Date of Construction Start: 01 Oct 1983
Date of First Criticality: 01 Dec 1999
Date of Grid Connection: 20 Dec 1999
Date of Commercial Operation: 11 Apr 2000

Lifetime Generation: 21718.6 GW(e).h
Cumulative Energy Availability Factor: 82.4%
Cumulative Load Factor: 77.4%
Cumulative Unit Capability Factor: 84.5%
Cumulative Energy Unavailability Factor: 17.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2000	2222.5	404.0	91.6	91.6	87.9	87.9	83.3	83.3	5912	89.6
2001	2540.9	404.0	78.2	83.9	72.1	78.9	71.8	76.8	6967	79.5
2002	2498.4	405.0	76.0	81.0	71.7	76.3	70.4	74.5	6862	78.3
2003	2964.9	405.0	87.8	82.9	87.4	79.2	83.6	76.9	7729	88.2
2004	2034.5	405.0	81.6	82.6	81.4	79.7	57.2	72.7	7210	82.1
2005	3050.9	405.0	89.5	83.8	88.5	81.2	86.0	75.0	7900	90.2
2006	2787.2	405.0	82.1	83.5	81.1	81.2	78.6	75.6	7254	82.8
2007	3191.3	405.0	91.3	84.5	90.8	82.4	90.0	77.4	8082	92.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2000 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		59			68	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	599			949		
D. Inspection, maintenance or repair without refuelling	19			119		
L. Human factor related					4	
Subtotal	618	59	0	1068	72	0
Total		677			1140	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2000 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		8
15. Reactor Cooling Systems		42
16. Steam generation systems		5
21. Fuel Handling and Storage Facilities	32	
31. Turbine and auxiliaries	27	
33. Circulating Water System		1
41. Main Generator Systems		7
42. Electrical Power Supply Systems		3
Total	59	66

SI-1 KRSKO

Operator: NEK (Nuklearna elektrarna Krško)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 666.0 MW(e)
Design Net Capacity: 632.0 MW(e)
Design Discharge Burnup: 44000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5428.2 GW(e).h
Energy Availability Factor: 90.9%
Load Factor: 93.0%
Operating Factor: 91.2%
Energy Unavailability Factor: 9.1%
Total Off-line Time: 771 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	517.9	469.4	517.0	487.3	499.7	482.6	496.8	495.1	490.9	83.1	372.1	516.4	5428.2
EAF (%)	100.0	100.0	100.0	98.7	99.0	100.0	99.4	99.5	99.8	16.2	79.6	100.0	90.9
UCF (%)	100.0	100.0	100.0	98.7	99.0	100.0	100.0	100.0	100.0	16.2	79.6	100.0	91.0
LF (%)	104.5	104.9	104.3	101.8	100.9	100.6	100.3	99.9	102.4	16.7	77.6	104.2	93.0
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	16.1	79.6	100.0	91.2
EUF (%)	0.0	0.0	0.0	1.3	1.0	0.0	0.6	0.5	0.2	83.8	20.4	0.0	9.1
PUF (%)	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	83.8	20.4	0.0	8.9
UCLF (%)	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.2	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

IN 2007 THE POWER PLANT HAD ONE UNPLANNED POWER REDUCTION AND NONE UNPLANNED SHUTDOWNS. ON 1 APRIL ONE OF THE THREE CONDENSATE PUMPS FAILED AND THE PLANT HAD TO REDUCE POWER TO 90 %. ON 12 MAY THE PLANT REDUCED POWER TO 50 % TO PERFORM A MODIFICATION ON CONDENSATE PUMPS MOTOR BEARINGS COOLING. ON 5 OCTOBER THE PLANT SHUTDOWN FOR A REFUELING OUTAGE THAT LASTED FOR 32 DAYS.

5. Historical Summary

Date of Construction Start: 30 Mar 1975
Date of First Criticality: 11 Sep 1981
Date of Grid Connection: 02 Oct 1981
Date of Commercial Operation: 01 Jan 1983

Lifetime Generation: 116406.6 GW(e).h
Cumulative Energy Availability Factor: 82.9%
Cumulative Load Factor: 81.5%
Cumulative Unit Capability Factor: 84.3%
Cumulative Energy Unavailability Factor: 17.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	3724.1	632.0	69.6	69.6	69.6	69.6	67.3	67.3	6255	71.4
1984	4207.6	632.0	79.8	74.7	79.8	74.7	75.8	71.5	7073	80.5
1985	3845.3	632.0	72.1	73.8	72.1	73.8	69.5	70.8	6421	73.3
1986	3822.0	620.0	74.8	74.1	73.7	73.8	70.4	70.7	6561	74.9
1987	4278.8	620.0	83.5	76.0	83.5	75.7	78.8	72.3	7287	83.2
1988	3935.8	620.0	77.0	76.1	76.9	75.9	72.3	72.3	6866	78.2
1989	4453.9	620.0	85.5	77.4	85.2	77.2	82.0	73.7	7500	85.6
1990	4386.8	620.0	87.1	78.6	85.4	78.3	80.8	74.6	7592	86.7
1991	4718.2	632.0	94.6	80.4	88.7	79.4	85.2	75.8	8133	92.8
1992	3767.2	632.0	73.9	79.8	68.5	78.3	68.0	75.0	6699	76.5
1993	3762.8	620.0	72.5	79.1	69.3	77.5	69.3	74.5	6493	74.1
1994	4403.5	620.0	82.1	79.4	81.1	77.8	81.1	75.0	7402	84.5
1995	4568.5	620.0	85.1	79.8	84.1	78.3	84.1	75.7	7606	86.8
1996	4361.6	620.0	79.6	79.8	79.6	78.4	80.1	76.0	7143	81.3
1997	4794.0	620.0	88.3	80.4	87.8	79.0	88.3	76.8	7824	89.3
1998	4793.6	620.0	89.5	80.9	88.0	79.6	88.3	77.5	7913	90.3
1999	4492.4	620.0	84.7	81.2	82.4	79.7	82.7	77.8	7480	85.4
2000	4548.8	646.0	82.6	81.2	80.5	79.8	80.1	78.0	7295	83.0
2001	5036.3	656.0	88.4	81.6	86.2	80.1	87.6	78.5	7790	88.9
2002	5308.8	676.0	92.0	82.2	91.1	80.7	89.6	79.1	8111	92.6
2003	4963.3	676.0	91.6	82.7	86.2	81.0	83.8	79.3	8084	92.3
2004	5212.2	676.0	91.4	83.1	89.9	81.4	87.8	79.8	8081	92.0
2005	5613.7	656.0	98.5	83.8	98.3	82.2	97.7	80.6	8664	98.9
2006	5289.5	656.0	90.1	84.1	89.9	82.5	91.3	81.0	7883	90.0
2007	5428.2	666.0	91.0	84.3	90.9	82.9	93.0	81.5	7989	91.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					133	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	771			917		
D. Inspection, maintenance or repair without refuelling				178		
E. Testing of plant systems or components				55	1	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				25		
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						0
L. Human factor related					1	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)					1	
Subtotal	771	0	0	1175	136	0
Total		771			1311	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		2
14. Safety Systems		3
15. Reactor Cooling Systems		16
16. Steam generation systems		15
31. Turbine and auxiliaries		28
32. Feedwater and Main Steam System		44
33. Circulating Water System		1
35. All other I&C Systems		0
41. Main Generator Systems		5
42. Electrical Power Supply Systems		15
Total	0	129

ZA-1 KOEBERG-1

Operator: ESKOM (ESKOM)
Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 900.0 MW(e)
Design Net Capacity: 921.0 MW(e)
Design Discharge Burnup: 36500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5747.0 GW(e).h
Energy Availability Factor: 73.6%
Load Factor: 72.9%
Operating Factor: 75.4%
Energy Unavailability Factor: 26.4%
Total Off-line Time: 2151 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	572.6	600.6	665.3	643.4	663.8	641.9	656.2	232.2	0.0	0.0	429.5	641.6	5747.0
EAF (%)	86.2	100.0	100.0	100.0	100.0	100.0	98.7	35.4	0.0	0.1	67.3	97.0	73.6
UCF (%)	90.9	100.0	100.0	100.0	100.0	100.0	100.0	39.0	0.0	0.1	67.4	97.0	74.4
LF (%)	85.5	99.3	99.4	99.4	99.1	99.1	98.0	34.7	0.0	0.0	66.3	95.8	72.9
OF (%)	91.9	100.0	100.0	100.1	100.0	100.0	100.0	39.0	0.0	0.0	78.6	97.4	75.4
EUUF (%)	13.8	0.0	0.0	0.0	0.0	0.0	1.3	64.6	100.0	99.9	32.7	3.0	26.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.0	100.0	80.8	7.1	0.0	20.9
UCLF (%)	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	25.5	3.0	4.7
XUF (%)	4.8	0.0	0.0	0.0	0.0	0.0	1.3	3.6	0.0	0.0	0.1	0.0	0.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

NONE

5. Historical Summary

Date of Construction Start: 01 Jul 1976 **Lifetime Generation:** 127092.0 GW(e).h
Date of First Criticality: 14 Mar 1984 **Cumulative Energy Availability Factor:** 70.2%
Date of Grid Connection: 04 Apr 1984 **Cumulative Load Factor:** 67.5%
Date of Commercial Operation: 21 Jul 1984 **Cumulative Unit Capability Factor:** 75.2%
Cumulative Energy Unavailability Factor: 29.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	3441.3	920.0	90.6	90.6	88.8	88.8	84.7	84.7	4110	93.1
1985	4004.3	920.0	53.5	65.9	53.5	65.3	49.7	61.4	4986	56.9
1986	3419.0	922.0	53.6	61.0	53.6	60.6	42.3	53.8	4575	52.2
1987	2864.5	920.0	61.6	61.2	61.6	60.9	35.5	48.6	4337	49.5
1988	5964.4	920.0	76.0	64.5	76.0	64.3	73.8	54.2	6791	77.3
1989	4498.1	922.0	63.2	64.2	63.2	64.1	55.2	54.4	5655	64.0
1990	3852.1	920.0	61.7	63.9	52.7	62.3	47.8	53.4	5360	61.2
1991	5976.8	920.0	76.3	65.5	74.6	64.0	74.2	56.1	6886	78.6
1992	3992.5	920.0	63.6	65.3	50.3	62.4	49.4	55.3	5697	64.9
1993	4097.9	920.0	66.4	65.4	50.5	61.1	50.8	54.9	6010	68.6
1994	5933.9	920.0	95.6	68.3	74.9	62.4	73.6	56.7	8422	96.1
1995	4576.9	920.0	65.7	68.1	56.8	61.9	56.7	56.7	5853	66.8
1996	5672.8	920.0	81.8	69.2	70.4	62.6	70.2	57.7	7260	82.7
1997	6610.7	920.0	87.4	70.5	82.3	64.1	82.0	59.5	7676	87.6
1998	7248.3	920.0	97.6	72.4	90.1	65.9	89.9	61.6	8552	97.6
1999	7051.7	920.0	88.1	73.4	83.3	67.0	87.5	63.3	7848	89.6
2000	5629.2	920.0	73.4	73.4	70.2	67.2	69.8	63.7	7250	82.7
2001	6042.5	920.0	83.0	73.9	77.1	67.7	75.0	64.3	7303	83.4
2002	7328.6	900.0	95.2	75.1	93.1	69.1	93.0	65.9	8417	96.1
2003	6413.4	900.0	84.1	75.5	81.9	69.7	81.3	66.6	7398	84.5
2004	6388.0	900.0	81.6	75.8	81.1	70.3	80.8	67.3	7358	83.8
2005	5821.0	900.0	76.8	75.8	74.7	70.5	73.8	67.6	6726	76.8
2006	4682.8	900.0	61.0	75.2	59.8	70.0	59.4	67.2	5435	62.0
2007	5747.0	900.0	74.4	75.2	73.6	70.2	72.9	67.5	6609	75.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		130			358	
B. Refuelling without a maintenance					9	
C. Inspection, maintenance or repair combined with refuelling	1776	19		1089	12	
D. Inspection, maintenance or repair without refuelling				180		
E. Testing of plant systems or components				73	0	15
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				67	32	
Z. Others		273			13	
Subtotal	1776	422	0	1409	424	15
Total		2198			1848	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems		7
13. Reactor Auxiliary Systems		1
14. Safety Systems		3
15. Reactor Cooling Systems		59
16. Steam generation systems		0
31. Turbine and auxiliaries	130	39
32. Feedwater and Main Steam System		24
33. Circulating Water System		2
41. Main Generator Systems		168
42. Electrical Power Supply Systems		49
Total	130	352

ZA-2 KOEBERG-2

Operator: ESKOM (ESKOM)
Contractor: FRAM (FRAMATOME)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 900.0 MW(e)
Design Net Capacity: 921.0 MW(e)
Design Discharge Burnup: 36500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6853.9 GW(e).h
Energy Availability Factor: 87.3%
Load Factor: 86.9%
Operating Factor: 96.1%
Energy Unavailability Factor: 12.7%
Total Off-line Time: 338 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	561.0	506.2	519.7	508.4	559.5	491.9	667.2	666.2	644.0	667.8	534.3	527.7	6853.9
EAF (%)	83.8	83.8	77.8	78.4	83.6	76.8	100.0	100.0	100.0	100.0	83.2	79.5	87.3
UCF (%)	100.0	100.0	92.7	91.4	97.6	78.4	100.0	100.0	100.0	100.0	86.2	97.1	95.3
LF (%)	83.8	83.7	77.6	78.6	83.6	75.9	99.6	99.5	99.4	99.6	82.5	78.8	86.9
OF (%)	100.0	100.0	92.7	93.3	97.6	79.3	100.0	100.0	100.0	99.9	90.6	100.0	96.1
EUUF (%)	16.2	16.2	22.2	21.6	16.4	23.2	0.0	0.0	0.0	0.0	16.8	20.5	12.7
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	7.3	8.6	2.4	21.7	0.0	0.0	0.0	0.0	13.8	2.9	4.7
XUF (%)	16.2	16.2	14.9	13.0	14.0	1.6	0.0	0.0	0.0	0.0	3.0	17.5	8.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UCF OF 95.3%

5. Historical Summary

Date of Construction Start: 01 Jul 1976 **Lifetime Generation:** 122496.0 GW(e).h
Date of First Criticality: 07 Jul 1985 **Cumulative Energy Availability Factor:** 69.8%
Date of Grid Connection: 25 Jul 1985 **Cumulative Load Factor:** 68.4%
Date of Commercial Operation: 09 Nov 1985 **Cumulative Unit Capability Factor:** 77.2%
Cumulative Energy Unavailability Factor: 30.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	483.7	920.0	37.2	37.2	37.2	37.2	35.9	35.9	555	37.9
1986	5409.0	922.0	67.4	63.1	67.3	63.0	67.0	62.5	5969	68.1
1987	3352.8	920.0	48.6	56.4	48.6	56.4	41.6	52.9	4193	47.9
1988	4552.7	920.0	63.1	58.5	63.1	58.5	56.3	54.0	5626	64.0
1989	6620.2	922.0	89.2	65.9	89.2	65.9	81.3	60.6	8115	91.9
1990	4614.3	920.0	64.8	65.7	58.4	64.5	57.3	59.9	5933	67.7
1991	3191.9	920.0	56.3	64.2	40.3	60.6	39.6	56.6	5067	57.8
1992	5308.1	920.0	94.9	68.5	66.3	61.4	65.7	57.9	8439	96.1
1993	3212.3	920.0	52.6	66.5	40.4	58.8	39.9	55.7	4654	53.1
1994	3755.9	920.0	69.2	66.8	49.5	57.8	46.6	54.7	5944	67.9
1995	6710.5	920.0	98.6	69.9	83.2	60.3	83.3	57.5	8640	98.6
1996	6084.9	920.0	81.5	71.0	75.8	61.7	75.3	59.1	7177	81.7
1997	6016.4	920.0	83.8	72.0	75.2	62.8	74.7	60.4	7409	84.6
1998	6333.0	920.0	81.3	72.7	79.0	64.0	78.6	61.8	7194	82.1
1999	6413.9	920.0	86.2	73.7	75.7	64.8	79.6	63.0	7509	85.7
2000	7365.9	920.0	98.1	75.3	91.2	66.6	91.1	64.9	8687	98.9
2001	4662.8	920.0	66.5	74.8	60.1	66.2	57.9	64.4	5461	62.3
2002	4688.8	900.0	60.6	73.9	59.6	65.8	59.5	64.2	5439	62.1
2003	6255.5	900.0	82.9	74.4	79.4	66.5	79.3	65.0	7150	81.6
2004	7896.7	900.0	99.8	75.7	99.8	68.2	99.9	66.8	8784	100.0
2005	6416.8	900.0	84.2	76.1	81.5	68.9	81.4	67.5	7330	83.7
2006	5391.4	900.0	81.3	76.4	71.4	69.0	68.4	67.5	7003	79.9
2007	6853.9	900.0	95.3	77.2	87.3	69.8	86.9	68.4	8422	96.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		282			333	14
B. Refuelling without a maintenance					7	
C. Inspection, maintenance or repair combined with refuelling				853	32	
D. Inspection, maintenance or repair without refuelling				36		
E. Testing of plant systems or components				44	0	
G. Major back-fitting, refurbishment or upgrading activities without refuelling						0
H. Nuclear regulatory requirements					1	
J. Grid failure or grid unavailability					0	12
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					80	3
L. Human factor related		118				
Subtotal	0	400	0	933	453	29
Total		400			1415	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1978 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		10
14. Safety Systems		51
15. Reactor Cooling Systems		12
16. Steam generation systems		47
31. Turbine and auxiliaries	97	18
32. Feedwater and Main Steam System		18
33. Circulating Water System		3
35. All other I&C Systems		1
41. Main Generator Systems	185	13
42. Electrical Power Supply Systems		169
Total	282	342

ES-6 ALMARAZ-1

Operator: CNAT (CENTRALES NUCLEARES ALMARAZ-TRILLO(ID/UFG/ENDESA/HC/NUCLENOR))

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 944.0 MW(e)
Design Net Capacity: 900.0 MW(e)
Design Discharge Burnup: 58000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8189.8 GW(e).h
Energy Availability Factor: 99.0%
Load Factor: 99.0%
Operating Factor: 100.0%
Energy Unavailability Factor: 1.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	703.1	635.0	696.9	676.7	695.7	669.1	685.2	682.3	663.4	695.7	682.4	704.4	8189.8
EAF (%)	100.0	99.9	99.3	100.0	99.1	98.4	97.6	97.1	97.6	98.9	100.0	100.0	99.0
UCF (%)	100.0	100.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9
LF (%)	100.1	100.1	99.2	99.7	99.1	98.4	97.6	97.1	97.6	98.9	100.4	100.3	99.0
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUF (%)	0.0	0.1	0.7	0.0	0.9	1.6	2.4	2.9	2.4	1.1	0.0	0.0	1.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.1	0.7	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
XUF (%)	0.0	0.0	0.0	0.0	0.9	1.6	2.4	2.8	2.4	1.1	0.0	0.0	1.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THIS UNIT HAS BEEN OPERATING TO FULL POWER DURING THE WHOLE YEAR.THE ANNUAL PRODUCCION HAS BEEN THE BIGGEST IN ONE YEAR.

5. Historical Summary

Date of Construction Start:	02 Jul 1973	Lifetime Generation:	172683.0 GW(e).h
Date of First Criticality:	05 Apr 1981	Cumulative Energy Availability Factor:	85.4%
Date of Grid Connection:	01 May 1981	Cumulative Load Factor:	85.6%
Date of Commercial Operation:	01 Sep 1983	Cumulative Unit Capability Factor:	86.3%
		Cumulative Energy Unavailability Factor:	14.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	2135.5	930.0	78.4	78.4	78.4	78.4	78.4	78.4	2597	88.7
1984	4820.5	893.0	65.0	68.5	65.0	68.5	61.5	65.8	6062	69.0
1985	4825.2	900.0	61.6	65.6	61.6	65.6	61.2	63.8	5705	65.1
1986	5425.0	900.0	69.3	66.7	69.3	66.7	68.8	65.3	6418	73.3
1987	7193.7	900.0	92.5	72.6	92.5	72.6	91.2	71.3	8346	95.3
1988	5879.6	900.0	74.6	73.0	74.6	73.0	74.4	71.9	6899	78.5
1989	6562.2	895.0	83.2	74.6	83.2	74.6	83.7	73.7	7640	87.2
1990	6460.7	895.0	82.2	75.6	82.2	75.6	82.4	74.9	7451	85.1
1991	7481.7	895.0	96.2	78.1	96.2	78.1	95.4	77.4	8589	98.0
1992	6379.1	895.0	80.8	78.4	80.8	78.4	81.1	77.8	7387	84.1
1993	6530.9	895.0	85.1	79.0	83.2	78.8	83.3	78.3	7663	87.5
1994	7448.6	895.0	95.9	80.5	95.1	80.3	95.0	79.8	8495	97.0
1995	6588.5	895.0	86.2	81.0	83.7	80.5	84.0	80.1	7709	88.0
1996	5904.3	895.0	73.8	80.4	72.5	79.9	75.1	79.7	6789	77.3
1997	6642.8	895.0	83.0	80.6	79.6	79.9	84.7	80.1	7371	84.1
1998	8032.5	944.0	98.8	81.8	97.1	81.1	97.1	81.2	8760	100.0
1999	6988.6	927.0	85.4	82.1	84.7	81.3	86.1	81.6	7613	86.9
2000	7471.6	927.0	91.1	82.6	90.3	81.9	91.8	82.2	8014	91.2
2001	8151.4	927.0	99.6	83.6	99.0	82.8	100.4	83.2	8749	99.9
2002	7428.0	944.0	92.2	84.0	90.4	83.2	89.8	83.5	8100	92.5
2003	7499.1	944.0	93.8	84.5	91.6	83.6	90.7	83.9	8233	94.0
2004	8185.7	944.0	99.9	85.3	99.2	84.4	98.7	84.6	8784	100.0
2005	7519.4	944.0	93.1	85.6	91.4	84.7	90.9	84.9	8180	93.4
2006	7152.4	944.0	88.1	85.7	86.5	84.8	86.5	85.0	7831	89.4
2007	8189.8	944.0	99.9	86.3	99.0	85.4	99.0	85.6	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				4	128	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling				745		
D. Inspection, maintenance or repair without refuelling				218		
E. Testing of plant systems or components				65	0	
H. Nuclear regulatory requirements					2	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	
L. Human factor related					2	
Subtotal	0	0	0	1032	133	0
Total	0			1165		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		13
13. Reactor Auxiliary Systems		35
15. Reactor Cooling Systems		18
16. Steam generation systems		0
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		6
32. Feedwater and Main Steam System		24
33. Circulating Water System		1
41. Main Generator Systems		6
42. Electrical Power Supply Systems		25
Total	0	128

ES-7 ALMARAZ-2

Operator: CNAT (CENTRALES NUCLEARES ALMARAZ-TRILLO(ID/UFG/ENDESA/HC/NUCLENOR))

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 956.0 MW(e)
Design Net Capacity: 930.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7191.7 GW(e).h
Energy Availability Factor: 86.0%
Load Factor: 85.9%
Operating Factor: 87.5%
Energy Unavailability Factor: 14.0%
Total Off-line Time: 1092 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	708.0	640.0	707.4	683.6	702.8	676.4	692.6	689.8	669.7	308.7	9.3	703.4	7191.7
EAF (%)	100.0	100.0	100.0	100.0	98.8	98.3	97.4	97.0	97.3	43.4	1.4	98.9	86.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	44.8	1.4	98.9	87.1
LF (%)	99.5	99.6	99.5	99.5	98.8	98.3	97.4	97.0	97.3	43.3	1.4	98.9	85.9
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	100.0	44.8	5.4	100.0	87.5
EUUF (%)	0.0	0.0	0.0	0.0	1.2	1.7	2.6	3.0	2.7	56.6	98.6	1.1	14.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.2	81.8	1.1	11.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.8	0.0	1.4
XUF (%)	0.0	0.0	0.0	0.0	1.2	1.7	2.6	3.0	2.7	1.4	0.0	0.0	1.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

EXCEPT DURING THE REFUELING, THE UNIT WAS COUPLED THE WHOLE YEAR.

5. Historical Summary

Date of Construction Start: 02 Jul 1973 **Lifetime Generation:** 168134.0 GW(e).h
Date of First Criticality: 19 Sep 1983 **Cumulative Energy Availability Factor:** 86.7%
Date of Grid Connection: 08 Oct 1983 **Cumulative Load Factor:** 87.0%
Date of Commercial Operation: 01 Jul 1984 **Cumulative Unit Capability Factor:** 87.9%
Cumulative Energy Unavailability Factor: 13.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	3204.9	893.0	86.0	86.0	86.0	86.0	81.3	81.3	3989	90.3
1985	6236.1	900.0	79.8	81.9	79.8	81.9	79.1	79.8	7297	83.3
1986	5825.2	900.0	75.2	79.2	75.2	79.2	73.9	77.4	7136	81.5
1987	6402.5	900.0	81.8	80.0	81.8	80.0	81.2	78.5	7351	83.9
1988	6809.4	900.0	86.3	81.4	86.3	81.4	86.1	80.2	7838	89.2
1989	6545.7	895.0	82.8	81.6	82.8	81.6	83.5	80.8	7638	87.2
1990	7649.3	895.0	97.4	84.0	97.4	84.0	97.6	83.4	8652	98.8
1991	6812.9	895.0	85.4	84.2	85.4	84.2	86.9	83.8	7712	88.0
1992	6892.7	895.0	87.3	84.6	87.3	84.6	87.7	84.3	7997	91.0
1993	7710.1	895.0	99.0	86.1	98.5	86.0	98.3	85.8	8760	100.0
1994	6384.6	895.0	84.2	85.9	80.9	85.6	81.4	85.4	7562	86.3
1995	6814.7	895.0	89.1	86.2	86.2	85.6	86.9	85.5	7952	90.8
1996	7273.3	895.0	91.6	86.6	91.5	86.1	92.5	86.1	8108	92.3
1997	6042.5	895.0	76.6	85.9	72.6	85.1	77.1	85.4	6811	77.8
1998	5892.4	953.0	75.9	85.2	70.2	84.0	70.6	84.3	6810	77.7
1999	8126.6	936.0	98.0	86.0	97.4	84.9	99.1	85.3	8743	99.8
2000	7401.8	936.0	90.6	86.3	88.5	85.1	90.0	85.6	8160	92.9
2001	7601.5	936.0	92.1	86.6	91.3	85.5	92.7	86.0	8189	93.5
2002	8154.9	953.0	98.8	87.3	98.1	86.2	97.7	86.7	8760	100.0
2003	6627.9	953.0	81.9	87.0	79.9	85.9	79.4	86.3	7391	84.4
2004	7563.2	953.0	91.6	87.3	90.9	86.1	90.3	86.5	8083	92.0
2005	8253.3	956.0	100.0	87.9	99.2	86.8	98.6	87.1	8760	100.0
2006	7250.1	956.0	87.7	87.9	86.8	86.8	86.6	87.1	7747	88.4
2007	7191.7	956.0	87.1	87.9	86.0	86.7	85.9	87.0	7668	87.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					139	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	972			621		
D. Inspection, maintenance or repair without refuelling				25		
E. Testing of plant systems or components				34		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					7	
L. Human factor related					0	
Z. Others		121				
Subtotal	972	121	0	680	154	0
Total		1093			834	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		10
13. Reactor Auxiliary Systems		4
14. Safety Systems		2
15. Reactor Cooling Systems		4
16. Steam generation systems		23
31. Turbine and auxiliaries		33
32. Feedwater and Main Steam System		24
35. All other I&C Systems		0
41. Main Generator Systems		1
42. Electrical Power Supply Systems		35
Total	0	136

ES-8 ASCO-1**Operator:** ANAV (ASOCIACION NUCLEAR ASCO-VANDELLOS A.I.E. (ENDESA/ID))**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 995.0 MW(e)
Design Net Capacity: 888.0 MW(e)
Design Discharge Burnup: 50500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7574.8 GW(e).h
Energy Availability Factor: 87.4%
Load Factor: 86.9%
Operating Factor: 89.9%
Energy Unavailability Factor: 12.6%
Total Off-line Time: 884 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	726.4	658.6	734.4	707.1	732.1	702.8	712.7	672.9	685.1	581.6	0.0	661.1	7574.8
EAF (%)	98.8	98.8	99.5	98.9	99.2	98.7	97.1	91.7	96.4	78.6	0.0	89.8	87.4
UCF (%)	99.9	99.6	99.9	99.2	99.9	99.9	99.9	94.0	99.4	79.9	0.0	91.3	88.6
LF (%)	98.1	98.5	99.2	98.7	98.9	98.1	96.3	90.9	95.6	78.6	0.0	89.3	86.9
OF (%)	100.0	100.0	99.9	100.0	100.0	100.0	100.0	97.4	100.0	83.9	0.0	96.8	89.9
EUF (%)	1.2	1.2	0.5	1.1	0.8	1.3	2.9	8.3	3.6	21.4	100.0	10.2	12.6
PUF (%)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	20.1	90.4	4.9	9.6
UCLF (%)	0.0	0.3	0.0	0.7	0.0	0.0	0.0	5.9	0.4	0.0	9.6	3.8	1.7
XUF (%)	1.0	0.7	0.4	0.3	0.6	1.1	2.8	2.3	3.0	1.3	0.0	1.6	1.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 16 May 1974 **Lifetime Generation:** 170931.6 GW(e).h
Date of First Criticality: 16 Jun 1983 **Cumulative Energy Availability Factor:** 85.2%
Date of Grid Connection: 13 Aug 1983 **Cumulative Load Factor:** 84.1%
Date of Commercial Operation: 10 Dec 1984 **Cumulative Unit Capability Factor:** 85.7%
Cumulative Energy Unavailability Factor: 14.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	104.0	887.0	20.0	20.0	20.0	20.0	15.8	15.8	161	21.6
1985	4429.4	898.0	60.3	57.2	60.3	57.2	56.3	53.2	5342	61.0
1986	5129.0	898.0	68.2	62.5	68.2	62.5	65.2	58.9	6208	70.9
1987	6392.0	898.0	84.3	69.5	83.7	69.3	81.3	66.2	7569	86.4
1988	6669.0	898.0	84.1	73.1	84.1	73.0	84.5	70.7	7599	86.5
1989	6750.0	930.0	86.1	75.7	86.0	75.6	82.9	73.1	7771	88.7
1990	6642.0	930.0	84.5	77.2	84.5	77.1	81.5	74.6	7699	87.9
1991	6836.0	930.0	87.2	78.6	87.0	78.5	83.9	75.9	7810	89.2
1992	6875.0	887.0	86.5	79.6	86.5	79.5	88.2	77.4	7898	89.9
1993	6599.0	930.0	83.3	80.0	83.2	79.9	81.0	77.8	7401	84.5
1994	6868.0	930.0	87.1	80.7	86.8	80.6	84.3	78.5	7758	88.6
1995	5708.0	900.0	70.7	79.8	70.4	79.7	72.4	77.9	6387	72.9
1996	7972.0	947.0	99.0	81.5	99.0	81.4	95.8	79.5	8755	99.7
1997	6411.0	915.0	80.5	81.4	77.6	81.1	80.0	79.5	7198	82.2
1998	7349.0	949.0	89.3	82.0	89.1	81.7	88.4	80.2	7943	90.7
1999	8147.0	945.0	99.0	83.2	98.7	82.8	98.4	81.4	8741	99.8
2000	7681.0	979.0	89.8	83.6	89.5	83.3	89.3	81.9	8008	91.2
2001	7798.0	991.0	90.3	84.0	89.8	83.7	89.8	82.4	8056	92.0
2002	8397.0	998.0	98.2	84.9	97.6	84.5	96.0	83.2	8737	99.7
2003	7581.1	996.0	88.0	85.0	87.3	84.7	86.9	83.4	7900	90.2
2004	7734.3	995.0	89.2	85.3	88.6	84.9	88.5	83.7	7949	90.5
2005	7640.5	995.0	89.0	85.4	88.2	85.0	87.7	83.9	8548	97.6
2006	7418.4	995.0	87.1	85.5	85.4	85.1	85.1	83.9	7971	91.0
2007	7574.8	995.0	88.6	85.7	87.4	85.2	86.9	84.1	7876	89.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		69			220	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	771	23		807	0	
D. Inspection, maintenance or repair without refuelling				18		
E. Testing of plant systems or components				67	5	
J. Grid failure or grid unavailability						5
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					7	0
L. Human factor related				7	1	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Z. Others					1	
Subtotal	771	92	0	899	237	6
Total		863			1142	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		3
13. Reactor Auxiliary Systems		0
15. Reactor Cooling Systems		12
16. Steam generation systems		11
17. Safety I&C Systems (excluding reactor I&C)		0
21. Fuel Handling and Storage Facilities	69	7
31. Turbine and auxiliaries		11
32. Feedwater and Main Steam System		13
35. All other I&C Systems		1
41. Main Generator Systems		91
42. Electrical Power Supply Systems		64
XX. Miscellaneous Systems		2
Total	69	215

ES-9 ASCO-2**Operator:** ANAV (ASOCIACION NUCLEAR ASCO-VANDELLOS A.I.E. (ENDESA/ID))**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 997.0 MW(e)
Design Net Capacity: 888.0 MW(e)
Design Discharge Burnup: 50500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7091.4 GW(e).h
Energy Availability Factor: 81.9%
Load Factor: 81.2%
Operating Factor: 86.0%
Energy Unavailability Factor: 18.1%
Total Off-line Time: 1228 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	688.9	654.8	533.2	0.0	346.2	665.1	702.2	708.1	683.5	685.9	701.0	722.6	7091.4
EAF (%)	94.3	98.9	72.2	-3.2	47.2	93.9	96.0	96.9	96.5	93.5	98.6	98.7	81.9
UCF (%)	95.5	99.8	72.8	-3.2	48.2	95.3	99.2	99.8	99.9	96.1	99.9	99.9	83.6
LF (%)	92.9	97.7	71.9	0.0	46.7	92.7	94.7	95.5	95.2	92.3	97.7	97.4	81.2
OF (%)	98.7	100.0	74.2	0.0	65.1	96.4	100.0	100.0	100.0	97.2	100.0	100.0	86.0
EUUF (%)	5.7	1.1	27.8	103.2	52.8	6.1	4.0	3.1	3.5	6.5	1.4	1.3	18.1
PUF (%)	0.1	0.1	27.2	82.5	4.6	0.2	0.8	0.2	0.1	0.1	0.1	0.1	9.6
UCLF (%)	4.4	0.1	0.0	20.6	47.2	4.5	0.0	0.0	0.0	3.8	0.0	0.0	6.8
XUF (%)	1.2	1.0	0.6	0.0	1.0	1.5	3.1	2.9	3.4	2.6	1.3	1.2	1.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 07 Mar 1975
Date of First Criticality: 11 Sep 1985
Date of Grid Connection: 23 Oct 1985
Date of Commercial Operation: 31 Mar 1986

Lifetime Generation: 162967.7 GW(e).h
Cumulative Energy Availability Factor: 87.6%
Cumulative Load Factor: 86.3%
Cumulative Unit Capability Factor: 88.4%
Cumulative Energy Unavailability Factor: 12.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	4977.0	898.0	79.3	79.3	79.3	79.3	75.5	75.5	5907	80.4
1987	5954.0	898.0	78.1	78.7	77.3	78.2	75.7	75.6	7035	80.3
1988	6865.0	898.0	88.2	82.0	86.8	81.2	87.0	79.6	7874	89.6
1989	6732.0	930.0	86.3	83.2	85.7	82.4	82.6	80.4	7729	88.2
1990	6933.0	930.0	90.4	84.7	90.4	84.1	85.1	81.4	7916	90.4
1991	6820.0	930.0	86.7	85.1	86.5	84.5	83.7	81.8	7799	89.0
1992	7077.0	953.0	89.9	85.8	89.9	85.3	84.5	82.2	8042	91.6
1993	7052.0	930.0	90.0	86.3	88.6	85.8	86.6	82.8	7897	90.1
1994	7085.0	930.0	89.8	86.7	89.5	86.2	87.0	83.3	7962	90.9
1995	6977.0	900.0	86.4	86.7	86.3	86.2	88.5	83.8	7674	87.6
1996	6011.0	963.0	75.6	85.6	75.1	85.1	71.1	82.6	6825	77.7
1997	7916.0	900.0	98.2	86.7	96.2	86.0	100.4	84.0	8725	99.6
1998	7399.0	946.0	90.6	87.0	89.9	86.3	89.3	84.4	8050	91.9
1999	7215.0	946.0	87.2	87.0	86.4	86.3	87.1	84.6	7854	89.7
2000	8451.0	983.0	98.6	87.8	98.6	87.2	97.9	85.6	8734	99.4
2001	7829.0	983.0	91.0	88.0	90.6	87.4	90.9	85.9	8102	92.5
2002	7780.0	997.0	90.8	88.2	89.4	87.6	89.1	86.1	8127	92.8
2003	8521.2	997.0	99.6	88.9	98.7	88.2	97.6	86.8	8738	99.7
2004	6909.3	997.0	80.2	88.4	79.6	87.7	78.9	86.4	7287	83.0
2005	7418.9	997.0	86.8	88.3	86.1	87.7	84.9	86.3	7779	88.8
2006	7968.7	997.0	94.3	88.6	92.4	87.9	91.2	86.5	8335	95.1
2007	7091.4	997.0	83.6	88.4	81.9	87.6	81.2	86.3	7532	86.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		312			152	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	767	186		605	3	
D. Inspection, maintenance or repair without refuelling				32	28	
E. Testing of plant systems or components				22	4	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				21		
J. Grid failure or grid unavailability					2	7
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				15	5	3
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						2
Z. Others		4			2	
Subtotal	767	502	0	695	197	12
Total		1269			904	

7. Equipment Related Full Outages, Analysis by System

System	2007	1985 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		3
12. Reactor I&C Systems		1
13. Reactor Auxiliary Systems	87	
15. Reactor Cooling Systems		1
16. Steam generation systems	166	9
31. Turbine and auxiliaries		14
32. Feedwater and Main Steam System		65
33. Circulating Water System	58	3
41. Main Generator Systems		0
42. Electrical Power Supply Systems		42
XX. Miscellaneous Systems		8
Total	311	146

ES-10 COFRENTES

Operator: ID (IBERDROLA, S.A.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
 Net Reference Unit Power at the beginning of 2007: 1064.0 MW(e)
 Design Net Capacity: 939.0 MW(e)
 Design Discharge Burnup: 40000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6008.4 GW(e).h
 Energy Availability Factor: 64.5%
 Load Factor: 64.5%
 Operating Factor: 67.3%
 Energy Unavailability Factor: 35.5%
 Total Off-line Time: 2862 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	749.3	708.4	736.3	631.1	0.0	0.0	16.1	158.8	680.1	787.4	762.5	778.4	6008.4
EAF (%)	94.7	99.1	93.2	82.4	0.0	0.0	2.0	20.1	88.8	99.3	99.5	98.3	64.5
UCF (%)	94.8	99.7	99.7	92.7	0.0	0.0	2.0	20.2	89.5	99.8	99.7	98.5	66.1
LF (%)	94.7	99.1	93.0	82.5	0.0	0.0	2.0	20.1	88.8	99.3	99.5	98.3	64.5
OF (%)	97.4	100.0	99.9	93.7	0.0	0.0	5.8	22.6	92.2	100.0	100.0	100.0	67.3
EUF (%)	5.3	0.9	6.8	17.6	100.0	100.0	98.0	79.9	11.2	0.7	0.5	1.7	35.5
PUF (%)	0.7	0.3	0.3	7.3	100.0	100.0	65.8	0.7	0.0	0.2	0.3	0.0	23.1
UCLF (%)	4.5	0.0	0.0	0.0	0.0	0.0	32.2	79.2	10.5	0.0	0.0	1.6	10.8
XUF (%)	0.2	0.6	6.5	10.4	0.0	0.0	0.0	0.1	0.7	0.4	0.2	0.1	1.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 09 Sep 1975 Lifetime Generation: 170579.0 GW(e).h
 Date of First Criticality: 23 Aug 1984 Cumulative Energy Availability Factor: 86.2%
 Date of Grid Connection: 14 Oct 1984 Cumulative Load Factor: 86.2%
 Date of Commercial Operation: 11 Mar 1985 Cumulative Unit Capability Factor: 87.0%
 Cumulative Energy Unavailability Factor: 13.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	5612.3	939.0	81.4	81.4	81.4	81.4	81.4	81.4	6444	87.7
1986	6668.3	939.0	82.0	81.7	81.1	81.2	81.1	81.2	7487	85.5
1987	6883.1	930.0	83.4	82.3	83.4	82.0	84.5	82.4	7615	86.9
1988	7142.2	930.0	85.7	83.2	85.5	82.9	87.4	83.7	7850	89.4
1989	7052.2	939.0	83.9	83.3	83.9	83.1	85.7	84.1	7732	88.3
1990	7070.3	939.0	85.1	83.6	85.1	83.5	86.0	84.4	7560	86.3
1991	6999.6	953.0	83.7	83.7	83.7	83.5	83.8	84.3	7660	87.4
1992	7712.1	939.0	91.9	84.7	91.9	84.6	93.5	85.5	8376	95.4
1993	7016.2	953.0	84.8	84.7	83.6	84.4	84.0	85.3	7579	86.5
1994	6990.9	953.0	85.1	84.7	83.5	84.4	83.7	85.2	7553	86.2
1995	8187.0	953.0	97.8	86.0	97.5	85.6	98.1	86.4	8683	99.1
1996	7687.5	953.0	91.9	86.5	90.9	86.0	91.8	86.8	8215	93.5
1997	6893.7	953.0	86.2	86.4	83.7	85.9	82.6	86.5	7668	87.5
1998	8174.1	993.0	96.6	87.2	96.6	86.7	94.0	87.1	8546	97.6
1999	7491.6	989.0	89.8	87.4	86.4	86.6	86.5	87.0	8004	91.4
2000	7348.1	989.0	86.9	87.4	84.6	86.5	84.6	86.9	7808	88.9
2001	8278.1	989.0	95.5	87.9	95.5	87.1	95.6	87.4	8424	96.2
2002	7918.1	1043.0	89.2	87.9	88.2	87.1	86.7	87.4	7875	89.9
2003	8002.5	1062.0	88.2	88.0	88.2	87.2	86.5	87.3	7742	88.4
2004	8813.9	1064.0	94.9	88.3	94.3	87.6	94.3	87.7	8457	96.3
2005	6765.1	1064.0	75.9	87.7	72.8	86.8	72.6	86.9	6768	77.3
2006	8872.5	1064.0	95.6	88.1	95.3	87.2	95.2	87.3	8492	96.9
2007	6008.4	1064.0	66.1	87.0	64.5	86.2	64.5	86.2	5898	67.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		315			183	
B. Refuelling without a maintenance				9	4	
C. Inspection, maintenance or repair combined with refuelling	1968			563	2	
D. Inspection, maintenance or repair without refuelling				55		
E. Testing of plant systems or components				23		
J. Grid failure or grid unavailability						3
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					7	0
L. Human factor related					3	
P. Fire		576				
Z. Others					7	
Subtotal	1968	891	0	650	206	3
Total		2859			859	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	239	3
12. Reactor I&C Systems		14
13. Reactor Auxiliary Systems		4
15. Reactor Cooling Systems		9
17. Safety I&C Systems (excluding reactor I&C)		1
21. Fuel Handling and Storage Facilities		26
31. Turbine and auxiliaries	56	74
32. Feedwater and Main Steam System		5
41. Main Generator Systems	19	32
42. Electrical Power Supply Systems		8
Total	314	176

ES-2 SANTA MARIA DE GARONA

Operator: NUCLENOR (NUCLENOR, S.A.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 446.0 MW(e)
Design Net Capacity: 440.0 MW(e)
Design Discharge Burnup: 31000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3321.9 GW(e).h
Energy Availability Factor: 84.9%
Load Factor: 85.0%
Operating Factor: 90.1%
Energy Unavailability Factor: 15.1%
Total Off-line Time: 871 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	233.5	117.9	78.2	292.6	334.2	322.9	313.0	330.1	319.2	330.7	321.2	328.3	3321.9
EAF (%)	70.4	39.3	23.7	90.9	100.0	100.0	94.3	99.5	99.4	99.5	100.0	98.8	84.9
UCF (%)	70.4	39.3	23.7	90.9	100.0	100.0	95.9	100.0	100.0	99.6	100.0	98.8	85.1
LF (%)	70.4	39.3	23.6	91.3	100.7	100.6	94.3	99.5	99.4	99.5	100.0	98.9	85.0
OF (%)	100.0	60.7	25.8	93.7	100.0	100.0	98.7	100.0	100.0	100.0	100.0	100.0	90.1
EUF (%)	29.6	60.7	76.3	9.1	0.0	0.0	5.7	0.5	0.6	0.5	0.0	1.2	15.1
PUF (%)	18.9	60.7	54.6	0.0	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0	11.0
UCLF (%)	10.7	0.0	21.7	9.1	0.0	0.0	3.8	0.0	0.0	0.0	0.0	1.2	3.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	0.6	0.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

-OPERATION AT FULL POWER IN BASE LOAD MODE. -REFUELING OUTAGE FROM 2007-02-18 TO 2007-03-23.

-OPERATION AT REDUCED POWER IN JANUARY AND FEBRUARY CAUSED BY POWER SUPPRESSION DUE TO FUEL FAILED. -OPERATION AT REDUCED POWER IN JULY DUE TO HIGH TEMPERATURE IN THE ULTIMATE HEAT SINK (RIVER EBRO).

5. Historical Summary

Date of Construction Start:	02 May 1966	Lifetime Generation:	108775.5 GW(e).h
Date of First Criticality:	05 Nov 1970	Cumulative Energy Availability Factor:	76.9%
Date of Grid Connection:	02 Mar 1971	Cumulative Load Factor:	76.4%
Date of Commercial Operation:	11 May 1971	Cumulative Unit Capability Factor:	77.6%
		Cumulative Energy Unavailability Factor:	23.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1971	1380.3	456.0	51.0	51.0	51.0	51.0	51.0	51.0	4029	68.5
1972	2668.9	460.0	66.0	60.0	66.0	60.0	66.1	60.0	6683	76.1
1973	2351.7	440.0	72.5	64.6	72.5	64.6	61.0	60.4	6532	74.6
1974	2237.8	440.0	58.0	62.8	58.0	62.8	58.1	59.8	6456	73.7
1975	2746.8	440.0	71.3	64.6	71.3	64.6	71.3	62.2	7079	80.8
1976	2859.9	440.0	74.0	66.2	74.0	66.2	74.0	64.2	7039	80.1
1977	1815.1	440.0	47.1	63.4	47.1	63.4	47.1	61.7	4743	54.1
1978	3111.1	440.0	80.7	65.6	80.7	65.6	80.7	64.2	7409	84.6
1979	2339.4	440.0	60.6	65.1	60.6	65.1	60.7	63.8	5786	66.1
1980	780.8	440.0	19.5	60.4	19.5	60.4	20.2	59.3	1926	21.9
1981	3178.7	440.0	82.4	62.4	82.4	62.4	82.5	61.4	7597	86.7
1982	2044.1	440.0	53.3	61.6	53.3	61.6	53.0	60.7	5132	58.6
1983	2322.1	440.0	60.2	61.5	60.2	61.5	60.2	60.7	5630	64.3
1984	2873.5	440.0	85.6	63.3	74.2	62.5	74.3	61.7	6853	78.0
1985	1731.0	440.0	46.6	62.2	44.1	61.2	44.9	60.5	4285	48.9
1986	3413.6	440.0	91.8	64.0	88.6	63.0	88.6	62.3	8173	93.3
1987	2565.1	440.0	67.6	64.3	66.6	63.2	66.6	62.6	6205	70.8
1988	2693.3	440.0	70.0	64.6	70.0	63.6	69.7	63.0	6639	75.6
1989	3515.8	440.0	92.2	66.0	91.3	65.0	91.2	64.5	8324	95.0
1990	2558.6	440.0	66.4	66.1	66.4	65.1	66.4	64.6	6297	71.9
1991	3678.3	440.0	95.4	67.5	95.4	66.6	95.4	66.1	8528	97.4
1992	2377.3	440.0	69.7	67.6	69.2	66.7	61.5	65.9	6360	72.4
1993	3671.9	440.0	95.1	68.8	95.1	67.9	95.3	67.1	8444	96.4
1994	3134.1	440.0	82.0	69.3	81.2	68.5	81.3	67.7	7271	83.0
1995	3826.0	440.0	99.3	70.6	99.1	69.7	99.3	69.0	8760	100.0
1996	3203.8	440.0	83.2	71.0	82.5	70.2	82.9	69.6	7450	84.8
1997	3363.7	440.0	89.2	71.7	89.1	70.9	87.3	70.2	7853	89.7
1998	3792.5	446.0	98.0	72.7	97.5	71.9	97.1	71.2	8735	99.7
1999	3330.8	448.0	86.1	73.2	84.9	72.4	84.9	71.7	7639	87.2
2000	3854.6	446.0	98.8	74.0	98.4	73.2	98.4	72.6	8699	99.0
2001	3435.0	446.0	88.0	74.5	87.9	73.7	87.9	73.1	7737	88.3
2002	3841.4	446.0	98.8	75.3	98.3	74.5	98.3	73.9	8679	99.1
2003	3577.7	446.0	92.0	75.8	91.6	75.0	91.6	74.4	8085	92.3
2004	3873.8	446.0	98.8	76.5	98.7	75.7	98.9	75.2	8699	99.0
2005	3515.3	446.0	90.1	76.9	89.8	76.2	90.0	75.6	7946	90.7
2006	3666.8	446.0	95.8	77.4	93.7	76.7	93.9	76.1	8487	96.9
2007	3321.9	446.0	85.1	77.6	84.9	76.9	85.0	76.4	7889	90.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		110			435	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling	692	157		1031	2	
D. Inspection, maintenance or repair without refuelling				45	1	
E. Testing of plant systems or components				2	4	
H. Nuclear regulatory requirements				20	36	17
J. Grid failure or grid unavailability					2	10
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				6	14	21
L. Human factor related					1	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						3
Z. Others					3	
Subtotal	692	267	0	1104	510	51
Total		959			1665	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		30
12. Reactor I&C Systems		40
13. Reactor Auxiliary Systems	68	10
14. Safety Systems		34
15. Reactor Cooling Systems		186
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries	41	19
32. Feedwater and Main Steam System		25
35. All other I&C Systems		0
41. Main Generator Systems		6
42. Electrical Power Supply Systems		39
Total	109	389

ES-11 TRILLO-1**Operator:** CNAT (CENTRALES NUCLEARES ALMARAZ-TRILLO(ID/UFG/ENDESA/HC/NUCLENOR))**Contractor:** KWU (SIEMENS KRAFTWERK UNION AG)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1003.0 MW(e)
Design Net Capacity: 990.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7948.9 GW(e).h
Energy Availability Factor: 91.4%
Load Factor: 90.5%
Operating Factor: 91.8%
Energy Unavailability Factor: 8.6%
Total Off-line Time: 721 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	741.7	669.5	740.0	716.2	586.5	113.8	734.5	735.4	713.1	740.0	717.0	741.1	7948.9
EAF (%)	100.0	100.0	99.9	100.0	79.7	17.7	99.8	99.8	99.9	99.9	100.0	100.0	91.4
UCF (%)	100.0	100.0	99.9	100.0	79.7	17.7	100.0	100.0	100.0	99.9	100.0	100.0	91.5
LF (%)	99.4	99.3	99.2	99.3	78.6	15.8	98.4	98.6	98.7	99.0	99.3	99.3	90.5
OF (%)	100.0	100.0	99.9	100.1	80.1	20.4	100.0	100.0	100.0	100.0	100.0	100.0	91.8
EUUF (%)	0.0	0.0	0.1	0.0	20.3	82.3	0.2	0.2	0.1	0.1	0.0	0.0	8.6
PUF (%)	0.0	0.0	0.1	0.0	20.3	59.7	0.0	0.0	0.0	0.1	0.0	0.0	6.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0	0.0	1.9
XUF (%)	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UNIT OPERATED AT 100% POWER EXCEPT FOR PERIODS OF REPORTED OUTAGES.

5. Historical Summary

Date of Construction Start: 17 Aug 1979 **Lifetime Generation:** 146195.9 GW(e).h
Date of First Criticality: 14 May 1988 **Cumulative Energy Availability Factor:** 86.5%
Date of Grid Connection: 23 May 1988 **Cumulative Load Factor:** 85.9%
Date of Commercial Operation: 06 Aug 1988 **Cumulative Unit Capability Factor:** 86.7%
Cumulative Energy Unavailability Factor: 13.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	2419.5	997.0	72.7	72.7	72.7	72.7	66.3	66.3	2648	72.1
1989	7147.8	974.0	83.8	80.5	83.8	80.4	83.8	78.5	7665	87.5
1990	6372.4	974.0	74.7	78.1	74.7	78.1	74.7	76.9	7170	81.8
1991	6481.5	974.0	76.0	77.5	76.0	77.5	76.0	76.7	6891	78.7
1992	7938.5	1000.0	90.4	80.4	90.4	80.4	90.4	79.8	8028	91.4
1993	7395.9	1000.0	84.4	81.2	84.4	81.2	84.4	80.7	7512	85.8
1994	7927.7	1000.0	91.0	82.7	91.0	82.7	90.5	82.2	8009	91.4
1995	7472.6	1000.0	86.4	83.2	85.8	83.1	85.3	82.7	7597	86.7
1996	7626.3	1000.0	87.4	83.7	87.3	83.7	86.8	83.2	7713	87.8
1997	7765.5	1000.0	91.9	84.6	89.3	84.3	88.6	83.7	8066	92.1
1998	6589.7	1000.0	76.1	83.8	75.8	83.4	75.2	82.9	6686	76.3
1999	6828.8	1000.0	78.0	83.3	78.0	83.0	77.9	82.5	6876	78.5
2000	8206.5	1000.0	93.7	84.1	93.6	83.8	93.4	83.4	8251	93.9
2001	7907.4	1000.0	90.7	84.6	90.6	84.3	90.3	83.9	7966	90.9
2002	7827.0	1000.0	89.6	85.0	89.6	84.7	89.3	84.3	7876	89.9
2003	8114.7	1003.0	93.1	85.5	93.1	85.2	92.5	84.8	8210	93.7
2004	7980.1	1003.0	91.5	85.9	91.5	85.6	90.6	85.2	8121	92.4
2005	8080.6	1003.0	92.9	86.3	92.9	86.1	92.0	85.5	8175	93.3
2006	7687.8	1003.0	88.6	86.4	88.4	86.2	87.5	85.7	7788	88.9
2007	7948.9	1003.0	91.5	86.7	91.4	86.5	90.5	85.9	8039	91.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		153		3	126	
C. Inspection, maintenance or repair combined with refuelling	568			764		
D. Inspection, maintenance or repair without refuelling				0	25	
Subtotal	568	153	0	767	151	0
Total		721			918	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		7
12. Reactor I&C Systems		6
15. Reactor Cooling Systems		41
16. Steam generation systems		15
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries	153	25
32. Feedwater and Main Steam System		2
41. Main Generator Systems		8
42. Electrical Power Supply Systems		13
XX. Miscellaneous Systems		4
Total	153	124

ES-16 VANDELLOS-2

Operator: ANAV (ASOCIACION NUCLEAR ASCO-VANDELLOS A.I.E. (ENDESA/ID))

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1045.0 MW(e)
Design Net Capacity: 930.0 MW(e)
Design Discharge Burnup: 50500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5387.8 GW(e).h
Energy Availability Factor: 59.1%
Load Factor: 58.9%
Operating Factor: 60.7%
Energy Unavailability Factor: 40.9%
Total Off-line Time: 3447 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	769.7	696.1	720.4	637.6	78.3	0.0	0.0	0.0	464.7	761.9	752.4	506.7	5387.8
EAF (%)	99.1	99.0	92.7	86.1	12.7	0.0	0.0	0.0	70.8	99.7	99.7	54.5	59.1
UCF (%)	99.8	99.8	93.3	86.6	12.9	0.0	0.0	0.0	71.0	99.9	99.9	54.6	59.4
LF (%)	99.0	99.1	92.7	84.9	10.1	0.0	0.0	0.0	61.8	97.9	100.0	65.2	58.9
OF (%)	100.0	100.0	90.9	93.9	12.9	0.0	0.0	0.0	71.9	100.0	100.0	62.8	60.7
EUF (%)	0.9	1.0	7.3	13.9	87.3	100.0	100.0	100.0	29.2	0.3	0.3	45.5	40.9
PUF (%)	0.1	0.1	0.2	0.2	87.1	83.3	0.0	0.0	0.9	0.2	0.1	0.2	14.4
UCLF (%)	0.1	0.1	6.5	13.2	0.0	16.7	100.0	100.0	28.1	0.0	0.0	45.2	26.2
XUF (%)	0.7	0.8	0.5	0.6	0.2	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

DURING THE YEAR THE MOST IMPORTANT HIGHLIGHT HAS BEEN THE OUTAGE FOR REFUELING THAT TOOK PLACE BETWEEN MAY 5TH AND SEPTEMBER 09TH, WITH A TOTAL DURATION ON 127 DAYS AND 10 HOURS. THE OUTAGE WAS PRELIMINARY SCHEDULED FOR 59 DAYS BUT, DUE A DIFFERENTS TEST TO PUT IN SERVICE A NEW SYSTEM FOR THE AEROREFRIGERATION OF THE ESSENTIAL WATER SERVICE, THE OUTAGE HAD A DURATION ON 69 DAYS MORE. DURING THE OUTAGE WAS MADE ALSO AN YEARLY REVISION OF THE DIESEL GENERATOR'S ENGINE, AN HIDRAULYC TEST IF THE ESSENTIAL SERVICE WATER SYSTEM, CHANGES IN THE PIPE LINE OF THAT SYSTEM AND SEVERAL INSPECTIONS OF SAFETY SYSTEMS.

5. Historical Summary

Date of Construction Start:	29 Dec 1980	Lifetime Generation:	142961.8 GW(e).h
Date of First Criticality:	14 Nov 1987	Cumulative Energy Availability Factor:	82.6%
Date of Grid Connection:	12 Dec 1987	Cumulative Load Factor:	82.6%
Date of Commercial Operation:	08 Mar 1988	Cumulative Unit Capability Factor:	83.4%
		Cumulative Energy Unavailability Factor:	17.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	4610.9	930.0	68.3	68.3	67.4	67.4	67.5	67.5	5180	70.5
1989	5868.8	943.0	70.6	69.6	70.6	69.1	71.0	69.4	6357	72.6
1990	7334.3	943.0	87.8	76.0	87.8	75.7	88.8	76.3	7925	90.5
1991	7214.9	953.0	88.5	79.3	86.3	78.5	86.4	79.0	7825	89.3
1992	6718.2	953.0	79.6	79.4	79.6	78.7	80.3	79.2	7249	82.5
1993	6910.4	961.0	84.3	80.2	82.4	79.4	82.1	79.7	7377	84.2
1994	7208.4	961.0	85.6	81.0	85.6	80.3	85.6	80.6	7676	87.6
1995	7571.3	961.0	89.5	82.1	89.5	81.5	89.9	81.8	7957	90.8
1996	7511.4	961.0	89.1	82.9	89.0	82.3	89.0	82.6	7942	90.4
1997	7243.1	961.0	88.7	83.5	85.5	82.7	86.0	83.0	7961	90.9
1998	8359.0	966.0	99.3	85.0	99.0	84.2	98.8	84.4	8760	100.0
1999	7224.4	1024.0	83.4	84.8	82.5	84.0	80.5	84.1	7430	84.8
2000	7976.9	1043.0	87.9	85.1	87.6	84.3	87.1	84.3	7852	89.4
2001	9010.3	1043.0	99.4	86.2	99.4	85.5	98.6	85.4	8727	99.6
2002	8010.1	1040.0	89.2	86.4	88.1	85.7	87.9	85.6	7881	90.0
2003	8219.3	1040.0	90.9	86.7	89.5	86.0	90.2	85.9	8067	92.1
2004	8677.0	1045.0	95.8	87.3	94.5	86.5	94.5	86.5	8429	96.0
2005	4698.4	1045.0	51.7	85.2	51.3	84.4	51.3	84.4	4657	53.2
2006	7022.7	1045.0	78.0	84.8	76.2	83.9	76.7	84.0	6882	78.6
2007	5387.8	1045.0	59.4	83.4	59.1	82.6	58.9	82.6	5313	60.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		514			378	
B. Refuelling without a maintenance					10	
C. Inspection, maintenance or repair combined with refuelling	1248			545	1	
D. Inspection, maintenance or repair without refuelling				63	3	
E. Testing of plant systems or components				5	1	
F. Major back-fitting, refurbishment or upgrading activities with refuelling		1810				
J. Grid failure or grid unavailability					4	13
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						6
Subtotal	1248	2324	0	613	397	19
Total		3572			1029	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		14
12. Reactor I&C Systems	351	38
13. Reactor Auxiliary Systems		157
15. Reactor Cooling Systems		33
31. Turbine and auxiliaries		19
32. Feedwater and Main Steam System		10
33. Circulating Water System		4
41. Main Generator Systems		10
42. Electrical Power Supply Systems	163	83
XX. Miscellaneous Systems		5
Total	514	373

SE-9 FORSMARK-1

Operator: FKA (FORSMARK KRAFTGRUPP AB)
Contractor: ABBATOM (ABBATOM (formerly ASEA-ATOM))

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 987.0 MW(e)
Design Net Capacity: 900.0 MW(e)
Design Discharge Burnup: 42000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6937.8 GW(e).h
Energy Availability Factor: 80.4%
Load Factor: 80.2%
Operating Factor: 82.2%
Energy Unavailability Factor: 19.6%
Total Off-line Time: 1556 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	740.7	50.5	325.2	714.3	734.6	694.7	711.6	709.0	218.1	724.6	640.0	674.7	6937.8
EAF (%)	100.0	7.5	44.1	100.0	99.9	98.1	96.9	96.5	30.7	98.7	89.8	95.2	80.4
UCF (%)	100.0	7.5	44.1	100.0	100.0	100.0	99.7	99.7	31.1	99.2	89.8	95.2	81.1
LF (%)	100.9	7.6	44.3	100.5	100.0	97.8	96.9	96.5	30.7	98.7	90.1	91.9	80.2
OF (%)	100.0	8.0	46.0	100.0	100.0	100.0	100.0	100.0	37.2	100.0	91.7	96.8	82.2
EUf (%)	0.0	92.5	55.9	0.0	0.1	1.9	3.1	3.5	69.3	1.3	10.2	4.8	19.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.7	0.0	0.0	0.0	5.6
UCLF (%)	0.0	92.5	55.9	0.0	0.0	0.0	0.3	0.3	0.2	0.9	10.2	4.8	13.2
XUF (%)	0.0	0.0	0.0	0.0	0.1	1.9	2.8	3.1	0.4	0.5	0.0	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE ELECTRICAL OUTPUT WAS CHANGED AND IS BASED ON 8 DEGREE CELSIUS COOLING WATER TEMPERATURE (THE ANNUAL AVERAGE TEMPERATURE OVER 12 MONTHS TO THE TURBINE CONDENSER).

5. Historical Summary

Date of Construction Start:	01 Jun 1973	Lifetime Generation:	183342.0 GW(e).h
Date of First Criticality:	23 Apr 1980	Cumulative Energy Availability Factor:	83.7%
Date of Grid Connection:	06 Jun 1980	Cumulative Load Factor:	80.8%
Date of Commercial Operation:	10 Dec 1980	Cumulative Unit Capability Factor:	85.9%
		Cumulative Energy Unavailability Factor:	16.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	669.6	928.0	100.0	100.0	100.0	100.0	100.0	100.0	744	100.0
1981	6063.7	900.0	76.9	78.7	76.9	78.7	76.9	78.7	7305	83.4
1982	5548.1	900.0	70.4	74.7	70.4	74.7	70.4	74.7	7131	81.4
1983	5926.0	900.0	75.2	74.9	75.2	74.9	75.2	74.9	8095	92.4
1984	6461.8	900.0	91.9	79.0	91.9	79.0	81.7	76.5	8207	93.4
1985	5587.6	900.0	79.4	79.1	79.4	79.1	70.9	75.4	7773	88.7
1986	7317.2	954.0	89.8	81.0	89.8	81.0	87.5	77.5	8303	94.8
1987	6493.4	970.0	79.5	80.7	79.5	80.7	76.4	77.4	8291	94.6
1988	6852.8	970.0	81.8	80.9	81.8	80.9	80.4	77.8	7739	88.1
1989	6138.6	969.0	85.5	81.4	85.5	81.4	72.3	77.1	7907	90.3
1990	6257.5	967.0	85.8	81.9	85.8	81.9	73.9	76.8	7885	90.0
1991	7486.6	968.0	90.6	82.7	88.3	82.5	88.3	77.9	8122	92.7
1992	6833.6	968.0	85.2	82.9	80.3	82.3	80.4	78.1	8174	93.1
1993	7022.8	968.0	91.9	83.6	82.7	82.3	82.8	78.5	8009	91.4
1994	7393.4	968.0	91.4	84.2	87.0	82.6	87.2	79.1	8109	92.6
1995	7325.2	968.0	91.3	84.6	86.2	82.9	86.4	79.6	8173	93.3
1996	7311.4	968.0	95.3	85.3	86.4	83.1	86.0	80.0	8412	95.8
1997	5403.0	968.0	64.6	84.1	64.6	82.0	63.5	79.0	6255	71.2
1998	7307.0	968.0	93.6	84.6	93.6	82.7	86.2	79.4	8265	94.3
1999	7583.0	968.0	96.7	85.3	96.3	83.4	89.4	79.9	8420	96.1
2000	5731.0	968.0	86.0	85.3	80.2	83.2	67.4	79.3	7203	82.0
2001	7286.0	968.0	94.8	85.8	86.3	83.4	85.9	79.6	8482	96.8
2002	7143.0	961.0	90.0	86.0	86.0	83.5	84.9	79.9	7978	91.1
2003	7456.0	961.0	88.5	86.1	88.5	83.7	88.6	80.2	8093	92.4
2004	8029.0	961.0	97.5	86.5	95.6	84.2	95.1	80.9	8555	97.4
2005	7337.4	961.0	85.6	86.5	84.6	84.2	84.6	81.0	7648	87.3
2006	6683.9	1016.0	76.6	86.1	75.6	83.9	75.1	80.8	6806	77.7
2007	6937.8	987.0	81.1	85.9	80.4	83.7	80.2	80.8	7204	82.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		84			156	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	452			583		
D. Inspection, maintenance or repair without refuelling				24		
E. Testing of plant systems or components				4		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				36		
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						16
L. Human factor related		1020			0	
S. Fuel management limitation (including high flux tilt, stretch out or coast-down operation)					4	
Subtotal	452	1104	0	647	162	18
Total		1556			827	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		12
12. Reactor I&C Systems		13
13. Reactor Auxiliary Systems		6
15. Reactor Cooling Systems		12
17. Safety I&C Systems (excluding reactor I&C)		3
21. Fuel Handling and Storage Facilities		30
31. Turbine and auxiliaries		7
32. Feedwater and Main Steam System		3
41. Main Generator Systems		5
42. Electrical Power Supply Systems	84	58
XX. Miscellaneous Systems		2
Total	84	151

SE-11 FORSMARK-2

Operator: FKA (FORSMARK KRAFTGRUPP AB)
Contractor: ABBATOM (ABBATOM (formerly ASEA-ATOM))

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1000.0 MW(e)
Design Net Capacity: 900.0 MW(e)
Design Discharge Burnup: 42000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7470.1 GW(e).h
Energy Availability Factor: 85.0%
Load Factor: 85.3%
Operating Factor: 88.5%
Energy Unavailability Factor: 15.0%
Total Off-line Time: 1010 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	748.0	232.2	714.5	720.8	730.0	646.0	716.6	155.2	686.5	733.4	713.1	673.9	7470.1
EAF (%)	99.9	34.3	95.4	99.7	98.1	89.7	96.3	20.9	95.4	98.4	98.7	90.0	85.0
UCF (%)	99.9	34.3	95.4	99.7	98.2	91.6	99.3	21.5	97.1	98.9	98.7	90.0	85.7
LF (%)	100.5	34.6	96.0	100.3	98.1	89.7	96.3	20.9	95.4	98.4	99.0	90.6	85.3
OF (%)	100.0	37.8	100.0	100.1	100.0	94.7	100.0	30.4	100.0	99.9	100.0	95.2	88.5
EUF (%)	0.1	65.7	4.6	0.3	1.9	10.3	3.7	79.1	4.7	1.6	1.3	10.0	15.0
PUF (%)	0.0	0.0	0.0	0.0	0.2	0.0	0.0	69.6	0.0	0.0	0.2	0.0	5.9
UCLF (%)	0.1	65.7	4.6	0.3	1.6	8.4	0.7	8.9	2.9	1.2	1.2	10.0	8.4
XUF (%)	0.0	0.0	0.0	0.0	0.1	1.9	3.0	0.7	1.7	0.4	0.0	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	01 Jan 1975	Lifetime Generation:	178946.0 GW(e).h
Date of First Criticality:	16 Nov 1980	Cumulative Energy Availability Factor:	84.2%
Date of Grid Connection:	26 Jan 1981	Cumulative Load Factor:	80.8%
Date of Commercial Operation:	07 Jul 1981	Cumulative Unit Capability Factor:	86.2%
		Cumulative Energy Unavailability Factor:	15.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	2870.7	900.0	72.2	72.2	72.2	72.2	72.2	72.2	3977	90.1
1982	5316.4	900.0	67.4	69.0	67.4	69.0	67.4	69.0	6076	69.4
1983	5484.4	900.0	69.6	69.2	69.6	69.2	69.6	69.2	7879	89.9
1984	5911.7	900.0	82.6	73.1	82.6	73.0	74.8	70.8	7442	84.7
1985	5735.4	900.0	83.8	75.4	83.8	75.4	72.7	71.3	8048	91.9
1986	6987.9	938.0	86.5	77.5	86.5	77.5	85.0	73.8	8231	94.0
1987	6553.8	949.0	85.5	78.8	85.5	78.8	78.8	74.6	8190	93.5
1988	6976.2	963.0	83.2	79.4	83.2	79.4	82.5	75.7	8032	91.4
1989	5943.4	964.0	90.0	80.7	90.0	80.7	70.4	75.1	8222	93.9
1990	6426.2	970.0	88.6	81.6	88.6	81.6	75.6	75.1	8119	92.7
1991	7155.2	969.0	85.8	82.0	84.2	81.8	84.3	76.0	8083	92.3
1992	6748.9	969.0	86.2	82.4	79.2	81.6	79.3	76.3	8293	94.4
1993	6715.5	969.0	88.8	82.9	79.1	81.4	79.2	76.6	7683	87.8
1994	7679.5	969.0	92.5	83.6	90.4	82.1	90.5	77.6	8194	93.6
1995	7149.2	969.0	91.6	84.2	84.1	82.2	84.2	78.1	8143	93.0
1996	7348.2	969.0	91.2	84.7	86.2	82.5	86.3	78.6	8134	92.6
1997	7325.0	969.0	87.4	84.8	87.4	82.8	86.1	79.1	7927	90.2
1998	7199.0	969.0	92.1	85.3	91.9	83.3	84.8	79.4	8240	94.1
1999	7292.0	968.0	91.8	85.6	91.8	83.8	86.0	79.8	8117	92.7
2000	5429.0	964.0	80.8	85.4	76.7	83.4	64.1	79.0	6946	79.1
2001	7400.0	964.0	92.3	85.7	88.8	83.7	87.6	79.4	8321	95.0
2002	6824.0	964.0	89.9	85.9	82.2	83.6	80.8	79.5	8155	93.1
2003	7303.9	959.0	87.1	86.0	87.1	83.8	86.9	79.8	7916	90.4
2004	7978.7	954.0	96.9	86.4	95.2	84.3	95.2	80.5	8529	97.1
2005	7815.5	951.0	94.6	86.8	93.7	84.7	93.7	81.0	8348	95.3
2006	6011.9	951.0	73.3	86.2	72.7	84.2	71.5	80.6	6426	73.4
2007	7470.1	1000.0	85.7	86.2	85.0	84.2	85.3	80.8	7750	88.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		74			173	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	518			544		
D. Inspection, maintenance or repair without refuelling				52		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				9		
H. Nuclear regulatory requirements					29	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						18
L. Human factor related		418			1	
P. Fire					4	
Subtotal	518	492	0	605	210	18
Total		1010			833	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems		1
13. Reactor Auxiliary Systems		2
14. Safety Systems		17
15. Reactor Cooling Systems	36	11
21. Fuel Handling and Storage Facilities		76
31. Turbine and auxiliaries		25
32. Feedwater and Main Steam System	38	6
42. Electrical Power Supply Systems		10
Total	74	148

SE-14 FORSMARK-3

Operator: FKA (FORSMARK KRAFTGRUPP AB)
Contractor: ABBATOM (ABBATOM (formerly ASEA-ATOM))

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1170.0 MW(e)
Design Net Capacity: 1050.0 MW(e)
Design Discharge Burnup: 42000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8992.6 GW(e).h
Energy Availability Factor: 87.3%
Load Factor: 87.7%
Operating Factor: 88.7%
Energy Unavailability Factor: 12.7%
Total Off-line Time: 990 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	879.7	795.9	873.3	843.8	525.3	0.1	819.6	835.9	824.3	866.9	847.8	880.0	8992.6
EAF (%)	100.0	100.0	99.3	99.5	60.3	0.0	94.2	96.0	97.8	99.5	100.0	100.0	87.3
UCF (%)	100.0	100.0	99.3	99.5	62.0	0.0	97.6	100.0	99.9	100.0	100.0	100.0	88.2
LF (%)	101.1	101.2	100.3	100.3	60.3	0.0	94.2	96.0	97.8	99.5	100.6	101.1	87.7
OF (%)	100.0	100.0	100.0	100.1	63.6	0.1	100.0	100.0	100.0	99.9	100.0	100.0	88.7
EUF (%)	0.0	0.0	0.7	0.5	39.7	100.0	5.8	4.0	2.2	0.5	0.0	0.0	12.7
PUF (%)	0.0	0.0	0.2	0.0	38.0	86.7	2.3	0.0	0.1	0.0	0.0	0.0	10.6
UCLF (%)	0.0	0.0	0.6	0.5	0.0	13.3	0.1	0.0	0.0	0.0	0.0	0.0	1.2
XUF (%)	0.0	0.0	0.0	0.0	1.6	0.0	3.5	4.0	2.0	0.5	0.0	0.0	1.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE ELECTRICAL OUTPUT WAS CHANGED AND IS BASED ON 8 DEGREE CELSIUS COOLING WATER TEMPERATURE (THE ANNUAL AVERAGE TEMPERATURE OVER 12 MONTHS TO THE TURBINE CONDENSER).

5. Historical Summary

Date of Construction Start: 01 Jan 1979 **Lifetime Generation:** 192788.0 GW(e).h
Date of First Criticality: 28 Oct 1984 **Cumulative Energy Availability Factor:** 87.7%
Date of Grid Connection: 05 Mar 1985 **Cumulative Load Factor:** 85.2%
Date of Commercial Operation: 18 Aug 1985 **Cumulative Unit Capability Factor:** 90.1%
Cumulative Energy Unavailability Factor: 12.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	3296.6	1068.0	93.8	93.8	93.8	93.8	85.5	85.5	3509	95.5
1986	8069.6	1060.0	88.4	90.0	88.4	90.0	86.9	86.5	7983	91.1
1987	7038.9	1063.0	77.9	84.9	77.9	84.9	75.6	82.0	7866	89.8
1988	7462.9	1068.0	80.4	83.6	80.4	83.6	79.6	81.3	7807	88.9
1989	7367.2	1118.0	85.8	84.1	85.8	84.1	75.2	79.8	7792	88.9
1990	7942.1	1150.0	90.6	85.4	90.6	85.4	78.8	79.6	8165	93.2
1991	8665.1	1155.0	87.5	85.7	85.6	85.4	85.6	80.6	8324	95.0
1992	8176.2	1197.0	89.4	86.3	81.2	84.8	77.8	80.2	7954	90.6
1993	8457.9	1158.0	93.2	87.1	83.4	84.6	83.4	80.6	8244	94.2
1994	9228.8	1158.0	93.4	87.8	90.9	85.3	91.1	81.7	8277	94.6
1995	8945.9	1158.0	92.8	88.3	88.2	85.6	88.2	82.4	8250	94.2
1996	8819.2	1158.0	89.1	88.4	86.7	85.7	86.7	82.8	8008	91.2
1997	8955.0	1158.0	89.9	88.5	89.9	86.0	88.0	83.2	8004	91.1
1998	8961.0	1158.0	93.9	88.9	93.8	86.6	88.3	83.6	8227	93.9
1999	8825.0	1157.0	91.1	89.1	91.0	86.9	87.1	83.8	8005	91.4
2000	7934.0	1157.0	94.9	89.5	87.7	87.0	78.1	83.5	8038	91.5
2001	8182.0	1155.0	86.2	89.3	81.8	86.7	80.9	83.3	7585	86.6
2002	9079.0	1158.0	95.0	89.6	91.2	86.9	89.5	83.7	8450	96.5
2003	9100.3	1155.0	89.9	89.6	89.9	87.1	89.9	84.0	8507	97.1
2004	8970.4	1155.0	89.4	89.6	87.7	87.1	87.6	84.2	7886	89.8
2005	9858.9	1190.0	96.2	89.9	94.6	87.5	94.6	84.7	8491	96.9
2006	9600.5	1190.0	94.6	90.2	92.4	87.7	92.1	85.1	8323	95.0
2007	8992.6	1170.0	88.2	90.1	87.3	87.7	87.7	85.2	7770	88.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		96			50	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	898			518		
D. Inspection, maintenance or repair without refuelling				13		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				11		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						9
Subtotal	898	96	0	542	52	9
Total		994			603	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		7
12. Reactor I&C Systems	96	4
15. Reactor Cooling Systems		10
21. Fuel Handling and Storage Facilities		5
31. Turbine and auxiliaries		10
41. Main Generator Systems		0
42. Electrical Power Supply Systems		12
Total	96	48

SE-2 OSKARSHAMN-1**Operator:** OKG (OKG AKTIEBOLAG)**Contractor:** ABBATOM (ABBATOM (formerly ASEA-ATOM))**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 467.0 MW(e)
Design Net Capacity: 440.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2575.1 GW(e).h
Energy Availability Factor: 63.2%
Load Factor: 62.9%
Operating Factor: 65.1%
Energy Unavailability Factor: 36.8%
Total Off-line Time: 3057 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	100.7	274.4	327.6	292.8	324.6	322.3	313.9	112.2	316.5	0.0	0.0	190.2	2575.1
EAF (%)	28.9	87.3	94.4	87.5	93.5	96.4	91.1	32.5	95.7	0.0	0.0	54.3	63.2
UCF (%)	28.9	87.3	94.5	87.9	94.7	99.3	94.3	33.4	97.7	0.0	0.0	54.3	64.1
LF (%)	29.0	87.4	94.3	87.2	93.4	95.9	90.3	32.3	94.1	0.0	0.0	54.7	62.9
OF (%)	31.2	88.8	95.2	89.0	95.6	100.0	95.2	34.0	99.0	0.0	0.0	56.6	65.1
EUF (%)	71.1	12.7	5.6	12.5	6.5	3.6	8.9	67.5	4.3	100.0	100.0	45.7	36.8
PUF (%)	61.3	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.6	100.0	5.2	1.2	14.4
UCLF (%)	9.8	12.7	5.5	12.1	5.3	0.7	5.6	66.6	0.8	0.0	94.8	44.5	21.5
XUF (%)	0.0	0.0	0.1	0.4	1.2	2.9	3.2	0.9	2.0	0.0	0.0	0.0	0.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

UPGRADING OF EMERGENCY POWER SYSTEM COMPLETED BY 21ST OF JANUARY. ANNUAL OUTAGE WITH REFUELLING LASTED FROM SEPTEMBER 30 UNTIL DECEMBER 15.

5. Historical Summary

Date of Construction Start:	01 Aug 1966	Lifetime Generation:	86596.2 GW(e).h
Date of First Criticality:	12 Dec 1970	Cumulative Energy Availability Factor:	62.9%
Date of Grid Connection:	19 Aug 1971	Cumulative Load Factor:	61.6%
Date of Commercial Operation:	06 Feb 1972	Cumulative Unit Capability Factor:	63.1%
		Cumulative Energy Unavailability Factor:	37.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1972	1300.9	458.0	41.4	41.4	41.4	41.4	35.3	35.3	3342	41.6
1973	1967.7	440.0	51.0	46.3	51.0	46.3	51.1	43.4	4871	55.6
1974	1283.8	440.0	33.1	41.8	33.1	41.8	33.3	40.0	3067	35.0
1975	2682.4	440.0	73.6	49.9	73.6	49.9	69.6	47.5	6483	74.0
1976	2469.5	440.0	70.4	54.0	70.4	54.0	63.9	50.8	6278	71.5
1977	2577.1	440.0	69.0	56.5	69.0	56.5	66.9	53.5	6540	74.7
1978	3113.7	440.0	83.7	60.4	83.7	60.4	80.8	57.4	7390	84.4
1979	2716.3	440.0	70.5	61.7	70.5	61.7	70.5	59.0	6422	73.3
1980	2994.1	440.0	77.8	63.5	77.8	63.5	77.5	61.1	7221	82.2
1981	2885.8	440.0	74.9	64.6	74.9	64.6	74.9	62.5	7094	81.0
1982	2937.7	440.0	76.2	65.7	76.2	65.7	76.2	63.7	6967	79.5
1983	3133.3	440.0	81.3	67.0	81.3	67.0	81.3	65.2	7694	87.8
1984	2959.7	440.0	81.1	68.1	81.1	68.1	76.6	66.1	7249	82.5
1985	2753.2	440.0	71.8	68.4	71.8	68.4	71.4	66.5	6491	74.1
1986	3134.4	440.0	81.9	69.3	81.9	69.3	81.3	67.5	7359	84.0
1987	3232.5	440.0	86.6	70.3	86.6	70.3	83.9	68.5	7809	89.1
1988	2863.1	442.0	73.6	70.5	73.6	70.5	73.7	68.8	6827	77.7
1989	3175.6	442.0	87.0	71.5	87.0	71.5	82.0	69.5	7788	88.9
1990	2493.8	442.0	64.1	71.1	64.1	71.1	64.4	69.3	5794	66.1
1991	3349.2	442.0	86.1	71.8	86.1	71.8	86.5	70.1	7856	89.7
1992	1784.8	442.0	45.9	70.6	45.9	70.6	46.0	69.0	4362	49.7
1993	0.0	442.0	-0.1	67.4	-0.1	67.4	0.0	65.8	0	0.0
1994	0.0	445.0	0.0	64.4	0.0	64.4	0.0	62.9	0	0.0
1995	0.0	445.0	0.0	61.7	0.0	61.7	0.0	60.3	0	0.0
1996	2380.0	442.0	61.1	61.7	61.1	61.7	61.3	60.3	5564	63.3
1997	2925.9	442.0	75.8	62.2	75.8	62.2	75.6	60.9	6716	76.7
1998	1297.7	445.0	32.6	61.1	32.6	61.1	33.3	59.9	2968	33.9
1999	3298.9	445.0	86.7	62.0	86.7	62.0	84.6	60.8	7647	87.3
2000	3060.2	445.0	88.8	63.0	88.8	63.0	78.3	61.4	7765	88.4
2001	3080.9	445.0	83.7	63.7	83.7	63.7	79.0	62.0	7462	85.2
2002	0.0	445.0	0.0	61.6	0.0	61.6	0.0	60.0	0	0.0
2003	3058.4	467.0	75.9	62.1	74.8	62.0	74.5	60.4	7075	80.8
2004	3536.5	467.0	87.9	62.9	85.8	62.8	86.2	61.3	7743	88.1
2005	3265.9	467.0	80.0	63.4	79.5	63.3	79.8	61.8	7129	81.4
2006	2088.4	467.0	51.3	63.1	50.9	62.9	51.0	61.5	4520	51.6
2007	2575.1	467.0	64.1	63.1	63.2	62.9	62.9	61.6	5703	65.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1776		2	668	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	789			783	67	
D. Inspection, maintenance or repair without refuelling				701		
E. Testing of plant systems or components				3	3	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				231	9	
G. Major back-fitting, refurbishment or upgrading activities without refuelling	456					
H. Nuclear regulatory requirements					314	
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					114	
L. Human factor related		36			5	
Z. Others					10	
Subtotal	1245	1812	0	1720	1194	1
Total		3057			2915	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	309	116
12. Reactor I&C Systems	33	97
13. Reactor Auxiliary Systems		14
14. Safety Systems	80	24
15. Reactor Cooling Systems	75	26
21. Fuel Handling and Storage Facilities		19
31. Turbine and auxiliaries	693	253
32. Feedwater and Main Steam System	30	25
33. Circulating Water System		0
35. All other I&C Systems	14	4
41. Main Generator Systems	527	59
42. Electrical Power Supply Systems	15	24
XX. Miscellaneous Systems		2
Total	1776	663

SE-3 OSKARSHAMN-2**Operator:** OKG (OKG AKTIEBOLAG)**Contractor:** ABBATOM (ABBATOM (formerly ASEA-ATOM))**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 598.0 MW(e)
Design Net Capacity: 580.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3993.2 GW(e).h
Energy Availability Factor: 76.4%
Load Factor: 76.2%
Operating Factor: 79.0%
Energy Unavailability Factor: 23.6%
Total Off-line Time: 1838 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	441.0	400.1	441.1	422.3	434.5	410.2	280.2	0.0	2.9	346.6	379.5	434.9	3993.2
EAF (%)	99.1	99.6	99.3	98.6	97.9	95.9	64.1	0.0	0.7	77.6	88.0	97.6	76.4
UCF (%)	99.7	99.9	99.7	99.3	99.4	99.3	66.7	0.0	0.7	80.1	90.0	99.4	77.7
LF (%)	99.1	99.6	99.1	98.1	97.7	95.3	63.0	0.0	0.7	77.9	88.1	97.7	76.2
OF (%)	100.0	100.0	99.9	100.0	100.0	100.0	67.9	0.0	3.6	87.2	91.0	100.0	79.0
EUf (%)	0.9	0.4	0.7	1.4	2.1	4.1	35.9	100.0	99.3	22.4	12.0	2.4	23.6
PUF (%)	0.2	0.0	0.0	0.4	0.0	0.0	32.8	100.0	43.9	13.8	0.0	0.3	16.1
UCLF (%)	0.1	0.1	0.3	0.3	0.6	0.7	0.5	0.0	55.4	6.1	10.0	0.3	6.1
XUF (%)	0.5	0.3	0.4	0.7	1.5	3.4	2.6	0.0	0.0	2.4	2.0	1.8	1.3

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

JANUARY 1ST, THE REFERENCE UNIT POWER (NET) WAS CHANGED FROM 602 TO 598 MW(E). ANNUAL OUTAGE WITH REFUELLING AND A PROGRAM OF MODIFICATIONS WERE PERFORMED JULY 22 UNTIL SEPTEMBER 9.

5. Historical Summary

Date of Construction Start:	01 Sep 1969	Lifetime Generation:	130594.9 GW(e).h
Date of First Criticality:	06 Mar 1974	Cumulative Energy Availability Factor:	78.9%
Date of Grid Connection:	02 Oct 1974	Cumulative Load Factor:	75.7%
Date of Commercial Operation:	01 Jan 1975	Cumulative Unit Capability Factor:	79.6%
		Cumulative Energy Unavailability Factor:	21.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	3010.6	580.0	64.5	64.5	64.5	64.5	59.3	59.3	5694	65.0
1976	2893.0	570.0	63.8	64.1	63.8	64.1	57.8	58.5	5744	65.4
1977	3160.9	590.0	65.0	64.4	65.0	64.4	61.2	59.4	6372	72.7
1978	3638.3	570.0	72.9	66.5	72.9	66.5	72.9	62.7	6695	76.4
1979	3789.2	570.0	74.5	68.1	74.5	68.1	75.9	65.3	7473	85.3
1980	4172.3	570.0	86.1	71.1	86.1	71.1	83.3	68.3	7699	87.6
1981	3836.5	570.0	76.7	71.9	76.7	71.9	76.8	69.5	7432	84.8
1982	4248.7	570.0	85.3	73.6	85.3	73.6	85.1	71.5	7905	90.2
1983	4054.3	595.0	86.9	75.1	86.9	75.1	77.8	72.2	7703	87.9
1984	4797.6	595.0	92.2	76.8	92.2	76.8	91.8	74.2	8253	94.0
1985	3988.7	595.0	86.9	77.8	86.9	77.8	76.5	74.4	7739	88.3
1986	4277.8	595.0	83.9	78.3	83.9	78.3	82.1	75.1	7770	88.7
1987	4230.8	595.0	83.5	78.7	83.5	78.7	81.2	75.6	7789	88.9
1988	4417.4	605.0	85.9	79.2	85.9	79.2	83.1	76.1	7894	89.9
1989	3960.7	605.0	88.3	79.9	88.3	79.9	74.7	76.0	8065	92.1
1990	4050.3	605.0	84.1	80.1	84.1	80.1	76.4	76.0	7885	90.0
1991	4103.4	605.0	79.4	80.1	79.4	80.1	77.4	76.1	7467	85.2
1992	2851.5	605.0	55.3	78.7	55.3	78.7	53.7	74.8	5310	60.5
1993	2611.5	605.0	55.3	77.4	51.0	77.2	49.3	73.5	4924	56.2
1994	4460.8	605.0	88.6	78.0	86.8	77.7	84.2	74.0	7833	89.4
1995	4175.8	605.0	83.6	78.3	79.4	77.8	78.8	74.2	7452	85.1
1996	3760.4	605.0	73.1	78.0	71.7	77.5	70.8	74.1	6543	74.5
1997	4417.4	605.0	86.4	78.4	85.4	77.8	83.4	74.5	7707	88.0
1998	4457.8	605.0	90.3	78.9	90.3	78.4	84.1	74.9	7951	90.8
1999	3198.2	605.0	64.7	78.3	64.7	77.8	60.3	74.3	5667	64.7
2000	3898.5	605.0	85.3	78.6	85.3	78.1	73.4	74.3	7525	85.7
2001	4748.5	602.0	92.3	79.1	92.3	78.6	90.0	74.9	8113	92.6
2002	4508.6	602.0	91.2	79.5	90.6	79.1	85.5	75.2	8043	91.8
2003	3055.3	602.0	59.5	78.8	58.3	78.3	57.9	74.6	5289	60.4
2004	4625.9	602.0	89.1	79.2	87.7	78.7	87.5	75.1	7900	89.9
2005	4728.1	602.0	92.3	79.6	90.0	79.0	89.7	75.6	8187	93.5
2006	4125.3	602.0	79.7	79.6	78.4	79.0	78.2	75.6	7089	80.9
2007	3993.2	598.0	77.7	79.6	76.4	78.9	76.2	75.7	6922	79.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure	42	445			198	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	1284			883	98	
D. Inspection, maintenance or repair without refuelling				44		
E. Testing of plant systems or components	5				3	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				17	3	
H. Nuclear regulatory requirements					135	
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					87	2
L. Human factor related					0	
P. Fire		65				
Z. Others					4	
Subtotal	1331	510	0	944	530	3
Total		1841			1477	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		27
12. Reactor I&C Systems		10
13. Reactor Auxiliary Systems	9	0
14. Safety Systems		7
15. Reactor Cooling Systems		23
31. Turbine and auxiliaries	432	82
32. Feedwater and Main Steam System	46	18
33. Circulating Water System		0
35. All other I&C Systems		0
41. Main Generator Systems		5
42. Electrical Power Supply Systems		1
XX. Miscellaneous Systems		0
Total	487	173

SE-12 OSKARSHAMN-3

Operator: OKG (OKG AKTIEBOLAG)
Contractor: ABBATOM (ABBATOM (formerly ASEA-ATOM))

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1150.0 MW(e)
Design Net Capacity: 1050.0 MW(e)
Design Discharge Burnup: 32000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8829.2 GW(e).h
Energy Availability Factor: 87.8%
Load Factor: 87.6%
Operating Factor: 90.9%
Energy Unavailability Factor: 12.2%
Total Off-line Time: 795 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	848.4	769.3	818.0	653.8	839.0	555.4	533.0	803.6	507.7	840.1	819.6	841.5	8829.2
EAF (%)	99.2	99.5	95.7	79.2	98.3	67.4	62.7	94.4	61.6	98.2	99.0	98.3	87.8
UCF (%)	99.8	99.8	96.0	79.6	100.0	76.3	64.8	96.8	63.0	99.9	99.8	98.7	89.6
LF (%)	99.2	99.5	95.6	79.1	98.1	67.1	62.3	93.9	61.3	98.1	99.0	98.3	87.6
OF (%)	100.0	100.0	96.6	82.6	100.0	76.7	69.9	98.5	66.5	100.0	100.0	99.9	90.9
EUUF (%)	0.8	0.5	4.3	20.8	1.7	32.6	37.3	5.6	38.4	1.8	1.0	1.7	12.2
PUF (%)	0.0	0.0	3.7	17.9	0.0	23.7	25.9	0.0	0.0	0.0	0.0	0.0	5.9
UCLF (%)	0.2	0.2	0.3	2.4	0.0	0.0	9.3	3.2	37.0	0.1	0.2	1.3	4.5
XUF (%)	0.6	0.2	0.2	0.4	1.6	8.9	2.1	2.4	1.4	1.7	0.8	0.5	1.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THE RATING WERE ADJUSTED FROM 2007-01-01.ANNUAL OUTAGE WITH REFUELLING WAS PERFORMED DURING 2007-06-24-07-07.THE UNIT WAS DOWN TWICE DURING THE YEAR (APRIL AND SEPTEMBER) FOR FIXING DEFECT FUEL ASSEMBLIES.

5. Historical Summary

Date of Construction Start: 01 May 1980 **Lifetime Generation:** 188003.0 GW(e).h
Date of First Criticality: 29 Dec 1984 **Cumulative Energy Availability Factor:** 87.5%
Date of Grid Connection: 03 Mar 1985 **Cumulative Load Factor:** 83.7%
Date of Commercial Operation: 15 Aug 1985 **Cumulative Unit Capability Factor:** 88.2%
Cumulative Energy Unavailability Factor: 12.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	3070.3	1068.0	92.7	92.7	92.7	92.7	79.6	79.6	3429	93.4
1986	8386.9	1070.0	90.1	90.9	90.1	90.9	89.5	86.6	8111	92.6
1987	7058.0	1070.0	79.6	86.2	79.6	86.2	75.3	81.9	7988	91.2
1988	7311.9	1065.0	82.1	85.0	82.1	85.0	78.2	80.8	7458	84.9
1989	7788.2	1083.0	91.3	86.4	91.3	86.4	82.0	81.1	8242	94.1
1990	7640.2	1088.0	82.2	85.6	82.2	85.6	80.1	80.9	7782	88.8
1991	8935.8	1160.0	89.3	86.2	89.3	86.2	87.9	82.1	8184	93.4
1992	8270.6	1160.0	82.6	85.7	82.5	85.7	81.2	81.9	7904	90.0
1993	8339.5	1160.0	91.6	86.5	83.8	85.5	82.1	82.0	8034	91.7
1994	8480.4	1160.0	85.0	86.3	84.9	85.4	83.5	82.1	7832	89.4
1995	8828.1	1160.0	89.8	86.6	87.5	85.6	86.9	82.6	7957	90.8
1996	8518.6	1160.0	85.2	86.5	85.0	85.6	83.6	82.7	7519	85.6
1997	8970.4	1160.0	91.1	86.9	91.1	86.0	88.3	83.2	8017	91.5
1998	8032.3	1160.0	89.4	87.1	89.4	86.3	79.0	82.8	7914	90.3
1999	8516.6	1160.0	89.2	87.2	89.2	86.5	83.8	82.9	7850	89.6
2000	7219.1	1160.0	91.2	87.5	91.2	86.8	70.8	82.1	8075	91.9
2001	9052.0	1160.0	92.6	87.8	92.6	87.2	89.1	82.5	8160	93.2
2002	8884.0	1160.0	92.3	88.1	92.3	87.5	87.4	82.8	8140	92.9
2003	7678.0	1160.0	78.0	87.5	76.2	86.9	75.6	82.4	6871	78.4
2004	9318.5	1160.0	93.1	87.8	92.6	87.2	91.5	82.9	8236	93.8
2005	8573.4	1160.0	86.7	87.8	85.5	87.1	84.4	83.0	7671	87.6
2006	9522.5	1160.0	96.3	88.2	95.0	87.4	93.7	83.5	8467	96.7
2007	8829.2	1150.0	89.6	88.2	87.8	87.5	87.6	83.7	7965	90.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		316			95	
B. Refuelling without a maintenance	137	17			10	
C. Inspection, maintenance or repair combined with refuelling	334			557	20	
D. Inspection, maintenance or repair without refuelling				23		
H. Nuclear regulatory requirements					48	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					19	
L. Human factor related					0	
Z. Others					5	
Subtotal	471	333	0	580	197	0
Total	804			777		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	208	5
12. Reactor I&C Systems		11
13. Reactor Auxiliary Systems	65	1
14. Safety Systems		11
15. Reactor Cooling Systems		24
21. Fuel Handling and Storage Facilities		12
31. Turbine and auxiliaries	32	15
32. Feedwater and Main Steam System	11	13
35. All other I&C Systems		0
Total	316	92

SE-4 RINGHALS-1**Operator:** RAB (Ringhals AB)**Contractor:** ABBATOM (ABBATOM (formerly ASEA-ATOM))**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 843.0 MW(e)
Design Net Capacity: 760.0 MW(e)
Design Discharge Burnup: 41000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5963.4 GW(e).h
Energy Availability Factor: 79.4%
Load Factor: 80.8%
Operating Factor: 83.0%
Energy Unavailability Factor: 20.6%
Total Off-line Time: 1485 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	565.7	326.7	624.7	609.0	625.0	575.2	617.0	589.5	0.0	196.2	611.6	622.7	5963.4
EAF (%)	90.2	57.3	99.6	99.7	97.9	92.5	96.1	91.8	0.0	29.3	98.8	97.0	79.4
UCF (%)	91.4	57.3	100.0	100.0	100.0	97.6	100.0	96.7	0.0	30.0	100.0	97.8	81.1
LF (%)	90.2	57.7	99.6	100.5	99.7	94.8	98.4	94.0	0.0	31.2	100.8	99.3	80.8
OF (%)	93.0	59.5	100.0	100.1	100.0	100.0	100.0	97.8	0.0	42.8	100.0	100.0	83.0
EUF (%)	9.8	42.7	0.4	0.3	2.1	7.5	3.9	8.2	100.0	70.7	1.2	3.0	20.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	100.0	35.3	0.0	0.0	11.5
UCLF (%)	8.6	42.7	0.0	0.0	0.0	2.5	0.0	0.0	0.0	34.8	0.0	2.2	7.4
XUF (%)	1.2	0.0	0.4	0.3	2.1	5.0	3.9	4.9	0.0	0.7	1.2	0.8	1.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Feb 1969
Date of First Criticality: 20 Aug 1973
Date of Grid Connection: 14 Oct 1974
Date of Commercial Operation: 01 Jan 1976

Lifetime Generation: 153413.0 GW(e).h
Cumulative Energy Availability Factor: 72.9%
Cumulative Load Factor: 68.5%
Cumulative Unit Capability Factor: 73.8%
Cumulative Energy Unavailability Factor: 27.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	2164.6	760.0	32.4	32.4	32.4	32.4	32.4	32.4	4269	48.6
1977	3531.2	760.0	53.0	42.7	53.0	42.7	53.0	42.7	6095	69.6
1978	4153.1	750.0	63.2	49.5	63.2	49.5	63.2	49.5	6099	69.6
1979	3868.2	750.0	58.9	51.8	58.9	51.8	58.9	51.8	6070	69.3
1980	4433.8	750.0	68.8	55.2	68.2	55.1	67.3	54.9	6362	72.4
1981	4059.4	750.0	61.8	56.3	61.8	56.2	61.8	56.0	6285	71.7
1982	4687.5	750.0	74.9	58.9	74.9	58.8	71.3	58.2	7162	81.8
1983	3265.0	750.0	49.7	57.8	49.7	57.7	49.7	57.2	5372	61.3
1984	4917.7	750.0	79.8	60.2	79.7	60.1	74.6	59.1	7382	84.0
1985	5168.8	750.0	86.0	62.8	86.0	62.7	78.7	61.0	7832	89.4
1986	4470.5	750.0	69.9	63.4	69.9	63.4	68.0	61.7	7203	82.2
1987	4872.7	750.0	77.7	64.6	77.7	64.6	74.2	62.7	7878	89.9
1988	4694.7	750.0	75.1	65.4	74.7	65.3	71.3	63.4	7338	83.5
1989	4855.3	755.0	81.8	66.6	81.8	66.5	73.4	64.1	7963	90.9
1990	4525.6	795.0	71.6	66.9	71.4	66.9	65.0	64.2	7918	90.4
1991	5638.9	795.0	82.6	68.0	82.5	67.9	81.0	65.3	8034	91.7
1992	3383.8	795.0	51.2	66.9	51.2	66.9	48.5	64.2	4938	56.2
1993	3996.4	795.0	68.5	67.0	68.5	67.0	57.4	63.8	6575	75.1
1994	5389.2	795.0	78.0	67.6	76.4	67.5	77.4	64.6	7189	82.1
1995	5667.0	826.0	78.3	68.2	78.2	68.1	78.3	65.3	7697	87.9
1996	6490.9	832.0	90.3	69.3	90.1	69.2	88.7	66.5	8008	91.2
1997	2035.6	830.0	97.3	70.7	95.8	70.5	28.0	64.6	2663	30.4
1998	5601.6	830.0	84.8	71.4	80.7	71.0	77.0	65.2	7605	86.8
1999	4930.4	825.0	73.3	71.5	68.4	70.8	68.2	65.3	6500	74.2
2000	3239.7	825.0	57.2	70.8	50.8	70.0	44.7	64.5	4659	53.0
2001	5835.0	825.0	86.1	71.5	86.1	70.7	80.7	65.1	7814	89.2
2002	5956.2	830.0	84.7	72.0	80.4	71.0	81.9	65.8	7667	87.5
2003	5104.3	830.0	70.4	71.9	70.2	71.0	70.2	66.0	6269	71.6
2004	6523.1	830.0	90.1	72.6	89.7	71.7	89.5	66.8	7974	90.8
2005	6064.8	830.0	83.9	73.0	83.5	72.1	83.4	67.4	7452	85.1
2006	6518.8	843.0	89.9	73.6	87.9	72.6	88.3	68.1	7982	91.1
2007	5963.4	843.0	81.1	73.8	79.4	72.9	80.8	68.5	7275	83.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		688			553	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	864			965	39	
D. Inspection, maintenance or repair without refuelling				2		
E. Testing of plant systems or components					5	
H. Nuclear regulatory requirements						14
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					29	10
L. Human factor related					1	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Z. Others					13	
Subtotal	864	688	0	967	642	27
Total		1552			1636	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	195	174
12. Reactor I&C Systems	117	69
13. Reactor Auxiliary Systems	376	9
14. Safety Systems		47
15. Reactor Cooling Systems		114
31. Turbine and auxiliaries		30
32. Feedwater and Main Steam System		38
35. All other I&C Systems		1
41. Main Generator Systems		0
42. Electrical Power Supply Systems		11
XX. Miscellaneous Systems		0
Total	688	493

SE-5 RINGHALS-2**Operator:** RAB (Ringhals AB)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 867.0 MW(e)
Design Net Capacity: 820.0 MW(e)
Design Discharge Burnup: 47000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6365.1 GW(e).h
Energy Availability Factor: 83.7%
Load Factor: 83.8%
Operating Factor: 88.8%
Energy Unavailability Factor: 16.3%
Total Off-line Time: 978 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	635.1	460.2	631.9	622.7	485.3	597.4	479.5	76.4	610.4	624.5	535.0	606.8	6365.1
EAF (%)	98.1	78.7	97.8	99.5	75.0	95.6	74.1	11.6	97.5	97.0	86.0	94.3	83.7
UCF (%)	100.0	78.7	97.8	100.0	77.0	100.0	77.1	12.1	100.0	98.8	86.9	94.4	85.2
LF (%)	98.5	79.0	98.0	99.9	75.2	95.7	74.3	11.8	97.8	96.7	85.7	94.1	83.8
OF (%)	100.0	83.0	98.5	100.1	100.0	100.0	83.9	14.9	100.0	99.9	87.8	98.4	88.8
EUF (%)	1.9	21.3	2.2	0.5	25.0	4.4	25.9	88.4	2.5	3.0	14.0	5.7	16.3
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	16.8	60.4	0.0	1.2	0.0	0.0	6.7
UCLF (%)	0.0	21.4	2.2	0.0	23.0	0.0	6.1	27.5	0.0	0.0	13.1	5.7	8.2
XUF (%)	1.9	0.0	0.0	0.5	1.9	4.4	3.0	0.5	2.5	1.8	0.9	0.0	1.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	01 Oct 1970	Lifetime Generation:	167110.0 GW(e).h
Date of First Criticality:	19 Jun 1974	Cumulative Energy Availability Factor:	71.9%
Date of Grid Connection:	17 Aug 1974	Cumulative Load Factor:	67.6%
Date of Commercial Operation:	01 May 1975	Cumulative Unit Capability Factor:	73.3%
		Cumulative Energy Unavailability Factor:	28.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	2162.0	820.0	44.9	44.9	44.9	44.9	44.8	44.8	3382	57.5
1976	4213.0	822.0	59.4	53.6	59.4	53.6	58.3	52.9	6167	70.2
1977	4114.4	822.0	57.1	54.9	57.1	54.9	57.1	54.5	6402	73.1
1978	4094.4	800.0	58.4	55.8	58.4	55.8	58.4	55.6	6772	77.3
1979	3585.3	800.0	51.2	54.9	51.2	54.9	51.2	54.6	5541	63.3
1980	4336.9	800.0	61.7	56.1	61.7	56.1	61.7	55.9	5824	66.3
1981	4093.2	800.0	58.4	56.4	58.4	56.4	58.4	56.2	6216	71.0
1982	4548.0	800.0	66.3	57.7	66.3	57.7	64.9	57.4	5922	67.6
1983	3935.3	800.0	56.2	57.5	56.2	57.5	56.2	57.2	6107	69.7
1984	4178.7	800.0	68.3	58.6	68.2	58.6	59.5	57.5	6090	69.3
1985	4294.7	800.0	74.8	60.1	74.8	60.1	61.3	57.8	6680	76.3
1986	3969.1	800.0	59.4	60.1	59.4	60.1	56.6	57.7	6383	72.9
1987	4216.6	800.0	65.2	60.5	65.2	60.5	60.2	57.9	7397	84.4
1988	4216.1	800.0	68.5	61.1	68.5	61.0	60.0	58.1	7368	83.9
1989	3619.6	800.0	50.0	60.3	50.0	60.3	51.6	57.6	6002	68.5
1990	5064.8	800.0	66.7	60.7	66.7	60.7	72.3	58.6	6348	72.5
1991	6232.8	875.0	83.5	62.2	83.5	62.2	81.3	60.0	7909	90.3
1992	5193.4	875.0	72.1	62.8	72.1	62.8	67.6	60.5	6959	79.2
1993	2650.0	875.0	37.8	61.4	37.8	61.4	34.6	59.0	3307	37.8
1994	6258.7	875.0	84.7	62.6	83.0	62.5	81.7	60.2	7429	84.8
1995	6096.6	867.0	85.6	63.8	84.8	63.7	80.3	61.3	7676	87.6
1996	5723.3	864.0	84.6	64.8	76.8	64.3	75.4	61.9	7574	86.2
1997	2372.1	864.0	98.8	66.4	98.2	65.9	31.3	60.5	2748	31.4
1998	6096.4	875.0	90.5	67.5	82.2	66.6	79.5	61.4	7866	89.8
1999	6445.8	862.0	92.2	68.5	85.8	67.4	85.4	62.4	8075	92.2
2000	5143.5	862.0	84.8	69.2	77.0	67.8	67.9	62.6	7284	82.9
2001	6322.7	862.0	87.0	69.9	85.7	68.5	83.7	63.4	8004	91.4
2002	6540.3	875.0	89.2	70.6	84.3	69.1	85.3	64.3	8130	92.8
2003	6811.5	875.0	92.5	71.4	90.9	69.9	88.9	65.2	8093	92.4
2004	6786.6	875.0	90.3	72.1	90.3	70.6	88.3	66.0	7976	90.8
2005	5784.4	875.0	78.4	72.3	77.9	70.9	75.5	66.3	6874	78.5
2006	6839.4	867.0	91.7	72.9	89.7	71.5	90.1	67.1	8107	92.5
2007	6365.1	867.0	85.2	73.3	83.7	71.9	83.8	67.6	7782	88.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		481			666	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	557			956		
D. Inspection, maintenance or repair without refuelling				81		
E. Testing of plant systems or components				2		
H. Nuclear regulatory requirements					4	
J. Grid failure or grid unavailability						5
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						8
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Z. Others					1	
Subtotal	557	481	0	1039	671	14
Total		1038			1724	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	359	170
12. Reactor I&C Systems		7
14. Safety Systems	100	74
15. Reactor Cooling Systems		17
16. Steam generation systems		226
21. Fuel Handling and Storage Facilities		46
31. Turbine and auxiliaries	22	14
32. Feedwater and Main Steam System		35
33. Circulating Water System		0
35. All other I&C Systems		0
41. Main Generator Systems		35
42. Electrical Power Supply Systems		29
Total	481	653

SE-7 RINGHALS-3

Operator: RAB (Ringhals AB)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1045.0 MW(e)
Design Net Capacity: 915.0 MW(e)
Design Discharge Burnup: 46000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5990.8 GW(e).h
Energy Availability Factor: 64.3%
Load Factor: 65.4%
Operating Factor: 74.9%
Energy Unavailability Factor: 35.7%
Total Off-line Time: 2195 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	681.9	605.1	752.1	720.8	402.0	0.0	0.0	254.4	452.9	720.4	667.3	733.9	5990.8
EAF (%)	86.1	84.7	95.4	94.5	50.5	-1.3	0.0	31.4	59.3	91.3	87.8	93.1	64.3
UCF (%)	95.8	85.3	96.3	96.5	52.6	-1.3	0.0	36.5	64.4	95.5	90.0	94.4	67.0
LF (%)	87.7	86.2	96.7	95.9	51.7	0.0	0.0	32.7	60.2	92.5	88.7	94.4	65.4
OF (%)	96.4	92.4	100.0	100.1	55.4	0.0	0.0	64.5	92.1	99.9	100.0	100.0	74.9
EUF (%)	13.9	15.3	4.6	5.5	49.5	101.3	100.0	68.6	40.7	8.7	12.2	6.9	35.7
PUF (%)	0.0	0.0	0.0	0.0	45.6	54.9	0.0	23.2	0.0	0.0	0.0	0.0	10.4
UCLF (%)	4.2	14.7	3.7	3.6	1.8	46.5	100.0	40.3	35.6	4.5	10.0	5.7	22.6
XUF (%)	9.7	0.6	0.9	2.0	2.1	0.0	0.0	5.1	5.1	4.1	2.2	1.3	2.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Sep 1972
Date of First Criticality: 29 Jul 1980
Date of Grid Connection: 07 Sep 1980
Date of Commercial Operation: 09 Sep 1981

Lifetime Generation: 159129.0 GW(e).h
Cumulative Energy Availability Factor: 77.0%
Cumulative Load Factor: 71.7%
Cumulative Unit Capability Factor: 78.6%
Cumulative Energy Unavailability Factor: 23.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	721.0	920.0	26.7	26.7	26.7	26.7	26.8	26.8	864	29.5
1982	1251.6	915.0	15.6	18.4	15.6	18.4	15.6	18.4	3680	42.0
1983	2909.9	867.0	38.2	26.7	38.2	26.7	38.2	26.7	5886	67.2
1984	5346.6	915.0	72.4	40.6	72.4	40.6	66.5	38.8	6450	73.4
1985	6090.3	915.0	84.8	50.9	84.8	50.9	76.0	47.5	7580	86.5
1986	6233.9	915.0	78.8	56.2	78.8	56.2	77.8	53.2	7026	80.2
1987	6169.2	915.0	83.1	60.5	83.1	60.5	77.0	57.0	7485	85.4
1988	6151.2	915.0	77.1	62.8	77.1	62.8	76.5	59.7	7645	87.0
1989	5829.7	915.0	82.6	65.2	82.6	65.2	72.7	61.3	7757	88.6
1990	5871.3	915.0	74.2	66.1	74.0	66.1	73.2	62.5	7855	89.7
1991	5923.6	915.0	75.7	67.1	75.7	67.0	73.9	63.6	8007	91.4
1992	5622.1	915.0	82.3	68.4	82.3	68.4	69.9	64.2	7941	90.4
1993	6685.8	915.0	89.8	70.1	89.8	70.1	83.4	65.8	7964	90.9
1994	6873.4	918.0	86.1	71.4	86.1	71.3	85.5	67.3	8097	92.4
1995	4873.6	918.0	60.7	70.6	60.7	70.6	60.6	66.8	6040	68.9
1996	6816.8	910.0	92.5	72.0	87.3	71.7	85.3	68.0	8166	93.0
1997	2284.3	910.0	95.5	73.5	95.5	73.1	28.7	65.6	2809	32.1
1998	6382.6	915.0	90.2	74.4	81.3	73.6	79.6	66.4	8008	91.4
1999	6976.0	911.0	90.0	75.3	88.0	74.4	87.4	67.5	7899	90.2
2000	6165.8	911.0	92.3	76.2	89.5	75.2	77.1	68.0	7966	90.7
2001	6285.3	911.0	88.6	76.8	79.4	75.4	78.8	68.6	7942	90.7
2002	6890.6	915.0	90.8	77.4	88.8	76.0	86.0	69.4	7930	90.5
2003	6714.6	915.0	85.3	77.8	84.4	76.4	83.8	70.0	7475	85.3
2004	7497.9	915.0	94.0	78.5	93.9	77.1	93.3	71.0	8295	94.4
2005	7181.6	915.0	91.2	79.0	90.5	77.7	89.6	71.8	8075	92.2
2006	6570.8	917.0	81.8	79.1	75.0	77.6	76.4	72.0	7249	82.8
2007	5990.8	1045.0	67.0	78.6	64.3	77.0	65.4	71.7	6565	74.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1427			293	
C. Inspection, maintenance or repair combined with refuelling	727			627	17	
D. Inspection, maintenance or repair without refuelling				277		
E. Testing of plant systems or components				5	1	
H. Nuclear regulatory requirements				3		
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						5
L. Human factor related		138				
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Z. Others					3	
Subtotal	727	1565	0	912	314	8
Total		2292			1234	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		19
12. Reactor I&C Systems		1
15. Reactor Cooling Systems		57
16. Steam generation systems		170
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries	1114	1
32. Feedwater and Main Steam System		13
41. Main Generator Systems	313	
42. Electrical Power Supply Systems		25
Total	1427	286

SE-10 RINGHALS-4

Operator: RAB (Ringhals AB)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 907.0 MW(e)
 Design Net Capacity: 915.0 MW(e)
 Design Discharge Burnup: 46000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7192.9 GW(e).h
 Energy Availability Factor: 89.4%
 Load Factor: 90.5%
 Operating Factor: 92.8%
 Energy Unavailability Factor: 10.6%
 Total Off-line Time: 634 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	674.0	587.1	675.8	649.6	662.1	378.1	237.7	659.7	650.1	655.1	666.7	696.8	7192.9
EAF (%)	99.1	95.6	99.4	100.0	97.4	57.4	36.8	97.0	98.8	96.3	98.4	97.6	89.4
UCF (%)	100.0	96.1	100.0	100.0	100.0	61.4	39.0	100.0	100.0	96.3	100.0	100.0	91.0
LF (%)	99.9	96.3	100.2	99.6	98.1	57.9	35.2	97.8	99.5	97.0	102.1	103.3	90.5
OF (%)	100.0	100.0	100.0	100.1	100.0	67.4	46.4	100.0	100.0	99.9	100.0	100.0	92.8
EUF (%)	0.9	4.4	0.6	0.0	2.6	42.6	63.2	3.0	1.2	3.7	1.6	2.4	10.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	33.4	46.7	0.0	0.0	0.0	0.0	0.0	6.7
UCLF (%)	0.0	3.9	0.0	0.0	0.0	5.3	14.3	0.0	0.0	3.7	0.0	0.0	2.3
XUF (%)	0.9	0.5	0.6	0.0	2.6	4.0	2.2	3.0	1.2	0.0	1.6	2.4	1.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

AUTOMATIC SCRAM HAPPEND 2007-07-16 UNDER UPSTART AT ABOUT 3% POWER NOT CONNECTED TO THE GRID.

5. Historical Summary

Date of Construction Start: 01 Nov 1973 Lifetime Generation: 155629.0 GW(e).h
 Date of First Criticality: 19 May 1982 Cumulative Energy Availability Factor: 85.2%
 Date of Grid Connection: 23 Jun 1982 Cumulative Load Factor: 77.5%
 Date of Commercial Operation: 21 Nov 1983 Cumulative Unit Capability Factor: 86.9%
 Cumulative Energy Unavailability Factor: 14.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	879.6	915.0	65.7	65.7	65.7	65.7	65.7	65.7	1275	87.1
1984	5987.7	915.0	82.3	79.9	82.2	79.8	74.5	73.2	7517	85.6
1985	5923.7	915.0	87.9	83.6	87.9	83.6	73.9	73.5	7755	88.5
1986	5619.3	915.0	70.7	79.5	70.7	79.5	70.1	72.5	6839	78.1
1987	5665.9	915.0	88.2	81.6	88.2	81.6	70.7	72.0	7827	89.3
1988	6641.7	915.0	83.4	82.0	83.4	81.9	82.6	74.1	7945	90.4
1989	5536.8	915.0	85.8	82.6	85.8	82.6	69.1	73.3	7624	87.0
1990	6467.3	915.0	89.1	83.5	89.1	83.5	80.7	74.3	8080	92.2
1991	6916.2	915.0	85.9	83.8	85.9	83.8	86.3	75.8	8041	91.8
1992	6432.4	915.0	90.1	84.5	90.0	84.5	80.0	76.2	8156	92.9
1993	6342.3	915.0	88.8	84.9	88.8	84.9	79.1	76.5	7906	90.3
1994	6234.7	914.0	84.8	84.9	84.8	84.9	77.9	76.6	7476	85.3
1995	6251.7	912.0	88.4	85.2	80.6	84.5	78.3	76.8	7684	87.7
1996	6426.8	912.0	91.8	85.7	79.6	84.1	80.2	77.0	8067	91.8
1997	2560.0	912.0	98.9	86.6	98.9	85.2	32.0	73.9	2783	31.8
1998	6809.8	915.0	92.5	87.0	86.5	85.3	85.0	74.6	8146	93.0
1999	6986.8	907.0	91.7	87.3	88.6	85.5	87.9	75.4	8042	91.8
2000	4060.7	907.0	66.5	86.1	63.4	84.2	51.0	74.0	5898	67.1
2001	6624.0	909.0	88.4	86.2	86.5	84.3	83.2	74.5	7758	88.6
2002	5942.2	915.0	80.2	85.9	75.5	83.9	74.1	74.5	7056	80.5
2003	6996.5	915.0	89.2	86.1	88.9	84.1	87.3	75.1	7843	89.5
2004	7209.6	915.0	92.1	86.3	92.1	84.5	89.7	75.8	8092	92.1
2005	7129.8	915.0	91.5	86.6	91.4	84.8	89.0	76.4	8073	92.2
2006	7092.4	907.0	91.2	86.8	88.7	85.0	89.3	77.0	8054	91.9
2007	7192.9	907.0	91.0	86.9	89.4	85.2	90.5	77.5	8126	92.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		81			159	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	575			674	1	
D. Inspection, maintenance or repair without refuelling				231		
E. Testing of plant systems or components				41	18	
H. Nuclear regulatory requirements					3	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	
L. Human factor related		0			3	
Z. Others				1	16	
Subtotal	575	81	0	947	200	0
Total		656			1147	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	81	14
12. Reactor I&C Systems		2
13. Reactor Auxiliary Systems		3
14. Safety Systems		1
15. Reactor Cooling Systems		81
16. Steam generation systems		33
31. Turbine and auxiliaries		1
32. Feedwater and Main Steam System		19
Total	81	154

CH-1 BEZNAU-1**Operator:** NOK (NORDOSTSCHWEIZERISCHE KRAFTWERKE)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 365.0 MW(e)
Design Net Capacity: 350.0 MW(e)
Design Discharge Burnup: 42000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3081.3 GW(e).h
Energy Availability Factor: 96.7%
Load Factor: 96.4%
Operating Factor: 96.9%
Energy Unavailability Factor: 3.3%
Total Off-line Time: 274 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	273.9	246.7	272.4	262.9	270.0	220.5	201.1	265.9	260.4	271.0	263.8	272.9	3081.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	85.2	75.5	99.6	100.0	100.0	100.0	100.0	96.7
UCF (%)	100.0	100.0	100.0	100.0	100.0	85.2	75.5	100.0	100.0	100.0	100.0	100.0	96.7
LF (%)	100.9	100.6	100.3	100.2	99.4	83.9	74.0	97.9	99.1	99.6	100.4	100.5	96.4
OF (%)	100.0	100.0	99.9	100.1	100.0	85.4	77.3	100.0	100.0	100.0	100.0	100.0	96.9
EUF (%)	0.0	0.0	0.0	0.0	0.0	14.8	24.5	0.4	0.0	0.0	0.0	0.0	3.3
PUF (%)	0.0	0.0	0.0	0.0	0.0	14.8	24.5	0.0	0.0	0.0	0.0	0.0	3.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

NO UNPLANNED SHUTDOWNS OR UNPLANNED LOAD REDUCTIONS DUE TO CAUSES UNDER THE PLANT MANAGEMENT CONTROL IN 2007.

5. Historical Summary

Date of Construction Start:	01 Sep 1965	Lifetime Generation:	98314.1 GW(e).h
Date of First Criticality:	30 Jun 1969	Cumulative Energy Availability Factor:	84.0%
Date of Grid Connection:	17 Jul 1969	Cumulative Load Factor:	82.6%
Date of Commercial Operation:	01 Sep 1969	Cumulative Unit Capability Factor:	84.3%
		Cumulative Energy Unavailability Factor:	16.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1969	0.0	364.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1970	1947.0	364.0	61.1	70.8	61.1	70.8	61.1	45.8	5917	67.5
1971	1700.5	364.0	59.0	65.7	59.0	65.7	53.3	49.0	5123	58.5
1972	1402.9	280.0	61.3	64.6	61.3	64.6	57.0	51.0	5391	61.4
1973	1655.0	350.0	71.6	66.3	71.6	66.3	54.0	51.7	6654	76.0
1974	2346.7	350.0	78.1	68.5	78.1	68.5	76.5	56.5	7177	81.9
1975	2490.9	350.0	81.2	70.6	81.2	70.6	81.2	60.4	7490	85.5
1976	2548.1	350.0	83.5	72.4	83.5	72.4	82.9	63.5	7530	85.7
1977	2596.3	350.0	85.2	73.9	85.2	73.9	84.7	66.1	7592	86.7
1978	2761.9	350.0	89.5	75.6	89.5	75.6	90.1	68.7	8031	91.7
1979	2658.8	350.0	86.1	76.6	86.1	76.6	86.7	70.5	7746	88.4
1980	2650.5	350.0	85.7	77.4	85.7	77.4	86.2	71.9	7682	87.5
1981	2569.7	350.0	83.5	77.9	83.5	77.9	83.8	72.8	7486	85.5
1982	2566.9	350.0	83.5	78.4	83.5	78.4	83.7	73.7	7553	86.2
1983	2551.7	350.0	83.5	78.7	83.5	78.7	83.2	74.3	7546	86.1
1984	2732.9	350.0	88.8	79.4	88.8	79.4	88.9	75.3	8001	91.1
1985	2634.3	350.0	86.0	79.8	86.0	79.8	85.9	76.0	7906	90.3
1986	2496.3	350.0	81.6	79.9	81.6	79.9	81.4	76.3	7403	84.5
1987	2486.3	350.0	80.7	79.9	80.7	79.9	81.1	76.5	7256	82.8
1988	2566.5	350.0	83.0	80.1	83.0	80.1	83.5	76.9	7499	85.4
1989	2433.1	350.0	78.6	80.0	78.6	80.0	79.4	77.0	7062	80.6
1990	2562.5	350.0	84.4	80.2	84.4	80.2	83.6	77.3	7506	85.7
1991	2495.3	350.0	83.5	80.4	83.5	80.4	81.4	77.5	7430	84.8
1992	2477.4	350.0	81.7	80.4	81.7	80.4	80.6	77.6	7303	83.1
1993	2158.4	350.0	69.9	80.0	69.4	80.0	70.4	77.3	6241	71.2
1994	2686.9	350.0	86.2	80.2	85.1	80.2	87.6	77.8	7610	86.9
1995	2850.5	350.0	90.5	80.6	90.2	80.6	93.0	78.3	7993	91.2
1996	2753.2	353.0	87.5	80.9	86.8	80.8	88.6	78.7	7704	87.7
1997	2708.2	365.0	87.5	81.1	85.1	81.0	84.7	78.9	7731	88.3
1998	3183.1	365.0	99.9	81.8	99.8	81.6	99.6	79.7	8760	100.0
1999	2841.3	365.0	91.3	82.1	88.6	81.9	88.9	80.0	8074	92.2
2000	2539.2	365.0	79.2	82.0	78.3	81.7	79.2	80.0	7113	81.0
2001	3090.2	365.0	96.8	82.5	96.8	82.2	96.6	80.5	8504	97.1
2002	2908.8	365.0	91.3	82.8	91.0	82.5	91.0	80.8	8000	91.3
2003	3061.8	365.0	96.9	83.2	96.2	82.9	95.8	81.3	8494	97.0
2004	2801.2	365.0	87.5	83.3	87.4	83.0	87.4	81.4	7758	88.3
2005	3096.0	365.0	96.7	83.7	96.6	83.4	96.8	81.9	8491	96.9
2006	2950.7	365.0	92.3	83.9	92.2	83.7	92.3	82.2	8114	92.6
2007	3081.3	365.0	96.7	84.3	96.7	84.0	96.4	82.6	8486	96.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					240	
B. Refuelling without a maintenance	274			16		
C. Inspection, maintenance or repair combined with refuelling				947		
D. Inspection, maintenance or repair without refuelling				18		
E. Testing of plant systems or components					0	
Subtotal	274	0	0	981	240	0
Total	274			1221		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		17
12. Reactor I&C Systems		95
13. Reactor Auxiliary Systems		2
14. Safety Systems		3
15. Reactor Cooling Systems		11
16. Steam generation systems		93
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		13
35. All other I&C Systems		0
Total	0	236

CH-3 BEZNAU-2**Operator:** NOK (NORDOSTSCHWEIZERISCHE KRAFTWERKE)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 365.0 MW(e)
Design Net Capacity: 350.0 MW(e)
Design Discharge Burnup: 42000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2911.6 GW(e).h
Energy Availability Factor: 91.5%
Load Factor: 91.1%
Operating Factor: 92.0%
Energy Unavailability Factor: 8.5%
Total Off-line Time: 697 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	271.8	245.8	272.1	262.9	269.9	259.3	267.5	80.4	175.6	270.7	263.3	272.3	2911.6
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	30.6	67.8	100.0	100.0	100.0	91.5
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	30.9	67.9	100.0	100.0	100.0	91.5
LF (%)	100.1	100.2	100.2	100.2	99.4	98.7	98.5	29.6	66.8	99.5	100.2	100.3	91.1
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	31.0	74.4	100.0	100.0	100.0	92.0
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.4	32.2	0.0	0.0	0.0	8.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.1	27.2	0.0	0.0	0.0	8.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

- LESS THAN 0.5% FORCED ENERGY LOSSES BECAUSE OF UNPLANNED SHUTDOWNS OR UNPLANNED LOAD REDUCTIONS DUE TO CAUSES UNDER THE PLANT MANAGEMENT CONTROL.- ONE PARTIAL-LOAD (12%) AUTOMATIC SCRAM DURING LOAD REDUCTION FOR PLANNED REFUELLING AND MAINTENANCE OUTAGE.

5. Historical Summary

Date of Construction Start:	01 Jan 1968	Lifetime Generation:	97691.1 GW(e).h
Date of First Criticality:	16 Oct 1971	Cumulative Energy Availability Factor:	87.0%
Date of Grid Connection:	23 Oct 1971	Cumulative Load Factor:	87.3%
Date of Commercial Operation:	01 Dec 1971	Cumulative Unit Capability Factor:	87.0%
		Cumulative Energy Unavailability Factor:	13.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1971	174.9	340.0	94.6	94.6	94.6	94.6	80.8	80.8	690	92.7
1972	2618.5	364.0	82.7	83.5	82.7	83.5	81.9	81.8	7624	86.8
1973	2220.7	350.0	78.4	81.1	78.4	81.1	72.4	77.4	7042	80.4
1974	2527.8	350.0	83.5	81.9	83.5	81.9	82.4	79.0	7607	86.8
1975	2547.0	350.0	83.1	82.2	83.1	82.2	83.1	80.0	7503	85.7
1976	2652.2	350.0	86.6	83.0	86.6	83.0	86.3	81.2	7777	88.5
1977	2690.9	350.0	85.6	83.4	85.6	83.4	87.8	82.3	7758	88.6
1978	2753.1	350.0	86.7	83.9	86.7	83.9	89.8	83.3	7888	90.0
1979	2700.0	350.0	86.7	84.2	86.7	84.2	88.1	83.9	7835	89.4
1980	2559.0	350.0	81.0	83.9	81.0	83.9	83.2	83.9	7279	82.9
1981	2768.8	350.0	88.8	84.4	88.8	84.4	90.3	84.5	7868	89.8
1982	2722.1	350.0	87.6	84.7	87.6	84.7	88.8	84.9	7811	89.2
1983	2790.5	350.0	89.6	85.1	89.6	85.1	91.0	85.4	7977	91.1
1984	2724.2	350.0	87.5	85.3	87.5	85.3	88.6	85.6	7874	89.6
1985	2629.1	350.0	84.9	85.2	84.9	85.2	85.7	85.6	7647	87.3
1986	2769.8	350.0	90.2	85.6	90.2	85.6	90.3	85.9	7983	91.1
1987	2527.6	350.0	82.4	85.4	82.4	85.4	82.4	85.7	7535	86.0
1988	2630.2	350.0	84.5	85.3	84.5	85.3	85.6	85.7	7604	86.6
1989	2643.3	350.0	85.1	85.3	85.1	85.3	86.2	85.7	7614	86.9
1990	2636.1	350.0	85.3	85.3	85.3	85.3	86.0	85.8	7568	86.4
1991	2619.5	350.0	84.5	85.3	84.5	85.3	85.4	85.7	7551	86.2
1992	2375.9	350.0	76.3	84.8	76.3	84.8	77.3	85.3	6836	77.8
1993	2650.9	350.0	85.1	84.8	84.9	84.8	86.5	85.4	7517	85.8
1994	3062.8	350.0	98.9	85.5	98.8	85.4	99.9	86.0	8710	99.4
1995	2560.9	350.0	82.7	85.3	82.6	85.3	83.5	85.9	7247	82.7
1996	2754.1	351.0	88.5	85.5	87.9	85.4	89.1	86.0	7912	90.1
1997	3090.2	357.0	99.5	86.0	99.5	86.0	98.8	86.5	8732	99.7
1998	2717.8	357.0	87.8	86.1	87.3	86.0	86.9	86.6	7755	88.5
1999	2217.2	357.0	70.7	85.5	70.3	85.5	70.9	86.0	6322	72.2
2000	3071.0	365.0	96.2	85.9	96.2	85.8	95.8	86.3	8499	96.8
2001	2568.7	365.0	80.7	85.7	80.7	85.7	80.3	86.1	7107	81.1
2002	3012.0	365.0	94.6	86.0	94.6	86.0	94.2	86.4	8292	94.7
2003	2920.3	365.0	92.0	86.2	91.8	86.1	91.3	86.6	8070	92.1
2004	3099.4	365.0	97.0	86.6	97.0	86.5	96.7	86.9	8556	97.4
2005	2801.0	365.0	88.0	86.6	87.8	86.5	87.6	86.9	7728	88.2
2006	3073.2	365.0	97.1	86.9	96.8	86.8	96.1	87.2	8517	97.2
2007	2911.6	365.0	91.5	87.0	91.5	87.0	91.1	87.3	8063	92.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		22			84	
B. Refuelling without a maintenance				23	1	
C. Inspection, maintenance or repair combined with refuelling	678			827		
D. Inspection, maintenance or repair without refuelling				38		
J. Grid failure or grid unavailability						0
L. Human factor related					0	
Subtotal	678	22	0	888	85	0
Total		700			973	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		5
12. Reactor I&C Systems		8
13. Reactor Auxiliary Systems		1
14. Safety Systems		0
15. Reactor Cooling Systems		9
16. Steam generation systems		26
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		14
32. Feedwater and Main Steam System	0	2
35. All other I&C Systems	22	1
42. Electrical Power Supply Systems		1
Total	22	68

CH-4 GOESGEN

Operator: KKG (KERNKRAFTWERK GOESGEN-DAENIKEN AG)

Contractor: KWU (SIEMENS KRAFTWERK UNION AG)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 970.0 MW(e)
Design Net Capacity: 920.0 MW(e)
Design Discharge Burnup: 52000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8158.9 GW(e).h
Energy Availability Factor: 94.6%
Load Factor: 96.0%
Operating Factor: 94.9%
Energy Unavailability Factor: 5.4%
Total Off-line Time: 447 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	742.1	669.7	739.5	707.7	717.0	249.9	724.3	722.5	704.2	730.4	713.2	738.4	8158.9
EAF (%)	100.0	100.0	100.0	100.0	98.6	36.4	100.0	100.0	100.0	100.0	100.0	100.0	94.6
UCF (%)	100.0	100.0	100.0	100.0	100.0	36.5	100.0	100.0	100.0	100.0	100.0	100.0	94.8
LF (%)	102.8	102.7	102.5	101.5	99.4	35.8	100.4	100.1	100.8	101.1	102.1	102.3	96.0
OF (%)	100.0	100.0	99.9	100.1	100.0	37.9	100.0	100.0	100.0	100.0	100.0	100.0	94.9
EUF (%)	0.0	0.0	0.0	0.0	1.4	63.6	0.0	0.0	0.0	0.0	0.0	0.0	5.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	63.5	0.0	0.0	0.0	0.0	0.0	0.0	5.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

MAY 15: START OF COAST DOWN OPERATION
 JUNE 2 TO JUNE 20: REFUELLING OUTAGE
 UNPLANNED REACTOR SCRAM
 UNPLANNED LOAD REDUCTION

5. Historical Summary

Date of Construction Start:	01 Dec 1973	Lifetime Generation:	209692.0 GW(e).h
Date of First Criticality:	20 Jan 1979	Cumulative Energy Availability Factor:	88.3%
Date of Grid Connection:	02 Feb 1979	Cumulative Load Factor:	88.6%
Date of Commercial Operation:	01 Nov 1979	Cumulative Unit Capability Factor:	89.2%
		Cumulative Energy Unavailability Factor:	11.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	1255.5	924.0	93.2	93.2	93.2	93.2	93.2	93.2	1422	97.1
1980	5935.7	920.0	73.5	76.3	73.5	76.3	73.4	76.3	6819	77.6
1981	6527.6	920.0	80.7	78.3	80.7	78.3	81.0	78.4	7523	85.9
1982	6436.1	920.0	79.8	78.8	79.8	78.8	79.9	78.9	7665	87.5
1983	6891.6	920.0	86.2	80.6	86.2	80.6	85.5	80.5	7790	88.9
1984	7134.8	900.0	90.6	82.5	89.8	82.3	90.2	82.3	8015	91.2
1985	6747.7	909.0	85.7	83.0	84.6	82.7	84.7	82.7	7789	88.9
1986	6754.5	941.0	84.1	83.1	82.8	82.7	81.9	82.6	7386	84.3
1987	6910.3	935.0	85.2	83.4	84.4	82.9	84.4	82.8	7521	85.9
1988	6859.0	936.0	84.7	83.5	83.4	83.0	83.4	82.9	7476	85.1
1989	6878.7	931.0	85.4	83.7	84.3	83.1	84.3	83.0	7514	85.8
1990	7131.5	929.0	89.4	84.2	87.6	83.5	87.6	83.5	7983	91.1
1991	7141.9	925.0	89.7	84.7	88.1	83.9	88.1	83.8	7918	90.4
1992	7406.9	934.0	92.1	85.3	90.2	84.4	90.2	84.3	8107	92.3
1993	7408.1	950.0	89.3	85.5	88.9	84.7	89.0	84.7	8075	92.2
1994	7661.1	947.0	92.1	86.0	91.1	85.1	92.3	85.2	8102	92.5
1995	7820.9	971.0	91.8	86.4	91.1	85.5	91.9	85.6	8109	92.6
1996	7928.4	986.0	93.4	86.8	91.5	85.9	91.5	86.0	8204	93.4
1997	7967.8	986.0	93.5	87.2	91.6	86.2	92.2	86.4	8189	93.5
1998	7839.7	986.0	93.2	87.5	90.8	86.5	90.8	86.6	8179	93.4
1999	7533.9	970.0	89.9	87.6	88.7	86.6	88.7	86.7	7887	90.0
2000	7804.3	970.0	92.0	87.8	91.6	86.8	91.8	86.9	8089	92.3
2001	7870.5	970.0	93.5	88.1	92.6	87.1	92.6	87.2	8206	93.7
2002	7853.3	970.0	92.9	88.3	92.3	87.3	92.4	87.4	8154	93.1
2003	7988.7	970.0	94.5	88.6	93.9	87.6	94.0	87.7	8291	94.6
2004	8015.6	970.0	94.3	88.8	93.8	87.9	94.1	88.0	8300	94.5
2005	7588.2	970.0	88.4	88.8	88.0	87.9	89.3	88.0	7754	88.5
2006	8099.1	970.0	93.7	89.0	93.6	88.1	95.3	88.3	8230	93.9
2007	8158.9	970.0	94.8	89.2	94.6	88.3	96.0	88.6	8313	94.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1979 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					36	
C. Inspection, maintenance or repair combined with refuelling	447			771		
E. Testing of plant systems or components					0	
J. Grid failure or grid unavailability						0
Subtotal	447	0	0	771	36	0
Total		447			807	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1979 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		4
16. Steam generation systems		1
31. Turbine and auxiliaries		4
32. Feedwater and Main Steam System		20
41. Main Generator Systems		4
Total	0	33

CH-5 LEIBSTADT

Operator: KKL (KERNKRAFTWERK LEIBSTADT)
Contractor: GETSCO (GENERAL ELECTRIC TECHNICAL SERVICES CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1165.0 MW(e)
Design Net Capacity: 942.0 MW(e)
Design Discharge Burnup: 43000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9436.8 GW(e).h
Energy Availability Factor: 93.2%
Load Factor: 92.5%
Operating Factor: 94.5%
Energy Unavailability Factor: 6.8%
Total Off-line Time: 485 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	868.2	786.3	759.0	831.2	851.7	812.5	824.5	288.1	832.2	865.4	843.1	874.5	9436.8
EAF (%)	99.8	100.0	87.7	100.0	100.0	99.7	98.1	35.3	99.9	100.0	99.8	100.0	93.2
UCF (%)	99.8	100.0	87.7	100.0	100.0	99.7	100.0	35.7	99.9	100.0	99.8	100.0	93.4
LF (%)	100.2	100.4	87.6	99.1	98.3	96.9	95.1	33.2	99.2	99.7	100.5	100.9	92.5
OF (%)	100.0	100.0	91.1	100.0	100.0	100.0	100.0	43.7	100.0	100.0	100.0	100.0	94.5
EUUF (%)	0.2	0.0	12.3	0.0	0.0	0.3	1.9	64.7	0.1	0.0	0.2	0.0	6.8
PUF (%)	0.2	0.0	0.2	0.0	0.0	0.3	0.0	64.3	0.1	0.0	0.2	0.0	5.5
UCLF (%)	0.0	0.0	12.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.4	0.0	0.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Jan 1974
Date of First Criticality: 09 Mar 1984
Date of Grid Connection: 24 May 1984
Date of Commercial Operation: 15 Dec 1984

Lifetime Generation: 183527.9 GW(e).h
Cumulative Energy Availability Factor: 85.0%
Cumulative Load Factor: 80.9%
Cumulative Unit Capability Factor: 86.8%
Cumulative Energy Unavailability Factor: 15.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	0.0	1030.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1985	6769.3	951.0	80.1	81.8	80.1	81.8	81.2	74.4	7233	82.6
1986	7209.2	957.0	83.2	82.5	83.2	82.5	85.9	79.9	7668	87.5
1987	7376.4	990.0	85.2	83.4	85.2	83.4	85.1	81.6	7917	90.4
1988	7003.5	990.0	80.0	82.5	80.0	82.5	80.5	81.4	7536	85.8
1989	7364.2	990.0	85.5	83.1	85.5	83.1	84.9	82.1	7671	87.6
1990	7596.2	990.0	89.9	84.3	89.9	84.3	87.6	83.0	7905	90.2
1991	7060.3	990.0	86.0	84.5	81.3	83.8	81.4	82.8	7580	86.5
1992	7537.6	990.0	90.4	85.2	86.4	84.2	86.7	83.2	7986	90.9
1993	7338.1	990.0	89.1	85.7	84.4	84.2	84.6	83.4	7898	90.2
1994	6988.2	1003.0	81.4	85.2	79.4	83.7	79.5	83.0	7108	81.1
1995	7673.8	1030.0	89.1	85.6	84.2	83.7	85.0	83.2	7819	89.3
1996	7705.1	1030.0	87.6	85.8	84.8	83.8	85.2	83.4	7734	88.0
1997	7762.5	1030.0	89.2	86.0	86.2	84.0	86.0	83.6	7830	89.4
1998	8046.2	1030.0	92.4	86.5	88.2	84.3	89.2	84.0	8102	92.5
1999	8320.0	1080.0	91.8	86.9	86.8	84.5	87.9	84.3	8126	92.8
2000	8823.2	1115.0	92.3	87.3	89.5	84.8	90.1	84.7	8159	92.9
2001	9.1	1145.0	91.2	87.5	90.4	85.2	0.1	79.2	8188	93.5
2002	9173.8	1115.0	91.5	87.7	90.8	85.5	93.9	80.1	8250	94.2
2003	9309.3	1165.0	90.9	87.9	90.1	85.8	91.2	80.8	8204	93.6
2004	8692.0	1165.0	85.7	87.8	84.9	85.8	84.9	81.0	7633	86.9
2005	5768.1	1165.0	56.5	86.2	56.3	84.2	56.5	79.7	5004	57.1
2006	9367.0	1165.0	92.7	86.5	91.7	84.6	91.8	80.3	8206	93.7
2007	9436.8	1165.0	93.4	86.8	93.2	85.0	92.5	80.9	8276	94.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				0	203	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	418			723		
D. Inspection, maintenance or repair without refuelling				19		
E. Testing of plant systems or components				0	1	
H. Nuclear regulatory requirements						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				3		
L. Human factor related		65			1	
Subtotal	418	65	0	745	208	1
Total		483			954	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		2
15. Reactor Cooling Systems		5
31. Turbine and auxiliaries		15
32. Feedwater and Main Steam System		7
35. All other I&C Systems		3
41. Main Generator Systems		165
XX. Miscellaneous Systems		0
Total	0	199

CH-2 MUEHLEBERG

Operator: BKW (BKW ENERGIE AG)

Contractor: GETSCO (GENERAL ELECTRIC TECHNICAL SERVICES CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 355.0 MW(e)
Design Net Capacity: 306.0 MW(e)
Design Discharge Burnup: 48000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2900.4 GW(e).h
Energy Availability Factor: 90.5%
Load Factor: 93.3%
Operating Factor: 91.6%
Energy Unavailability Factor: 9.5%
Total Off-line Time: 739 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	271.7	240.6	271.7	261.8	267.5	258.0	263.1	30.9	214.0	276.1	268.1	276.9	2900.4
EAF (%)	99.9	97.8	99.9	100.0	99.8	99.9	98.9	13.2	78.2	99.8	99.6	99.9	90.5
UCF (%)	99.9	97.8	99.9	100.0	99.8	100.0	100.0	13.2	78.2	99.8	99.6	99.9	90.6
LF (%)	102.9	100.9	102.9	102.6	101.3	100.9	99.6	11.7	83.7	104.4	104.9	104.9	93.3
OF (%)	100.0	98.7	99.9	100.1	100.0	100.0	100.0	13.2	88.3	100.0	100.0	100.0	91.6
EUF (%)	0.1	2.2	0.1	0.0	0.2	0.1	1.1	86.8	21.8	0.2	0.4	0.1	9.5
PUF (%)	0.1	0.9	0.1	0.0	0.2	0.0	0.0	86.8	19.9	0.2	0.4	0.1	9.2
UCLF (%)	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

HIGHLIGHTS OF OPERATION DURING THE YEAR NORMAL OPERATION WITHOUT ANY MAYOR PROBLEMS. FROM JANUARY 18 TO 27 AN ON-LINE NOBLE METAL CHEMICAL APPLICATION WAS PERFORMED TO PROTECT REACTOR PRESSURE VESSEL INTERNALS. FEBRUARY 8: DURING COMMISSIONING OF A CONDENSATE FILTER UNIT A SCRAM AND MAIN STEAM ISOLATION OCCURRED DUE TO HIGH MAIN STEAM ACTIVITY. A SMALL AMOUNT OF A CHEMICAL COMPOUND NEEDED IN THE MANUFACTURING OF THE FILTER UNITS WAS RELEASED TO THE REACTOR AND SUBSEQUENTLY CAUSED A SHORT RELEASE OF N16 AND THUS THE ISOLATION. THE REFUELING AND MAINTENANCE OUTAGE LASTED 30 DAYS, FROM AUGUST 5. TO SEPTEMBER 3. DURING THE WHOLE YEAR THE HYDROGEN INJECTION WAS IN SERVICE.

5. Historical Summary

Date of Construction Start: 01 Mar 1967
Date of First Criticality: 08 Mar 1971
Date of Grid Connection: 01 Jul 1971
Date of Commercial Operation: 06 Nov 1972

Lifetime Generation: 87115.9 GW(e).h
Cumulative Energy Availability Factor: 86.3%
Cumulative Load Factor: 86.7%
Cumulative Unit Capability Factor: 87.5%
Cumulative Energy Unavailability Factor: 13.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1972	387.9	323.0	92.2	92.2	92.2	92.2	82.0	82.0	1334	91.1
1973	2011.6	306.0	80.7	82.4	80.7	82.4	75.0	76.1	7315	83.5
1974	1846.2	306.0	73.2	78.2	73.2	78.2	68.9	72.8	7062	80.6
1975	2344.1	306.0	87.1	81.0	87.1	81.0	87.4	77.4	7989	91.2
1976	2355.2	306.0	85.2	82.0	85.2	82.0	87.6	79.8	7960	90.6
1977	2429.3	320.0	85.7	82.7	85.7	82.7	86.7	81.2	8097	92.4
1978	2465.7	320.0	87.3	83.5	87.3	83.5	88.0	82.3	8001	91.3
1979	2473.9	320.0	87.7	84.1	87.7	84.1	88.3	83.2	8024	91.6
1980	2482.4	320.0	88.5	84.6	88.5	84.6	88.3	83.8	8005	91.1
1981	2539.0	324.0	89.1	85.2	89.1	85.2	89.5	84.5	8051	91.9
1982	2663.3	326.0	88.9	85.5	88.9	85.5	93.3	85.4	8017	91.5
1983	2564.3	326.0	89.6	85.9	89.6	85.9	89.8	85.8	8026	91.6
1984	2527.2	326.0	88.1	86.1	88.1	86.1	88.3	86.0	7989	90.9
1985	2500.7	323.0	87.3	86.2	87.2	86.2	88.2	86.1	7882	90.0
1986	2114.5	326.0	73.7	85.3	73.7	85.3	74.0	85.3	6645	75.9
1987	2465.0	326.0	85.5	85.3	85.5	85.3	86.3	85.3	7959	90.9
1988	2497.6	326.0	87.1	85.4	87.1	85.4	87.2	85.5	7968	90.7
1989	2297.5	323.0	81.3	85.2	81.3	85.2	81.0	85.2	7226	82.5
1990	2477.9	324.0	86.5	85.2	86.5	85.2	87.3	85.3	7910	90.3
1991	2415.1	323.0	87.3	85.4	84.8	85.2	85.4	85.3	7714	88.1
1992	2413.5	323.0	85.0	85.3	85.0	85.2	85.1	85.3	7755	88.3
1993	2568.5	338.0	88.5	85.5	86.8	85.3	86.5	85.4	7917	90.4
1994	2643.1	355.0	89.3	85.7	84.9	85.3	85.0	85.3	7952	90.8
1995	2669.0	355.0	87.8	85.8	85.4	85.3	85.8	85.4	7894	90.1
1996	2649.0	355.0	87.7	85.9	84.4	85.2	85.0	85.3	7847	89.3
1997	2549.2	355.0	86.9	85.9	81.8	85.1	82.0	85.2	7671	87.6
1998	2659.7	355.0	86.5	85.9	85.2	85.1	85.5	85.2	7886	90.0
1999	2702.8	355.0	87.2	86.0	86.6	85.1	86.9	85.3	8064	92.1
2000	2817.0	355.0	93.5	86.3	90.1	85.3	90.3	85.5	8290	94.4
2001	2768.7	355.0	93.3	86.5	88.8	85.5	89.0	85.6	8195	93.6
2002	2828.2	355.0	91.4	86.7	87.7	85.5	90.9	85.8	8280	94.5
2003	2744.2	355.0	89.6	86.8	87.7	85.6	88.2	85.9	8034	91.7
2004	2906.1	355.0	93.3	87.0	92.4	85.8	93.2	86.1	8282	94.3
2005	2855.3	355.0	92.7	87.2	91.0	86.0	91.8	86.3	8130	92.8
2006	2882.9	355.0	92.7	87.4	90.9	86.2	92.7	86.5	8174	93.3
2007	2900.4	355.0	90.6	87.5	90.5	86.3	93.3	86.7	8021	91.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		9			177	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	717			760		
D. Inspection, maintenance or repair without refuelling				21		
E. Testing of plant systems or components				2		
H. Nuclear regulatory requirements		14				
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					2	0
Subtotal	717	23	0	783	180	1
Total		740			964	

7. Equipment Related Full Outages, Analysis by System

System	2007	1971 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		7
12. Reactor I&C Systems		0
14. Safety Systems		2
15. Reactor Cooling Systems		1
17. Safety I&C Systems (excluding reactor I&C)	9	
31. Turbine and auxiliaries		162
32. Feedwater and Main Steam System		1
35. All other I&C Systems		0
42. Electrical Power Supply Systems		0
Total	9	173

UA-40 KHMELNITSKI-1**Operator:** NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)**Contractor:** PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6905.3 GW(e).h
Energy Availability Factor: 83.0%
Load Factor: 83.0%
Operating Factor: 83.3%
Energy Unavailability Factor: 17.0%
Total Off-line Time: 1463 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	714.4	646.8	712.5	689.3	0.0	0.0	673.0	673.4	683.4	709.7	684.9	717.7	6905.3
EAF (%)	100.0	100.0	100.0	99.9	0.0	1.1	99.5	97.0	99.6	99.6	100.0	100.0	83.0
UCF (%)	100.0	100.0	100.0	99.9	0.0	1.1	99.9	97.8	99.8	99.6	100.0	100.0	83.1
LF (%)	101.1	101.3	100.8	100.9	0.0	0.0	95.2	95.3	99.9	100.3	100.1	101.5	83.0
OF (%)	100.0	100.0	99.9	100.1	0.1	1.9	100.0	98.1	100.0	100.0	100.0	100.0	83.3
EUF (%)	0.0	0.0	0.0	0.1	100.0	98.9	0.5	3.0	0.4	0.4	0.0	0.0	17.0
PUF (%)	0.0	0.0	0.0	0.1	100.0	87.7	0.1	0.0	0.0	0.0	0.0	0.0	15.7
UCLF (%)	0.0	0.0	0.0	0.0	0.0	11.2	0.0	2.2	0.3	0.5	0.0	0.0	1.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	0.1	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO EXTERNAL CAUSES: TRANSMISSION LINE LIMITATION=52GW(E)H, HIGH TEMPERATURE OF COOLING WATER=11 GW(E)H

5. Historical Summary

Date of Construction Start: 01 Nov 1981 **Lifetime Generation:** 112935.0 GW(e).h
Date of First Criticality: 10 Dec 1987 **Cumulative Energy Availability Factor:** 72.4%
Date of Grid Connection: 31 Dec 1987 **Cumulative Load Factor:** 72.7%
Date of Commercial Operation: 13 Aug 1988 **Cumulative Unit Capability Factor:** 73.3%
Cumulative Energy Unavailability Factor: 27.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	2133.1	950.0	67.1	67.1	67.1	67.1	61.1	61.1	2753	75.0
1989	5872.3	950.0	70.7	69.6	70.6	69.6	70.6	67.8	6295	71.9
1990	6498.6	950.0	77.4	72.8	77.4	72.8	78.1	72.0	6870	78.4
1991	5172.5	950.0	61.2	69.4	61.2	69.4	62.2	69.1	5551	63.4
1992	6075.1	950.0	67.6	69.0	66.5	68.8	72.8	70.0	6167	70.2
1993	5487.7	950.0	65.2	68.3	65.2	68.1	65.9	69.2	5782	66.0
1994	6303.4	950.0	76.0	69.5	75.5	69.3	75.7	70.2	6775	77.3
1995	5700.3	950.0	68.0	69.3	68.0	69.1	68.5	70.0	6014	68.7
1996	4497.9	950.0	54.2	67.5	53.9	67.3	53.9	68.1	4854	55.3
1997	6152.1	950.0	72.8	68.1	72.6	67.8	73.9	68.7	6415	73.2
1998	5499.2	950.0	67.1	68.0	65.8	67.6	66.1	68.5	5904	67.4
1999	5526.7	950.0	66.8	67.9	66.4	67.5	66.4	68.3	6506	74.3
2000	5899.6	950.0	74.3	68.4	70.4	67.8	70.7	68.5	6541	74.5
2001	6167.3	950.0	76.5	69.0	73.6	68.2	73.9	68.9	6781	77.2
2002	6730.5	950.0	80.3	69.8	79.9	69.0	80.9	69.7	7049	80.5
2003	7137.7	950.0	85.4	70.8	84.9	70.0	85.8	70.8	7512	85.8
2004	6325.1	950.0	80.9	71.4	75.4	70.4	75.8	71.1	6935	79.0
2005	6862.8	950.0	84.9	72.2	84.8	71.2	82.5	71.7	7433	84.9
2006	6684.9	950.0	83.9	72.8	83.5	71.9	80.3	72.2	7407	84.6
2007	6905.3	950.0	83.1	73.3	83.0	72.4	83.0	72.7	7297	83.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		95			233	
B. Refuelling without a maintenance					6	
C. Inspection, maintenance or repair combined with refuelling	1368			1576		
D. Inspection, maintenance or repair without refuelling				231		
E. Testing of plant systems or components				18		
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	10
Subtotal	1368	95	0	1825	240	10
Total		1463			2075	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		28
13. Reactor Auxiliary Systems		12
14. Safety Systems		1
15. Reactor Cooling Systems		25
16. Steam generation systems		1
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries	14	25
32. Feedwater and Main Steam System		14
35. All other I&C Systems		0
41. Main Generator Systems	81	113
42. Electrical Power Supply Systems		6
Total	95	228

UA-41 KHMELNITSKI-2

Operator: NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)

Contractor: PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7213.4 GW(e).h
Energy Availability Factor: 89.1%
Load Factor: 86.7%
Operating Factor: 91.4%
Energy Unavailability Factor: 10.9%
Total Off-line Time: 752 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	171.2	560.4	599.6	693.6	716.7	682.4	691.8	666.5	636.1	713.3	675.1	406.7	7213.4
EAF (%)	28.6	100.0	100.0	99.8	99.9	99.3	97.5	98.3	92.6	99.6	97.7	58.1	89.1
UCF (%)	28.6	100.0	100.0	99.8	99.9	100.0	99.4	100.0	93.5	99.9	100.0	75.4	91.2
LF (%)	24.2	87.8	84.8	101.5	101.4	99.8	97.9	94.3	93.0	100.8	98.7	57.5	86.7
OF (%)	29.2	100.0	99.9	100.1	100.0	100.0	100.0	100.0	93.9	100.0	100.0	75.7	91.4
EUF (%)	71.4	0.0	0.0	0.2	0.1	0.7	2.5	1.7	7.4	0.4	2.3	41.9	10.9
PUF (%)	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	24.6	8.7
UCLF (%)	0.0	0.0	0.0	0.2	0.1	0.0	0.6	0.0	0.0	0.1	0.0	0.0	0.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.7	1.9	1.7	0.9	0.2	2.3	17.4	2.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO EXTERNAL CAUSES: TRANSMISSION LINE LIMITATION=258GW(E)H, HIGH TEMPERATURE OF COOLING WATER=40 GW(E)H

5. Historical Summary

Date of Construction Start: 01 Feb 1985 **Lifetime Generation:** 21545.0 GW(e).h
Date of First Criticality: 01 Aug 2004 **Cumulative Energy Availability Factor:** 88.1%
Date of Grid Connection: 07 Aug 2004 **Cumulative Load Factor:** 84.5%
Date of Commercial Operation: 15 Dec 2005 **Cumulative Unit Capability Factor:** 89.7%
Cumulative Energy Unavailability Factor: 11.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2005	261.4	950.0	100.0	100.0	100.0	100.0	37.0	37.0	296	39.8
2006	7178.3	950.0	87.4	88.4	86.2	87.2	86.3	82.4	7697	87.9
2007	7213.4	950.0	91.2	89.7	89.1	88.1	86.7	84.5	8008	91.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2006 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		0			43	
C. Inspection, maintenance or repair combined with refuelling	707			431		
D. Inspection, maintenance or repair without refuelling	44			57		
Subtotal	751	0	0	488	43	0
Total	751			531		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2006 to 2007 Average Hours Lost Per Year
14. Safety Systems		35
31. Turbine and auxiliaries		8
32. Feedwater and Main Steam System	0	
Total	0	43

UA-27 ROVNO-1**Operator:** NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)**Contractor:** PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 381.0 MW(e)
Design Net Capacity: 361.0 MW(e)
Design Discharge Burnup: 28600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2079.0 GW(e).h
Energy Availability Factor: 65.7%
Load Factor: 62.3%
Operating Factor: 67.1%
Energy Unavailability Factor: 34.3%
Total Off-line Time: 2878 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	283.2	233.8	220.9	268.2	284.4	267.7	93.8	0.0	0.0	0.0	145.0	282.0	2079.0
EAF (%)	97.1	100.0	99.9	98.2	97.8	97.1	33.1	0.0	0.0	0.0	72.4	96.8	65.7
UCF (%)	97.1	100.0	100.0	98.3	99.4	99.3	35.4	0.0	0.0	0.0	72.4	96.8	66.3
LF (%)	99.9	91.3	77.9	97.9	100.3	97.6	33.1	0.0	0.0	0.0	52.8	99.5	62.3
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	35.5	0.0	0.0	0.0	73.8	100.0	67.1
EUF (%)	2.9	0.0	0.1	1.8	2.2	2.9	66.9	100.0	100.0	100.0	27.6	3.2	34.3
PUF (%)	2.3	0.0	0.0	0.0	0.0	0.0	64.5	100.0	100.0	100.0	26.8	2.5	33.3
UCLF (%)	0.6	0.0	0.0	1.7	0.6	0.7	0.1	0.0	0.0	0.0	0.8	0.8	0.4
XUF (%)	0.0	0.0	0.0	0.2	1.6	2.2	2.3	0.0	0.0	0.0	0.0	0.0	0.5

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO CONDENSER PROBLEM: 13 GW(E)H AND EXTERNAL CAUSES: THE GRID DISPATCHER'S REQUEST =149GW(E)H

5. Historical Summary

Date of Construction Start:	01 Aug 1973	Lifetime Generation:	69111.0 GW(e).h
Date of First Criticality:	17 Dec 1980	Cumulative Energy Availability Factor:	80.0%
Date of Grid Connection:	31 Dec 1980	Cumulative Load Factor:	79.7%
Date of Commercial Operation:	21 Sep 1981	Cumulative Unit Capability Factor:	80.7%
		Cumulative Energy Unavailability Factor:	20.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	932.3	361.0	91.0	91.0	91.0	91.0	88.2	88.2	2924	99.9
1982	1725.2	361.0	51.9	61.7	51.9	61.7	54.6	63.0	5498	62.8
1983	2036.6	361.0	61.6	61.7	61.6	61.7	64.4	63.6	6752	77.1
1984	2686.3	361.0	82.5	67.9	82.5	67.9	84.7	69.9	7782	88.6
1985	2664.8	365.0	81.4	71.1	81.4	71.1	83.3	73.1	7636	87.2
1986	2712.7	361.0	77.5	72.3	77.5	72.3	85.8	75.4	7606	86.8
1987	3040.8	402.0	86.6	74.7	86.6	74.7	86.3	77.3	7756	88.5
1988	2718.0	361.0	86.0	76.3	86.0	76.3	85.7	78.4	7877	89.7
1989	2823.8	361.0	89.2	77.8	89.2	77.8	89.3	79.7	7994	91.3
1990	2590.6	361.0	79.3	77.9	79.3	77.9	81.9	80.0	7265	82.9
1991	2640.1	361.0	81.4	78.3	81.4	78.3	83.5	80.3	7430	84.8
1992	3082.9	403.0	88.5	79.3	87.3	79.1	87.0	80.9	7989	90.9
1993	2584.4	406.0	83.0	79.6	81.4	79.3	72.7	80.2	7159	81.7
1994	2578.6	361.0	81.7	79.7	81.7	79.5	81.5	80.3	7378	84.2
1995	2747.4	361.0	88.4	80.3	86.1	80.0	86.9	80.8	7756	88.5
1996	2432.0	361.0	79.0	80.2	76.7	79.8	76.7	80.5	6960	79.2
1997	2701.1	361.0	82.2	80.4	81.6	79.9	85.4	80.8	7867	89.8
1998	2612.9	361.0	78.1	80.2	77.8	79.7	82.6	80.9	6912	78.9
1999	2240.5	361.0	82.8	80.4	82.8	79.9	70.8	80.4	6214	70.9
2000	2733.7	361.0	85.7	80.6	82.6	80.1	86.2	80.7	7580	86.3
2001	2753.8	381.0	82.6	80.7	81.4	80.1	82.3	80.7	7369	83.9
2002	2656.2	381.0	81.0	80.8	79.9	80.1	79.6	80.7	7242	82.7
2003	2816.1	381.0	84.5	80.9	83.5	80.3	84.4	80.9	7560	86.3
2004	2876.6	381.0	87.9	81.2	86.5	80.5	86.0	81.1	7914	90.1
2005	2362.6	381.0	85.8	81.4	84.5	80.7	70.8	80.6	7753	88.5
2006	2493.6	381.0	78.4	81.3	78.0	80.6	74.7	80.4	7012	80.0
2007	2079.0	381.0	66.3	80.7	65.7	80.0	62.3	79.7	5882	67.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					51	
C. Inspection, maintenance or repair combined with refuelling	2878			1005		
D. Inspection, maintenance or repair without refuelling				127	1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						0
L. Human factor related					1	
Subtotal	2878	0	0	1132	53	0
Total	2878			1185		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		3
12. Reactor I&C Systems		9
13. Reactor Auxiliary Systems		3
14. Safety Systems		0
15. Reactor Cooling Systems		15
16. Steam generation systems		8
32. Feedwater and Main Steam System		0
35. All other I&C Systems		0
41. Main Generator Systems		3
42. Electrical Power Supply Systems		6
Total	0	47

UA-28 ROVNO-2**Operator:** NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)**Contractor:** PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 376.0 MW(e)
Design Net Capacity: 384.0 MW(e)
Design Discharge Burnup: 28600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2082.9 GW(e).h
Energy Availability Factor: 62.8%
Load Factor: 63.2%
Operating Factor: 64.7%
Energy Unavailability Factor: 37.2%
Total Off-line Time: 3088 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	288.7	217.1	286.8	269.6	279.7	269.9	274.6	126.0	3.7	0.0	0.0	66.7	2082.9
EAF (%)	99.1	98.4	97.3	97.0	96.9	98.4	97.4	47.1	0.0	0.0	0.0	23.3	62.8
UCF (%)	99.1	98.4	97.5	97.9	98.5	98.5	98.5	54.3	0.0	0.0	0.0	23.3	63.7
LF (%)	103.2	85.9	102.5	99.7	100.0	99.7	98.2	45.0	1.4	0.0	0.0	23.8	63.2
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	54.8	0.0	0.0	0.0	23.8	64.7
EUF (%)	0.9	1.6	2.7	3.0	3.1	1.6	2.6	52.9	100.0	100.0	100.0	76.7	37.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.2	100.0	100.0	100.0	76.5	35.3
UCLF (%)	0.9	1.6	2.5	2.1	1.6	1.5	1.5	0.5	0.0	0.0	0.0	0.2	1.0
XUF (%)	0.0	0.0	0.2	0.9	1.6	0.2	1.2	7.2	0.0	0.0	0.0	0.0	0.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO CONDENSER PROBLEM: 33 GW(E)H AND EXTERNAL CAUSES: THE GRID DISPATCHER'S REQUEST =45GW(E)H

5. Historical Summary

Date of Construction Start: 01 Oct 1973
Date of First Criticality: 19 Dec 1981
Date of Grid Connection: 30 Dec 1981
Date of Commercial Operation: 30 Jul 1982

Lifetime Generation: 68229.0 GW(e).h
Cumulative Energy Availability Factor: 80.1%
Cumulative Load Factor: 79.1%
Cumulative Unit Capability Factor: 81.2%
Cumulative Energy Unavailability Factor: 19.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1982	1397.2	384.0	90.8	90.8	90.8	90.8	82.4	82.4	4403	99.7
1983	1926.9	384.0	58.0	69.0	58.0	69.0	57.3	65.7	5572	63.6
1984	2808.2	384.0	83.1	74.6	83.1	74.6	83.3	72.7	7884	89.8
1985	2913.5	384.0	86.0	77.9	86.0	77.9	86.6	76.7	7994	91.3
1986	2891.8	384.0	83.0	79.0	83.0	79.0	86.0	78.7	7819	89.3
1987	3166.4	416.0	86.3	80.4	86.3	80.4	86.9	80.3	7649	87.3
1988	2778.3	384.0	85.8	81.2	85.8	81.2	82.4	80.6	7875	89.7
1989	2700.4	384.0	86.3	81.9	86.3	81.9	80.3	80.6	7989	91.2
1990	2799.0	384.0	83.1	82.0	83.1	82.0	83.2	80.9	7815	89.2
1991	2393.2	384.0	71.0	80.9	71.0	80.9	71.1	79.9	6560	74.9
1992	2983.7	416.0	83.8	81.2	82.9	81.1	81.7	80.1	7487	85.2
1993	2053.7	406.0	66.0	79.8	64.4	79.6	57.7	78.0	5981	68.3
1994	2690.7	384.0	83.1	80.1	83.1	79.9	80.0	78.2	7626	87.1
1995	2568.5	384.0	79.6	80.0	76.4	79.6	76.4	78.1	7215	82.4
1996	2783.1	384.0	87.8	80.6	82.5	79.8	82.5	78.4	7905	90.0
1997	2585.6	384.0	77.6	80.4	76.5	79.6	76.9	78.3	6847	78.2
1998	2739.6	384.0	83.2	80.5	81.2	79.7	81.4	78.5	7424	84.7
1999	2543.7	384.0	78.0	80.4	75.5	79.5	75.6	78.3	6958	79.4
2000	2718.2	384.0	84.0	80.6	80.3	79.5	80.6	78.4	7460	84.9
2001	2796.9	376.0	86.6	80.9	83.2	79.7	84.7	78.7	7691	87.6
2002	2861.8	376.0	86.5	81.2	85.7	80.0	86.9	79.1	7756	88.5
2003	2784.2	376.0	82.6	81.2	81.6	80.0	84.5	79.4	7376	84.2
2004	2999.7	376.0	89.4	81.6	88.4	80.4	90.8	79.9	8047	91.6
2005	2549.0	376.0	86.5	81.8	86.0	80.6	77.4	79.8	7527	85.9
2006	2627.5	376.0	84.5	81.9	83.3	80.7	79.8	79.8	7727	88.2
2007	2082.9	376.0	63.7	81.2	62.8	80.1	63.2	79.1	5672	64.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		5			145	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	3088			903		
D. Inspection, maintenance or repair without refuelling				129		
E. Testing of plant systems or components				0		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				41		4
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)					1	
Subtotal	3088	5	0	1073	146	4
Total		3093			1223	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		18
13. Reactor Auxiliary Systems		2
15. Reactor Cooling Systems		5
16. Steam generation systems		91
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		0
32. Feedwater and Main Steam System		15
41. Main Generator Systems		3
42. Electrical Power Supply Systems	5	7
Total	5	141

UA-29 ROVNO-3**Operator:** NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)**Contractor:** PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5317.2 GW(e).h
Energy Availability Factor: 66.8%
Load Factor: 63.9%
Operating Factor: 75.6%
Energy Unavailability Factor: 33.2%
Total Off-line Time: 2138 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	404.7	396.4	365.4	0.0	0.0	395.3	669.3	671.3	662.3	652.0	641.9	458.7	5317.2
EAF (%)	65.5	67.3	55.2	-0.1	0.0	59.6	96.9	97.2	98.4	93.6	99.5	67.9	66.8
UCF (%)	65.6	67.3	55.2	-0.1	0.0	61.2	99.6	99.8	98.9	94.0	99.6	68.0	67.4
LF (%)	57.3	62.1	51.7	0.0	0.0	57.8	94.7	95.0	96.8	92.1	93.8	64.9	63.9
OF (%)	96.8	100.0	83.7	0.0	0.0	63.8	100.0	100.0	100.0	94.6	100.0	69.2	75.6
EUF (%)	34.5	32.7	44.8	100.1	100.0	40.4	3.1	2.8	1.6	6.4	0.5	32.1	33.2
PUF (%)	32.0	32.0	43.1	100.1	100.0	37.8	0.0	0.0	0.0	5.4	0.1	31.8	31.8
UCLF (%)	2.5	0.7	1.8	0.0	0.0	1.1	0.4	0.2	1.2	0.5	0.3	0.2	0.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	1.5	2.7	2.7	0.5	0.4	0.0	0.0	0.7

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO CONDENSER PROBLEM: 45 GW(E)H AND EXTERNAL CAUSES: THE GRID DISPATCHER'S REQUEST =89GW(E)H

5. Historical Summary

Date of Construction Start: 01 Feb 1980 **Lifetime Generation:** 118432.0 GW(e).h
Date of First Criticality: 11 Nov 1986 **Cumulative Energy Availability Factor:** 70.5%
Date of Grid Connection: 21 Dec 1986 **Cumulative Load Factor:** 68.3%
Date of Commercial Operation: 16 May 1987 **Cumulative Unit Capability Factor:** 72.3%
Cumulative Energy Unavailability Factor: 29.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	3961.1	1000.0	81.3	81.3	81.3	81.3	67.4	67.4	4474	76.1
1988	5661.3	950.0	71.1	75.3	71.1	75.3	67.8	67.6	6357	72.4
1989	6046.1	950.0	75.1	75.2	75.1	75.2	72.7	69.5	6771	77.3
1990	6360.1	950.0	77.3	75.8	77.3	75.8	76.4	71.4	6981	79.7
1991	5454.8	950.0	66.0	73.7	66.0	73.7	65.5	70.1	5971	68.2
1992	7084.9	1000.0	82.2	75.3	82.2	75.3	80.7	72.1	7323	83.4
1993	6195.1	950.0	76.5	75.5	75.9	75.4	74.4	72.4	6861	78.3
1994	5574.7	950.0	67.7	74.5	67.7	74.4	67.0	71.7	6042	69.0
1995	5018.3	950.0	61.0	72.9	60.3	72.8	60.3	70.4	5500	62.8
1996	5550.9	950.0	66.8	72.3	66.5	72.1	66.5	70.0	6064	69.0
1997	6249.6	950.0	75.9	72.6	74.7	72.4	75.1	70.5	6730	76.8
1998	5603.5	950.0	68.2	72.3	67.3	71.9	67.3	70.2	6036	68.9
1999	5303.5	950.0	72.6	72.3	63.7	71.3	63.7	69.7	6342	72.4
2000	4991.3	950.0	72.4	72.3	59.8	70.5	59.8	69.0	5641	64.2
2001	5783.6	950.0	75.3	72.5	69.6	70.4	69.3	69.0	6387	72.7
2002	5562.6	950.0	69.8	72.3	68.4	70.3	66.8	68.9	6320	72.1
2003	6250.5	950.0	75.2	72.5	74.3	70.5	75.1	69.2	6815	77.8
2004	6693.3	950.0	84.2	73.1	83.2	71.2	80.2	69.9	7321	83.3
2005	4768.1	950.0	69.7	73.0	68.3	71.1	57.3	69.2	6158	70.3
2006	4614.0	950.0	65.6	72.6	64.6	70.7	55.4	68.5	6777	77.4
2007	5317.2	950.0	67.4	72.3	66.8	70.5	63.9	68.3	6622	75.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		24		81	313	
B. Refuelling without a maintenance					9	
C. Inspection, maintenance or repair combined with refuelling	1846			1523		
D. Inspection, maintenance or repair without refuelling	268			126		
E. Testing of plant systems or components				26		
G. Major back-fitting, refurbishment or upgrading activities without refuelling						9
J. Grid failure or grid unavailability						18
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					3	35
Subtotal	2114	24	0	1756	325	62
Total		2138			2143	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		26
12. Reactor I&C Systems		32
13. Reactor Auxiliary Systems		14
15. Reactor Cooling Systems		6
16. Steam generation systems		30
17. Safety I&C Systems (excluding reactor I&C)	24	3
31. Turbine and auxiliaries		28
32. Feedwater and Main Steam System		3
33. Circulating Water System		1
35. All other I&C Systems		0
41. Main Generator Systems		210
42. Electrical Power Supply Systems		35
Total	24	388

UA-69 ROVNO-4

Operator: NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>
Contractor: PAA (PRODUCTION AMALGAMATION 'ATOMMASH', VOLGODONSK)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5560.9 GW(e).h
Energy Availability Factor: 69.5%
Load Factor: 66.8%
Operating Factor: 87.4%
Energy Unavailability Factor: 30.5%
Total Off-line Time: 1103 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	548.3	494.7	540.0	530.1	548.6	211.6	77.6	451.5	535.3	539.2	529.4	554.6	5560.9
EAF (%)	79.5	79.2	78.4	79.3	79.5	31.8	15.7	71.7	80.4	78.5	80.0	80.4	69.5
UCF (%)	79.5	79.2	78.4	79.3	79.5	31.8	16.2	72.3	80.4	78.5	80.0	80.4	69.6
LF (%)	77.6	77.5	76.4	77.6	77.6	30.9	11.0	63.9	78.3	76.2	77.4	78.5	66.8
OF (%)	100.0	100.0	99.9	100.1	100.0	40.0	17.6	92.2	100.0	100.0	100.0	100.0	87.4
EUF (%)	20.5	20.8	21.6	20.7	20.5	68.2	84.3	28.3	19.6	21.5	20.0	19.6	30.5
PUF (%)	20.5	20.8	21.6	20.7	20.5	68.2	83.7	27.3	19.6	21.5	20.0	19.6	30.4
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.0	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO EXTERNAL CAUSES: THE GRID DISPATCHER'S REQUEST =72GW(E)H

5. Historical Summary

Date of Construction Start: 01 Aug 1986 **Lifetime Generation:** 15842.0 GW(e).h
Date of First Criticality: 26 Sep 2004 **Cumulative Energy Availability Factor:** 64.1%
Date of Grid Connection: 10 Oct 2004 **Cumulative Load Factor:** 60.3%
Date of Commercial Operation: 06 Apr 2006 **Cumulative Unit Capability Factor:** 64.6%
Cumulative Energy Unavailability Factor: 35.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
2006	3244.7	950.0	57.9	57.9	57.0	57.0	51.7	51.7	4326	65.5
2007	5560.9	950.0	69.6	64.6	69.5	64.1	66.8	60.3	7657	87.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			2006 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure						
C. Inspection, maintenance or repair combined with refuelling	1045			768		319
D. Inspection, maintenance or repair without refuelling	58			278		
Subtotal	1103	0	0	1046	319	0
Total	1103			1365		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	2006 to 2007 Average Hours Lost Per Year
41. Main Generator Systems		319
Total	0	319

UA-44 SOUTH UKRAINE-1

Operator: NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)

Contractor: PAA (PRODUCTION AMALGAMATION 'ATOMMASH', VOLGODONSK)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5159.8 GW(e).h
Energy Availability Factor: 61.6%
Load Factor: 62.0%
Operating Factor: 63.5%
Energy Unavailability Factor: 38.4%
Total Off-line Time: 3198 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	711.8	647.4	719.2	692.1	552.5	663.4	614.3	0.0	0.0	0.0	0.0	559.0	5159.8
EAF (%)	99.6	98.8	99.8	99.6	79.0	97.8	88.5	0.1	0.0	0.0	0.0	78.0	61.6
UCF (%)	99.6	98.8	99.8	99.6	82.1	98.7	98.3	0.1	0.0	0.0	0.0	78.0	62.7
LF (%)	100.7	101.4	101.8	101.3	78.2	97.0	86.9	0.0	0.0	0.0	0.0	79.1	62.0
OF (%)	100.0	100.0	99.9	100.1	84.4	100.0	100.0	0.1	0.0	0.0	0.0	79.3	63.5
EUF (%)	0.4	1.2	0.2	0.4	21.0	2.2	11.5	99.9	100.0	100.0	100.0	22.0	38.4
PUF (%)	0.0	0.0	0.0	0.0	6.3	0.0	0.0	99.9	100.0	100.0	100.0	21.6	35.8
UCLF (%)	0.4	1.2	0.2	0.4	11.5	1.3	1.8	0.0	0.0	0.0	0.0	0.3	1.4
XUF (%)	0.0	0.0	0.0	0.0	3.1	0.9	9.8	0.0	0.0	0.0	0.0	0.0	1.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO CONDENSER TEMPERATURE DIFFERENCE- 40 GW(E)H AND EXTERNAL CAUSES: HIGH TEMPERATURE OF COOLING WATER=154GW(E)H, COOLING WATER TEMPERATURE LIMITS DUE TO COOLING POND=88GW(E)H

5. Historical Summary

Date of Construction Start:	01 Mar 1977	Lifetime Generation:	129786.0 GW(e).h
Date of First Criticality:	09 Dec 1982	Cumulative Energy Availability Factor:	66.0%
Date of Grid Connection:	31 Dec 1982	Cumulative Load Factor:	66.8%
Date of Commercial Operation:	18 Oct 1983	Cumulative Unit Capability Factor:	66.8%
		Cumulative Energy Unavailability Factor:	34.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	1582.5	950.0	75.6	75.6	75.6	75.6	75.4	75.4	1746	79.1
1984	6075.1	950.0	71.7	72.4	71.7	72.4	72.8	73.3	6364	72.4
1985	6939.1	950.0	81.4	76.4	81.1	76.3	83.4	77.8	7148	81.6
1986	6176.1	950.0	74.1	75.7	73.5	75.4	74.2	76.7	6735	76.9
1987	6385.9	1000.0	75.6	75.7	75.6	75.5	72.9	75.8	6642	75.8
1988	5467.5	950.0	65.9	73.8	65.9	73.7	65.5	73.8	6177	70.3
1989	2501.6	950.0	30.8	67.0	30.8	66.9	30.1	66.9	3321	37.9
1990	6174.4	950.0	75.2	68.1	75.0	68.0	74.2	67.9	7063	80.6
1991	3865.9	950.0	46.5	65.5	46.5	65.4	46.4	65.3	5532	63.1
1992	4946.8	833.0	49.2	64.0	49.1	63.8	67.6	65.5	6142	69.9
1993	5277.8	950.0	62.3	63.8	61.4	63.6	63.4	65.3	5650	64.5
1994	5117.4	950.0	58.7	63.3	58.7	63.1	61.5	65.0	5667	64.7
1995	5438.6	950.0	66.1	63.6	65.4	63.3	65.4	65.0	6212	70.9
1996	5138.2	950.0	62.1	63.5	61.6	63.2	61.6	64.7	5549	63.2
1997	6196.1	950.0	73.0	64.1	72.5	63.8	74.5	65.4	6416	73.2
1998	6164.9	950.0	73.7	64.8	73.1	64.5	74.1	66.0	6477	73.9
1999	5558.9	950.0	67.1	64.9	66.5	64.6	66.8	66.1	5920	67.6
2000	5203.0	950.0	63.9	64.9	61.2	64.4	62.4	65.8	5677	64.6
2001	5563.7	950.0	68.3	65.0	66.6	64.5	66.7	65.9	6015	68.5
2002	4254.8	950.0	52.2	64.4	50.9	63.8	51.1	65.1	4625	52.8
2003	6008.2	950.0	74.2	64.9	72.6	64.2	72.2	65.5	6612	75.5
2004	6988.9	950.0	85.0	65.8	84.0	65.2	83.8	66.3	7592	86.4
2005	6068.5	950.0	78.3	66.4	77.1	65.7	72.9	66.6	6926	79.1
2006	6345.1	950.0	79.1	66.9	76.9	66.2	76.2	67.0	6988	79.8
2007	5159.8	950.0	62.7	66.8	61.6	66.0	62.0	66.8	5562	63.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		75			410	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	3081			1365		
D. Inspection, maintenance or repair without refuelling	41			357		
E. Testing of plant systems or components				10	0	
J. Grid failure or grid unavailability					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					36	0
Z. Others					1	
Subtotal	3122	75	0	1732	450	0
Total		3197			2182	

7. Equipment Related Full Outages, Analysis by System

System	2007	1980 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		12
14. Safety Systems		1
15. Reactor Cooling Systems		5
16. Steam generation systems		199
31. Turbine and auxiliaries	75	57
32. Feedwater and Main Steam System		10
33. Circulating Water System		1
35. All other I&C Systems		1
41. Main Generator Systems		118
42. Electrical Power Supply Systems		2
XX. Miscellaneous Systems		1
Total	75	407

UA-45 SOUTH UKRAINE-2

Operator: NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)

Contractor: PAA (PRODUCTION AMALGAMATION 'ATOMMASH', VOLGODONSK)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6241.7 GW(e).h
Energy Availability Factor: 75.8%
Load Factor: 75.0%
Operating Factor: 78.7%
Energy Unavailability Factor: 24.2%
Total Off-line Time: 1868 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	680.5	643.1	696.0	671.9	503.9	0.0	69.7	670.7	245.1	691.2	668.4	701.2	6241.7
EAF (%)	95.9	99.7	99.7	99.3	72.5	0.0	10.5	96.2	36.9	99.3	99.6	99.6	75.8
UCF (%)	95.9	99.7	99.7	99.3	86.0	0.0	19.8	98.8	37.4	99.3	99.6	99.6	78.0
LF (%)	96.3	100.7	98.5	98.4	71.3	0.0	9.9	94.9	35.8	97.7	97.7	99.2	75.0
OF (%)	97.2	100.0	99.9	100.1	87.4	0.0	20.7	100.0	38.5	100.0	100.0	100.0	78.7
EUf (%)	4.1	0.3	0.3	0.7	27.5	100.0	89.5	3.8	63.1	0.7	0.4	0.4	24.2
PUf (%)	3.6	0.0	0.0	0.0	12.7	100.0	79.5	0.7	38.9	0.0	0.0	0.0	19.6
UCLF (%)	0.5	0.3	0.3	0.7	1.3	0.0	0.8	0.6	23.7	0.7	0.4	0.4	2.4
XUF (%)	0.0	0.0	0.0	0.1	13.5	0.0	9.3	2.6	0.4	0.0	0.0	0.0	2.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO CONDENSER TEMPERATURE DIFFERENCE- 40 GW(E)H AND TO EXTERNAL CAUSES: HIGH TEMPERATURE OF COOLING WATER=145GW(E)H, COOLING WATER TEMPERATURE LIMITS DUE TO COOLING POND=65GW(E)H

5. Historical Summary

Date of Construction Start: 01 Oct 1979
Date of First Criticality: 30 Dec 1984
Date of Grid Connection: 06 Jan 1985
Date of Commercial Operation: 06 Apr 1985

Lifetime Generation: 115150.0 GW(e).h
Cumulative Energy Availability Factor: 62.4%
Cumulative Load Factor: 62.4%
Cumulative Unit Capability Factor: 63.6%
Cumulative Energy Unavailability Factor: 37.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	4666.7	950.0	73.3	73.3	73.3	73.3	74.4	74.4	4924	74.6
1986	5565.5	950.0	67.0	69.7	66.2	69.3	66.9	70.1	6315	72.1
1987	1641.7	1000.0	22.0	51.8	22.0	51.6	18.7	50.8	1941	22.2
1988	4850.6	950.0	57.4	53.3	57.4	53.1	58.1	52.8	5198	59.2
1989	4437.3	950.0	54.3	53.5	54.3	53.3	53.3	52.9	6674	76.2
1990	1769.0	950.0	21.9	48.1	21.9	47.9	21.3	47.4	4522	51.6
1991	6209.8	950.0	72.0	51.6	72.0	51.5	74.6	51.4	6722	76.7
1992	6412.1	1000.0	72.9	54.4	71.7	54.2	73.0	54.3	6574	74.8
1993	5204.0	950.0	64.0	55.5	61.7	55.0	62.5	55.2	6570	75.0
1994	3958.5	950.0	47.3	54.7	46.9	54.2	47.6	54.5	6471	73.9
1995	5429.4	950.0	66.1	55.7	65.2	55.2	65.2	55.5	6514	74.4
1996	4593.7	950.0	55.4	55.7	55.0	55.2	55.0	55.4	5590	63.6
1997	6326.5	950.0	77.2	57.4	75.4	56.8	76.0	57.0	7400	84.5
1998	4542.4	950.0	55.1	57.2	54.0	56.6	54.6	56.9	4867	55.6
1999	5537.9	950.0	72.0	58.2	66.4	57.2	66.5	57.5	6372	72.7
2000	4103.5	950.0	50.0	57.7	49.2	56.7	49.2	57.0	4486	51.1
2001	6206.5	950.0	74.8	58.7	74.4	57.8	74.4	58.0	6869	78.2
2002	6057.2	950.0	74.2	59.6	72.7	58.6	72.8	58.8	6565	74.9
2003	5507.7	950.0	66.2	59.9	65.8	59.0	66.2	59.2	5868	67.0
2004	6899.7	950.0	86.1	61.2	82.2	60.2	82.7	60.4	7647	87.1
2005	6479.2	950.0	82.0	62.2	81.1	61.2	77.9	61.2	7243	82.7
2006	6110.2	950.0	77.5	62.9	75.3	61.8	73.4	61.8	6847	78.2
2007	6241.7	950.0	78.0	63.6	75.8	62.4	75.0	62.4	6892	78.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		163			528	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1404			1342		
D. Inspection, maintenance or repair without refuelling	301			475	4	
E. Testing of plant systems or components				12		
H. Nuclear regulatory requirements					1	5
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					67	
L. Human factor related					1	
Subtotal	1705	163	0	1829	601	5
Total		1868			2435	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		10
14. Safety Systems	0	
15. Reactor Cooling Systems		26
16. Steam generation systems		414
17. Safety I&C Systems (excluding reactor I&C)		11
31. Turbine and auxiliaries		24
32. Feedwater and Main Steam System		37
41. Main Generator Systems	163	2
42. Electrical Power Supply Systems		0
Total	163	524

UA-48 SOUTH UKRAINE-3

Operator: NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)
Contractor: PAA (PRODUCTION AMALGAMATION 'ATOMMASH', VOLGODONSK)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5326.1 GW(e).h
Energy Availability Factor: 66.1%
Load Factor: 64.0%
Operating Factor: 68.2%
Energy Unavailability Factor: 33.9%
Total Off-line Time: 2782 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	239.9	623.8	490.0	338.1	662.6	630.3	671.3	673.4	519.7	200.8	0.0	276.3	5326.1
EAF (%)	34.3	98.2	69.4	65.7	94.7	93.4	96.3	96.4	79.2	28.5	0.0	39.9	66.1
UCF (%)	34.3	98.2	69.4	65.7	98.7	98.6	98.5	98.4	79.4	28.5	0.0	39.9	67.3
LF (%)	33.9	97.7	69.3	49.5	93.7	92.1	95.0	95.3	76.0	28.4	0.0	39.1	64.0
OF (%)	37.5	100.0	75.7	54.2	100.0	100.0	100.0	100.0	81.5	29.0	0.0	42.9	68.2
EUF (%)	65.7	1.8	30.6	34.3	5.3	6.6	3.7	3.6	20.8	71.5	100.0	60.1	33.9
PUF (%)	0.0	0.0	26.3	32.3	0.0	0.0	0.0	0.0	19.7	71.1	100.0	11.3	21.7
UCLF (%)	65.7	1.8	4.4	2.1	1.3	1.4	1.5	1.6	0.9	0.4	0.0	48.8	11.0
XUF (%)	0.0	0.0	0.0	0.0	4.1	5.1	2.2	2.0	0.2	0.0	0.0	0.0	1.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO CONDENSER TEMPERATURE DIFFERENCE- 40 GW(E)H AND TO EXTERNAL CAUSES:REDUCED POWER UPON THE GRID DISPATCHER'S REQUEST = 114 GW(E)H, HIGH TEMPERATURE OF COOLING WATER=145GW(E)H, COOLING WATER TEMPERATURE LIMITS DUE TO COOLING POND=65GW(E)H

5. Historical Summary

Date of Construction Start: 01 Feb 1985 **Lifetime Generation:** 100967.0 GW(e).h
Date of First Criticality: 01 Sep 1989 **Cumulative Energy Availability Factor:** 71.1%
Date of Grid Connection: 20 Sep 1989 **Cumulative Load Factor:** 70.5%
Date of Commercial Operation: 29 Dec 1989 **Cumulative Unit Capability Factor:** 72.3%
Cumulative Energy Unavailability Factor: 28.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	501.9	950.0	100.0	100.0	100.0	100.0	71.0	71.0	563	75.7
1990	5691.6	950.0	69.4	71.8	69.4	71.8	68.4	68.6	6408	73.2
1991	5762.8	950.0	70.4	71.1	70.0	70.9	69.2	68.9	6996	79.9
1992	6458.1	1000.0	75.2	72.5	75.2	72.4	73.5	70.5	6646	75.7
1993	6043.4	950.0	72.8	72.6	71.7	72.2	72.6	71.0	6527	74.5
1994	5565.0	950.0	66.5	71.4	66.4	71.1	66.9	70.2	6223	71.0
1995	4954.8	950.0	60.2	69.6	59.5	69.2	59.5	68.4	6300	71.9
1996	6155.0	950.0	76.4	70.5	73.8	69.8	73.8	69.2	7463	85.0
1997	6514.8	950.0	79.7	71.7	77.7	70.8	78.3	70.3	7079	80.8
1998	5851.0	950.0	71.0	71.6	69.9	70.7	70.3	70.3	6396	73.0
1999	5464.3	950.0	67.2	71.1	65.5	70.2	65.7	69.9	6244	71.3
2000	5909.7	950.0	73.3	71.3	70.6	70.2	70.8	69.9	6588	75.0
2001	6136.3	950.0	76.3	71.8	73.7	70.5	73.5	70.2	6985	79.5
2002	6335.2	950.0	77.5	72.2	76.0	70.9	76.1	70.7	7043	80.4
2003	6036.5	950.0	74.3	72.3	73.1	71.1	72.5	70.8	6680	76.3
2004	6625.1	950.0	82.0	73.0	79.9	71.7	79.4	71.4	7246	82.5
2005	6801.0	950.0	85.7	73.8	85.0	72.5	81.7	72.0	7548	86.2
2006	4290.9	950.0	53.6	72.6	53.0	71.4	51.6	70.8	4734	54.0
2007	5326.1	950.0	67.3	72.3	66.1	71.1	64.0	70.5	5978	68.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1990 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		819			272	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1320			1480		
D. Inspection, maintenance or repair without refuelling	535			214		
E. Testing of plant systems or components				22		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)			109			
Subtotal	1855	819	109	1716	272	0
Total		2783			1988	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1990 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		4
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems		0
15. Reactor Cooling Systems		2
16. Steam generation systems	48	4
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries		26
32. Feedwater and Main Steam System		1
33. Circulating Water System		0
35. All other I&C Systems		1
41. Main Generator Systems	771	216
42. Electrical Power Supply Systems		1
Total	819	262

UA-54 ZAPOROZHE-1

Operator: NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)

Contractor: PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6921.0 GW(e).h
Energy Availability Factor: 83.5%
Load Factor: 83.2%
Operating Factor: 84.5%
Energy Unavailability Factor: 16.5%
Total Off-line Time: 1354 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	690.6	629.9	699.8	626.4	0.0	381.6	563.3	618.1	677.6	717.9	681.7	634.1	6921.0
EAF (%)	99.3	99.4	98.8	89.1	0.0	56.5	80.1	87.4	97.6	99.2	97.1	99.4	83.5
UCF (%)	99.3	99.4	98.8	89.1	0.0	57.0	80.9	87.4	97.6	99.2	97.1	99.4	83.6
LF (%)	97.7	98.7	99.0	91.7	0.0	55.8	79.7	87.5	99.1	101.4	99.7	89.7	83.2
OF (%)	100.0	100.0	99.6	90.1	0.0	58.9	81.9	88.7	98.6	100.0	98.5	100.0	84.5
EUF (%)	0.7	0.6	1.2	10.9	100.0	43.5	19.9	12.6	2.4	0.8	2.9	0.6	16.5
PUF (%)	0.0	0.0	0.0	10.4	100.0	42.6	18.3	11.6	0.0	0.0	2.2	0.0	15.6
UCLF (%)	0.7	0.6	1.2	0.5	0.0	0.5	0.8	1.0	2.4	0.8	0.7	0.7	0.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.1

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE AN ENERGY LOSSES DUE TO CONDENSER PRESSURE DEVIATION FROM THE NOMINAL ONE - 35 GW(E)H; STEAM UNDERHEATING IN MOISTURE SEPARATOR - 18 GW(E)H AND EXTERNAL CAUSES: HIGH TEMPERATURE OF COOLING WATER=142GW(E)H, TRANSMISSION LINE LIMITATION=141 GW(E)H

5. Historical Summary

Date of Construction Start:	01 Apr 1980	Lifetime Generation:	113413.0 GW(e).h
Date of First Criticality:	07 Dec 1984	Cumulative Energy Availability Factor:	62.7%
Date of Grid Connection:	10 Dec 1984	Cumulative Load Factor:	62.2%
Date of Commercial Operation:	25 Dec 1985	Cumulative Unit Capability Factor:	65.0%
		Cumulative Energy Unavailability Factor:	37.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	495.0	950.0	70.8	70.8	70.8	70.8	70.0	70.0	594	79.8
1986	4826.3	950.0	61.5	62.3	58.3	59.2	58.0	58.9	5580	63.7
1987	6720.9	1000.0	80.8	71.4	80.8	69.9	76.7	67.7	7205	82.2
1988	5170.4	950.0	67.4	70.1	67.2	69.0	62.0	65.9	6225	70.9
1989	0.0	950.0	0.0	53.2	0.0	52.3	0.0	50.0	0	0.0
1990	4668.7	950.0	58.8	54.3	56.4	53.1	56.1	51.2	5684	64.9
1991	5332.2	950.0	68.5	56.6	64.2	54.9	64.1	53.3	6343	72.4
1992	6103.5	950.0	70.3	58.5	67.8	56.8	73.1	56.0	6739	76.7
1993	4209.7	950.0	53.5	57.9	52.1	56.2	50.6	55.4	6591	75.2
1994	3771.0	950.0	45.5	56.5	45.5	55.0	45.3	54.3	5062	57.8
1995	3557.3	950.0	44.9	55.4	42.7	53.8	42.7	53.1	4213	48.1
1996	4299.5	950.0	53.5	55.2	51.5	53.6	51.5	53.0	5224	59.5
1997	4070.6	950.0	53.9	55.1	48.9	53.2	48.9	52.7	5531	63.1
1998	5517.5	950.0	68.7	56.1	66.3	54.2	66.3	53.7	6122	69.9
1999	5992.5	950.0	84.0	58.1	72.0	55.5	72.0	55.0	7422	84.7
2000	4222.7	950.0	52.0	57.7	50.3	55.1	50.6	54.7	4589	52.2
2001	5847.1	950.0	71.8	58.6	69.9	56.0	70.1	55.7	6434	73.2
2002	6735.0	950.0	83.2	60.0	80.6	57.5	80.9	57.1	7334	83.7
2003	6596.4	950.0	81.9	61.2	79.0	58.7	79.3	58.3	7223	82.5
2004	6748.3	950.0	82.6	62.3	80.6	59.8	80.9	59.5	7290	83.0
2005	6018.8	950.0	77.8	63.1	76.8	60.6	72.3	60.2	6823	77.9
2006	6899.0	950.0	83.7	64.1	83.3	61.7	82.9	61.2	7380	84.2
2007	6921.0	950.0	83.6	65.0	83.5	62.7	83.2	62.2	7406	84.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		12		343	326	3
B. Refuelling without a maintenance					11	
C. Inspection, maintenance or repair combined with refuelling	1112			1519	34	
D. Inspection, maintenance or repair without refuelling	230			357	11	
E. Testing of plant systems or components				6		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					3	5
Subtotal	1342	12	0	2225	385	8
Total		1354			2618	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		48
15. Reactor Cooling Systems		33
16. Steam generation systems		428
17. Safety I&C Systems (excluding reactor I&C)		8
31. Turbine and auxiliaries		54
32. Feedwater and Main Steam System		39
33. Circulating Water System		3
35. All other I&C Systems		0
41. Main Generator Systems	10	37
42. Electrical Power Supply Systems	2	14
XX. Miscellaneous Systems		0
Total	12	664

UA-56 ZAPOROZHE-2**Operator:** NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)**Contractor:** PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH, VOLGODONSK, RUSSIA)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7064.5 GW(e).h
Energy Availability Factor: 85.1%
Load Factor: 84.9%
Operating Factor: 85.9%
Energy Unavailability Factor: 14.9%
Total Off-line Time: 1232 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	684.8	627.0	703.3	673.0	711.9	410.6	0.0	463.9	687.2	711.3	691.9	699.7	7064.5
EAF (%)	99.7	99.3	99.7	99.6	99.5	61.6	0.0	66.6	99.0	99.0	99.7	99.7	85.1
UCF (%)	99.7	99.4	99.7	99.6	99.5	61.8	0.0	68.9	99.0	99.0	99.7	99.7	85.3
LF (%)	96.9	98.2	99.5	98.5	100.7	60.0	0.0	65.6	100.5	100.5	101.2	99.0	84.9
OF (%)	100.0	100.0	99.9	100.1	100.0	63.3	0.0	69.9	100.0	100.0	100.0	100.0	85.9
EUf (%)	0.3	0.7	0.3	0.4	0.5	38.4	100.0	33.4	1.0	1.0	0.3	0.3	14.9
PUf (%)	0.0	0.0	0.0	0.0	0.0	37.8	100.0	30.1	0.0	0.0	0.0	0.0	14.2
UCLF (%)	0.3	0.7	0.3	0.4	0.5	0.4	0.0	1.0	1.0	1.0	0.3	0.3	0.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.2	0.0	2.3	0.0	0.0	0.0	0.0	0.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE AN ENERGY LOSSES DUE TO CONDENSER PRESSURE DEVIATION FROM THE NOMINAL ONE - 24 GW(E)H; STEAM UNDERHEATING IN MOISTURE SEPARATOR - 17 GW(E)H AND EXTERNAL CAUSES: HIGH TEMPERATURE OF COOLING WATER=150GW(E)H, TRANSMISSION LINE LIMITATION=113 GW(E)H

5. Historical Summary

Date of Construction Start: 01 Jan 1981 **Lifetime Generation:** 116708.0 GW(e).h
Date of First Criticality: 28 Jun 1985 **Cumulative Energy Availability Factor:** 67.3%
Date of Grid Connection: 22 Jul 1985 **Cumulative Load Factor:** 65.7%
Date of Commercial Operation: 15 Feb 1986 **Cumulative Unit Capability Factor:** 69.0%
Cumulative Energy Unavailability Factor: 32.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	5112.9	950.0	70.9	70.9	68.4	68.4	67.1	67.1	5764	71.9
1987	6058.3	1000.0	76.0	73.6	76.0	72.5	69.2	68.2	6675	76.2
1988	6088.6	950.0	81.2	76.2	81.2	75.4	73.0	69.8	7253	82.6
1989	3050.9	950.0	45.1	68.4	45.1	67.8	36.7	61.5	3393	38.7
1990	1869.1	950.0	22.6	59.1	22.3	58.6	22.5	53.6	2165	24.7
1991	4583.9	950.0	56.1	58.6	55.4	58.1	55.1	53.9	5112	58.4
1992	6551.7	950.0	77.7	61.4	76.2	60.7	78.5	57.4	7016	79.9
1993	4386.1	950.0	56.6	60.8	53.8	59.8	52.7	56.8	6194	70.7
1994	4103.5	950.0	49.9	59.6	49.8	58.7	49.3	56.0	5924	67.6
1995	5051.8	950.0	63.5	60.0	60.7	58.9	60.7	56.5	7329	83.7
1996	5373.0	950.0	67.5	60.6	64.4	59.4	64.4	57.2	6247	71.1
1997	6081.7	950.0	76.5	62.0	73.0	60.6	73.1	58.5	6745	77.0
1998	4922.8	950.0	62.9	62.0	59.0	60.4	59.2	58.6	5601	63.9
1999	5476.0	950.0	66.9	62.4	65.7	60.8	65.8	59.1	5887	67.2
2000	5626.4	950.0	70.7	63.0	67.4	61.3	67.4	59.6	6281	71.5
2001	5867.6	950.0	72.5	63.6	70.6	61.8	70.3	60.3	6422	73.1
2002	6315.6	950.0	78.8	64.5	75.9	62.7	75.9	61.2	6834	78.0
2003	6742.4	950.0	83.8	65.5	80.9	63.7	81.0	62.3	7387	84.3
2004	6944.3	950.0	86.0	66.6	83.1	64.7	83.2	63.4	7531	85.7
2005	6303.2	950.0	83.4	67.4	82.4	65.6	75.7	64.0	7332	83.7
2006	6644.7	950.0	83.0	68.2	82.8	66.4	79.8	64.8	7297	83.3
2007	7064.5	950.0	85.3	69.0	85.1	67.3	84.9	65.7	7528	85.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					415	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	1244			1433		
D. Inspection, maintenance or repair without refuelling				519		
E. Testing of plant systems or components				5		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					2	15
L. Human factor related					0	
Subtotal	1244	0	0	1957	420	15
Total		1244			2392	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		11
13. Reactor Auxiliary Systems		0
15. Reactor Cooling Systems		9
16. Steam generation systems		252
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		38
32. Feedwater and Main Steam System		8
35. All other I&C Systems		8
41. Main Generator Systems		68
42. Electrical Power Supply Systems		4
Total	0	399

UA-78 ZAPOROZHE-3**Operator:** NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)**Contractor:** PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6631.4 GW(e).h
Energy Availability Factor: 80.5%
Load Factor: 79.7%
Operating Factor: 83.0%
Energy Unavailability Factor: 19.5%
Total Off-line Time: 1492 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	701.0	636.7	699.7	675.8	682.7	648.9	671.6	670.3	622.0	24.3	0.0	598.3	6631.4
EAF (%)	98.9	98.9	99.0	98.9	97.5	96.2	96.3	96.3	92.3	5.1	0.0	87.2	80.5
UCF (%)	98.9	98.9	99.0	98.9	98.6	98.3	98.2	98.0	98.7	6.2	0.0	87.8	81.7
LF (%)	99.2	99.7	99.0	98.9	96.6	94.9	95.0	94.8	90.9	3.4	0.0	84.6	79.7
OF (%)	100.0	100.0	99.9	100.1	100.0	100.0	100.0	100.0	100.0	6.8	0.0	89.5	83.0
EUUF (%)	1.1	1.1	1.0	1.1	2.5	3.8	3.7	3.7	7.7	94.9	100.0	12.8	19.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.7	100.0	11.5	17.2
UCLF (%)	1.1	1.1	1.1	1.1	1.4	1.7	1.8	2.0	1.3	0.1	0.0	0.6	1.1
XUF (%)	0.0	0.0	0.0	0.0	1.1	2.1	1.9	1.7	6.4	1.1	0.0	0.6	1.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE AN ENERGY LOSSES DUE TO CONDENSER PRESSURE DEVIATION FROM THE NOMINAL ONE - 92 GW(E)H AND EXTERNAL CAUSES: HIGH TEMPERATURE OF COOLING WATER=175GW(E)H, TRANSMISSION LINE LIMITATION=10 GW(E)H

5. Historical Summary

Date of Construction Start: 01 Apr 1982 **Lifetime Generation:** 112876.0 GW(e).h
Date of First Criticality: 04 Dec 1986 **Cumulative Energy Availability Factor:** 69.3%
Date of Grid Connection: 10 Dec 1986 **Cumulative Load Factor:** 67.8%
Date of Commercial Operation: 05 Mar 1987 **Cumulative Unit Capability Factor:** 72.1%
Cumulative Energy Unavailability Factor: 30.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	5757.0	1000.0	80.3	80.3	80.3	80.3	78.4	78.4	5886	80.1
1988	6414.3	950.0	81.3	80.9	81.3	80.9	76.9	77.6	7077	80.6
1989	6614.4	950.0	80.9	80.9	80.9	80.9	79.5	78.2	7373	84.2
1990	5625.3	950.0	68.1	77.6	67.7	77.5	67.6	75.5	6166	70.4
1991	4958.8	950.0	61.1	74.2	59.9	73.9	59.6	72.2	5877	67.1
1992	4140.9	950.0	54.0	70.8	50.5	69.9	49.6	68.4	5274	60.0
1993	5416.6	950.0	67.6	70.3	66.0	69.3	65.1	67.9	7263	82.9
1994	4273.7	950.0	52.5	68.0	52.5	67.2	51.4	65.8	6068	69.3
1995	4027.8	950.0	49.7	66.0	48.4	65.1	48.4	63.9	5804	66.3
1996	4940.2	950.0	62.3	65.6	59.2	64.5	59.2	63.4	6096	69.4
1997	4869.8	950.0	70.1	66.0	58.5	63.9	58.5	62.9	6544	74.7
1998	4953.2	950.0	63.1	65.8	59.5	63.6	59.5	62.6	6316	72.1
1999	5114.5	950.0	64.7	65.7	61.5	63.4	61.5	62.6	6162	70.3
2000	6123.2	950.0	76.6	66.5	73.0	64.1	73.4	63.3	6875	78.3
2001	6307.8	950.0	80.9	67.5	75.7	64.9	75.6	64.2	7027	80.0
2002	6602.0	950.0	84.4	68.5	79.2	65.8	79.3	65.1	7470	85.3
2003	6588.9	950.0	81.9	69.3	79.0	66.6	79.2	65.9	7236	82.6
2004	6308.7	950.0	85.4	70.2	75.5	67.1	75.6	66.5	7371	83.9
2005	6224.1	950.0	84.4	71.0	83.5	67.9	74.8	66.9	7229	82.5
2006	6048.0	950.0	84.8	71.7	83.3	68.7	72.7	67.2	7031	80.3
2007	6631.4	950.0	81.7	72.1	80.5	69.3	79.7	67.8	7268	83.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					95	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	1492			1450		
D. Inspection, maintenance or repair without refuelling				232		
E. Testing of plant systems or components				21	3	
J. Grid failure or grid unavailability						11
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				1	4	37
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)						12
Subtotal	1492	0	0	1704	110	60
Total		1492			1874	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		3
13. Reactor Auxiliary Systems		3
14. Safety Systems		6
15. Reactor Cooling Systems		0
16. Steam generation systems		14
31. Turbine and auxiliaries		5
32. Feedwater and Main Steam System		14
33. Circulating Water System		1
35. All other I&C Systems		1
41. Main Generator Systems		30
42. Electrical Power Supply Systems		5
XX. Miscellaneous Systems		0
Total	0	82

UA-79 ZAPOROZHE-4**Operator:** NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)**Contractor:** PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7027.8 GW(e).h
Energy Availability Factor: 86.2%
Load Factor: 84.4%
Operating Factor: 87.3%
Energy Unavailability Factor: 13.8%
Total Off-line Time: 1115 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	135.8	84.2	715.5	631.7	693.8	634.0	679.5	682.5	677.8	701.2	690.0	701.9	7027.8
EAF (%)	24.5	15.6	100.0	100.0	98.6	97.7	97.3	97.2	99.2	99.5	100.0	100.0	86.2
UCF (%)	24.6	15.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	100.0	100.0	87.1
LF (%)	19.2	13.2	101.2	92.5	98.2	92.7	96.1	96.6	99.1	99.1	100.9	99.3	84.4
OF (%)	25.8	16.2	99.9	100.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.3
EUF (%)	75.5	84.4	0.0	0.0	1.4	2.3	2.7	2.8	0.9	0.5	0.0	0.0	13.8
PUF (%)	75.4	84.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
XUF (%)	0.1	0.0	0.0	0.0	1.4	2.3	2.7	2.8	0.9	0.3	0.0	0.0	0.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Apr 1983 **Lifetime Generation:** 114438.0 GW(e).h
Date of First Criticality: 15 Dec 1987 **Cumulative Energy Availability Factor:** 73.2%
Date of Grid Connection: 18 Dec 1987 **Cumulative Load Factor:** 72.4%
Date of Commercial Operation: 14 Apr 1988 **Cumulative Unit Capability Factor:** 75.8%
Cumulative Energy Unavailability Factor: 26.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	4798.9	950.0	79.1	79.1	79.1	79.1	76.5	76.5	5278	80.0
1989	5828.1	950.0	73.1	75.7	73.1	75.7	70.0	72.8	6613	75.5
1990	6637.3	950.0	79.8	77.2	78.9	76.8	79.8	75.3	7393	84.4
1991	4259.5	950.0	51.3	70.3	51.1	70.0	51.2	68.9	5114	58.4
1992	6962.3	1000.0	78.8	72.1	78.6	71.8	79.3	71.2	6961	79.2
1993	6118.8	950.0	74.1	72.5	73.4	72.1	73.5	71.6	6821	77.9
1994	5888.7	950.0	71.4	72.3	71.3	72.0	70.8	71.5	6718	76.7
1995	4717.1	950.0	58.4	70.5	56.7	70.0	56.7	69.6	5902	67.4
1996	5372.2	950.0	66.3	70.0	64.4	69.4	64.4	69.0	6372	72.5
1997	6284.4	950.0	79.9	71.1	75.5	70.0	75.5	69.6	7060	80.6
1998	6022.0	950.0	74.0	71.3	72.4	70.2	72.4	69.9	6839	78.1
1999	3921.3	950.0	49.8	69.5	47.1	68.3	47.1	68.0	4630	52.9
2000	6708.4	950.0	83.8	70.6	80.3	69.2	80.4	68.9	7423	84.5
2001	6091.2	950.0	89.8	72.0	73.1	69.5	73.0	69.2	7884	89.8
2002	6337.1	950.0	78.5	72.5	76.1	69.9	76.1	69.7	6895	78.7
2003	6736.3	950.0	82.4	73.1	80.9	70.6	80.9	70.4	7248	82.7
2004	6537.6	950.0	88.5	74.0	78.3	71.1	78.3	70.9	7247	82.5
2005	6511.9	950.0	85.1	74.6	84.1	71.8	78.2	71.3	7498	85.6
2006	6621.8	950.0	85.2	75.2	84.8	72.5	79.6	71.7	7186	82.0
2007	7027.8	950.0	87.1	75.8	86.2	73.2	84.4	72.4	7645	87.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					154	
B. Refuelling without a maintenance					32	
C. Inspection, maintenance or repair combined with refuelling	1115			1481		
D. Inspection, maintenance or repair without refuelling				140		
E. Testing of plant systems or components				18	0	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						41
Subtotal	1115	0	0	1639	186	41
Total		1115			1866	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		7
12. Reactor I&C Systems		10
13. Reactor Auxiliary Systems		5
14. Safety Systems		2
15. Reactor Cooling Systems		10
16. Steam generation systems		18
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		10
32. Feedwater and Main Steam System		5
35. All other I&C Systems		0
41. Main Generator Systems		74
42. Electrical Power Supply Systems		5
XX. Miscellaneous Systems		1
Total	0	149

UA-126 ZAPOROZHE-5**Operator:** NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)**Contractor:** PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6936.5 GW(e).h
Energy Availability Factor: 84.3%
Load Factor: 83.4%
Operating Factor: 84.6%
Energy Unavailability Factor: 15.7%
Total Off-line Time: 1352 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	716.1	634.2	608.6	673.0	711.0	657.0	699.3	215.7	0.0	663.9	696.3	661.5	6936.5
EAF (%)	100.0	100.0	86.7	99.8	99.5	99.3	99.7	31.9	0.0	94.6	100.0	100.0	84.3
UCF (%)	100.0	100.0	86.7	99.8	99.5	99.3	99.7	31.9	0.0	94.9	100.0	100.0	84.3
LF (%)	101.3	99.3	86.1	98.5	100.6	96.0	98.9	30.5	0.0	93.8	101.8	93.6	83.4
OF (%)	100.0	100.0	87.0	100.1	100.0	100.0	100.0	32.3	0.0	95.7	100.0	100.0	84.6
EUUF (%)	0.0	0.0	13.3	0.2	0.5	0.7	0.3	68.1	100.0	5.4	0.0	0.0	15.7
PUF (%)	0.0	0.0	13.3	0.0	0.0	0.0	0.0	68.0	100.0	5.1	0.0	0.0	15.6
UCLF (%)	0.0	0.0	0.0	0.2	0.5	0.7	0.3	0.2	0.0	0.0	0.0	0.0	0.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO CONDENSER PRESSURE DEVIATION FROM THE NOMINAL ONE - 13 GW(E)H AND TO EXTERNAL CAUSES: HIGH TEMPERATURE OF COOLING WATER=125GW(E)H, TRANSMISSION LINE LIMITATION=124 GW(E)H

5. Historical Summary

Date of Construction Start: 01 Nov 1985 **Lifetime Generation:** 105055.0 GW(e).h
Date of First Criticality: 20 Jul 1989 **Cumulative Energy Availability Factor:** 73.2%
Date of Grid Connection: 14 Aug 1989 **Cumulative Load Factor:** 72.7%
Date of Commercial Operation: 27 Oct 1989 **Cumulative Unit Capability Factor:** 74.9%
Cumulative Energy Unavailability Factor: 26.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	1670.0	950.0	83.1	83.1	83.1	83.1	79.6	79.6	1957	88.6
1990	4678.7	950.0	57.9	63.0	56.6	62.0	56.2	60.9	6002	68.5
1991	6554.9	950.0	79.5	70.3	78.4	69.3	78.8	68.8	7319	83.6
1992	6898.8	1000.0	80.1	73.4	79.2	72.4	78.5	71.9	7032	80.1
1993	5661.8	950.0	68.9	72.4	68.3	71.5	68.0	71.0	6735	76.9
1994	4858.9	950.0	59.1	69.9	59.1	69.1	58.4	68.7	6779	77.4
1995	5391.9	950.0	66.0	69.3	64.7	68.4	64.8	68.0	6506	74.3
1996	6126.0	950.0	74.1	69.9	73.4	69.1	73.4	68.8	6799	77.4
1997	6381.5	950.0	76.2	70.7	75.8	69.9	76.7	69.7	6705	76.5
1998	5856.2	950.0	70.7	70.7	70.1	69.9	70.4	69.8	6249	71.3
1999	5070.2	950.0	63.0	70.0	60.6	69.0	60.9	68.9	5525	63.1
2000	6286.6	950.0	77.9	70.7	74.9	69.6	75.3	69.5	6928	78.9
2001	5890.8	950.0	76.2	71.1	70.7	69.6	70.6	69.6	6751	76.9
2002	6222.5	950.0	80.8	71.8	74.5	70.0	74.8	70.0	6983	79.7
2003	6585.5	950.0	80.2	72.4	79.0	70.6	79.1	70.6	7107	81.1
2004	6826.7	950.0	85.6	73.3	81.6	71.4	81.8	71.4	7551	86.0
2005	6278.9	950.0	81.5	73.8	80.8	71.9	75.4	71.6	6975	79.6
2006	6713.6	950.0	83.7	74.4	83.3	72.6	80.7	72.1	7297	83.3
2007	6936.5	950.0	84.3	74.9	84.3	73.2	83.4	72.7	7408	84.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					96	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	1256			1351		
D. Inspection, maintenance or repair without refuelling	96			241		
E. Testing of plant systems or components				25		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	22
Subtotal	1352	0	0	1617	105	22
Total		1352			1744	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		8
14. Safety Systems		1
15. Reactor Cooling Systems		8
16. Steam generation systems		45
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		9
32. Feedwater and Main Steam System		8
41. Main Generator Systems		7
42. Electrical Power Supply Systems		6
Total	0	94

UA-127 ZAPOROZHE-6**Operator:** NNEGC (NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>)**Contractor:** PAIP (PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 950.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6756.3 GW(e).h
Energy Availability Factor: 83.3%
Load Factor: 81.2%
Operating Factor: 83.0%
Energy Unavailability Factor: 16.7%
Total Off-line Time: 1485 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	714.2	662.2	64.6	180.8	725.2	679.3	711.8	713.3	705.2	734.1	539.9	325.7	6756.3
EAF (%)	100.0	100.0	9.5	26.8	100.0	100.0	100.0	100.0	100.0	100.0	76.9	87.3	83.3
UCF (%)	100.0	100.0	9.5	26.8	100.0	100.0	100.0	100.0	100.0	100.0	76.9	87.6	83.4
LF (%)	101.1	103.7	9.1	26.5	102.6	99.3	100.7	100.9	103.1	103.7	78.9	46.1	81.2
OF (%)	100.0	100.0	9.7	28.5	100.0	100.0	100.0	100.0	100.0	100.0	78.3	80.8	83.0
EUF (%)	0.0	0.0	90.5	73.2	0.0	0.0	0.0	0.0	0.0	0.0	23.1	12.7	16.7
PUF (%)	0.0	0.0	90.5	73.2	0.0	0.0	0.0	0.0	0.0	0.0	22.2	12.4	16.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS THE NPP OPERATION AT FULL POWER IN BASE LOAD MODE. BUT THERE WERE ENERGY LOSSES DUE TO EXTERNAL CAUSES: HIGH TEMPERATURE OF COOLING WATER=142GW(E)H, TRANSMISSION LINE LIMITATION=303 GW(E)H

5. Historical Summary

Date of Construction Start: 01 Jun 1986 **Lifetime Generation:** 73690.0 GW(e).h
Date of First Criticality: 06 Oct 1995 **Cumulative Energy Availability Factor:** 78.7%
Date of Grid Connection: 19 Oct 1995 **Cumulative Load Factor:** 77.7%
Date of Commercial Operation: 16 Sep 1996 **Cumulative Unit Capability Factor:** 81.0%
Cumulative Energy Unavailability Factor: 21.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1996	2359.7	950.0	86.4	86.4	84.8	84.8	84.8	84.8	2540	86.7
1997	6332.7	950.0	75.5	78.2	75.2	77.6	76.1	78.3	6640	75.8
1998	6132.2	950.0	76.2	77.4	73.4	75.8	73.7	76.3	6766	77.2
1999	6165.4	950.0	78.4	77.7	74.1	75.3	74.1	75.6	6934	79.2
2000	5844.2	950.0	70.1	75.9	69.3	73.9	70.0	74.3	6191	70.5
2001	6336.2	950.0	80.1	76.7	75.2	74.2	75.9	74.6	7118	81.0
2002	6790.6	950.0	83.4	77.8	81.0	75.2	81.6	75.7	7393	84.4
2003	7006.4	950.0	86.3	78.9	83.5	76.3	84.2	76.9	7590	86.6
2004	6867.8	950.0	87.4	79.9	81.7	77.0	82.3	77.5	7715	87.8
2005	5850.7	950.0	84.5	80.4	83.5	77.7	70.3	76.8	6557	74.9
2006	6855.0	950.0	84.0	80.8	83.6	78.3	82.4	77.3	7317	83.5
2007	6756.3	950.0	83.4	81.0	83.3	78.7	81.2	77.7	7275	83.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1995 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					40	
C. Inspection, maintenance or repair combined with refuelling	1186			1197		
D. Inspection, maintenance or repair without refuelling	300			79		
E. Testing of plant systems or components				35		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						66
Subtotal	1486	0	0	1311	40	66
Total	1486			1417		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1995 to 2007 Average Hours Lost Per Year
15. Reactor Cooling Systems		3
16. Steam generation systems		14
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		10
32. Feedwater and Main Steam System		0
35. All other I&C Systems		0
41. Main Generator Systems		2
42. Electrical Power Supply Systems		2
XX. Miscellaneous Systems		1
Total	0	33

GB-18A DUNGNESS-B1

Operator: BE (BRITISH ENERGY)

Contractor: APC (ATOMIC POWER CONSTRUCTION LTD.)

1. Station Details

Type: GCR
 Net Reference Unit Power
 at the beginning of 2007: 545.0 MW(e)
 Design Net Capacity: 607.0 MW(e)
 Design Discharge Burnup: 19000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2981.3 GW(e).h
 Energy Availability Factor: 63.3%
 Load Factor: 62.4%
 Operating Factor: 73.6%
 Energy Unavailability Factor: 36.7%
 Total Off-line Time: 2313 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	306.2	217.6	33.7	259.5	44.7	319.8	382.2	383.9	370.0	360.7	70.7	232.3	2981.3
EAF (%)	76.0	60.3	11.0	66.9	13.3	81.7	94.3	94.7	94.3	88.8	19.9	58.4	63.3
UCF (%)	76.0	60.3	11.0	66.9	13.3	81.7	94.3	94.7	94.3	88.8	19.9	58.4	63.3
LF (%)	75.5	59.4	8.3	66.2	11.0	81.5	94.3	94.7	94.3	88.8	18.0	57.3	62.4
OF (%)	83.7	70.5	29.3	75.9	27.7	92.1	100.0	100.0	100.0	99.9	32.1	71.8	73.6
EUF (%)	24.0	39.7	89.0	33.1	86.7	18.3	5.7	5.3	5.7	11.2	80.1	41.6	36.7
PUF (%)	1.1	31.5	59.3	28.4	77.6	4.0	4.2	4.8	5.1	4.8	68.3	40.0	27.4
UCLF (%)	22.9	8.2	29.7	4.7	9.1	14.3	1.5	0.5	0.6	6.3	11.8	1.6	9.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Oct 1965 Lifetime Generation: 69800.4 GW(e).h
 Date of First Criticality: 23 Dec 1982 Cumulative Energy Availability Factor: 44.4%
 Date of Grid Connection: 03 Apr 1983 Cumulative Load Factor: 43.6%
 Date of Commercial Operation: 01 Apr 1985 Cumulative Unit Capability Factor: 46.3%
 Cumulative Energy Unavailability Factor: 55.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	1826.2	450.0	64.8	64.8	62.8	62.8	61.9	61.9	4443	67.8
1986	1172.6	450.0	33.7	47.0	29.1	43.5	29.8	43.6	4447	50.9
1987	210.3	450.0	13.2	34.6	6.5	29.9	5.2	29.5	1179	13.2
1988	1233.9	450.0	45.5	37.5	33.3	30.8	31.4	30.0	3857	44.2
1989	647.2	412.0	43.8	38.7	24.8	29.6	18.0	27.6	2650	30.3
1990	758.0	360.0	26.3	36.9	26.3	29.1	24.1	27.1	5093	58.3
1991	2656.2	410.0	74.5	42.3	74.5	35.6	74.0	33.8	7329	83.9
1992	1052.3	441.0	27.5	40.3	27.4	34.5	26.7	32.8	2670	30.0
1993	3493.2	516.0	77.5	45.3	77.1	40.2	77.5	38.8	7138	81.7
1994	2385.7	555.0	51.5	46.0	49.2	41.4	49.2	40.1	4676	53.5
1995	873.7	555.0	18.2	42.9	18.2	38.8	17.9	37.6	1587	18.1
1996	2517.0	555.0	51.6	43.8	51.6	40.1	51.6	39.1	5311	60.5
1997	2078.2	555.0	42.9	43.7	42.9	40.3	42.6	39.4	4549	51.8
1998	2198.3	555.0	47.4	44.0	47.0	40.9	45.1	39.9	5716	65.1
1999	1584.2	555.0	33.0	43.2	33.0	40.3	32.5	39.3	4752	54.1
2000	409.6	555.0	8.4	40.7	8.4	38.0	8.4	37.1	1201	13.7
2001	3049.1	555.0	62.2	42.1	61.9	39.6	62.5	38.8	7108	80.9
2002	2167.6	555.0	45.6	42.3	45.5	40.0	44.6	39.1	5043	57.6
2003	2482.9	555.0	54.6	43.1	51.9	40.7	51.1	39.8	5212	59.5
2004	3082.5	555.0	63.8	44.2	63.8	42.0	63.2	41.2	6305	71.8
2005	2955.1	555.0	61.7	45.1	61.6	43.0	60.8	42.2	6039	68.9
2006	2453.8	555.0	51.7	45.5	51.6	43.4	51.2	42.6	5246	59.9
2007	2981.3	545.0	63.3	46.3	63.3	44.4	62.4	43.6	6447	73.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					977	
B. Refuelling without a maintenance	2328	312			37	
C. Inspection, maintenance or repair combined with refuelling				632	92	
D. Inspection, maintenance or repair without refuelling				1035	78	
E. Testing of plant systems or components					6	6
H. Nuclear regulatory requirements				327		
J. Grid failure or grid unavailability						8
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					10	4
L. Human factor related					9	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)					7	
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)					6	
Z. Others				118	42	
Subtotal	2328	312	0	2112	1264	18
Total		2640			3394	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		34
13. Reactor Auxiliary Systems		17
14. Safety Systems		1
15. Reactor Cooling Systems		24
16. Steam generation systems		62
21. Fuel Handling and Storage Facilities		8
31. Turbine and auxiliaries		68
32. Feedwater and Main Steam System		590
33. Circulating Water System		24
41. Main Generator Systems		115
42. Electrical Power Supply Systems		19
XX. Miscellaneous Systems		0
Total	0	962

GB-18B DUNGENESS-B2

Operator: BE (BRITISH ENERGY)

Contractor: APC (ATOMIC POWER CONSTRUCTION LTD.)

1. Station Details

Type: GCR
 Net Reference Unit Power at the beginning of 2007: 545.0 MW(e)
 Design Net Capacity: 607.0 MW(e)
 Design Discharge Burnup: 18000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2875.7 GW(e).h
 Energy Availability Factor: 60.9%
 Load Factor: 60.2%
 Operating Factor: 71.9%
 Energy Unavailability Factor: 39.1%
 Total Off-line Time: 2459 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	170.1	43.1	226.2	349.9	339.9	188.9	381.6	363.6	133.9	0.0	292.6	386.0	2875.7
EAF (%)	43.8	13.8	56.8	89.1	84.0	50.1	94.1	89.7	35.3	0.0	75.1	95.2	60.9
UCF (%)	43.8	13.8	56.8	89.1	84.0	50.1	94.1	89.7	35.3	0.0	75.1	95.2	60.9
LF (%)	42.0	11.8	55.8	89.3	83.8	48.1	94.1	89.7	34.1	0.0	74.6	95.2	60.2
OF (%)	55.9	20.2	79.8	100.1	96.0	61.5	100.0	100.0	55.8	0.0	89.4	100.0	71.9
EUUF (%)	56.2	86.2	43.2	10.9	16.0	49.9	5.9	10.3	64.7	100.0	24.9	4.8	39.1
PUF (%)	9.8	0.6	8.6	2.5	9.7	41.6	3.3	2.9	46.8	47.4	2.8	4.3	15.0
UCLF (%)	46.4	85.6	34.6	8.4	6.3	8.3	2.6	7.5	17.9	52.6	22.2	0.6	24.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Oct 1965 Lifetime Generation: 72816.4 GW(e).h
 Date of First Criticality: 04 Dec 1985 Cumulative Energy Availability Factor: 51.2%
 Date of Grid Connection: 29 Dec 1985 Cumulative Load Factor: 51.3%
 Date of Commercial Operation: 01 Apr 1989 Cumulative Unit Capability Factor: 51.4%
 Cumulative Energy Unavailability Factor: 48.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation								
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online		
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)	
1989	0.0	412.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0
1990	726.0	360.0	23.1	12.6	23.1	12.6	23.1	12.6	23.1	4060	46.5
1991	1467.2	410.0	44.8	24.9	44.8	24.9	40.9	23.4	4295	49.2	
1992	2360.4	441.0	62.0	35.9	61.9	35.9	59.9	34.2	6525	73.3	
1993	2306.7	517.0	50.2	39.5	50.0	39.4	51.0	38.5	4672	53.5	
1994	2568.3	555.0	57.1	43.3	57.0	43.2	53.0	41.6	5075	58.1	
1995	773.8	555.0	16.1	38.5	16.1	38.4	15.9	37.0	1358	15.5	
1996	3615.0	555.0	74.2	43.8	74.1	43.8	74.2	42.6	6882	78.3	
1997	3327.3	555.0	68.5	47.1	68.3	47.0	68.3	46.0	6975	79.4	
1998	1897.8	555.0	39.2	46.1	39.2	46.1	38.9	45.1	4390	50.0	
1999	2123.3	555.0	30.6	44.5	30.6	44.5	43.6	45.0	5504	62.7	
2000	1814.3	555.0	37.2	43.9	37.2	43.8	37.2	44.2	3767	42.9	
2001	3007.4	555.0	62.1	45.4	61.1	45.3	61.7	45.7	6393	72.8	
2002	2483.3	555.0	51.8	45.9	51.8	45.8	51.1	46.2	5135	58.6	
2003	3747.3	555.0	78.3	48.3	76.0	48.0	77.1	48.4	7275	83.0	
2004	3514.4	555.0	72.6	49.9	72.6	49.7	72.3	50.0	7138	81.5	
2005	2739.7	555.0	57.7	50.4	57.7	50.2	56.4	50.5	5612	64.1	
2006	2695.7	555.0	57.9	50.9	56.9	50.6	56.2	50.8	5712	65.2	
2007	2875.7	545.0	60.9	51.4	60.9	51.2	60.2	51.3	6301	71.9	

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		840			553	
B. Refuelling without a maintenance	1056	1128		80	33	
C. Inspection, maintenance or repair combined with refuelling				770	155	
D. Inspection, maintenance or repair without refuelling				878		
E. Testing of plant systems or components						23
H. Nuclear regulatory requirements				412		
J. Grid failure or grid unavailability					2	13
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				24		11
Z. Others				83	13	
Subtotal	1056	1968	0	2247	756	47
Total		3024			3050	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		11
12. Reactor I&C Systems		54
13. Reactor Auxiliary Systems		1
15. Reactor Cooling Systems		22
16. Steam generation systems	840	36
17. Safety I&C Systems (excluding reactor I&C)		1
21. Fuel Handling and Storage Facilities		16
31. Turbine and auxiliaries		24
32. Feedwater and Main Steam System		240
33. Circulating Water System		83
41. Main Generator Systems		0
42. Electrical Power Supply Systems		7
XX. Miscellaneous Systems		50
Total	840	545

GB-19A HARTLEPOOL-A1

Operator: BE (BRITISH ENERGY)
Contractor: NPC (NUCLEAR POWER CO. LTD.)

1. Station Details

Type: GCR
Net Reference Unit Power at the beginning of 2007: 595.0 MW(e)
Design Net Capacity: 625.0 MW(e)
Design Discharge Burnup: 24000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3295.8 GW(e).h
Energy Availability Factor: 63.1%
Load Factor: 63.2%
Operating Factor: 64.8%
Energy Unavailability Factor: 36.9%
Total Off-line Time: 3080 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	446.4	358.3	446.7	291.3	416.3	423.8	426.8	421.7	64.4	0.0	0.0	0.0	3295.8
EAF (%)	100.0	89.4	100.0	68.0	94.1	98.9	96.4	95.3	15.3	0.0	0.0	0.0	63.1
UCF (%)	100.0	89.4	100.0	68.0	94.1	98.9	96.4	95.3	15.3	0.0	0.0	0.0	63.1
LF (%)	100.8	89.6	100.9	68.1	94.0	98.9	96.4	95.3	15.0	0.0	0.0	0.0	63.2
OF (%)	100.0	92.4	100.0	70.2	100.0	100.0	100.0	100.0	15.8	0.0	0.0	0.0	64.8
EUUF (%)	0.0	10.6	0.0	32.0	5.9	1.1	3.6	4.7	84.7	100.0	100.0	100.0	36.9
PUF (%)	0.0	0.0	0.0	32.0	5.1	1.1	1.0	1.0	76.0	100.0	12.6	1.4	19.2
UCLF (%)	0.0	10.6	0.0	0.0	0.8	0.0	2.6	3.8	8.7	0.0	87.4	98.6	17.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Oct 1968
Date of First Criticality: 24 Jun 1983
Date of Grid Connection: 01 Aug 1983
Date of Commercial Operation: 01 Apr 1989

Lifetime Generation: 73535.8 GW(e).h
Cumulative Energy Availability Factor: 71.9%
Cumulative Load Factor: 69.5%
Cumulative Unit Capability Factor: 72.0%
Cumulative Energy Unavailability Factor: 28.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	1315.7	539.0	72.8	72.8	72.8	72.8	39.1	39.1	2983	45.2
1990	1698.7	487.0	40.1	54.5	40.1	54.5	39.9	39.5	3486	39.9
1991	2953.4	625.0	75.0	63.1	75.0	63.1	54.1	45.6	6791	77.7
1992	2910.4	510.0	63.6	63.2	63.5	63.2	64.1	50.4	6156	69.1
1993	4449.6	582.0	87.4	68.7	87.1	68.5	87.4	58.7	7802	89.3
1994	4296.6	605.0	81.7	71.1	81.4	71.0	81.3	62.9	7716	88.3
1995	3584.2	605.0	67.7	70.6	67.7	70.4	67.4	63.7	5937	67.6
1996	4518.0	605.0	85.7	72.7	85.6	72.5	85.0	66.6	7691	87.6
1997	4441.7	605.0	83.9	74.0	83.6	73.9	83.6	68.7	7644	87.0
1998	3892.3	605.0	73.5	74.0	73.5	73.8	73.2	69.1	7108	80.9
1999	5000.1	605.0	94.4	75.9	94.4	75.8	94.1	71.6	8369	95.3
2000	4757.3	605.0	89.5	77.1	88.6	77.0	89.5	73.2	8153	92.8
2001	4291.2	605.0	81.0	77.5	80.9	77.3	80.7	73.8	7301	83.1
2002	4627.8	605.0	87.5	78.2	87.5	78.1	87.3	74.8	7965	90.9
2003	4583.3	605.0	86.6	78.8	86.6	78.7	86.5	75.6	7856	89.7
2004	1942.7	605.0	36.7	76.1	36.7	75.9	36.7	73.1	3385	38.6
2005	2322.9	605.0	43.9	74.1	43.9	74.0	43.8	71.3	4829	55.1
2006	2378.9	605.0	45.9	72.5	45.9	72.4	45.5	69.8	4291	49.0
2007	3295.8	595.0	63.1	72.0	63.1	71.9	63.2	69.5	5680	64.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1464			701	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	1368			468	24	
D. Inspection, maintenance or repair without refuelling				857		
E. Testing of plant systems or components					19	
G. Major back-fitting, refurbishment or upgrading activities without refuelling				51		
H. Nuclear regulatory requirements				259	214	
J. Grid failure or grid unavailability					4	3
Z. Others				32	78	
Subtotal	1368	1464	0	1667	1048	3
Total		2832			2718	

7. Equipment Related Full Outages, Analysis by System

System	2007	1985 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories	1392	
12. Reactor I&C Systems		22
13. Reactor Auxiliary Systems		48
16. Steam generation systems		223
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		54
32. Feedwater and Main Steam System		70
33. Circulating Water System	72	85
41. Main Generator Systems		154
42. Electrical Power Supply Systems		38
Total	1464	696

GB-19B HARTLEPOOL-A2

Operator: BE (BRITISH ENERGY)
Contractor: NPC (NUCLEAR POWER CO. LTD.)

1. Station Details

Type: GCR
Net Reference Unit Power at the beginning of 2007: 595.0 MW(e)
Design Net Capacity: 600.0 MW(e)
Design Discharge Burnup: 24000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3593.6 GW(e).h
Energy Availability Factor: 69.1%
Load Factor: 68.9%
Operating Factor: 74.4%
Energy Unavailability Factor: 30.9%
Total Off-line Time: 2246 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	325.3	215.1	444.8	427.5	439.8	413.8	263.1	430.9	416.6	216.7	0.0	0.0	3593.6
EAF (%)	73.5	54.5	100.0	99.7	99.3	96.6	60.2	97.3	97.3	50.6	0.0	0.0	69.1
UCF (%)	73.5	54.5	100.0	99.7	99.4	96.6	60.2	97.3	97.3	50.6	0.0	0.0	69.1
LF (%)	73.5	53.8	100.5	99.9	99.3	96.6	59.4	97.3	97.2	48.9	0.0	0.0	68.9
OF (%)	100.0	70.4	100.0	100.1	100.0	100.0	67.3	100.0	100.0	54.2	0.0	0.0	74.4
EUUF (%)	26.5	45.5	0.0	0.3	0.7	3.4	39.8	2.7	2.7	49.4	100.0	100.0	30.9
PUF (%)	0.0	35.0	0.0	0.3	0.7	1.7	38.3	2.2	2.7	2.5	1.6	37.9	10.1
UCLF (%)	26.5	10.5	0.0	0.1	0.0	1.8	1.6	0.4	0.0	46.9	98.4	62.1	20.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Oct 1968
Date of First Criticality: 09 Sep 1984
Date of Grid Connection: 31 Oct 1984
Date of Commercial Operation: 01 Apr 1989

Lifetime Generation: 69713.8 GW(e).h
Cumulative Energy Availability Factor: 75.5%
Cumulative Load Factor: 73.7%
Cumulative Unit Capability Factor: 75.7%
Cumulative Energy Unavailability Factor: 24.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	2234.8	421.0	100.0	100.0	100.0	100.0	80.6	80.6	4689	71.0
1990	3238.4	487.0	74.1	84.3	74.1	84.3	76.0	77.8	6796	77.8
1991	1855.9	625.0	55.1	71.6	55.1	71.6	34.0	58.7	3755	43.0
1992	4316.8	571.0	87.3	76.1	87.0	76.0	84.9	66.3	7923	89.0
1993	4264.6	582.0	84.9	78.1	83.8	77.8	83.8	70.2	7682	87.9
1994	3703.9	605.0	70.2	76.6	69.9	76.3	70.1	70.2	6612	75.7
1995	3750.7	605.0	70.9	75.7	70.9	75.4	70.6	70.2	6149	70.0
1996	4370.3	605.0	82.2	76.6	82.1	76.3	82.2	71.9	8131	92.6
1997	4127.9	605.0	77.9	76.8	77.2	76.4	77.7	72.6	6954	79.2
1998	4555.1	605.0	86.0	77.7	85.6	77.4	85.7	74.0	7973	90.8
1999	4472.5	605.0	84.4	78.4	83.6	78.0	84.2	75.0	7808	88.9
2000	4265.9	605.0	80.3	78.6	80.3	78.2	80.3	75.5	7463	85.0
2001	4635.9	605.0	87.5	79.3	87.5	79.0	87.2	76.4	8092	92.1
2002	4910.3	605.0	92.7	80.3	92.7	80.0	92.7	77.6	8383	95.7
2003	3488.4	605.0	66.4	79.3	66.4	79.1	65.8	76.8	6258	71.4
2004	3380.6	605.0	63.9	78.3	63.9	78.1	63.8	76.0	6016	68.7
2005	3651.6	605.0	69.2	77.8	69.2	77.5	68.9	75.5	6428	73.4
2006	2481.1	605.0	47.8	76.1	47.8	75.8	47.4	73.9	4455	50.9
2007	3593.6	595.0	69.1	75.7	69.1	75.5	68.9	73.7	6514	74.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1488			566	
B. Refuelling without a maintenance	264				5	
C. Inspection, maintenance or repair combined with refuelling				617	22	
D. Inspection, maintenance or repair without refuelling				604		
E. Testing of plant systems or components					6	
G. Major back-fitting, refurbishment or upgrading activities without refuelling				48		
H. Nuclear regulatory requirements				109		55
Z. Others				80	8	
Subtotal	264	1488	0	1458	607	55
Total		1752			2120	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	1488	31
12. Reactor I&C Systems		19
13. Reactor Auxiliary Systems		2
15. Reactor Cooling Systems		59
16. Steam generation systems		10
21. Fuel Handling and Storage Facilities		3
31. Turbine and auxiliaries		21
32. Feedwater and Main Steam System		171
33. Circulating Water System		87
41. Main Generator Systems		126
42. Electrical Power Supply Systems		17
Total	1488	546

GB-20A HEYSHAM-A1

Operator: BE (BRITISH ENERGY)
Contractor: NPC (NUCLEAR POWER CO. LTD.)

1. Station Details

Type: GCR
Net Reference Unit Power at the beginning of 2007: 585.0 MW(e)
Design Net Capacity: 611.0 MW(e)
Design Discharge Burnup: 24000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2498.5 GW(e).h
Energy Availability Factor: 49.1%
Load Factor: 48.8%
Operating Factor: 55.8%
Energy Unavailability Factor: 50.9%
Total Off-line Time: 3868 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	396.8	384.5	319.1	253.7	403.7	0.0	0.0	40.9	416.9	283.0	0.0	0.0	2498.5
EAF (%)	91.4	97.8	73.4	60.2	92.8	0.0	0.0	12.2	99.0	65.6	0.0	0.0	49.1
UCF (%)	91.4	97.8	73.4	60.2	92.8	0.0	0.0	12.3	99.0	65.6	0.0	0.0	49.1
LF (%)	91.2	97.8	73.3	60.3	92.7	0.0	0.0	9.4	99.0	64.9	0.0	0.0	48.8
OF (%)	94.9	100.0	100.0	100.1	94.9	0.0	0.0	17.6	100.0	66.2	0.0	0.0	55.8
EUF (%)	8.6	2.2	26.6	39.8	7.2	100.0	100.0	87.8	1.0	34.4	100.0	100.0	50.9
PUF (%)	0.0	0.0	0.1	0.6	6.3	100.0	88.3	2.3	0.4	0.1	0.0	0.0	16.5
UCLF (%)	8.6	2.2	26.5	39.2	1.0	0.0	11.7	85.5	0.6	34.3	100.0	100.0	34.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Dec 1970 **Lifetime Generation:** 73264.6 GW(e).h
Date of First Criticality: 06 Apr 1983 **Cumulative Energy Availability Factor:** 74.5%
Date of Grid Connection: 09 Jul 1983 **Cumulative Load Factor:** 73.4%
Date of Commercial Operation: 01 Apr 1989 **Cumulative Unit Capability Factor:** 74.8%
Cumulative Energy Unavailability Factor: 25.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	2351.6	420.0	100.0	100.0	100.0	100.0	84.8	84.8	5448	82.5
1990	1786.7	487.0	43.4	65.7	43.4	65.7	42.0	58.9	4096	46.9
1991	3826.2	621.0	86.4	74.7	86.4	74.7	70.5	63.9	7279	83.3
1992	2764.2	550.0	55.8	69.4	55.6	69.3	56.4	61.8	5981	67.2
1993	3638.2	555.0	75.0	70.6	74.3	70.4	75.0	64.7	6643	76.0
1994	4563.4	575.0	90.5	74.3	90.4	74.1	90.8	69.5	8128	93.0
1995	2808.9	575.0	55.9	71.4	55.9	71.3	55.6	67.4	4794	54.6
1996	4056.8	575.0	80.3	72.6	80.2	72.5	80.3	69.1	7674	87.4
1997	4298.8	575.0	85.4	74.1	84.5	73.9	85.1	71.0	7757	88.3
1998	3766.1	575.0	74.8	74.2	73.8	73.9	74.6	71.4	6950	79.1
1999	4549.8	575.0	90.4	75.8	89.7	75.4	90.1	73.2	7990	91.0
2000	4587.9	575.0	90.8	77.1	90.4	76.7	90.8	74.7	8230	93.7
2001	4034.6	575.0	78.0	77.2	77.6	76.8	79.9	75.2	6959	79.2
2002	4445.5	575.0	88.4	78.0	87.9	77.6	88.3	76.1	7921	90.4
2003	3746.2	575.0	74.8	77.8	74.4	77.4	74.4	76.0	6783	77.4
2004	2638.1	575.0	52.7	76.1	52.4	75.8	52.4	74.5	4951	56.5
2005	4033.1	575.0	80.1	76.4	80.1	76.1	80.1	74.8	7458	85.1
2006	3839.1	575.0	75.5	76.3	75.5	76.0	75.2	74.8	7229	82.5
2007	2498.5	585.0	49.1	74.8	49.1	74.5	48.8	73.4	4892	55.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1728			404	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	1416	888		739	14	
D. Inspection, maintenance or repair without refuelling				607		
E. Testing of plant systems or components					79	30
H. Nuclear regulatory requirements				97	60	17
J. Grid failure or grid unavailability					6	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						8
Z. Others				77	41	
Subtotal	1416	2616	0	1520	606	55
Total		4032			2181	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	1728	
12. Reactor I&C Systems		6
15. Reactor Cooling Systems		57
16. Steam generation systems		38
31. Turbine and auxiliaries		6
32. Feedwater and Main Steam System		24
33. Circulating Water System		128
41. Main Generator Systems		101
42. Electrical Power Supply Systems		33
XX. Miscellaneous Systems		8
Total	1728	401

GB-20B HEYSHAM-A2

Operator: BE (BRITISH ENERGY)
Contractor: NPC (NUCLEAR POWER CO. LTD.)

1. Station Details

Type: GCR
Net Reference Unit Power at the beginning of 2007: 575.0 MW(e)
Design Net Capacity: 611.0 MW(e)
Design Discharge Burnup: 24000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 2981.6 GW(e).h
Energy Availability Factor: 59.4%
Load Factor: 59.2%
Operating Factor: 71.7%
Energy Unavailability Factor: 40.6%
Total Off-line Time: 2480 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	344.8	309.0	22.2	335.8	362.8	352.5	367.4	368.7	356.0	162.6	0.0	0.0	2981.6
EAF (%)	80.6	80.0	6.8	81.1	84.8	85.1	85.9	86.2	86.0	38.3	0.0	0.0	59.4
UCF (%)	80.6	80.0	6.8	81.1	84.8	85.1	85.9	86.2	86.0	38.3	0.0	0.0	59.4
LF (%)	80.6	80.0	5.2	81.2	84.8	85.1	85.9	86.2	86.0	37.9	0.0	0.0	59.2
OF (%)	100.0	99.1	11.3	100.1	100.0	100.0	100.0	100.0	100.0	52.9	0.0	0.0	71.7
EUUF (%)	19.4	20.0	93.2	18.9	15.2	14.9	14.1	13.8	14.0	61.7	100.0	100.0	40.6
PUF (%)	0.1	1.6	72.2	1.0	0.9	1.8	1.4	1.2	0.6	40.8	0.1	0.0	10.3
UCLF (%)	19.3	18.5	21.0	17.9	14.3	13.1	12.8	12.6	13.4	20.9	99.9	100.0	30.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Dec 1970
Date of First Criticality: 03 Jun 1984
Date of Grid Connection: 11 Oct 1984
Date of Commercial Operation: 01 Apr 1989

Lifetime Generation: 67362.3 GW(e).h
Cumulative Energy Availability Factor: 72.5%
Cumulative Load Factor: 71.4%
Cumulative Unit Capability Factor: 73.2%
Cumulative Energy Unavailability Factor: 27.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	2505.6	470.0	100.0	100.0	100.0	100.0	90.4	90.4	5507	83.4
1990	3044.2	487.0	72.0	83.0	72.0	83.0	71.5	78.9	6690	76.6
1991	2647.7	622.0	65.0	75.2	64.6	75.0	48.7	65.8	5132	58.7
1992	3548.1	550.0	74.6	75.0	72.8	74.4	72.5	67.7	6951	78.1
1993	4336.5	555.0	88.5	77.9	88.1	77.4	89.4	72.4	7886	90.3
1994	3707.5	575.0	75.3	77.5	72.8	76.5	73.8	72.7	6652	76.1
1995	3367.5	575.0	66.9	75.8	66.9	75.0	66.7	71.7	5772	65.7
1996	3561.9	575.0	70.8	75.1	70.5	74.4	70.5	71.6	6836	77.8
1997	4443.3	575.0	88.2	76.7	86.9	75.9	88.0	73.5	8026	91.4
1998	4497.6	575.0	89.3	78.0	86.7	77.1	89.0	75.2	7999	91.1
1999	3712.7	575.0	73.8	77.6	71.7	76.5	73.5	75.0	6570	74.8
2000	4342.6	575.0	86.3	78.4	86.1	77.4	86.0	76.0	7946	90.5
2001	4495.0	575.0	90.8	79.4	89.3	78.3	89.0	77.0	8187	93.2
2002	3407.9	575.0	68.3	78.6	68.1	77.6	67.7	76.3	6313	72.1
2003	3647.0	575.0	72.5	78.1	72.5	77.2	72.4	76.1	6595	75.3
2004	1974.6	575.0	39.7	75.7	39.6	74.8	39.2	73.7	3805	43.4
2005	2112.6	575.0	43.7	73.7	43.7	72.9	41.9	71.7	3869	44.2
2006	3972.3	575.0	79.0	74.0	79.0	73.2	78.9	72.1	7735	88.3
2007	2981.6	575.0	59.4	73.2	59.4	72.5	59.2	71.4	6280	71.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1704			510	
B. Refuelling without a maintenance	624				3	
C. Inspection, maintenance or repair combined with refuelling				742	25	
D. Inspection, maintenance or repair without refuelling	264			555		
E. Testing of plant systems or components				8	21	6
H. Nuclear regulatory requirements				65	82	63
J. Grid failure or grid unavailability					2	12
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				59	6	7
Z. Others				55	67	
Subtotal	888	1704	0	1484	716	88
Total		2592			2288	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	1704	89
12. Reactor I&C Systems		6
13. Reactor Auxiliary Systems		0
15. Reactor Cooling Systems		64
16. Steam generation systems		12
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		113
32. Feedwater and Main Steam System		34
33. Circulating Water System		130
41. Main Generator Systems		11
42. Electrical Power Supply Systems		45
Total	1704	505

GB-22A HEYSHAM-B1

Operator: BE (BRITISH ENERGY)
Contractor: NPC (NUCLEAR POWER CO. LTD.)

1. Station Details

Type: GCR
Net Reference Unit Power at the beginning of 2007: 615.0 MW(e)
Design Net Capacity: 615.0 MW(e)
Design Discharge Burnup: 27000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4617.3 GW(e).h
Energy Availability Factor: 85.8%
Load Factor: 85.7%
Operating Factor: 91.4%
Energy Unavailability Factor: 14.2%
Total Off-line Time: 754 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	445.4	410.5	385.4	426.7	380.5	318.9	451.3	104.5	416.6	415.1	404.1	458.3	4617.3
EAF (%)	96.8	99.3	84.4	96.4	83.5	72.6	98.6	24.4	94.1	90.6	91.1	99.9	85.8
UCF (%)	96.8	99.3	84.4	96.4	83.5	72.6	98.6	24.4	94.1	90.6	91.1	99.9	85.8
LF (%)	97.3	99.3	84.2	96.5	83.2	72.0	98.6	22.8	94.1	90.6	91.3	100.2	85.7
OF (%)	100.0	100.0	100.0	100.1	89.2	79.2	100.0	29.6	100.0	99.9	100.0	100.0	91.4
EUF (%)	3.2	0.7	15.6	3.6	16.5	27.4	1.4	75.6	5.9	9.4	8.9	0.1	14.2
PUF (%)	2.5	0.0	9.2	0.0	0.3	9.6	0.8	8.2	0.9	6.6	5.8	0.0	3.7
UCLF (%)	0.7	0.7	6.4	3.6	16.2	17.8	0.6	67.4	5.0	2.8	3.0	0.1	10.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Aug 1980
Date of First Criticality: 23 Jun 1988
Date of Grid Connection: 12 Jul 1988
Date of Commercial Operation: 01 Apr 1989

Lifetime Generation: 75459.7 GW(e).h
Cumulative Energy Availability Factor: 76.4%
Cumulative Load Factor: 74.9%
Cumulative Unit Capability Factor: 77.2%
Cumulative Energy Unavailability Factor: 23.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	900.8	615.0	56.9	56.9	56.9	56.9	22.2	22.2	2319	35.1
1990	1487.0	615.0	27.7	40.3	27.7	40.3	27.7	25.3	3509	40.2
1991	1465.4	615.0	36.9	39.1	36.9	39.1	27.3	26.0	2786	31.9
1992	4096.0	615.0	80.2	50.2	74.8	48.7	74.8	39.2	7240	81.3
1993	4498.2	622.0	83.7	57.3	82.3	55.8	82.7	48.4	7376	84.4
1994	4181.1	625.0	79.1	61.1	75.6	59.3	76.6	53.3	7255	83.0
1995	5193.8	625.0	94.9	66.2	94.5	64.6	94.6	59.5	8286	94.3
1996	4707.4	625.0	85.7	68.7	85.0	67.2	85.7	62.9	7699	87.6
1997	4152.8	625.0	75.9	69.5	75.2	68.1	75.6	64.4	7105	80.9
1998	5019.4	625.0	91.7	71.8	90.5	70.4	91.4	67.2	8688	98.9
1999	4235.5	625.0	77.4	72.3	76.6	71.0	77.1	68.1	7212	82.1
2000	4415.3	625.0	80.4	73.0	79.9	71.8	80.4	69.2	7502	85.4
2001	5241.0	625.0	92.0	74.5	91.5	73.3	95.5	71.2	8534	97.2
2002	4414.0	625.0	80.8	75.0	80.8	73.9	80.6	71.9	7501	85.6
2003	5045.3	625.0	92.2	76.2	92.0	75.1	92.2	73.3	8444	96.4
2004	4115.7	625.0	75.3	76.1	75.3	75.1	75.2	73.4	7250	82.8
2005	4262.5	625.0	78.0	76.2	78.0	75.3	77.9	73.7	7317	83.5
2006	4604.0	625.0	85.2	76.7	85.2	75.8	85.1	74.3	8057	92.0
2007	4617.3	615.0	85.8	77.2	85.8	76.4	85.7	74.9	8006	91.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1990 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				17	305	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling				708	25	
D. Inspection, maintenance or repair without refuelling				50		
E. Testing of plant systems or components				1	8	
G. Major back-fitting, refurbishment or upgrading activities without refuelling				158		
H. Nuclear regulatory requirements				115		
J. Grid failure or grid unavailability						49
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						4
L. Human factor related		648				
Subtotal	0	648	0	1049	343	53
Total		648			1445	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1990 to 2007 Average Hours Lost Per Year
15. Reactor Cooling Systems		8
31. Turbine and auxiliaries		139
32. Feedwater and Main Steam System		145
41. Main Generator Systems		19
42. Electrical Power Supply Systems		2
Total	0	313

GB-22B HEYSHAM-B2

Operator: BE (BRITISH ENERGY)
Contractor: NPC (NUCLEAR POWER CO. LTD.)

1. Station Details

Type: GCR
Net Reference Unit Power at the beginning of 2007: 615.0 MW(e)
Design Net Capacity: 615.0 MW(e)
Design Discharge Burnup: 27000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4046.7 GW(e).h
Energy Availability Factor: 74.9%
Load Factor: 75.1%
Operating Factor: 81.1%
Energy Unavailability Factor: 25.1%
Total Off-line Time: 1656 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	310.0	418.3	403.6	0.0	0.0	382.2	457.8	438.5	372.2	396.5	444.8	423.0	4046.7
EAF (%)	68.2	100.0	88.0	-0.1	0.0	86.3	99.9	95.8	84.1	86.3	99.9	92.1	74.9
UCF (%)	68.2	100.0	88.0	-0.1	0.0	86.3	99.9	95.8	84.1	86.3	99.9	92.1	74.9
LF (%)	67.8	101.2	88.2	0.0	0.0	86.3	100.0	95.8	84.1	86.5	100.4	92.4	75.1
OF (%)	79.0	100.0	94.8	0.0	0.4	100.0	100.0	100.0	100.0	99.9	100.0	100.0	81.1
EUUF (%)	31.8	0.0	12.0	100.1	100.0	13.7	0.1	4.2	15.9	13.7	0.1	7.9	25.1
PUF (%)	5.7	0.0	8.9	100.1	92.4	0.0	0.1	1.2	8.8	8.0	0.0	6.0	19.3
UCLF (%)	26.0	0.0	3.1	0.0	7.6	13.7	0.0	3.0	7.1	5.7	0.0	1.9	5.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Aug 1980
Date of First Criticality: 01 Nov 1988
Date of Grid Connection: 11 Nov 1988
Date of Commercial Operation: 01 Apr 1989

Lifetime Generation: 73147.9 GW(e).h
Cumulative Energy Availability Factor: 75.6%
Cumulative Load Factor: 74.1%
Cumulative Unit Capability Factor: 76.8%
Cumulative Energy Unavailability Factor: 24.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	2590.4	615.0	74.4	74.4	74.4	74.4	63.8	63.8	4878	73.9
1990	784.0	615.0	14.9	40.5	14.9	40.5	14.6	35.8	1901	21.8
1991	2424.0	615.0	53.7	45.3	53.4	45.2	45.1	39.2	4453	51.0
1992	3486.5	615.0	66.4	51.0	64.7	50.5	63.7	45.8	6198	69.6
1993	4384.9	622.0	91.6	59.6	79.6	56.6	80.6	53.1	7125	81.6
1994	4435.3	625.0	84.0	63.9	80.7	60.9	81.2	58.1	7723	88.4
1995	4498.8	625.0	82.2	66.6	82.3	64.1	81.9	61.6	7249	82.5
1996	4265.4	625.0	78.6	68.2	78.4	65.9	77.7	63.7	7103	80.9
1997	4780.7	625.0	87.4	70.4	85.5	68.2	87.1	66.4	8021	91.3
1998	4209.7	625.0	77.0	71.1	76.2	69.0	76.7	67.5	7574	86.2
1999	2987.2	625.0	54.7	69.5	54.6	67.7	54.4	66.3	4987	56.8
2000	5001.9	625.0	91.1	71.4	90.5	69.6	91.1	68.4	8660	98.6
2001	4234.2	625.0	91.4	73.0	90.8	71.3	77.1	69.1	7103	80.9
2002	5010.3	625.0	91.5	74.3	91.5	72.8	91.5	70.7	8521	97.3
2003	4582.8	625.0	83.9	75.0	83.8	73.5	83.7	71.6	7712	88.0
2004	4244.2	625.0	77.4	75.1	77.4	73.8	77.5	72.0	7383	84.3
2005	5056.8	625.0	92.3	76.1	92.3	74.9	92.4	73.2	8564	97.8
2006	4816.7	625.0	89.1	76.9	89.1	75.7	89.0	74.1	8293	94.7
2007	4046.7	615.0	74.9	76.8	74.9	75.6	75.1	74.1	7104	81.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				14	381	
B. Refuelling without a maintenance					6	
C. Inspection, maintenance or repair combined with refuelling	1416	216		615	38	
D. Inspection, maintenance or repair without refuelling				42		
E. Testing of plant systems or components					10	
G. Major back-fitting, refurbishment or upgrading activities without refuelling				23		
H. Nuclear regulatory requirements				256		
J. Grid failure or grid unavailability					7	42
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						52
Subtotal	1416	216	0	950	442	94
Total	1632			1486		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		8
31. Turbine and auxiliaries		296
32. Feedwater and Main Steam System		36
41. Main Generator Systems		55
Total	0	395

GB-16A HINKLEY POINT-B1

Operator: BEG (British Energy Group Plc)

Contractor: TNPG (THE NUCLEAR POWER GROUP LTD.)

1. Station Details

Type: GCR
Net Reference Unit Power at the beginning of 2007: 620.0 MW(e)
Design Net Capacity: 625.0 MW(e)
Design Discharge Burnup: 27000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1877.4 GW(e).h
Energy Availability Factor: 45.2%
Load Factor: 44.9%
Operating Factor: 59.4%
Energy Unavailability Factor: 54.8%
Total Off-line Time: 3556 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	285.1	280.6	258.8	254.1	261.2	253.3	284.4	1877.4
EAF (%)	0.0	0.0	0.1	-0.1	3.4	92.1	87.7	80.9	82.1	81.5	81.8	88.9	45.2
UCF (%)	0.0	0.0	0.1	-0.1	3.4	92.1	87.7	80.9	82.5	81.5	81.8	88.9	45.2
LF (%)	0.0	0.0	0.0	0.0	0.0	92.1	87.7	80.9	82.1	81.5	81.8	88.9	44.9
OF (%)	0.0	0.0	0.0	0.0	9.1	100.0	100.0	100.0	100.0	99.9	100.0	100.0	59.4
EUF (%)	100.0	100.0	99.9	100.1	96.6	7.9	12.3	19.1	17.9	18.5	18.2	11.1	54.8
PUF (%)	0.1	0.1	0.1	0.0	0.0	1.0	1.9	5.4	1.3	0.3	2.7	2.2	1.1
UCLF (%)	100.0	100.0	99.8	100.1	96.6	6.9	10.4	13.7	16.2	18.1	15.5	9.0	53.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

~30% LOAD REDUCTION DUE TO BOILER ISSUES

5. Historical Summary

Date of Construction Start:	01 Sep 1967	Lifetime Generation:	106762.6 GW(e).h
Date of First Criticality:	24 Sep 1976	Cumulative Energy Availability Factor:	75.3%
Date of Grid Connection:	30 Oct 1976	Cumulative Load Factor:	76.3%
Date of Commercial Operation:	02 Oct 1978	Cumulative Unit Capability Factor:	76.0%
		Cumulative Energy Unavailability Factor:	24.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978			Data not provided							
1979	3079.8	400.0	79.4	79.4	73.5	73.5	88.1	88.1	6646	76.1
1980	2337.2	475.0	59.9	68.8	55.4	63.6	56.3	70.9	5394	61.7
1981	3441.6	520.0	78.5	72.5	74.3	67.7	74.3	72.2	7118	79.9
1982	2950.8	520.0	67.8	71.2	65.4	67.0	65.0	70.2	6000	68.7
1983	4083.0	520.0	88.3	74.8	86.6	71.2	89.9	74.4	8127	93.0
1984	3408.2	520.0	72.0	74.3	71.6	71.3	75.0	74.5	6589	75.4
1985	4263.0	520.0	82.3	75.5	82.2	72.9	93.8	77.4	8167	93.5
1986	3199.2	560.0	68.2	74.5	67.2	72.1	65.4	75.7	6110	69.9
1987	1838.0	560.0	39.6	70.2	38.8	68.0	36.9	70.9	3554	39.9
1988	2905.4	560.0	59.9	69.1	59.1	67.0	59.4	69.7	5370	61.5
1989	4195.3	560.0	85.6	70.7	85.5	68.8	85.8	71.2	7878	90.2
1990	3102.0	560.0	63.9	70.1	63.4	68.3	63.4	70.6	5732	65.6
1991	4601.9	560.0	94.3	72.1	94.3	70.5	94.1	72.5	8430	96.5
1992	3614.5	583.0	70.2	71.9	69.8	70.4	69.5	72.2	6565	73.7
1993	4843.3	585.0	94.8	73.6	94.6	72.2	94.0	73.8	8587	97.5
1994	4126.2	585.0	78.7	73.9	78.3	72.6	80.7	74.3	7342	84.0
1995	4812.5	610.0	90.1	75.0	89.6	73.7	89.8	75.3	7910	90.1
1996	4797.3	610.0	90.2	76.0	89.7	74.7	89.5	76.2	8418	95.8
1997	4185.7	610.0	78.4	76.1	78.3	74.9	78.1	76.3	7341	83.6
1998	4252.6	610.0	79.6	76.3	80.9	75.3	79.4	76.5	7740	88.1
1999	4045.2	610.0	75.8	76.3	77.0	75.4	75.5	76.4	7221	82.2
2000	3850.6	610.0	71.9	76.1	71.9	75.2	71.9	76.2	7208	82.1
2001	4802.0	610.0	87.0	76.6	87.0	75.7	89.6	76.9	8545	97.3
2002	4581.0	610.0	85.0	77.0	85.0	76.2	85.7	77.3	8021	91.6
2003	4076.4	610.0	74.8	76.9	74.8	76.1	76.3	77.2	7032	80.3
2004	4578.7	610.0	84.7	77.2	84.7	76.5	85.7	77.6	8091	92.4
2005	4580.6	610.0	85.2	77.5	85.2	76.8	85.7	77.9	8257	94.3
2006	3370.2	610.0	62.4	76.9	62.4	76.2	62.3	77.3	6200	70.8
2007	1877.4	430.0	45.2	76.0	45.2	75.3	44.9	76.3	5204	59.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		3648		15	360	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling				124	25	
D. Inspection, maintenance or repair without refuelling				335		
E. Testing of plant systems or components					1	
H. Nuclear regulatory requirements				147		
J. Grid failure or grid unavailability					4	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						1
Subtotal	0	3648	0	621	392	1
Total		3648			1014	

7. Equipment Related Full Outages, Analysis by System

System	2007	1978 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		13
12. Reactor I&C Systems		13
15. Reactor Cooling Systems		4
16. Steam generation systems	3648	42
31. Turbine and auxiliaries		140
32. Feedwater and Main Steam System		22
41. Main Generator Systems		85
42. Electrical Power Supply Systems		45
Total	3648	364

GB-16B HINKLEY POINT-B2

Operator: BE (BRITISH ENERGY)

Contractor: TNPG (THE NUCLEAR POWER GROUP LTD.)

1. Station Details

Type: GCR
Net Reference Unit Power at the beginning of 2007: 600.0 MW(e)
Design Net Capacity: 625.0 MW(e)
Design Discharge Burnup: 27000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1812.9 GW(e).h
Energy Availability Factor: 44.0%
Load Factor: 43.9%
Operating Factor: 54.9%
Energy Unavailability Factor: 56.0%
Total Off-line Time: 3954 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	93.3	292.1	283.0	274.7	295.5	286.9	287.3	1812.9
EAF (%)	0.0	0.0	0.1	-0.1	0.0	32.6	91.3	88.4	88.7	92.3	92.7	89.8	44.0
UCF (%)	0.0	0.0	0.1	-0.1	0.0	32.6	91.3	88.5	88.7	92.3	92.7	89.8	44.0
LF (%)	0.0	0.0	0.0	0.0	0.0	30.2	91.3	88.4	88.7	92.3	92.7	89.8	43.9
OF (%)	0.0	0.0	0.0	0.0	0.0	54.2	100.0	100.0	100.0	99.9	100.0	100.0	54.9
EUF (%)	100.0	100.0	99.9	100.1	100.0	67.4	8.7	11.6	11.3	7.7	7.3	10.2	56.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.9	1.9	5.1	3.1	0.3	0.0	4.0	1.2
UCLF (%)	100.0	100.0	99.9	100.1	100.0	66.6	6.8	6.4	8.2	7.4	7.3	6.2	54.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

~30% LOAD REDUCTION DUE TO BOILER ISSUES

5. Historical Summary

Date of Construction Start:	01 Sep 1967	Lifetime Generation:	102233.7 GW(e).h
Date of First Criticality:	01 Feb 1976	Cumulative Energy Availability Factor:	72.7%
Date of Grid Connection:	05 Feb 1976	Cumulative Load Factor:	71.3%
Date of Commercial Operation:	27 Sep 1976	Cumulative Unit Capability Factor:	73.9%
		Cumulative Energy Unavailability Factor:	27.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976			Data not provided							
1977	1044.0	400.0	74.6	74.6	74.6	74.6	29.9	29.9	2756	31.5
1978			Data not provided							
1979	1499.7	400.0	44.0	59.3	38.2	56.4	42.9	36.4	3512	40.2
1980	3008.9	475.0	71.3	63.8	69.3	61.2	72.5	49.9	6390	73.1
1981	2488.8	520.0	57.1	61.8	54.7	59.3	53.8	51.0	5054	56.8
1982	3155.1	520.0	73.6	64.5	69.8	61.6	69.5	55.1	6834	78.2
1983	3454.5	520.0	75.6	66.5	74.1	63.9	76.0	58.9	6839	78.3
1984	4393.5	520.0	89.6	70.1	89.4	67.8	96.7	64.8	8228	94.2
1985	3229.9	520.0	66.7	69.6	66.7	67.7	71.1	65.6	5950	68.1
1986	3497.3	560.0	81.2	71.1	75.1	68.6	72.5	66.5	7257	84.2
1987	2971.1	560.0	68.3	70.7	60.6	67.7	59.6	65.7	6333	71.1
1988	4268.2	560.0	91.1	72.8	86.6	69.6	87.2	67.9	8467	96.9
1989	2484.6	560.0	65.6	72.1	65.3	69.2	50.8	66.3	4896	56.0
1990	4463.5	560.0	92.4	73.8	91.2	71.1	91.2	68.4	8565	98.0
1991	2353.5	560.0	57.4	72.6	57.4	70.0	48.1	66.8	4432	50.7
1992	3902.0	583.0	76.6	72.9	76.3	70.5	75.1	67.4	7225	81.1
1993	3743.0	597.0	71.7	72.8	71.4	70.5	71.7	67.8	6575	75.3
1994	4852.2	610.0	91.5	74.0	91.1	71.9	91.1	69.3	8602	98.5
1995	4518.1	610.0	84.6	74.7	84.6	72.7	84.3	70.3	7411	84.4
1996	3119.9	610.0	58.9	73.8	59.1	71.9	58.2	69.6	5615	63.9
1997	4512.9	610.0	84.5	74.4	85.0	72.7	84.2	70.4	7958	90.6
1998	4738.9	610.0	88.7	75.1	88.3	73.5	88.4	71.3	8641	98.4
1999	4082.3	610.0	76.9	75.2	75.8	73.6	76.2	71.6	7402	84.3
2000	4189.4	610.0	78.9	75.4	78.9	73.9	78.2	71.9	7851	89.4
2001	4772.4	610.0	84.1	75.8	84.1	74.3	89.1	72.7	8406	95.7
2002	3257.3	610.0	61.2	75.2	61.2	73.8	61.0	72.2	6163	70.4
2003	4619.5	610.0	86.5	75.6	86.5	74.3	86.4	72.8	8575	97.9
2004	4150.5	610.0	77.7	75.7	77.7	74.4	77.7	73.0	8163	93.2
2005	3357.2	610.0	63.3	75.2	63.3	74.0	62.8	72.6	6544	74.7
2006	3132.9	610.0	61.5	74.7	59.8	73.5	59.4	72.1	6051	69.1
2007	1812.9	430.0	44.0	73.9	44.0	72.7	43.9	71.3	4806	54.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		4032		7	590	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling				107	18	
D. Inspection, maintenance or repair without refuelling				150		
E. Testing of plant systems or components				4	12	
H. Nuclear regulatory requirements				42	66	
J. Grid failure or grid unavailability					3	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					5	
Z. Others					12	
Subtotal	0	4032	0	310	709	0
Total		4032			1019	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		32
12. Reactor I&C Systems		17
16. Steam generation systems	3264	183
31. Turbine and auxiliaries		144
32. Feedwater and Main Steam System		141
33. Circulating Water System		1
41. Main Generator Systems	768	45
42. Electrical Power Supply Systems		13
XX. Miscellaneous Systems		3
Total	4032	579

GB-17A HUNTERSTON-B1**Operator:** BE (BRITISH ENERGY)**Contractor:** TNPG (THE NUCLEAR POWER GROUP LTD.)**1. Station Details**

Type: GCR
Net Reference Unit Power at the beginning of 2007: 610.0 MW(e)
Design Net Capacity: 624.0 MW(e)
Design Discharge Burnup: 21000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1303.3 GW(e).h
Energy Availability Factor: 32.5%
Load Factor: 31.9%
Operating Factor: 49.3%
Energy Unavailability Factor: 67.5%
Total Off-line Time: 4445 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	6.3	210.2	243.9	201.0	171.7	236.1	234.2	1303.3
EAF (%)	0.0	0.0	0.1	-0.1	1.0	7.6	67.7	78.0	66.5	56.1	78.1	75.0	32.5
UCF (%)	0.0	0.0	0.1	-0.1	1.0	7.6	67.7	78.0	66.5	56.1	78.1	75.0	32.5
LF (%)	0.0	0.0	0.0	0.0	0.0	2.1	67.3	78.0	66.5	54.9	78.1	75.0	31.9
OF (%)	0.0	0.0	0.0	0.0	4.7	15.7	91.9	100.0	97.9	76.5	100.0	100.0	49.3
EUf (%)	100.0	100.0	99.9	100.1	99.0	92.4	32.3	22.0	33.5	43.9	21.9	25.0	67.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	5.4	0.1	1.1	3.3	0.8
UCLF (%)	100.0	100.0	99.9	100.1	99.0	92.4	32.0	21.5	28.1	43.8	20.8	21.7	66.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

~30% LOAD REDUCTION DUE TO BOILER ISSUES

5. Historical Summary

Date of Construction Start: 01 Nov 1967
Date of First Criticality: 31 Jan 1976
Date of Grid Connection: 06 Feb 1976
Date of Commercial Operation: 06 Feb 1976

Lifetime Generation: 105771.1 GW(e).h
Cumulative Energy Availability Factor: 70.2%
Cumulative Load Factor: 68.6%
Cumulative Unit Capability Factor: 70.5%
Cumulative Energy Unavailability Factor: 29.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	1349.0	459.0	36.0	36.0	36.0	36.0	35.7	35.7	4293	52.2
1977	1709.2	500.0	40.1	38.2	40.1	38.2	39.1	37.5	4313	49.4
1978	2158.4	500.0	49.4	42.1	49.4	42.1	49.4	41.7	5375	61.5
1979	2250.0	500.0	52.2	44.7	52.2	44.7	51.5	44.2	5259	60.2
1980	1486.0	500.0	34.4	42.6	34.4	42.6	34.0	42.1	3750	42.9
1981	1794.8	500.0	40.8	42.3	40.8	42.3	40.3	41.8	3941	44.3
1982	3484.1	515.0	77.3	47.5	77.3	47.5	77.4	47.1	7408	84.8
1983	2912.0	520.0	63.1	49.5	63.1	49.5	64.1	49.3	6107	69.9
1984	4214.0	550.0	85.5	53.9	85.5	53.9	87.7	54.0	8080	92.5
1985	3644.2	575.0	71.1	55.8	71.1	55.8	72.5	56.1	6655	76.2
1986	4571.2	575.0	89.1	59.2	89.1	59.2	91.0	59.6	8268	94.6
1987	3268.4	575.0	63.7	59.6	63.7	59.6	63.8	60.0	6358	71.4
1988	4492.3	575.0	89.2	62.1	89.2	62.1	89.4	62.5	8568	98.1
1989	2959.7	575.0	58.2	61.8	58.2	61.8	58.9	62.2	5467	62.6
1990	4744.1	575.0	92.7	64.0	92.7	64.0	94.4	64.5	8585	98.3
1991	2033.8	575.0	40.1	62.4	40.1	62.4	40.5	62.9	3827	43.8
1992	4315.7	575.0	92.0	64.3	84.4	63.8	84.3	64.3	8771	98.5
1993	2928.9	575.0	59.5	64.0	58.2	63.5	58.3	63.9	5581	63.9
1994	4698.1	582.0	92.8	65.7	92.4	65.1	92.3	65.5	8545	97.8
1995	3830.0	585.0	74.2	66.1	74.2	65.6	72.5	65.9	6917	76.6
1996	1643.7	585.0	98.5	67.8	98.5	67.3	32.0	64.2	2839	32.3
1997	3834.0	595.0	73.6	68.1	73.6	67.6	73.4	64.6	7035	80.1
1998	4835.4	595.0	92.8	69.3	92.8	68.8	92.5	66.0	8584	97.7
1999	4811.5	595.0	92.3	70.3	92.3	69.9	92.1	67.1	8591	97.8
2000	4035.6	595.0	77.2	70.6	77.2	70.2	77.2	67.6	7497	85.3
2001	5030.4	595.0	86.6	71.3	86.6	70.9	96.2	68.7	8598	97.9
2002	4678.5	595.0	89.1	72.0	89.1	71.6	89.8	69.6	8356	95.4
2003	3936.5	595.0	74.7	72.1	74.6	71.7	75.5	69.8	7225	82.5
2004	4522.7	595.0	85.7	72.6	85.5	72.2	86.8	70.4	8271	94.4
2005	4096.4	595.0	78.8	72.8	78.4	72.4	78.6	70.7	8207	93.7
2006	1991.4	595.0	37.8	71.6	37.8	71.2	37.5	69.6	3838	43.8
2007	1303.3	420.0	32.5	70.5	32.5	70.2	31.9	68.6	4315	49.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		4368			420	4
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling				330	6	
D. Inspection, maintenance or repair without refuelling				747		
E. Testing of plant systems or components				82	7	
H. Nuclear regulatory requirements				33		
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				2	13	
Subtotal	0	4368	0	1194	448	5
Total		4368			1647	

7. Equipment Related Full Outages, Analysis by System

System	2007	1976 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		23
13. Reactor Auxiliary Systems		5
14. Safety Systems		1
15. Reactor Cooling Systems		61
16. Steam generation systems	4368	122
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries		84
32. Feedwater and Main Steam System		32
33. Circulating Water System		6
35. All other I&C Systems		2
41. Main Generator Systems		44
42. Electrical Power Supply Systems		29
XX. Miscellaneous Systems		4
Total	4368	414

GB-17B HUNTERSTON-B2**Operator:** BE (BRITISH ENERGY)**Contractor:** TNPG (THE NUCLEAR POWER GROUP LTD.)**1. Station Details**

Type: GCR
Net Reference Unit Power at the beginning of 2007: 605.0 MW(e)
Design Net Capacity: 624.0 MW(e)
Design Discharge Burnup: 21000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1658.4 GW(e).h
Energy Availability Factor: 41.3%
Load Factor: 40.7%
Operating Factor: 53.0%
Energy Unavailability Factor: 58.7%
Total Off-line Time: 4118 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	95.4	293.1	115.7	261.8	236.3	134.9	261.1	260.1	1658.4
EAF (%)	0.0	0.0	0.1	-0.1	33.2	96.9	39.6	83.8	78.6	45.7	86.3	83.2	41.3
UCF (%)	0.0	0.0	0.1	-0.1	33.2	96.9	39.6	83.8	78.6	45.7	86.3	83.2	41.3
LF (%)	0.0	0.0	0.0	0.0	30.5	96.9	37.0	83.8	78.1	43.1	86.3	83.2	40.7
OF (%)	0.0	0.0	0.0	0.0	37.0	100.0	46.9	100.0	91.5	57.9	100.0	100.0	53.0
EUF (%)	100.0	100.0	99.9	100.1	66.8	3.1	60.4	16.2	21.4	54.3	13.7	16.8	58.7
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.5	6.4	0.1	0.0	4.2	1.4
UCLF (%)	100.0	100.0	99.9	100.1	66.8	3.0	52.8	15.7	15.1	54.2	13.7	12.5	57.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

~30% LOAD REDUCTION DUE TO BOILER ISSUES

5. Historical Summary

Date of Construction Start:	01 Nov 1967	Lifetime Generation:	100523.5 GW(e).h
Date of First Criticality:	27 Mar 1977	Cumulative Energy Availability Factor:	70.7%
Date of Grid Connection:	31 Mar 1977	Cumulative Load Factor:	68.2%
Date of Commercial Operation:	31 Mar 1977	Cumulative Unit Capability Factor:	70.8%
		Cumulative Energy Unavailability Factor:	29.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	1047.7	500.0	29.2	29.2	29.2	29.2	28.4	28.4	3071	41.7
1978	0.0	500.0	0.0	13.4	0.0	13.4	0.0	13.0	0	0.0
1979	0.0	500.0	0.0	8.7	0.0	8.7	0.0	8.4	0	0.0
1980	2544.0	500.0	58.9	21.7	58.9	21.7	58.2	21.4	5147	58.9
1981	3019.9	500.0	68.2	31.5	68.2	31.5	67.8	31.1	7219	81.1
1982	2706.2	515.0	59.8	36.4	59.8	36.4	60.1	36.2	5596	64.0
1983	4153.0	520.0	88.4	44.2	88.4	44.2	91.4	44.5	8524	97.6
1984	3287.0	550.0	67.7	47.4	67.7	47.4	68.4	47.7	6365	72.9
1985	4507.7	575.0	88.7	52.6	88.7	52.6	89.7	53.0	8303	95.0
1986	3616.1	575.0	70.8	54.6	70.8	54.6	72.0	55.1	6496	74.4
1987	4623.4	575.0	90.8	58.3	90.5	58.3	90.3	58.7	8710	97.8
1988	3115.5	575.0	61.3	58.6	61.3	58.5	62.0	59.0	5754	65.9
1989	4728.0	575.0	93.5	61.5	93.5	61.5	94.1	61.9	8643	98.9
1990	3231.3	575.0	63.8	61.7	63.8	61.6	64.3	62.1	5858	67.1
1991	4727.8	575.0	94.7	64.0	94.0	64.0	94.1	64.4	8707	99.7
1992	1969.7	575.0	39.2	62.3	39.2	62.3	38.5	62.6	3733	41.9
1993	4322.1	575.0	86.7	63.9	86.1	63.8	86.0	64.1	8128	93.0
1994	3784.7	582.0	74.9	64.5	74.7	64.4	74.4	64.7	6949	79.5
1995	4671.3	585.0	90.1	66.0	90.1	65.9	87.9	66.1	8315	91.6
1996	1276.6	585.0	91.9	67.4	91.9	67.3	24.8	63.9	2377	27.1
1997	4559.7	595.0	87.5	68.4	87.5	68.3	87.2	65.1	8200	93.4
1998	4518.0	595.0	86.7	69.3	86.7	69.2	86.4	66.1	8149	92.8
1999	4102.0	595.0	78.8	69.8	78.8	69.7	78.5	66.7	7302	83.1
2000	3241.6	595.0	62.0	69.4	62.0	69.3	62.0	66.5	6411	73.0
2001	3785.0	595.0	83.7	70.0	83.7	70.0	72.4	66.7	6485	73.8
2002	4413.1	595.0	83.1	70.6	83.1	70.5	84.7	67.5	7721	88.1
2003	4627.3	595.0	87.8	71.2	87.5	71.2	88.8	68.3	8381	95.7
2004	4238.7	595.0	83.7	71.7	83.4	71.6	81.3	68.8	7799	89.0
2005	3633.6	595.0	70.0	71.6	69.4	71.5	69.7	68.8	7017	80.1
2006	3746.0	595.0	71.0	71.6	71.0	71.5	71.0	68.9	6753	77.1
2007	1658.4	420.0	41.3	70.8	41.3	70.7	40.7	68.2	4642	53.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		2160		89	921	4
B. Refuelling without a maintenance					6	
C. Inspection, maintenance or repair combined with refuelling				181	17	
D. Inspection, maintenance or repair without refuelling				661		
E. Testing of plant systems or components				0	2	
H. Nuclear regulatory requirements					0	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				1	1	0
Subtotal	0	2160	0	932	947	4
Total		2160			1883	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems		8
14. Safety Systems		0
15. Reactor Cooling Systems		35
16. Steam generation systems	2160	69
31. Turbine and auxiliaries		55
32. Feedwater and Main Steam System		784
33. Circulating Water System		4
35. All other I&C Systems		1
41. Main Generator Systems		12
42. Electrical Power Supply Systems		10
XX. Miscellaneous Systems		0
Total	2160	984

GB-11A OLDBURY-A1**Operator:** MEL (Magnox Electric Limited)**Contractor:** TNPG (THE NUCLEAR POWER GROUP LTD.)**1. Station Details**

Type: GCR
Net Reference Unit Power at the beginning of 2007: 217.0 MW(e)
Design Net Capacity: 300.0 MW(e)
Design Discharge Burnup: 5430 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 0.0 GW(e).h
Energy Availability Factor: 0.0%
Load Factor: 0.0%
Operating Factor: 0.0%
Energy Unavailability Factor: 100.0%
Total Off-line Time: 8760 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
UCF (%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
LF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
PUF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

NII GRAPHITE SAFETY CASE WITH REGULATOR

5. Historical Summary

Date of Construction Start:	01 May 1962	Lifetime Generation:	58125.0 GW(e).h
Date of First Criticality:	01 Aug 1967	Cumulative Energy Availability Factor:	81.1%
Date of Grid Connection:	07 Nov 1967	Cumulative Load Factor:	78.2%
Date of Commercial Operation:	31 Dec 1967	Cumulative Unit Capability Factor:	81.5%
		Cumulative Energy Unavailability Factor:	18.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1967	0.0	217.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1968	0.0	217.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1969	0.0	217.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1970	2546.0	423.0	100.0	100.0	100.0	100.0	68.7	33.2	0	0.0
1971	3120.9	423.0	86.9	95.7	86.9	95.7	83.8	49.7	8759	99.4
1972	2872.9	420.0	76.0	90.9	76.0	90.9	78.3	56.7	8736	100.0
1973	2530.4	400.0	63.3	85.7	63.3	85.7	72.4	59.6	8704	99.6
1974	2710.0	400.0	74.9	84.0	74.9	84.0	77.6	62.5	8731	99.9
1975	2873.0	407.0	78.8	83.3	78.8	83.3	80.8	65.0	8693	99.5
1976	3017.0	416.0	80.2	82.9	80.2	82.9	81.5	67.1	8714	97.9
1977	3110.0	416.0	85.5	83.2	85.5	83.2	85.6	69.1	8736	100.0
1978	3067.0	416.0	84.5	83.3	84.5	83.3	84.4	70.6	8736	100.0
1979	3184.0	416.0	88.1	83.7	88.1	83.7	87.6	72.2	8736	100.0
1980	3296.0	416.0	86.2	83.9	86.2	83.9	90.7	73.7	8736	100.0
1981	3376.0	416.0	85.5	84.1	85.5	84.1	91.1	75.1	8904	100.0
1982	3434.0	416.0	86.0	84.2	86.0	84.2	94.5	76.4	8736	100.0
1983	3013.0	434.0	77.4	83.7	77.4	83.7	79.5	76.7	8566	98.1
1984	3041.0	434.0	77.7	83.3	77.7	83.3	80.2	76.9	8736	100.0
1985	3322.1	434.0	83.2	83.3	83.2	83.3	87.6	77.5	8701	99.6
1986	3308.6	434.0	87.0	83.5	85.0	83.4	87.3	78.1	8650	99.0
1987	3222.9	434.0	84.1	83.6	82.9	83.4	83.4	78.4	8904	100.0
1988	3375.2	434.0	90.8	83.9	85.9	83.5	89.0	78.9	8530	97.6
1989	2915.2	434.0	86.5	84.1	82.0	83.5	76.9	78.8	8644	98.9
1990	2915.1	434.0	76.1	83.7	76.1	83.1	76.9	78.7	8713	99.7
1991	3184.2	434.0	84.3	83.7	84.3	83.2	84.0	79.0	8736	100.0
1992	3412.1	434.0	88.6	83.9	88.6	83.4	88.3	79.4	8857	99.5
1993	3541.3	434.0	92.9	84.3	92.5	83.8	93.4	79.9	8736	100.0
1994	3486.8	434.0	91.6	84.6	91.6	84.1	92.0	80.4	8318	95.2
1995	1570.5	217.0	82.6	84.6	82.6	84.1	82.6	80.5	7861	89.7
1996	1548.8	217.0	81.2	84.5	81.2	84.0	81.5	80.5	7870	89.8
1997	1693.1	217.0	89.1	84.6	89.1	84.1	89.1	80.6	8722	99.6
1998	1532.3	217.0	80.6	84.5	80.6	84.0	80.6	80.6	7617	87.0
1999	1774.3	217.0	93.2	84.7	93.2	84.2	93.3	80.9	8420	96.1
2000	1641.4	217.0	86.1	84.7	86.1	84.2	86.3	81.0	7928	90.5
2001	1621.3	217.0	85.3	84.7	85.3	84.2	85.3	81.0	7668	87.5
2002	1715.0	217.0	90.1	84.8	90.1	84.3	90.2	81.2	8215	93.8
2003	1513.7	217.0	79.6	84.7	79.6	84.3	79.6	81.2	7438	84.9
2004	723.8	217.0	37.8	83.9	37.8	83.5	38.1	80.5	3430	39.2
2005	744.6	217.0	39.2	83.2	39.2	82.8	39.2	79.8	3997	45.6
2006	1106.0	217.0	58.2	82.8	58.2	82.4	58.2	79.4	5628	64.2
2007	0.0	217.0	0.0	81.5	0.0	81.1	0.0	78.2	0	0.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				1	365	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling				29		
D. Inspection, maintenance or repair without refuelling	8760			773		
E. Testing of plant systems or components				123		0
H. Nuclear regulatory requirements				32	7	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						4
Subtotal	8760	0	0	958	374	4
Total		8760			1336	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		17
12. Reactor I&C Systems		10
14. Safety Systems		0
15. Reactor Cooling Systems		34
16. Steam generation systems		18
17. Safety I&C Systems (excluding reactor I&C)		2
21. Fuel Handling and Storage Facilities		10
31. Turbine and auxiliaries		46
32. Feedwater and Main Steam System		10
35. All other I&C Systems		1
41. Main Generator Systems		154
42. Electrical Power Supply Systems		54
Total	0	356

GB-11B OLDBURY-A2**Operator:** MEL (Magnox Electric Limited)**Contractor:** TNPG (THE NUCLEAR POWER GROUP LTD.)**1. Station Details**

Type: GCR
Net Reference Unit Power at the beginning of 2007: 217.0 MW(e)
Design Net Capacity: 300.0 MW(e)
Design Discharge Burnup: 5470 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 618.0 GW(e).h
Energy Availability Factor: 32.5%
Load Factor: 32.5%
Operating Factor: 36.3%
Energy Unavailability Factor: 67.5%
Total Off-line Time: 5582 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	0.0	0.0	0.0	0.0	8.2	0.2	9.3	37.0	142.5	153.6	151.8	115.3	618.0
EAF (%)	0.0	0.0	0.0	0.0	5.1	0.1	5.8	22.9	91.2	95.1	97.2	71.4	32.5
UCF (%)	0.0	0.0	0.0	0.0	5.1	0.1	5.8	22.9	91.2	95.1	97.2	71.4	32.5
LF (%)	0.0	0.0	0.0	0.0	5.1	0.1	5.8	22.9	91.2	95.1	97.2	71.4	32.5
OF (%)	0.0	0.0	0.0	0.0	8.5	1.7	8.7	27.7	100.0	100.0	100.0	87.1	36.3
EUF (%)	100.0	100.0	100.0	100.0	94.9	99.9	94.2	77.1	8.8	4.9	2.8	28.6	67.5
PUF (%)	100.0	100.0	100.0	100.0	86.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.2
UCLF (%)	0.0	0.0	0.0	0.0	8.5	99.9	94.2	77.1	8.8	4.9	2.8	28.6	27.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

OLDBURY R1 REMAINED OUT OF SERVICE UNTIL MAY 2007, DUE TO THE GRAPHITE SAFETY CASE BEING WITH THE REGULATOR. THE REACTOR RETURNED TO SERVICE ON 27 MAY. HOWEVER, AN AUTOMATIC TRIP OCCURRED ON 30 MAY DUE TO A GENERATOR TRANSFORMER HV BUSHING FAULT. THE REACTOR RETURNED TO SERVICE ON 30 JUNE. ON 03 JULY THE REACTOR WAS SHUTDOWN DUE TO MAIN TURBINE ECCENTRICITY. THE REACTOR RETURNED TO SERVICE ON 23 AUGUST WITH TURBINE 1 WHILE INVESTIGATIONS PROCEEDED ON TURBINE 2. ON 13 DECEMBER AN AUTOMATIC TRIP OCCURRED DUE TO A SPURIOUS TEMPERATURE TRIP DURING ON-LOAD REFUELLING. THE REACTOR RETURNED TO SERVICE ON 17 DECEMBER.

5. Historical Summary

Date of Construction Start:	01 May 1962	Lifetime Generation:	60705.0 GW(e).h
Date of First Criticality:	01 Dec 1967	Cumulative Energy Availability Factor:	77.4%
Date of Grid Connection:	06 Apr 1968	Cumulative Load Factor:	78.5%
Date of Commercial Operation:	30 Sep 1968	Cumulative Unit Capability Factor:	77.4%
		Cumulative Energy Unavailability Factor:	22.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1968	Data not provided									
1969	"									
1970	"									
1971	"									
1972	"									
1973	"									
1974	"									
1975	"									
1976	"									
1977	"									
1978	"									
1979	"									
1980	"									
1981	"									
1982	"									
1983	"									
1984	"									
1985	"									
1986	"									
1987	"									
1988	"									
1989	"									
1990	"									
1991	"									
1992	"									
1993	"									
1994	"									
1995	1841.3	217.0	96.7	96.7	96.7	96.7	96.9	96.9	8613	98.3
1996	1790.9	217.0	93.9	95.3	93.9	95.3	94.2	95.5	8641	98.6
1997	1832.4	217.0	96.4	95.7	96.4	95.7	96.4	95.8	8618	98.4
1998	1883.1	217.0	98.8	96.5	98.8	96.5	99.1	96.6	8760	100.0
1999	1515.5	217.0	79.3	93.0	79.3	93.0	79.7	93.3	7036	80.3
2000	1951.6	217.0	98.6	94.0	98.6	94.0	102.7	94.8	8685	99.1
2001	1939.8	217.0	98.8	94.7	98.8	94.7	102.0	95.9	8715	99.5
2002	1705.7	217.0	87.8	93.8	87.8	93.8	89.7	95.1	7724	88.2
2003	1859.4	217.0	93.4	93.8	93.4	93.8	97.8	95.4	8187	93.5
2004	1686.4	217.0	88.4	93.2	88.4	93.2	88.7	94.7	8187	93.5
2005	776.5	217.0	40.9	88.5	40.9	88.5	40.9	89.8	3743	42.7
2006	0.0	217.0	0.0	81.1	0.0	81.1	0.0	82.3	0	0.0
2007	618.0	217.0	32.5	77.4	32.5	77.4	32.5	78.5	3178	36.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		2059			115	1
D. Inspection, maintenance or repair without refuelling	3523			810		
H. Nuclear regulatory requirements				73		
Subtotal	3523	2059	0	883	115	1
Total		5582			999	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		19
12. Reactor I&C Systems		11
15. Reactor Cooling Systems		4
16. Steam generation systems		5
17. Safety I&C Systems (excluding reactor I&C)	96	8
21. Fuel Handling and Storage Facilities		11
31. Turbine and auxiliaries	1217	30
32. Feedwater and Main Steam System		4
33. Circulating Water System		6
41. Main Generator Systems		2
42. Electrical Power Supply Systems	746	10
Total	2059	110

GB-24 SIZEWELL-B

Operator: BE (BRITISH ENERGY)
Contractor: PPC (PWR POWER PROJECTS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1196.0 MW(e)
Design Net Capacity: 1188.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10264.3 GW(e).h
Energy Availability Factor: 98.5%
Load Factor: 98.5%
Operating Factor: 100.0%
Energy Unavailability Factor: 1.5%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	883.9	798.7	882.4	854.3	839.6	804.5	874.8	872.7	846.3	875.0	849.8	882.3	10264.3
EAF (%)	99.4	99.4	99.2	99.9	97.7	91.2	99.1	98.8	98.8	98.8	99.3	99.8	98.5
UCF (%)	99.4	99.4	99.2	99.9	97.7	91.2	99.1	98.9	98.8	98.8	99.3	99.8	98.5
LF (%)	99.3	99.4	99.2	100.0	95.0	94.0	99.0	98.7	98.9	98.9	99.3	99.8	98.5
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
EUF (%)	0.6	0.6	0.8	0.1	2.3	8.8	0.9	1.2	1.2	1.2	0.7	0.2	1.5
PUF (%)	0.6	0.6	0.8	0.1	0.4	7.5	0.9	0.9	0.9	0.5	0.6	0.2	1.2
UCLF (%)	0.0	0.0	0.0	0.0	1.9	1.3	0.0	0.2	0.3	0.7	0.1	0.0	0.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

REVERT TO ORIGINAL RUP FOLLOWING RE-ASSESSMENT OF FEED FLOW MEASUREMENT

5. Historical Summary

Date of Construction Start: 18 Jul 1988 **Lifetime Generation:** 86742.5 GW(e).h
Date of First Criticality: 31 Jan 1995 **Cumulative Energy Availability Factor:** 86.2%
Date of Grid Connection: 14 Feb 1995 **Cumulative Load Factor:** 84.0%
Date of Commercial Operation: 22 Sep 1995 **Cumulative Unit Capability Factor:** 86.3%
Cumulative Energy Unavailability Factor: 13.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1995	0.0	1188.0	100.0	100.0	99.6	99.6	0.0	0.0	0	0.0
1996	8488.5	1188.0	81.3	86.0	81.4	85.9	81.3	61.0	7367	83.9
1997	8469.8	1188.0	81.4	84.0	81.5	84.0	81.2	69.6	6992	79.6
1998	10123.1	1188.0	97.3	88.0	97.4	88.0	97.0	77.9	8705	99.1
1999	7959.0	1188.0	76.5	85.4	76.5	85.4	76.3	77.5	7134	81.2
2000	8527.2	1188.0	81.7	84.7	81.6	84.7	81.7	78.3	7612	86.7
2001	9198.0	1188.0	77.4	83.5	77.2	83.5	88.1	79.8	7784	88.6
2002	9195.0	1188.0	88.9	84.3	88.5	84.2	88.4	81.0	7862	89.7
2003	8854.2	1188.0	89.3	84.9	88.7	84.7	85.1	81.5	7613	86.9
2004	9329.1	1188.0	89.4	85.4	89.4	85.2	89.6	82.4	8685	99.1
2005	8696.3	1188.0	83.9	85.2	83.9	85.1	83.6	82.5	7476	85.3
2006	8908.3	1188.0	85.2	85.2	85.2	85.1	85.2	82.7	7570	86.4
2007	10264.3	1188.0	98.5	86.3	98.5	86.2	98.5	84.0	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1995 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					262	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling				407	60	
E. Testing of plant systems or components					5	
H. Nuclear regulatory requirements				292		
Subtotal	0	0	0	699	329	0
Total	0			1028		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1995 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		31
13. Reactor Auxiliary Systems		4
14. Safety Systems		66
15. Reactor Cooling Systems		6
16. Steam generation systems		4
31. Turbine and auxiliaries		3
32. Feedwater and Main Steam System		25
41. Main Generator Systems		118
XX. Miscellaneous Systems		0
Total	0	257

GB-23A TORNESS 1

Operator: BE (BRITISH ENERGY)

Contractor: NNC (NATIONAL NUCLEAR CORPORATION)

1. Station Details

Type: GCR
 Net Reference Unit Power
 at the beginning of 2007: 625.0 MW(e)
 Design Net Capacity: 645.0 MW(e)
 Design Discharge Burnup: 29500 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3500.9 GW(e).h
 Energy Availability Factor: 64.2%
 Load Factor: 63.9%
 Operating Factor: 71.2%
 Energy Unavailability Factor: 35.8%
 Total Off-line Time: 2526 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	408.3	402.3	434.1	405.2	430.3	397.3	383.0	0.0	0.0	241.0	399.1	0.5	3500.9
EAF (%)	87.8	95.8	93.5	90.0	92.5	88.3	82.4	0.0	0.0	52.6	88.7	1.8	64.2
UCF (%)	89.5	97.0	93.5	92.1	94.9	91.8	84.7	0.0	0.0	52.6	89.6	1.8	65.3
LF (%)	87.8	95.8	93.4	90.2	92.5	88.3	82.4	0.0	0.0	51.8	88.7	0.1	63.9
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	87.1	0.0	0.0	67.9	100.0	2.2	71.2
EUF (%)	12.2	4.2	6.5	10.0	7.5	11.7	17.6	100.0	100.0	47.4	11.3	98.2	35.8
PUF (%)	8.4	3.0	5.5	7.9	5.0	6.6	15.1	100.0	64.6	2.2	8.1	1.8	19.1
UCLF (%)	2.1	0.0	1.0	0.0	0.2	1.7	0.3	0.0	35.4	45.2	2.3	96.4	15.6
XUF (%)	1.7	1.2	0.0	2.0	2.3	3.5	2.3	0.0	0.0	0.0	0.9	0.0	1.2

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Aug 1980 Lifetime Generation: 70219.7 GW(e).h
 Date of First Criticality: 25 Mar 1988 Cumulative Energy Availability Factor: 72.7%
 Date of Grid Connection: 25 May 1988 Cumulative Load Factor: 68.2%
 Date of Commercial Operation: 25 May 1988 Cumulative Unit Capability Factor: 74.8%
 Cumulative Energy Unavailability Factor: 27.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	2287.1	638.0	92.5	92.5	69.1	69.1	66.2	66.2	4330	80.9
1989	2162.1	625.0	53.2	68.5	39.5	51.0	39.6	49.9	4582	52.4
1990	1938.4	625.0	35.7	56.0	35.7	45.1	35.5	44.4	3943	45.1
1991	2513.6	625.0	46.0	53.2	46.0	45.4	46.0	44.9	5011	57.4
1992	4532.9	632.0	81.7	59.5	81.7	53.4	80.6	52.8	7792	87.5
1993	3603.1	632.0	67.9	61.1	67.7	56.0	62.9	54.6	6358	70.2
1994	4329.9	632.0	86.7	64.9	79.5	59.6	78.4	58.2	7716	88.3
1995	4058.6	632.0	75.2	66.3	75.2	61.6	71.5	60.0	6867	76.5
1996	1178.1	632.0	96.6	69.8	96.6	65.7	21.2	55.5	2043	23.3
1997	4909.4	625.0	89.7	71.9	89.7	68.2	89.4	59.0	8050	91.6
1998	4297.9	625.0	78.6	72.5	78.6	69.1	78.3	60.8	7153	81.4
1999	5157.8	625.0	94.2	74.3	94.2	71.3	93.9	63.6	8737	99.5
2000	4376.8	625.0	79.7	74.8	79.7	71.9	79.7	64.9	8769	99.8
2001	3968.5	625.0	70.2	74.4	70.2	71.8	72.3	65.4	7613	86.7
2002	3761.9	625.0	69.6	74.1	68.7	71.6	68.7	65.6	6719	76.7
2003	4681.9	625.0	85.8	74.8	85.6	72.5	85.5	66.9	8347	95.3
2004	3921.8	625.0	71.6	74.6	71.6	72.4	71.6	67.2	6993	79.8
2005	4667.7	625.0	85.3	75.2	85.3	73.2	85.3	68.2	8372	95.6
2006	4000.9	625.0	76.7	75.3	73.3	73.2	73.1	68.5	7939	90.6
2007	3500.9	625.0	65.3	74.8	64.2	72.7	63.9	68.2	6234	71.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		744			217	
B. Refuelling without a maintenance					6	
C. Inspection, maintenance or repair combined with refuelling	1296	528		623	8	
D. Inspection, maintenance or repair without refuelling				191		
E. Testing of plant systems or components					1	
H. Nuclear regulatory requirements				58		
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						30
M. Governmental requirements or court decisions						16
Z. Others				3	32	
Subtotal	1296	1272	0	875	264	46
Total		2568			1185	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		30
15. Reactor Cooling Systems		87
16. Steam generation systems		7
31. Turbine and auxiliaries		23
32. Feedwater and Main Steam System		11
41. Main Generator Systems	744	9
42. Electrical Power Supply Systems		31
Total	744	198

GB-23B TORNESS 2

Operator: BE (BRITISH ENERGY)

Contractor: NNC (NATIONAL NUCLEAR CORPORATION)

1. Station Details

Type: GCR
 Net Reference Unit Power
 at the beginning of 2007: 625.0 MW(e)
 Design Net Capacity: 645.0 MW(e)
 Design Discharge Burnup: 29500 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4829.0 GW(e).h
 Energy Availability Factor: 88.3%
 Load Factor: 88.2%
 Operating Factor: 96.8%
 Energy Unavailability Factor: 11.7%
 Total Off-line Time: 280 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	404.4	401.3	405.8	430.8	415.2	418.3	422.1	452.8	405.3	221.8	397.1	454.1	4829.0
EAF (%)	87.0	95.6	87.4	95.7	89.3	93.0	90.8	97.4	90.1	48.3	88.3	97.7	88.3
UCF (%)	89.0	97.3	87.4	97.5	91.0	94.9	92.0	97.4	90.1	48.3	89.1	97.7	89.2
LF (%)	87.0	95.6	87.3	95.9	89.3	93.0	90.8	97.4	90.1	47.6	88.3	97.7	88.2
OF (%)	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.0	62.3	100.0	100.0	96.8
EUf (%)	13.0	4.4	12.6	4.3	10.7	7.0	9.2	2.6	9.9	51.7	11.7	2.3	11.7
PUF (%)	9.0	2.1	10.3	2.5	8.9	5.0	7.5	2.4	9.2	3.4	8.7	1.9	5.9
UCLF (%)	2.0	0.6	2.3	0.0	0.1	0.1	0.5	0.2	0.7	48.3	2.2	0.4	4.9
XUF (%)	2.0	1.8	0.0	1.7	1.7	1.9	1.2	0.0	0.0	0.0	0.9	0.0	0.9

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Aug 1980 Lifetime Generation: 67998.4 GW(e).h
 Date of First Criticality: 23 Dec 1988 Cumulative Energy Availability Factor: 72.4%
 Date of Grid Connection: 03 Feb 1989 Cumulative Load Factor: 68.2%
 Date of Commercial Operation: 03 Feb 1989 Cumulative Unit Capability Factor: 73.7%
 Cumulative Energy Unavailability Factor: 27.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	3633.8	625.0	87.4	87.4	74.2	74.2	73.3	73.3	7068	89.1
1990	1948.3	625.0	36.1	60.5	36.1	54.2	35.7	53.6	4211	48.2
1991	2651.3	625.0	48.4	56.3	48.4	52.2	48.6	51.9	5068	58.0
1992	3732.7	625.0	67.0	59.1	67.0	56.1	67.1	55.8	6560	73.7
1993	4038.0	632.0	74.4	62.2	74.4	59.8	73.1	59.4	7168	82.1
1994	3478.1	632.0	71.2	63.8	65.5	60.8	62.8	59.9	6264	71.5
1995	4651.9	632.0	85.9	67.1	85.9	64.5	81.3	63.1	7909	87.4
1996	1571.3	632.0	96.2	70.8	96.2	68.5	28.3	58.7	2409	27.4
1997	4218.0	625.0	77.7	71.5	77.7	69.6	76.8	60.7	7181	81.8
1998	5094.4	625.0	93.7	73.8	93.7	72.0	92.8	64.0	8713	99.2
1999	4984.0	625.0	91.1	75.3	91.1	73.7	90.8	66.4	8588	97.8
2000	3936.1	625.0	71.7	75.0	71.7	73.6	71.7	66.8	7686	87.5
2001	4293.6	625.0	77.2	75.2	76.6	73.8	78.2	67.7	8476	96.5
2002	1945.6	625.0	37.0	72.5	35.7	71.1	35.5	65.4	3751	42.8
2003	3782.8	625.0	69.4	72.3	69.4	71.0	69.1	65.7	6874	78.5
2004	4083.0	625.0	74.5	72.4	74.5	71.2	74.6	66.2	7682	87.7
2005	4821.9	625.0	87.9	73.3	87.9	72.2	88.1	67.5	8570	97.8
2006	3297.0	625.0	64.4	72.8	60.5	71.5	60.2	67.1	6456	73.7
2007	4829.0	625.0	89.2	73.7	88.3	72.4	88.2	68.2	8480	96.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		360			335	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling				655	40	
D. Inspection, maintenance or repair without refuelling				219		
G. Major back-fitting, refurbishment or upgrading activities without refuelling				24	25	
H. Nuclear regulatory requirements				50		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	
M. Governmental requirements or court decisions						18
R. External restrictions on supply and services (lack of funds due to delayed payments from customers, disputes in fuel industries, fuel-rationing, labour strike outside the plant , spare part delivery problems etc.)				8		
Subtotal	0	360	0	956	404	18
Total		360			1378	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1989 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		2
15. Reactor Cooling Systems		276
16. Steam generation systems		30
17. Safety I&C Systems (excluding reactor I&C)		22
21. Fuel Handling and Storage Facilities		2
32. Feedwater and Main Steam System	120	0
42. Electrical Power Supply Systems	240	
Total	360	332

GB-13A WYLFA 1

Operator: MEL (Magnox Electric Limited)

Contractor: EE/B&W/T (THE ENGLISH ELECTRIC CO. LTD / BABCOCK & WILCOX CO. / TAYLOR WOODROW CONSTRUCTION)

1. Station Details

Type: GCR
Net Reference Unit Power at the beginning of 2007: 490.0 MW(e)
Design Net Capacity: 550.0 MW(e)
Design Discharge Burnup: 54000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 1569.9 GW(e).h
Energy Availability Factor: 36.6%
Load Factor: 36.6%
Operating Factor: 50.2%
Energy Unavailability Factor: 63.4%
Total Off-line Time: 4359 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	308.8	275.4	315.2	57.2	0.0	0.0	0.0	43.3	55.8	23.9	195.2	295.2	1569.9
EAF (%)	84.7	83.6	86.5	16.1	0.0	0.0	0.0	11.9	15.8	6.7	55.3	81.0	36.6
UCF (%)	84.7	83.6	86.5	16.1	0.0	0.0	0.0	11.9	16.4	6.7	55.3	81.0	36.6
LF (%)	84.7	83.6	86.5	16.2	0.0	0.0	0.0	11.9	15.8	6.5	55.3	81.0	36.6
OF (%)	100.0	100.0	100.0	17.4	0.0	0.0	0.0	35.1	37.6	16.1	100.0	100.0	50.2
EUF (%)	15.3	16.4	13.5	83.9	100.0	100.0	100.0	88.1	84.2	93.3	44.7	19.0	63.4
PUF (%)	0.0	0.0	0.0	82.8	100.0	100.0	100.0	79.4	21.3	8.2	0.0	0.0	41.2
UCLF (%)	15.3	16.4	13.5	1.2	0.0	0.0	0.0	8.8	62.4	85.1	44.7	19.0	22.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

STATUTORY OUTAGE COMMENCED ON 06 APRIL FOR A DURATION OF ABOUT 135 DAYS WHICH INCLUDED GUIDE TUBE ASSEMBLY INSPECTIONS AND REPAIRS. THERE WAS A CONTROLLED SHUTDOWN ON 29 AUGUST OF ABOUT 11 DAYS DURATION DUE TO A TURBINE OVERSPEED BOLT PROBLEM. THERE WAS A CONTROLLED SHUTDOWN ON 20 SEPTEMBER OF ABOUT 20 DAYS DURATION DUE TO A TURBINE OVERSPEED BOLT PROBLEM. THERE WAS AN AUTOMATIC TRIP ON 11 OCTOBER OF ABOUT 16 DAYS DURATION DUE TO CONDENSATE INSTABILITY.

5. Historical Summary

Date of Construction Start: 01 Sep 1963
Date of First Criticality: 01 Nov 1969
Date of Grid Connection: 24 Jan 1971
Date of Commercial Operation: 01 Nov 1971

Lifetime Generation: 103257.0 GW(e).h
Cumulative Energy Availability Factor: 70.7%
Cumulative Load Factor: 71.2%
Cumulative Unit Capability Factor: 71.2%
Cumulative Energy Unavailability Factor: 29.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1971	684.7	990.0	47.2	47.2	47.2	47.2	47.2	47.2	1273	87.0
1972	3026.3	990.0	35.0	36.7	35.0	36.7	35.0	36.7	0	0.0
1973	2236.9	840.0	33.1	35.2	30.5	34.1	30.5	34.1	0	0.0
1974	4364.0	840.0	59.5	42.4	59.5	41.6	59.5	41.6	8568	98.1
1975	1583.0	840.0	21.6	37.6	21.6	37.0	21.6	37.0	4437	50.8
1976	4818.0	840.0	66.8	43.1	66.8	42.7	64.4	42.2	8633	97.0
1977	4984.0	840.0	73.5	47.9	70.0	46.9	67.9	46.2	8008	91.7
1978	3801.0	840.0	52.5	48.5	52.5	47.7	51.8	47.0	7739	88.6
1979	5200.0	840.0	74.9	51.7	74.9	50.9	70.9	49.8	8694	99.5
1980	5764.0	840.0	78.1	54.5	78.1	53.8	78.5	52.9	8609	98.5
1981	6234.0	840.0	83.2	57.3	83.2	56.7	83.3	55.9	8823	99.1
1982	6040.0	840.0	81.7	59.4	81.7	58.9	81.4	58.1	8700	98.5
1983	6296.0	840.0	83.9	61.4	83.9	60.9	85.8	60.4	8715	99.8
1984	6757.0	840.0	89.5	63.5	89.5	63.1	92.1	62.7	8728	99.9
1985	6682.5	840.0	88.5	65.2	88.4	64.8	91.1	64.7	8736	100.0
1986	4099.9	840.0	62.1	65.0	61.9	64.6	55.7	64.1	7939	90.6
1987	4499.4	840.0	59.1	64.7	58.8	64.3	60.2	63.9	8611	96.7
1988	6172.4	840.0	84.3	65.8	83.8	65.4	84.1	65.0	8530	97.6
1989	6614.0	840.0	86.9	66.9	86.9	66.6	89.6	66.4	8572	97.6
1990	6746.4	840.0	89.9	68.1	89.9	67.8	91.9	67.7	8549	97.9
1991	7451.3	840.0	91.5	69.3	89.7	68.8	101.5	69.3	8374	95.9
1992	7795.2	950.0	92.3	70.5	92.1	70.1	92.2	70.5	8904	100.0
1993	7215.2	950.0	87.0	71.3	86.8	70.9	86.9	71.4	8477	97.0
1994	6111.0	950.0	76.1	71.5	72.4	71.0	73.6	71.5	6933	79.4
1995	2928.8	475.0	69.7	71.5	69.7	70.9	70.4	71.4	6216	71.0
1996	3973.8	475.0	93.1	72.0	93.1	71.4	95.5	72.0	8438	96.3
1997	3534.8	490.0	81.9	72.2	81.9	71.7	82.3	72.2	7353	83.9
1998	3725.2	490.0	86.3	72.5	86.3	72.0	86.8	72.6	8079	92.2
1999	3130.3	490.0	72.7	72.5	72.7	72.0	72.9	72.6	7632	87.1
2000	1001.0	490.0	23.0	71.5	23.0	71.0	23.3	71.5	2460	28.1
2001	1306.5	490.0	30.4	70.6	30.4	70.1	30.4	70.6	3451	39.4
2002	4058.3	490.0	95.3	71.1	94.5	70.6	94.5	71.1	8541	97.5
2003	2916.0	980.0	68.2	71.1	67.9	70.6	67.9	71.1	6389	72.9
2004	4144.3	490.0	97.0	71.6	96.1	71.1	96.3	71.6	8784	100.0
2005	2967.9	490.0	69.7	71.5	69.1	71.0	69.1	71.5	7200	82.2
2006	3730.4	490.0	86.9	71.8	86.9	71.3	86.9	71.8	8598	98.2
2007	1569.9	490.0	36.6	71.2	36.6	70.7	36.6	71.2	4401	50.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1130			549	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling				177	9	
D. Inspection, maintenance or repair without refuelling	3229			709		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				97		
H. Nuclear regulatory requirements				17	9	
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	15
L. Human factor related					1	
Subtotal	3229	1130	0	1000	570	17
Total		4359			1587	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		14
12. Reactor I&C Systems		32
13. Reactor Auxiliary Systems		0
14. Safety Systems		3
15. Reactor Cooling Systems		23
16. Steam generation systems		144
17. Safety I&C Systems (excluding reactor I&C)		1
21. Fuel Handling and Storage Facilities		34
31. Turbine and auxiliaries	742	106
32. Feedwater and Main Steam System	388	32
33. Circulating Water System		0
41. Main Generator Systems		0
42. Electrical Power Supply Systems		7
Total	1130	396

GB-13B WYLFA 2

Operator: MEL (Magnox Electric Limited)

Contractor: EE/B&W/T (THE ENGLISH ELECTRIC CO. LTD / BABCOCK & WILCOX CO. / TAYLOR WOODROW CONSTRUCTION)

1. Station Details

Type: GCR
Net Reference Unit Power at the beginning of 2007: 490.0 MW(e)
Design Net Capacity: 550.0 MW(e)
Design Discharge Burnup: 54000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3198.8 GW(e).h
Energy Availability Factor: 74.5%
Load Factor: 74.5%
Operating Factor: 89.9%
Energy Unavailability Factor: 25.5%
Total Off-line Time: 889 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	299.8	277.5	338.6	320.7	298.9	244.3	241.1	0.4	238.8	289.4	316.2	333.1	3198.8
EAF (%)	82.2	84.3	92.9	90.9	82.0	69.2	66.1	0.1	67.7	79.4	89.6	91.4	74.5
UCF (%)	82.2	84.3	92.9	90.9	82.0	69.2	66.1	0.1	69.3	83.7	91.1	91.4	75.1
LF (%)	82.2	84.3	92.9	91.0	82.0	69.2	66.1	0.1	67.7	79.3	89.6	91.4	74.5
OF (%)	100.0	100.0	100.0	100.1	100.0	86.9	96.2	6.7	89.9	99.9	100.0	100.0	89.9
EUf (%)	17.8	15.7	7.1	9.1	18.0	30.8	33.9	99.9	32.3	20.6	10.4	8.6	25.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	17.8	15.7	7.1	9.1	18.0	30.8	33.9	99.9	30.8	16.3	8.9	8.6	24.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	4.2	1.5	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

THERE WAS A CONTROLLED SHUTDOWN ON 20 JUNE OF ABOUT FOUR DAYS DURATION DUE TO AN ELECTRICAL FAULT ON TURBINE 4. THERE WAS A CONTROLLED SHUTDOWN ON 30 JULY OF ABOUT 30 DAYS DUE TO BOILER 8 LEAK REPAIR WHICH REQUIRED TO BE COMPLETED OFF LOAD. THERE WAS AN AUTOMATIC TRIP ON 13 SEPTEMBER OF ABOUT THREE DAYS DUE TO AN AUTOMATIC VOLTAGE REGULATOR FAULT.

5. Historical Summary

Date of Construction Start:	01 Sep 1963	Lifetime Generation:	98602.0 GW(e).h
Date of First Criticality:	01 Sep 1970	Cumulative Energy Availability Factor:	70.8%
Date of Grid Connection:	21 Jul 1971	Cumulative Load Factor:	70.9%
Date of Commercial Operation:	03 Jan 1972	Cumulative Unit Capability Factor:	71.0%
		Cumulative Energy Unavailability Factor:	29.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation								
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online		
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)	
1972	Data not provided										
1973	"										
1974	"										
1975	"										
1976	"										
1977	"										
1978	"										
1979	"										
1980	"										
1981	"										
1982	"										
1983	"										
1984	"										
1985	"										
1986	"										
1987	"										
1988	"										
1989	"										
1990	"										
1991	"										
1992	"										
1993	"										
1994	"										
1995	3765.9	475.0	90.5	90.5	90.5	90.5	90.5	90.5	90.5	8760	100.0
1996	3150.5	475.0	75.4	83.0	75.4	83.0	75.7	83.1	7445	85.0	
1997	3979.4	490.0	92.7	86.3	92.7	86.3	92.7	86.4	8342	95.2	
1998	3329.1	490.0	78.1	84.2	78.1	84.2	77.6	84.1	7128	81.4	
1999	4035.4	490.0	93.8	86.1	93.0	86.0	94.0	86.1	8656	98.8	
2000	887.0	490.0	20.4	75.1	20.4	74.9	20.7	75.1	2208	25.2	
2001	1286.4	490.0	30.0	68.6	30.0	68.5	30.0	68.6	3198	36.5	
2002	3417.2	490.0	80.0	70.0	79.5	69.8	79.6	70.0	7385	84.3	
2003	3354.4	490.0	78.6	71.0	78.1	70.8	78.1	70.9	7544	86.1	
2004	3247.0	490.0	75.4	71.4	75.4	71.2	75.6	71.4	7296	83.3	
2005	3782.0	490.0	88.9	73.0	88.1	72.8	88.1	72.9	8645	98.7	
2006	1932.6	490.0	45.0	70.7	45.0	70.5	45.0	70.6	6020	68.7	
2007	3198.8	490.0	75.1	71.0	74.5	70.8	74.5	70.9	7871	89.9	

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		889			408	
B. Refuelling without a maintenance					7	
C. Inspection, maintenance or repair combined with refuelling				213		
D. Inspection, maintenance or repair without refuelling				659		
E. Testing of plant systems or components					2	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				117		
H. Nuclear regulatory requirements					13	
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)						15
Subtotal	0	889	0	989	430	17
Total		889			1436	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		37
12. Reactor I&C Systems		13
14. Safety Systems		4
15. Reactor Cooling Systems		49
16. Steam generation systems	722	173
17. Safety I&C Systems (excluding reactor I&C)		11
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries	94	83
32. Feedwater and Main Steam System		11
41. Main Generator Systems		4
42. Electrical Power Supply Systems	73	14
Total	889	400

US-313 ARKANSAS ONE-1

Operator: ENTGARKS (Entergy Arkansas, Inc.)

Contractor: B&W (BABCOCK & WILCOX CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 836.0 MW(e)
Design Net Capacity: 850.0 MW(e)
Design Discharge Burnup: 35000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6882.8 GW(e).h
Energy Availability Factor: 92.7%
Load Factor: 94.0%
Operating Factor: 92.7%
Energy Unavailability Factor: 7.3%
Total Off-line Time: 638 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	642.1	580.0	631.6	425.6	233.3	610.8	629.3	623.7	610.4	634.7	620.3	641.0	6882.8
EAF (%)	100.0	100.0	100.0	70.0	43.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.7
UCF (%)	100.0	100.0	100.0	70.0	43.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.7
LF (%)	103.2	103.2	101.7	70.7	37.5	101.5	101.2	100.3	101.4	102.0	102.9	103.1	94.0
OF (%)	100.0	100.0	100.0	71.1	42.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.7
EUF (%)	0.0	0.0	0.0	30.0	56.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3
PUF (%)	0.0	0.0	0.0	30.0	39.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
UCLF (%)	0.0	0.0	0.0	0.0	17.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 06 Dec 1968
Date of First Criticality: 06 Aug 1974
Date of Grid Connection: 17 Aug 1974
Date of Commercial Operation: 19 Dec 1974

Lifetime Generation: 166532.4 GW(e).h
Cumulative Energy Availability Factor: 78.6%
Cumulative Load Factor: 74.1%
Cumulative Unit Capability Factor: 79.0%
Cumulative Energy Unavailability Factor: 21.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	0.0	819.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1975	4898.4	797.0	67.7	70.2	67.7	70.2	70.2	64.7	6661	76.0
1976	3888.0	836.0	53.0	61.8	53.0	61.8	52.9	58.9	4966	56.5
1977	5103.1	836.0	69.7	64.4	69.7	64.4	69.7	62.4	6688	76.3
1978	5249.8	836.0	71.7	66.2	71.7	66.2	71.7	64.7	6676	76.2
1979	3323.4	836.0	45.4	62.1	45.4	62.1	45.4	60.9	4253	48.6
1980	3781.2	836.0	74.8	64.2	63.7	62.3	51.5	59.3	5570	63.4
1981	4900.8	836.0	72.5	65.4	72.5	63.8	66.9	60.4	6336	72.3
1982	3721.4	836.0	64.8	65.3	64.8	63.9	50.8	59.2	5671	64.7
1983	3220.6	836.0	48.3	63.4	48.3	62.2	44.0	57.5	4191	47.8
1984	4604.1	836.0	70.1	64.1	70.1	63.0	62.7	58.0	6150	70.0
1985	5190.4	836.0	78.3	65.4	78.3	64.3	70.9	59.2	6852	78.2
1986	3589.9	836.0	62.2	65.1	62.2	64.2	49.0	58.4	5446	62.2
1987	4763.3	836.0	88.2	66.9	88.2	66.0	65.0	58.9	7720	88.1
1988	3963.2	836.0	68.3	67.0	68.3	66.2	54.0	58.5	5996	68.3
1989	3377.0	836.0	67.1	67.0	67.1	66.2	46.1	57.7	5871	67.0
1990	4145.8	836.0	75.9	67.5	75.9	66.8	56.6	57.6	6437	73.5
1991	6540.5	836.0	91.3	68.9	91.3	68.3	89.3	59.5	7991	91.2
1992	5833.1	836.0	80.7	69.6	80.7	69.0	79.4	60.6	7088	80.7
1993	6126.5	836.0	85.9	70.4	85.9	69.8	83.7	61.8	7520	85.8
1994	7198.6	836.0	98.7	71.8	98.7	71.3	98.3	63.6	8643	98.7
1995	5978.2	836.0	85.6	72.5	85.6	72.0	81.6	64.5	7493	85.5
1996	6287.0	836.0	86.7	73.1	86.7	72.6	85.6	65.4	7613	86.7
1997	7251.1	836.0	99.6	74.3	99.6	73.8	99.0	66.9	8723	99.6
1998	6216.8	836.0	84.1	74.7	84.1	74.2	84.9	67.6	7364	84.1
1999	6714.7	836.0	90.3	75.3	90.3	74.9	91.7	68.6	7907	90.3
2000	6410.1	836.0	88.2	75.8	88.2	75.4	87.3	69.3	7748	88.2
2001	6875.5	836.0	91.8	76.4	91.8	76.0	93.9	70.2	8100	92.5
2002	6568.6	836.0	89.1	76.9	89.1	76.5	89.7	70.9	7820	89.3
2003	6794.3	836.0	91.8	77.4	91.8	77.0	92.8	71.7	8050	91.9
2004	6827.6	836.0	91.6	77.8	91.6	77.5	93.0	72.4	8045	91.6
2005	5743.2	840.0	77.4	77.8	77.4	77.5	78.1	72.6	6778	77.4
2006	7474.9	836.0	100.0	78.5	100.0	78.2	102.1	73.5	8760	100.0
2007	6882.8	836.0	92.7	79.0	92.7	78.6	94.0	74.1	8122	92.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		128			608	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling	508			857		
D. Inspection, maintenance or repair without refuelling				143		
E. Testing of plant systems or components				3	2	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				57		
H. Nuclear regulatory requirements						48
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				57	4	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)					2	
Subtotal	508	128	0	1117	621	49
Total		636			1787	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		89
12. Reactor I&C Systems		34
13. Reactor Auxiliary Systems		15
14. Safety Systems		28
15. Reactor Cooling Systems		46
16. Steam generation systems		52
17. Safety I&C Systems (excluding reactor I&C)		21
31. Turbine and auxiliaries		113
32. Feedwater and Main Steam System		70
33. Circulating Water System		10
35. All other I&C Systems		1
41. Main Generator Systems		86
42. Electrical Power Supply Systems	128	35
XX. Miscellaneous Systems		0
Total	128	600

US-368 ARKANSAS ONE-2

Operator: ENTERGY (ENTERGY NUCLEAR)
Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 988.0 MW(e)
Design Net Capacity: 912.0 MW(e)
Design Discharge Burnup: 35000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8603.3 GW(e).h
Energy Availability Factor: 98.0%
Load Factor: 99.4%
Operating Factor: 98.0%
Energy Unavailability Factor: 2.0%
Total Off-line Time: 176 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	595.3	644.8	749.9	717.0	746.2	720.1	743.0	739.4	717.7	748.4	728.5	752.9	8603.3
EAF (%)	77.2	98.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0
UCF (%)	77.2	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0
LF (%)	81.0	97.1	102.2	100.8	101.5	101.2	101.1	100.6	100.9	101.8	102.3	102.4	99.4
OF (%)	79.8	96.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0
EUF (%)	22.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	22.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 06 Dec 1968
Date of First Criticality: 05 Dec 1978
Date of Grid Connection: 26 Dec 1978
Date of Commercial Operation: 26 Mar 1980

Lifetime Generation: 163036.2 GW(e).h
Cumulative Energy Availability Factor: 82.6%
Cumulative Load Factor: 82.8%
Cumulative Unit Capability Factor: 82.8%
Cumulative Energy Unavailability Factor: 17.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	3646.6	884.0	80.2	80.2	73.5	73.5	60.8	60.8	4913	72.8
1981	4323.6	858.0	65.2	71.9	65.2	68.9	57.5	59.0	5622	64.2
1982	3807.5	858.0	57.9	66.9	57.9	65.0	50.7	56.0	5023	57.3
1983	4427.9	858.0	61.5	65.5	61.5	64.0	58.9	56.8	5380	61.4
1984	6203.6	858.0	84.7	69.5	84.7	68.4	82.3	62.1	7439	84.7
1985	4701.2	858.0	69.2	69.4	69.0	68.5	62.5	62.2	6040	68.9
1986	5314.3	858.0	71.6	69.8	71.6	68.9	70.7	63.4	6274	71.6
1987	6605.2	858.0	87.7	72.1	87.7	71.3	87.9	66.6	7678	87.6
1988	4952.9	858.0	66.8	71.5	66.8	70.8	65.7	66.5	5867	66.8
1989	5472.2	858.0	74.4	71.8	74.4	71.2	72.8	67.1	6514	74.4
1990	7129.6	858.0	93.8	73.8	93.8	73.3	94.9	69.7	8211	93.7
1991	6123.3	858.0	82.1	74.5	82.1	74.0	81.5	70.7	7187	82.0
1992	5504.8	858.0	72.8	74.4	72.8	73.9	73.0	70.9	6390	72.7
1993	7344.7	858.0	95.3	75.9	95.3	75.5	97.7	72.8	8346	95.3
1994	6724.9	858.0	88.0	76.7	88.0	76.3	89.5	73.9	7707	88.0
1995	5694.5	858.0	75.9	76.6	75.9	76.3	75.8	74.1	6644	75.8
1996	7063.9	858.0	91.6	77.5	91.6	77.2	93.7	75.2	8049	91.6
1997	6957.0	858.0	91.5	78.3	91.5	78.0	92.6	76.2	8013	91.5
1998	6877.3	858.0	91.3	79.0	91.3	78.7	91.5	77.0	7995	91.3
1999	6226.9	858.0	82.4	79.2	82.4	78.9	82.8	77.3	7219	82.4
2000	5265.3	858.0	69.2	78.7	69.2	78.4	69.9	76.9	6077	69.2
2001	7917.0	858.0	96.8	79.5	96.8	79.3	105.3	78.2	8498	97.0
2002	8002.2	858.0	93.1	80.1	93.1	79.9	106.5	79.5	8203	93.6
2003	7925.7	858.0	92.5	80.6	92.5	80.4	105.5	80.6	8156	93.1
2004	8627.6	1000.0	97.7	81.4	97.7	81.2	98.2	81.4	8580	97.7
2005	7959.5	1000.0	90.9	81.9	90.9	81.7	90.9	81.8	7966	90.9
2006	7765.4	998.0	89.0	82.2	89.0	82.0	88.8	82.1	7793	89.0
2007	8603.3	988.0	98.0	82.8	98.0	82.6	99.4	82.8	8584	98.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		175			524	
B. Refuelling without a maintenance					13	
C. Inspection, maintenance or repair combined with refuelling				881		
D. Inspection, maintenance or repair without refuelling				133		
E. Testing of plant systems or components				13	21	
J. Grid failure or grid unavailability						15
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	3	0
Z. Others					0	
Subtotal	0	175	0	1027	561	15
Total		175			1603	

7. Equipment Related Full Outages, Analysis by System

System	2007	1978 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		6
12. Reactor I&C Systems	175	64
13. Reactor Auxiliary Systems		21
14. Safety Systems		94
15. Reactor Cooling Systems		153
16. Steam generation systems		27
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		47
32. Feedwater and Main Steam System		56
33. Circulating Water System		3
41. Main Generator Systems		10
42. Electrical Power Supply Systems		32
Total	175	514

US-334 BEAVER VALLEY-1

Operator: FENOC (FIRST ENERGY NUCLEAR OPERATING CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 849.0 MW(e)
Design Net Capacity: 835.0 MW(e)
Design Discharge Burnup: 43727 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7057.7 GW(e).h
Energy Availability Factor: 91.0%
Load Factor: 92.7%
Operating Factor: 91.5%
Energy Unavailability Factor: 9.0%
Total Off-line Time: 743 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	645.6	574.5	633.1	658.6	669.4	612.7	669.5	664.3	466.2	122.8	657.8	683.0	7057.7
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	75.7	19.8	100.0	100.0	91.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	75.7	19.8	100.0	100.0	91.0
LF (%)	102.2	100.7	100.4	107.7	106.0	96.4	101.9	101.1	73.3	18.7	103.3	104.0	92.7
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	76.7	22.7	100.0	100.0	91.5
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3	80.2	0.0	0.0	9.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3	80.2	0.0	0.0	9.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 26 Jun 1970
Date of First Criticality: 10 May 1976
Date of Grid Connection: 14 Jun 1976
Date of Commercial Operation: 01 Oct 1976

Lifetime Generation: 140099.1 GW(e).h
Cumulative Energy Availability Factor: 71.3%
Cumulative Load Factor: 67.8%
Cumulative Unit Capability Factor: 71.3%
Cumulative Energy Unavailability Factor: 28.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	303.2	834.0	100.0	100.0	100.0	100.0	16.1	16.1	821	37.2
1977	2870.3	843.0	39.2	51.6	39.2	51.6	38.9	34.2	4312	49.2
1978	2481.4	800.0	35.4	44.6	35.4	44.6	35.4	34.7	3569	40.7
1979	1778.4	815.0	24.8	38.6	24.8	38.6	24.9	31.7	3498	39.9
1980	300.7	811.0	6.9	31.2	6.9	31.2	4.2	25.3	600	6.8
1981	4674.7	810.0	73.9	39.2	73.9	39.2	65.9	33.0	6444	73.6
1982	2717.4	810.0	41.7	39.6	41.7	39.6	38.3	33.8	3644	41.6
1983	4682.2	810.0	68.5	43.6	68.5	43.6	66.0	38.2	5976	68.2
1984	4756.8	810.0	71.8	47.0	71.8	47.0	66.9	41.7	6301	71.7
1985	5901.5	810.0	91.9	51.8	91.9	51.8	83.2	46.1	8046	91.8
1986	4784.2	810.0	70.7	53.7	70.7	53.7	67.4	48.2	6195	70.7
1987	5620.9	810.0	84.0	56.3	84.0	56.3	79.2	50.9	7320	83.6
1988	4993.6	810.0	79.6	58.2	79.6	58.2	70.2	52.5	6989	79.6
1989	3794.3	810.0	66.5	58.9	66.5	58.9	53.5	52.6	5822	66.5
1990	6167.1	810.0	92.2	61.2	92.2	61.2	86.9	55.0	8074	92.2
1991	3710.9	810.0	55.8	60.8	55.8	60.8	52.3	54.8	4883	55.7
1992	6298.4	810.0	93.6	62.9	93.6	62.9	88.5	56.9	8218	93.6
1993	4359.8	810.0	67.3	63.1	67.3	63.1	61.4	57.1	5891	67.2
1994	5504.4	810.0	79.9	64.0	79.9	64.0	77.6	58.3	6991	79.8
1995	5449.2	810.0	77.8	64.7	77.8	64.7	76.8	59.2	6813	77.8
1996	5698.1	810.0	81.3	65.6	81.3	65.6	80.1	60.3	7132	81.2
1997	4025.8	810.0	56.8	65.1	56.8	65.1	56.7	60.1	4972	56.8
1998	2829.3	810.0	40.4	64.0	40.4	64.0	39.9	59.2	3557	40.6
1999	6106.2	810.0	88.5	65.1	88.5	65.1	86.1	60.3	7746	88.4
2000	5883.0	810.0	84.6	65.9	84.6	65.9	82.7	61.3	7430	84.6
2001	5991.0	821.0	84.6	66.6	84.6	66.6	84.1	62.2	7407	84.6
2002	6989.9	821.0	97.0	67.8	97.0	67.8	97.2	63.5	8490	96.9
2003	5985.4	821.0	84.1	68.4	84.1	68.4	83.2	64.2	7359	84.0
2004	6678.5	821.0	92.4	69.3	92.4	69.3	92.6	65.3	8119	92.4
2005	7290.3	821.0	100.0	70.3	100.0	70.3	101.4	66.5	8760	100.0
2006	5828.6	851.0	79.6	70.6	79.6	70.6	78.2	66.9	6973	79.6
2007	7057.7	868.0	91.0	71.3	91.0	71.3	92.7	67.8	8017	91.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					692	
B. Refuelling without a maintenance					14	
C. Inspection, maintenance or repair combined with refuelling	742			1186	6	
D. Inspection, maintenance or repair without refuelling				112		
E. Testing of plant systems or components				10	20	
H. Nuclear regulatory requirements					121	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				21	190	2
Z. Others					2	
Subtotal	742	0	0	1329	1045	2
Total		742			2376	

7. Equipment Related Full Outages, Analysis by System

System	2007	1976 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		7
13. Reactor Auxiliary Systems		34
14. Safety Systems		19
15. Reactor Cooling Systems		173
16. Steam generation systems		2
17. Safety I&C Systems (excluding reactor I&C)		6
31. Turbine and auxiliaries		19
32. Feedwater and Main Steam System		135
35. All other I&C Systems		1
41. Main Generator Systems		22
42. Electrical Power Supply Systems		153
XX. Miscellaneous Systems		60
Total	0	631

US-412 BEAVER VALLEY-2

Operator: FENOC (FIRST ENERGY NUCLEAR OPERATING CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 832.0 MW(e)
Design Net Capacity: 836.0 MW(e)
Design Discharge Burnup: 36351 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7473.2 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 102.5%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	640.3	579.5	628.3	620.9	639.3	612.1	621.2	617.2	608.8	634.4	623.6	647.5	7473.2
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	103.4	103.7	101.6	103.7	103.3	102.2	100.4	99.7	101.6	102.5	104.0	104.6	102.5
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 03 May 1974 **Lifetime Generation:** 107189.5 GW(e).h
Date of First Criticality: 04 Aug 1987 **Cumulative Energy Availability Factor:** 85.9%
Date of Grid Connection: 17 Aug 1987 **Cumulative Load Factor:** 82.1%
Date of Commercial Operation: 17 Nov 1987 **Cumulative Unit Capability Factor:** 85.9%
Cumulative Energy Unavailability Factor: 14.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	738.1	822.0	100.0	100.0	100.0	100.0	82.4	82.4	950	88.7
1988	6477.1	833.0	93.8	94.5	93.8	94.5	88.5	87.9	8224	93.6
1989	4557.1	833.0	71.7	83.7	71.7	83.7	62.5	75.9	6245	71.3
1990	4291.6	827.0	77.1	81.6	77.1	81.6	59.2	70.6	6734	76.9
1991	6762.2	820.0	99.5	85.9	99.5	85.9	94.1	76.2	8720	99.5
1992	5647.1	820.0	94.8	87.7	94.8	87.7	78.4	76.7	7342	83.6
1993	5212.7	820.0	77.3	86.0	77.3	86.0	72.6	76.0	6770	77.3
1994	7024.7	820.0	96.8	87.5	96.8	87.5	97.8	79.0	8481	96.8
1995	6047.0	820.0	87.0	87.4	87.0	87.4	84.2	79.7	7616	86.9
1996	4788.6	820.0	70.3	85.6	70.3	85.6	66.5	78.2	6169	70.2
1997	6158.7	820.0	86.6	85.7	86.6	85.7	85.7	79.0	7583	86.6
1998	1808.7	820.0	25.1	80.2	25.1	80.2	25.2	74.1	2179	24.9
1999	5752.5	820.0	81.7	80.4	81.7	80.4	80.1	74.6	7155	81.7
2000	6227.8	820.0	88.9	81.0	88.9	81.0	86.5	75.5	7804	88.8
2001	7191.7	831.0	99.4	82.3	99.4	82.3	99.8	77.3	8702	99.3
2002	6604.3	831.0	92.9	83.0	92.9	83.0	90.7	78.1	8133	92.8
2003	6637.0	831.0	91.8	83.6	91.8	83.6	91.2	79.0	8037	91.7
2004	7314.8	831.0	100.0	84.5	100.0	84.5	100.2	80.2	8784	100.0
2005	6680.0	831.0	93.3	85.0	93.3	85.0	91.8	80.9	8169	93.3
2006	6309.5	851.0	87.6	85.2	87.6	85.2	84.6	81.1	7673	87.6
2007	7473.2	832.0	100.0	85.9	100.0	85.9	102.5	82.1	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					485	
B. Refuelling without a maintenance					7	
C. Inspection, maintenance or repair combined with refuelling				642	3	
D. Inspection, maintenance or repair without refuelling				19		
E. Testing of plant systems or components				1	21	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					69	
Subtotal	0	0	0	662	585	0
Total	0			1247		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		16
12. Reactor I&C Systems		6
13. Reactor Auxiliary Systems		44
14. Safety Systems		15
15. Reactor Cooling Systems		276
16. Steam generation systems		27
17. Safety I&C Systems (excluding reactor I&C)		8
31. Turbine and auxiliaries		24
32. Feedwater and Main Steam System		10
35. All other I&C Systems		4
41. Main Generator Systems		8
42. Electrical Power Supply Systems		31
XX. Miscellaneous Systems		11
Total	0	480

US-456 BRAIDWOOD-1**Operator:** EXELON (Exelon Generation)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1178.0 MW(e)
Design Net Capacity: 1120.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9526.7 GW(e).h
Energy Availability Factor: 92.7%
Load Factor: 92.3%
Operating Factor: 92.7%
Energy Unavailability Factor: 7.3%
Total Off-line Time: 641 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	898.5	810.5	893.1	865.9	887.8	783.1	875.7	872.5	837.6	88.3	815.6	898.0	9526.7
EAF (%)	100.0	100.0	100.0	100.0	100.0	94.8	100.0	100.0	96.7	22.3	100.0	100.0	92.7
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7	22.3	100.0	100.0	93.1
LF (%)	102.5	102.4	102.0	102.1	101.3	92.3	99.9	99.6	98.8	10.1	96.0	102.5	92.3
OF (%)	100.0	100.0	100.0	100.0	100.0	94.7	100.0	100.0	99.9	19.1	100.0	100.0	92.7
EUf (%)	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0	3.3	77.7	0.0	0.0	7.3
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	77.7	0.0	0.0	6.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 31 Dec 1975 **Lifetime Generation:** 147331.0 GW(e).h
Date of First Criticality: 29 May 1987 **Cumulative Energy Availability Factor:** 86.8%
Date of Grid Connection: 12 Jul 1987 **Cumulative Load Factor:** 84.7%
Date of Commercial Operation: 29 Jul 1988 **Cumulative Unit Capability Factor:** 86.8%
Cumulative Energy Unavailability Factor: 13.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	3424.2	1105.0	91.7	91.7	91.7	91.7	82.0	82.0	3409	91.4
1989	4649.1	1120.0	62.3	71.0	62.3	71.0	47.4	57.7	5435	62.0
1990	8264.6	1120.0	89.1	78.5	89.1	78.5	84.2	68.6	7778	88.8
1991	5018.6	1120.0	59.4	72.9	59.4	72.9	51.2	63.5	5198	59.3
1992	7157.9	1120.0	81.4	74.8	81.4	74.8	72.8	65.6	7142	81.3
1993	8693.1	1120.0	92.1	78.0	92.1	78.0	88.6	69.9	8048	91.9
1994	7398.2	1120.0	79.8	78.3	79.8	78.3	75.4	70.7	6940	79.2
1995	6614.3	1120.0	71.7	77.4	71.7	77.4	67.4	70.3	6214	70.9
1996	7618.9	1120.0	80.5	77.8	80.5	77.8	77.4	71.1	7021	79.9
1997	8096.3	1120.0	84.0	78.4	84.0	78.4	82.5	72.3	7339	83.8
1998	7578.8	1118.0	79.9	78.6	79.9	78.6	77.4	72.8	6976	79.6
1999	9904.8	1120.0	99.1	80.4	99.1	80.4	101.0	75.3	8680	99.1
2000	9311.3	1103.0	94.9	81.5	94.9	81.5	96.1	76.9	8335	94.9
2001	9557.9	1168.0	94.0	82.5	94.0	82.5	97.7	78.5	8247	94.1
2002	10612.2	1161.0	100.0	83.7	100.0	83.7	104.1	80.3	8760	100.0
2003	10094.8	1161.0	95.3	84.5	95.3	84.5	99.3	81.6	8353	95.4
2004	9807.2	1161.0	94.5	85.1	94.5	85.1	96.2	82.5	8310	94.6
2005	10277.0	1185.0	98.5	85.9	98.5	85.9	99.0	83.5	8630	98.5
2006	9945.9	1178.0	95.4	86.5	95.4	86.5	96.4	84.2	8352	95.3
2007	9526.7	1178.0	93.1	86.8	92.7	86.8	92.3	84.7	8119	92.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					300	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	602			640		
D. Inspection, maintenance or repair without refuelling				129	0	
E. Testing of plant systems or components				2		
H. Nuclear regulatory requirements					22	
J. Grid failure or grid unavailability					4	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	6	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			37			
Subtotal	602	0	37	771	340	0
Total		639			1111	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		4
14. Safety Systems		5
15. Reactor Cooling Systems		8
16. Steam generation systems		23
17. Safety I&C Systems (excluding reactor I&C)		9
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		19
41. Main Generator Systems		167
42. Electrical Power Supply Systems		12
XX. Miscellaneous Systems		13
Total	0	262

US-457 BRAIDWOOD-2**Operator:** EXELON (Exelon Generation)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1152.0 MW(e)
Design Net Capacity: 1120.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10131.2 GW(e).h
Energy Availability Factor: 99.4%
Load Factor: 100.4%
Operating Factor: 99.4%
Energy Unavailability Factor: 0.6%
Total Off-line Time: 54 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	877.8	793.0	873.7	848.2	860.3	830.6	855.6	767.1	831.8	871.8	847.0	874.1	10131.2
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.8	100.0	100.0	100.0	100.0	99.4
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	102.4	102.4	102.1	102.3	100.4	100.1	99.8	89.5	100.3	101.7	102.0	102.0	100.4
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.7	100.0	100.0	100.0	100.0	99.4
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0	0.0	0.0	0.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0	0.0	0.0	0.6

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 31 Dec 1975 **Lifetime Generation:** 148660.4 GW(e).h
Date of First Criticality: 08 Mar 1988 **Cumulative Energy Availability Factor:** 90.4%
Date of Grid Connection: 25 May 1988 **Cumulative Load Factor:** 87.7%
Date of Commercial Operation: 17 Oct 1988 **Cumulative Unit Capability Factor:** 90.4%
Cumulative Energy Unavailability Factor: 9.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	1350.9	1097.0	81.9	81.9	81.9	81.9	66.6	66.6	1476	81.5
1989	7142.0	1120.0	86.9	86.0	86.9	86.0	72.8	71.7	7581	86.5
1990	6353.6	1120.0	78.8	82.8	78.8	82.8	64.8	68.6	6849	78.2
1991	6545.5	1120.0	75.7	80.6	75.7	80.6	66.7	68.0	6626	75.6
1992	8751.1	1120.0	95.1	84.0	95.1	84.0	89.0	73.0	8346	95.0
1993	7362.3	1120.0	81.5	83.5	81.5	83.5	75.0	73.4	7098	81.0
1994	6636.1	1120.0	74.1	82.0	74.1	82.0	67.6	72.5	6454	73.7
1995	9533.0	1120.0	98.1	84.2	98.1	84.2	97.2	75.9	8583	98.0
1996	8011.8	1120.0	84.1	84.2	84.1	84.2	81.4	76.6	7349	83.7
1997	8234.7	1120.0	86.5	84.5	86.5	84.5	83.9	77.4	7563	86.3
1998	9694.6	1118.0	97.7	85.8	97.7	85.8	99.0	79.5	8552	97.6
1999	9030.9	1120.0	92.3	86.3	92.3	86.3	92.0	80.6	8070	92.1
2000	9510.9	1103.0	94.6	87.0	94.6	87.0	98.1	82.0	8303	94.5
2001	9647.9	1122.0	96.7	87.7	96.7	87.7	99.0	83.3	8481	96.8
2002	9449.5	1154.0	92.5	88.1	92.5	88.1	94.3	84.1	8099	92.5
2003	9932.2	1154.0	95.1	88.6	95.1	88.6	98.3	85.0	8337	95.2
2004	10201.0	1129.0	99.7	89.3	99.7	89.3	102.7	86.1	8757	99.7
2005	9519.4	1177.0	94.1	89.5	94.1	89.5	92.3	86.5	8244	94.1
2006	9624.6	1152.0	95.2	89.9	95.2	89.9	95.4	87.0	8335	95.1
2007	10131.2	1152.0	100.0	90.4	99.4	90.4	100.4	87.7	8706	99.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					144	
B. Refuelling without a maintenance					13	
C. Inspection, maintenance or repair combined with refuelling				565		
D. Inspection, maintenance or repair without refuelling				80		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					19	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			53			
Subtotal	0	0	53	645	176	0
Total		53			821	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		12
14. Safety Systems		10
15. Reactor Cooling Systems		3
21. Fuel Handling and Storage Facilities		8
31. Turbine and auxiliaries		0
32. Feedwater and Main Steam System		18
35. All other I&C Systems		5
41. Main Generator Systems		12
42. Electrical Power Supply Systems		64
Total	0	132

US-259 BROWNS FERRY-1

Operator: TVA (TENNESSEE VALLEY AUTHORITY)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1170.0 MW(e)
Design Net Capacity: 1065.0 MW(e)
Design Discharge Burnup: 38000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4535.3 GW(e).h
Energy Availability Factor: 87.4%
Load Factor: 75.5%
Operating Factor: 86.7%
Energy Unavailability Factor: 12.6%
Total Off-line Time: 685 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h						480.1	769.6	660.2	698.4	621.7	482.0	823.3	4535.3
EAF (%)						76.8	100.0	94.5	95.4	81.5	62.8	100.0	87.4
UCF (%)						76.8	100.0	94.5	95.4	81.5	62.8	100.0	87.4
LF (%)						57.0	88.4	75.8	82.9	71.4	57.1	94.6	75.5
OF (%)						74.7	100.0	94.0	94.9	79.6	62.7	100.0	86.7
EUF (%)						23.2	0.0	5.5	4.6	18.5	37.2	0.0	12.6
PUF (%)						3.6	0.0	0.0	0.0	0.0	37.2	0.0	5.7
UCLF (%)						19.5	0.0	5.5	4.7	18.5	0.0	0.0	6.9
XUF (%)						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	01 May 1967	Lifetime Generation:	56518.9 GW(e).h
Date of First Criticality:	17 Aug 1973	Cumulative Energy Availability Factor:	59.1%
Date of Grid Connection:	15 Oct 1973	Cumulative Load Factor:	55.2%
Date of Commercial Operation:	01 Aug 1974	Cumulative Unit Capability Factor:	59.1%
		Cumulative Energy Unavailability Factor:	40.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	2765.4	1065.0	85.8	85.8	85.8	85.8	70.7	70.7	3114	84.8
1975	1378.5	1065.0	14.8	35.8	14.8	35.8	14.8	31.3	1535	17.5
1976	1301.1	1065.0	13.9	26.7	13.9	26.7	13.9	24.1	2174	24.7
1977	5043.1	1065.0	54.1	34.7	54.1	34.7	54.1	32.9	5817	66.4
1978	5817.8	1065.0	62.4	41.0	62.4	41.0	62.4	39.5	7042	80.4
1979	7495.7	1065.0	80.3	48.2	80.3	48.2	80.3	47.1	7918	90.4
1980	6061.3	1065.0	73.5	52.2	73.3	52.2	64.8	49.8	6376	72.6
1981	4405.3	1065.0	51.0	52.0	51.0	52.0	47.2	49.5	4435	50.6
1982	7880.9	1065.0	91.2	56.7	91.2	56.7	84.5	53.6	7967	90.9
1983	2175.5	1065.0	26.5	53.5	26.5	53.5	23.3	50.4	2316	26.4
1984	7848.5	1065.0	90.3	57.0	90.3	57.0	83.9	53.6	7930	90.3
1985	1603.0	1065.0	74.9	57.4	74.9	57.4	69.7	54.0	1626	75.3
1986	Data not available - Long-term shutdown									
1987	"									
1988	"									
1989	"									
1990	"									
1991	"									
1992	"									
1993	"									
1994	"									
1995	"									
1996	"									
1997	"									
1998	"									
1999	"									
2000	"									
2001	"									
2002	"									
2003	"									
2004	"									
2005	"									
2006	"									
2007	4535.3	1126.0	87.4	59.1	87.4	59.1	75.5	55.2	4452	86.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1973 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		314			135	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling				469		
D. Inspection, maintenance or repair without refuelling	268			46		
E. Testing of plant systems or components	0			0	12	
H. Nuclear regulatory requirements				1		0
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					379	
L. Human factor related		72				
Subtotal	268	386	0	516	530	0
Total		654			1046	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1973 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems	44	6
13. Reactor Auxiliary Systems		10
14. Safety Systems		4
15. Reactor Cooling Systems	36	40
31. Turbine and auxiliaries	233	22
32. Feedwater and Main Steam System		17
41. Main Generator Systems		3
42. Electrical Power Supply Systems		2
XX. Miscellaneous Systems		8
Total	313	112

US-260 BROWNS FERRY-2

Operator: TVA (TENNESSEE VALLEY AUTHORITY)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1118.0 MW(e)
Design Net Capacity: 1065.0 MW(e)
Design Discharge Burnup: 38000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7606.6 GW(e).h
Energy Availability Factor: 83.2%
Load Factor: 72.5%
Operating Factor: 82.5%
Energy Unavailability Factor: 16.8%
Total Off-line Time: 1531 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	723.3	396.4	0.0	215.3	826.4	785.2	808.7	588.8	787.3	818.2	813.5	843.6	7606.6
EAF (%)	91.4	67.9	-0.1	42.8	100.0	100.0	100.0	87.5	100.0	100.0	100.0	100.0	83.2
UCF (%)	91.4	67.9	-0.1	42.8	100.0	100.0	100.0	87.5	100.0	100.0	100.0	100.0	83.2
LF (%)	87.0	52.8	0.0	24.5	90.8	89.2	88.9	64.7	89.4	89.9	92.3	92.7	72.5
OF (%)	91.4	69.2	0.0	41.3	100.0	100.0	100.0	87.4	100.0	100.0	100.0	100.0	82.5
EUF (%)	8.6	32.1	100.1	57.2	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	16.8
PUF (%)	0.0	32.1	100.1	56.1	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	16.0
UCLF (%)	8.6	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	01 May 1967	Lifetime Generation:	175754.3 GW(e).h
Date of First Criticality:	20 Jul 1974	Cumulative Energy Availability Factor:	78.1%
Date of Grid Connection:	28 Aug 1974	Cumulative Load Factor:	74.2%
Date of Commercial Operation:	01 Mar 1975	Cumulative Unit Capability Factor:	78.1%
		Cumulative Energy Unavailability Factor:	21.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	550.6	1065.0	7.0	7.0	7.0	7.0	7.0	7.0	517	7.0
1976	1567.2	1065.0	16.8	12.3	16.8	12.3	16.8	12.3	2547	29.0
1977	6225.0	1065.0	66.8	31.5	66.8	31.5	66.7	31.5	6963	79.5
1978	5547.5	1065.0	59.5	38.8	59.5	38.8	59.5	38.8	6032	68.9
1979	7441.4	1065.0	79.8	47.2	79.8	47.2	79.8	47.2	7593	86.7
1980	5618.4	1065.0	69.8	51.1	69.5	51.1	60.1	49.4	6073	69.1
1981	7471.9	1065.0	85.2	56.1	85.2	56.1	80.1	53.9	7452	85.1
1982	4450.9	1065.0	54.9	55.9	54.9	55.9	47.7	53.1	4778	54.5
1983	6385.6	1065.0	74.8	58.1	74.8	58.0	68.4	54.9	6514	74.4
1984	4044.4	1065.0	66.5	58.9	66.5	58.9	43.2	53.7	5844	66.5
1985	0.0	1065.0	0.0	57.5	0.0	57.5	0.0	52.4	0	0.0
1986	Data not available - Long-term shutdown									
1987	"									
1988	"									
1989	"									
1990	"									
1991	3804.0	1065.0	70.2	58.3	70.2	58.3	60.7	52.9	4125	70.1
1992	8388.8	1065.0	95.7	61.5	95.7	61.5	89.7	56.0	8401	95.6
1993	5776.8	1065.0	65.7	61.8	65.7	61.8	61.9	56.5	5753	65.7
1994	7345.2	1065.0	82.6	63.3	82.6	63.3	78.7	58.1	7234	82.6
1995	9197.0	1065.0	98.5	65.7	98.5	65.7	98.6	60.8	8629	98.5
1996	8046.3	1065.0	88.7	67.2	88.7	67.1	86.0	62.4	7795	88.7
1997	8372.9	1065.0	92.8	68.7	92.8	68.7	89.7	64.1	8130	92.8
1998	9301.0	1065.0	99.7	70.4	99.7	70.4	99.7	66.1	8730	99.7
1999	8586.3	1100.0	91.0	71.6	91.0	71.6	89.1	67.3	7985	91.2
2000	9733.5	1118.0	99.4	73.0	99.4	73.0	99.1	69.0	8727	99.4
2001	8414.6	1118.0	87.2	73.8	87.2	73.7	85.9	69.9	7636	87.2
2002	8911.3	1118.0	94.4	74.7	94.4	74.7	91.0	70.9	8269	94.4
2003	8369.2	1118.0	90.1	75.4	90.1	75.4	85.5	71.5	7888	90.0
2004	9786.0	1118.0	99.2	76.5	99.2	76.5	99.6	72.8	8715	99.2
2005	8802.2	1118.0	91.9	77.1	91.9	77.1	89.9	73.5	8052	91.9
2006	9232.6	1118.0	95.5	77.9	95.5	77.9	94.3	74.3	8365	95.5
2007	7606.6	1196.0	83.2	78.1	83.2	78.1	72.5	74.2	7229	82.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		72			178	
B. Refuelling without a maintenance					23	
C. Inspection, maintenance or repair combined with refuelling	1364			892		
D. Inspection, maintenance or repair without refuelling	93			73	3	
E. Testing of plant systems or components				7	2	
H. Nuclear regulatory requirements						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					383	
Subtotal	1457	72	0	972	589	0
Total		1529			1561	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		5
12. Reactor I&C Systems		26
13. Reactor Auxiliary Systems		10
14. Safety Systems		7
15. Reactor Cooling Systems		26
31. Turbine and auxiliaries		50
32. Feedwater and Main Steam System		9
35. All other I&C Systems		0
41. Main Generator Systems	72	9
42. Electrical Power Supply Systems		25
XX. Miscellaneous Systems		1
Total	72	168

US-296 BROWNS FERRY-3

Operator: TVA (TENNESSEE VALLEY AUTHORITY)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1114.0 MW(e)
Design Net Capacity: 1065.0 MW(e)
Design Discharge Burnup: 38000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9086.1 GW(e).h
Energy Availability Factor: 95.6%
Load Factor: 93.1%
Operating Factor: 95.6%
Energy Unavailability Factor: 4.4%
Total Off-line Time: 388 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	837.7	626.5	832.4	805.8	824.5	780.3	794.7	742.5	602.4	816.1	774.9	648.2	9086.1
EAF (%)	100.0	86.1	100.0	100.0	100.0	100.0	100.0	100.0	81.8	100.0	96.7	81.7	95.6
UCF (%)	100.0	86.1	100.0	100.0	100.0	100.0	100.0	100.0	81.8	100.0	96.7	81.7	95.6
LF (%)	101.1	83.7	100.6	100.5	99.5	97.3	95.9	89.6	75.1	98.5	96.5	78.2	93.1
OF (%)	100.0	86.0	100.0	100.0	100.0	100.0	100.0	100.0	81.7	100.0	97.9	80.2	95.6
EUF (%)	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	18.2	0.0	3.3	18.3	4.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2	0.0	3.3	18.0	3.3
UCLF (%)	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	01 Jul 1968	Lifetime Generation:	137572.5 GW(e).h
Date of First Criticality:	08 Aug 1976	Cumulative Energy Availability Factor:	80.8%
Date of Grid Connection:	12 Sep 1976	Cumulative Load Factor:	78.3%
Date of Commercial Operation:	01 Mar 1977	Cumulative Unit Capability Factor:	80.8%
		Cumulative Energy Unavailability Factor:	19.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	5850.9	1065.0	74.8	74.8	74.8	74.8	74.8	74.8	6499	88.5
1978	5554.3	1065.0	59.5	66.5	59.5	66.5	59.5	66.5	6225	71.1
1979	5482.5	1065.0	58.8	63.8	58.8	63.8	58.8	63.8	5704	65.1
1980	6936.1	1065.0	79.9	68.0	79.3	67.8	74.1	66.5	6949	79.1
1981	6264.8	1065.0	72.6	68.9	72.6	68.8	67.2	66.6	6358	72.6
1982	4892.8	1065.0	57.4	67.0	57.4	66.9	52.4	64.2	5022	57.3
1983	5394.3	1065.0	61.9	66.2	61.9	66.1	57.8	63.3	5417	61.8
1984	290.5	1065.0	5.7	58.5	5.7	58.4	3.1	55.6	503	5.7
1985	1526.5	1065.0	68.8	58.8	68.8	58.7	66.4	55.9	1496	69.3
1986	Data not available - Long-term shutdown									
1987	"									
1988	"									
1989	"									
1990	"									
1991	"									
1992	"									
1993	"									
1994	"									
1995	764.6	1065.0	79.5	59.1	79.5	59.0	70.4	56.1	810	79.4
1996	8803.5	1065.0	95.8	63.1	95.8	63.0	94.1	60.2	8412	95.8
1997	8523.4	1065.0	94.8	66.2	94.8	66.1	91.4	63.3	8302	94.8
1998	7884.9	1078.0	89.9	68.3	89.9	68.3	83.5	65.1	7863	89.8
1999	9730.6	1118.0	100.0	71.0	100.0	71.0	99.4	68.0	8760	100.0
2000	9097.4	1118.0	94.6	72.9	94.6	72.9	92.6	70.0	8311	94.6
2001	9803.4	1118.0	100.0	74.9	100.0	74.8	100.1	72.2	8760	100.0
2002	9260.1	1118.0	96.0	76.3	96.0	76.3	94.6	73.7	8407	96.0
2003	9325.7	1118.0	96.6	77.6	96.6	77.6	95.2	75.1	8463	96.6
2004	8701.8	1118.0	91.1	78.4	91.1	78.4	88.6	75.9	8000	91.1
2005	9153.7	1114.0	96.2	79.4	95.7	79.4	93.8	76.9	8384	95.7
2006	8638.8	1117.0	91.1	80.1	91.1	80.0	88.3	77.5	7974	91.0
2007	9086.1	1114.0	95.6	80.8	95.6	80.8	93.1	78.3	8372	95.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		95			194	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling				501	251	
D. Inspection, maintenance or repair without refuelling	290			17		
E. Testing of plant systems or components				4		
H. Nuclear regulatory requirements						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				3	16	
L. Human factor related					3	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Z. Others					1	
Subtotal	290	95	0	525	470	2
Total		385			997	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems	93	11
13. Reactor Auxiliary Systems		10
14. Safety Systems		16
15. Reactor Cooling Systems		39
31. Turbine and auxiliaries		57
32. Feedwater and Main Steam System		22
41. Main Generator Systems	2	0
42. Electrical Power Supply Systems		20
XX. Miscellaneous Systems		1
Total	95	178

US-325 BRUNSWICK-1

Operator: PROGENG (Progress Energy Carolinas, Inc.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 938.0 MW(e)
Design Net Capacity: 821.0 MW(e)
Design Discharge Burnup: 27800 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7881.9 GW(e).h
Energy Availability Factor: 94.6%
Load Factor: 95.9%
Operating Factor: 94.6%
Energy Unavailability Factor: 5.4%
Total Off-line Time: 470 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	717.8	654.2	719.7	549.5	706.3	683.3	710.1	692.1	334.3	715.4	698.2	700.9	7881.9
EAF (%)	100.0	100.0	100.0	83.1	100.0	100.0	100.0	100.0	51.7	100.0	100.0	100.0	94.6
UCF (%)	100.0	100.0	100.0	83.1	100.0	100.0	100.0	100.0	51.7	100.0	100.0	100.0	94.6
LF (%)	102.9	103.8	103.3	81.4	101.2	101.2	101.7	99.2	49.5	102.5	103.2	100.4	95.9
OF (%)	100.0	100.0	100.0	83.1	100.0	100.0	100.0	100.0	51.7	100.0	100.0	100.0	94.6
EUF (%)	0.0	0.0	0.0	16.9	0.0	0.0	0.0	0.0	48.3	0.0	0.0	0.0	5.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.3	0.0	0.0	0.0	4.0
UCLF (%)	0.0	0.0	0.0	16.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 07 Feb 1970
Date of First Criticality: 08 Oct 1976
Date of Grid Connection: 04 Dec 1976
Date of Commercial Operation: 18 Mar 1977

Lifetime Generation: 140812.9 GW(e).h
Cumulative Energy Availability Factor: 73.0%
Cumulative Load Factor: 70.5%
Cumulative Unit Capability Factor: 73.3%
Cumulative Energy Unavailability Factor: 27.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	2515.8	790.0	43.4	43.4	43.4	43.4	43.4	43.4	3920	53.4
1978	5122.9	790.0	74.1	60.1	74.1	60.1	74.0	60.0	7624	87.0
1979	3169.2	790.0	45.8	55.1	45.8	55.1	45.8	55.0	4778	54.5
1980	3939.2	790.0	69.7	58.9	69.7	58.9	56.8	55.5	6045	68.8
1981	2574.8	790.0	49.0	56.8	49.0	56.8	37.2	51.7	4155	47.4
1982	2935.4	790.0	62.9	57.9	62.9	57.9	42.4	50.1	5428	62.0
1983	1419.1	790.0	26.4	53.3	26.4	53.3	20.5	45.8	2116	24.2
1984	5037.7	790.0	81.4	56.9	79.8	56.7	72.6	49.2	6797	77.4
1985	1942.5	790.0	38.9	54.9	38.9	54.7	28.1	46.8	3247	37.1
1986	5973.8	790.0	92.2	58.6	92.2	58.5	86.3	50.8	8068	92.1
1987	4057.9	790.0	65.6	59.3	65.6	59.1	58.6	51.6	5651	64.5
1988	4458.4	790.0	74.5	60.6	74.5	60.4	64.2	52.6	6514	74.2
1989	4193.8	790.0	64.6	60.9	64.6	60.8	60.6	53.2	5568	63.6
1990	4340.3	790.0	68.4	61.4	68.4	61.3	62.7	53.9	5909	67.5
1991	4400.3	780.0	67.3	61.8	67.3	61.7	64.4	54.6	5849	66.8
1992	1874.5	767.0	28.3	59.8	28.3	59.7	27.8	53.0	2486	28.3
1993	0.0	767.0	0.0	56.3	0.0	56.2	0.0	49.9	0	0.0
1994	5956.3	767.0	88.6	58.1	88.6	58.0	88.7	52.0	7755	88.5
1995	5780.7	767.0	84.4	59.4	84.4	59.3	86.0	53.8	7391	84.4
1996	5708.2	767.0	88.6	60.9	85.3	60.6	84.7	55.3	7490	85.3
1997	6857.0	767.0	97.7	62.6	97.7	62.4	102.1	57.5	8558	97.7
1998	6360.4	820.0	91.4	64.0	89.9	63.7	88.5	59.0	7811	89.2
1999	6998.2	820.0	99.0	65.6	96.8	65.2	97.4	60.8	8481	96.8
2000	6746.5	820.0	92.5	66.8	92.5	66.4	93.7	62.2	8122	92.5
2001	7303.1	820.0	100.0	68.1	100.0	67.8	101.7	63.8	8760	100.0
2002	6697.3	820.0	89.9	69.0	89.9	68.7	93.2	65.0	7874	89.9
2003	7701.8	872.0	98.9	70.2	98.9	69.9	100.8	66.5	8653	98.8
2004	7093.4	872.0	90.5	71.0	89.4	70.7	92.6	67.5	7853	89.4
2005	7755.1	872.0	94.5	71.9	94.5	71.6	101.5	68.8	8275	94.5
2006	7190.8	938.0	86.8	72.5	86.8	72.2	87.5	69.5	7601	86.8
2007	7881.9	938.0	94.6	73.3	94.6	73.0	95.9	70.5	8290	94.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					382	
B. Refuelling without a maintenance					40	
C. Inspection, maintenance or repair combined with refuelling				1299		
D. Inspection, maintenance or repair without refuelling	347			486		
E. Testing of plant systems or components				6	69	
H. Nuclear regulatory requirements		121			1	
J. Grid failure or grid unavailability						4
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					13	19
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						3
Subtotal	347	121	0	1791	505	26
Total		468			2322	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		17
13. Reactor Auxiliary Systems		10
14. Safety Systems		26
15. Reactor Cooling Systems		67
21. Fuel Handling and Storage Facilities		6
31. Turbine and auxiliaries		37
32. Feedwater and Main Steam System		13
41. Main Generator Systems		100
42. Electrical Power Supply Systems		51
XX. Miscellaneous Systems		11
Total	0	338

US-324 BRUNSWICK-2

Operator: PROGENG (Progress Energy Carolinas, Inc.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 937.0 MW(e)
Design Net Capacity: 821.0 MW(e)
Design Discharge Burnup: 27800 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7140.3 GW(e).h
Energy Availability Factor: 87.3%
Load Factor: 87.0%
Operating Factor: 87.3%
Energy Unavailability Factor: 12.7%
Total Off-line Time: 1115 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	697.7	636.3	36.6	255.1	703.2	673.5	698.2	695.5	656.6	701.9	676.2	709.3	7140.3
EAF (%)	100.0	100.0	6.3	41.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.3
UCF (%)	100.0	100.0	6.3	41.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.3
LF (%)	100.1	101.1	5.3	37.8	100.9	99.8	100.2	99.8	97.3	100.7	100.1	101.7	87.0
OF (%)	100.0	100.0	6.5	41.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.3
EUF (%)	0.0	0.0	93.7	58.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7
PUF (%)	0.0	0.0	93.7	58.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	07 Feb 1970	Lifetime Generation:	141066.5 GW(e).h
Date of First Criticality:	20 Mar 1975	Cumulative Energy Availability Factor:	71.6%
Date of Grid Connection:	29 Apr 1975	Cumulative Load Factor:	68.0%
Date of Commercial Operation:	03 Nov 1975	Cumulative Unit Capability Factor:	72.0%
		Cumulative Energy Unavailability Factor:	28.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	706.8	804.0	93.2	93.2	93.2	93.2	58.8	58.8	1364	93.2
1976	2486.6	789.0	35.8	44.3	35.8	44.3	35.9	39.3	4911	55.9
1977	2436.6	790.0	35.3	40.1	35.3	40.1	35.2	37.4	4872	55.6
1978	4794.6	790.0	69.3	49.3	69.3	49.3	69.3	47.4	7018	80.1
1979	3652.1	790.0	52.8	50.1	52.8	50.1	52.8	48.7	5741	65.5
1980	1864.6	790.0	38.1	47.8	38.1	47.8	26.9	44.5	3086	35.1
1981	3283.9	790.0	68.0	51.1	68.0	51.1	47.5	45.0	5800	66.2
1982	1942.1	790.0	41.4	49.7	41.4	49.7	28.1	42.6	3378	38.6
1983	3941.7	790.0	65.3	51.6	65.3	51.6	57.0	44.4	5630	64.3
1984	1429.0	790.0	28.9	49.2	28.9	49.2	20.6	41.8	2236	25.5
1985	5021.9	790.0	84.1	52.6	80.0	52.2	72.6	44.8	6983	79.7
1986	2933.1	790.0	48.5	52.2	48.5	51.9	42.4	44.6	4027	46.0
1987	5694.1	790.0	94.0	55.6	94.0	55.3	82.3	47.7	8203	93.6
1988	3929.2	790.0	62.8	56.2	62.8	55.9	56.6	48.4	5361	61.0
1989	4195.4	790.0	67.4	57.0	67.4	56.7	60.6	49.2	5763	65.8
1990	4067.4	790.0	66.1	57.6	66.1	57.3	58.8	49.8	5616	64.1
1991	3664.2	775.0	57.8	57.6	57.8	57.3	54.0	50.1	4959	56.6
1992	1315.1	754.0	25.1	55.8	25.1	55.5	19.9	48.4	2200	25.0
1993	4000.9	754.0	63.1	56.2	63.1	55.9	60.6	49.1	5525	63.1
1994	4823.2	754.0	73.5	57.0	73.5	56.8	73.0	50.3	6436	73.5
1995	6216.0	754.0	100.0	59.1	100.0	58.9	94.1	52.3	8760	100.0
1996	5188.1	754.0	86.9	60.3	82.9	60.0	78.3	53.5	7277	82.8
1997	6055.4	754.0	89.2	61.6	89.2	61.2	91.7	55.2	7816	89.2
1998	6963.5	811.0	98.9	63.3	97.7	62.9	98.0	57.1	8539	97.5
1999	6095.2	811.0	89.2	64.4	86.5	63.9	85.8	58.3	7577	86.5
2000	7055.0	811.0	98.1	65.8	98.1	65.3	99.0	60.0	8616	98.1
2001	6540.4	811.0	91.3	66.8	91.3	66.3	92.1	61.3	7996	91.3
2002	7078.6	811.0	98.3	68.0	98.3	67.5	99.6	62.7	8609	98.3
2003	7028.1	811.0	91.0	68.8	91.0	68.4	98.9	64.1	7966	90.9
2004	7756.8	900.0	98.5	70.0	98.5	69.6	98.1	65.4	8639	98.3
2005	6781.7	811.0	88.2	70.6	88.2	70.2	95.4	66.4	7724	88.2
2006	7361.3	937.0	91.0	71.4	91.0	71.0	89.7	67.3	7972	91.0
2007	7140.3	937.0	87.3	72.0	87.3	71.6	87.0	68.0	7645	87.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					688	
B. Refuelling without a maintenance					53	
C. Inspection, maintenance or repair combined with refuelling	1114			1179		
D. Inspection, maintenance or repair without refuelling				396		
E. Testing of plant systems or components				14	4	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				0		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					5	32
Subtotal	1114	0	0	1589	750	32
Total		1114			2371	

7. Equipment Related Full Outages, Analysis by System

System	2007	1975 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		3
12. Reactor I&C Systems		25
13. Reactor Auxiliary Systems		14
14. Safety Systems		38
15. Reactor Cooling Systems		264
31. Turbine and auxiliaries		92
32. Feedwater and Main Steam System		53
33. Circulating Water System		0
41. Main Generator Systems		33
42. Electrical Power Supply Systems		74
XX. Miscellaneous Systems		6
Total	0	602

US-454 BYRON-1**Operator:** EXELON (Exelon Generation)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1164.0 MW(e)
Design Net Capacity: 1120.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10024.2 GW(e).h
Energy Availability Factor: 96.8%
Load Factor: 98.3%
Operating Factor: 96.8%
Energy Unavailability Factor: 3.2%
Total Off-line Time: 278 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	890.4	803.3	881.9	857.7	878.5	847.4	874.6	870.1	846.8	536.8	849.5	887.1	10024.2
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	62.7	100.0	100.0	96.8
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	62.7	100.0	100.0	96.8
LF (%)	102.8	102.7	102.0	102.3	101.4	101.1	101.0	100.5	101.0	62.0	101.2	102.4	98.3
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	62.6	100.0	100.0	96.8
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.3	0.0	0.0	3.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.3	0.0	0.0	3.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 31 Dec 1975 **Lifetime Generation:** 165690.8 GW(e).h
Date of First Criticality: 02 Feb 1985 **Cumulative Energy Availability Factor:** 86.9%
Date of Grid Connection: 01 Mar 1985 **Cumulative Load Factor:** 83.0%
Date of Commercial Operation: 16 Sep 1985 **Cumulative Unit Capability Factor:** 87.0%
Cumulative Energy Unavailability Factor: 13.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	1012.9	1124.0	46.8	46.8	46.8	46.8	34.9	34.9	1191	46.4
1986	7396.0	1129.0	89.1	79.5	89.1	79.5	74.8	65.7	7760	88.6
1987	5355.7	1125.0	69.6	75.2	68.7	74.8	54.3	60.8	6005	68.6
1988	6303.7	1112.0	72.9	74.5	72.9	74.2	64.5	61.9	6393	72.8
1989	8945.5	1105.0	99.7	80.3	99.7	80.1	92.4	68.9	8737	99.7
1990	6951.7	1105.0	80.3	80.3	80.3	80.1	71.8	69.5	7059	80.6
1991	6318.1	1105.0	81.3	80.5	81.3	80.3	65.3	68.8	7148	81.6
1992	8986.4	1105.0	99.3	83.0	99.3	82.9	92.6	72.0	8723	99.3
1993	7366.9	1105.0	80.9	82.8	80.9	82.7	76.1	72.5	7104	81.1
1994	6801.6	1105.0	81.2	82.6	81.2	82.5	70.3	72.3	7136	81.5
1995	7706.5	1105.0	82.3	82.6	82.3	82.5	79.6	73.0	7228	82.5
1996	6871.1	1105.0	74.7	81.9	74.7	81.8	70.8	72.8	6588	75.0
1997	7161.7	1105.0	76.8	81.5	76.8	81.4	74.0	72.9	6737	76.9
1998	7804.6	1105.0	81.5	81.5	81.5	81.4	80.6	73.5	7145	81.6
1999	8908.5	1105.0	90.6	82.1	90.6	82.1	92.0	74.8	7944	90.7
2000	9291.9	1105.0	94.2	82.9	94.2	82.8	95.7	76.1	8284	94.3
2001	10389.9	1163.0	100.0	84.0	100.0	83.9	104.1	77.9	8760	100.0
2002	9827.8	1163.0	94.1	84.6	94.1	84.5	96.5	79.0	8256	94.2
2003	9858.8	1163.0	94.0	85.1	94.0	85.1	96.8	80.0	8248	94.2
2004	10381.3	1152.0	100.0	85.9	100.0	85.9	102.2	81.2	8784	100.0
2005	9589.7	1194.0	92.9	86.3	92.9	86.2	91.7	81.8	8135	92.9
2006	9317.0	1164.0	90.4	86.5	90.4	86.4	91.4	82.2	7914	90.3
2007	10024.2	1164.0	96.8	87.0	96.8	86.9	98.3	83.0	8482	96.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					72	
B. Refuelling without a maintenance					9	
C. Inspection, maintenance or repair combined with refuelling				816		
D. Inspection, maintenance or repair without refuelling				185		
H. Nuclear regulatory requirements		277			2	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				4	6	3
Subtotal	0	277	0	1005	89	3
Total		277			1097	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		3
13. Reactor Auxiliary Systems		1
15. Reactor Cooling Systems		7
21. Fuel Handling and Storage Facilities		22
31. Turbine and auxiliaries		16
32. Feedwater and Main Steam System		10
41. Main Generator Systems		0
42. Electrical Power Supply Systems		5
Total	0	64

US-455 BYRON-2**Operator:** EXELON (Exelon Generation)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1136.0 MW(e)
Design Net Capacity: 1120.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8828.6 GW(e).h
Energy Availability Factor: 88.3%
Load Factor: 88.7%
Operating Factor: 88.3%
Energy Unavailability Factor: 11.7%
Total Off-line Time: 1024 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	866.9	781.8	835.3	12.9	725.3	830.0	855.9	855.6	833.6	531.6	831.3	868.3	8828.6
EAF (%)	100.0	100.0	100.0	0.0	95.3	100.0	100.0	100.0	100.0	64.0	100.0	100.0	88.3
UCF (%)	100.0	100.0	100.0	0.0	95.3	100.0	100.0	100.0	100.0	64.0	100.0	100.0	88.3
LF (%)	102.6	102.4	99.0	1.6	85.8	101.5	101.3	101.2	101.9	62.9	101.5	102.7	88.7
OF (%)	100.0	100.0	100.0	3.2	92.1	100.0	100.0	100.0	100.0	64.0	100.0	100.0	88.3
EUf (%)	0.0	0.0	0.0	100.0	4.7	0.0	0.0	0.0	0.0	36.0	0.0	0.0	11.7
PUF (%)	0.0	0.0	0.0	100.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.0	0.0	0.0	3.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 31 Dec 1975 **Lifetime Generation:** 158691.6 GW(e).h
Date of First Criticality: 09 Jan 1987 **Cumulative Energy Availability Factor:** 91.4%
Date of Grid Connection: 06 Feb 1987 **Cumulative Load Factor:** 87.1%
Date of Commercial Operation: 21 Aug 1987 **Cumulative Unit Capability Factor:** 91.4%
Cumulative Energy Unavailability Factor: 8.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	1970.9	1128.0	100.0	100.0	100.0	100.0	47.5	47.5	2310	62.9
1988	6357.9	1112.0	95.9	97.1	95.9	97.1	65.1	59.8	8419	95.8
1989	6069.5	1105.0	79.5	89.9	79.5	89.9	62.7	61.0	6981	79.7
1990	6052.7	1105.0	75.0	85.5	75.0	85.5	62.5	61.5	6598	75.3
1991	8772.7	1105.0	96.9	88.1	96.9	88.1	90.6	68.0	8489	96.9
1992	7000.3	1105.0	79.8	86.6	79.8	86.6	72.1	68.8	7027	80.0
1993	7622.5	1105.0	84.3	86.2	84.3	86.2	78.7	70.3	7399	84.5
1994	9504.2	1105.0	99.4	88.0	99.4	88.0	98.2	74.1	8704	99.4
1995	8183.8	1105.0	87.9	88.0	87.9	88.0	84.5	75.3	7710	88.0
1996	7830.6	1105.0	82.0	87.3	82.0	87.3	80.7	75.9	7225	82.3
1997	9102.9	1105.0	95.2	88.1	95.2	88.1	94.0	77.6	8344	95.3
1998	8592.8	1105.0	89.5	88.2	89.5	88.2	88.8	78.6	7855	89.7
1999	9174.1	1105.0	93.3	88.6	93.3	88.6	94.8	79.9	8182	93.4
2000	10005.4	1105.0	99.3	89.4	99.3	89.4	103.1	81.6	8724	99.3
2001	9826.7	1131.0	95.3	89.8	95.3	89.8	100.1	82.9	8353	95.4
2002	9537.6	1131.0	92.3	90.0	92.3	90.0	96.3	83.8	8119	92.7
2003	10298.7	1131.0	100.0	90.6	100.0	90.6	103.9	85.1	8760	100.0
2004	9623.2	1125.0	95.0	90.9	95.0	90.9	97.2	85.8	8360	95.2
2005	9521.0	1162.0	95.1	91.1	95.1	91.1	93.5	86.2	8328	95.1
2006	10158.7	1136.0	100.0	91.6	100.0	91.6	102.1	87.0	8760	100.0
2007	8828.6	1136.0	88.3	91.4	88.3	91.4	88.7	87.1	7736	88.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				8	82	
C. Inspection, maintenance or repair combined with refuelling	755			575		
D. Inspection, maintenance or repair without refuelling				35		
H. Nuclear regulatory requirements		267				
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					8	
Subtotal	755	267	0	618	90	0
Total		1022			708	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		5
15. Reactor Cooling Systems		11
16. Steam generation systems		20
17. Safety I&C Systems (excluding reactor I&C)		3
21. Fuel Handling and Storage Facilities		2
32. Feedwater and Main Steam System		4
35. All other I&C Systems		2
41. Main Generator Systems		10
42. Electrical Power Supply Systems		1
Total	0	58

US-483 CALLAWAY-1

Operator: AMERGENE (AMERGEN ENERGY GENERATING CO.)
Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1190.0 MW(e)
Design Net Capacity: 1171.0 MW(e)
Design Discharge Burnup: 42000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9372.0 GW(e).h
Energy Availability Factor: 88.4%
Load Factor: 89.9%
Operating Factor: 88.4%
Energy Unavailability Factor: 11.6%
Total Off-line Time: 1018 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	921.4	832.1	773.4	17.4	592.9	866.7	894.6	889.0	869.5	906.1	888.7	920.3	9372.0
EAF (%)	100.0	100.0	86.8	0.0	73.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.4
UCF (%)	100.0	100.0	86.8	0.0	73.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.4
LF (%)	104.1	104.1	87.5	2.0	67.0	101.2	101.0	100.4	101.5	102.3	103.6	103.9	89.9
OF (%)	100.0	100.0	86.7	3.2	70.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.4
EUUF (%)	0.0	0.0	13.2	100.0	26.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6
PUF (%)	0.0	0.0	0.0	100.0	26.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5
UCLF (%)	0.0	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 16 Apr 1976 **Lifetime Generation:** 180489.0 GW(e).h
Date of First Criticality: 02 Oct 1984 **Cumulative Energy Availability Factor:** 88.1%
Date of Grid Connection: 24 Oct 1984 **Cumulative Load Factor:** 86.8%
Date of Commercial Operation: 19 Dec 1984 **Cumulative Unit Capability Factor:** 88.1%
Cumulative Energy Unavailability Factor: 11.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	323.0	1140.0	100.0	100.0	100.0	100.0	90.0	90.0	303	100.0
1985	8045.8	1120.0	90.0	90.3	90.0	90.3	82.0	82.3	7882	90.0
1986	7199.1	1120.0	81.6	86.0	81.6	86.0	73.4	77.9	7121	81.3
1987	6321.8	1120.0	70.0	80.8	70.0	80.8	64.4	73.5	6141	70.1
1988	8144.2	1120.0	92.5	83.7	92.5	83.7	82.8	75.8	7413	84.4
1989	8350.9	1118.0	84.0	83.8	84.0	83.8	85.3	77.7	7368	84.1
1990	8005.1	1125.0	81.8	83.4	81.8	83.4	81.2	78.3	7167	81.8
1991	9979.4	1125.0	99.6	85.7	99.6	85.7	101.3	81.5	8726	99.6
1992	8094.6	1125.0	82.0	85.3	82.0	85.3	81.9	81.6	7204	82.0
1993	8390.0	1120.0	85.5	85.3	85.5	85.3	85.5	82.0	7498	85.6
1994	10006.5	1115.0	99.6	86.7	99.6	86.7	102.4	84.0	8726	99.6
1995	8252.8	1125.0	84.0	86.5	84.0	86.5	83.7	84.0	7356	84.0
1996	8890.4	1125.0	89.6	86.7	89.6	86.7	90.0	84.5	7864	89.5
1997	8954.6	1125.0	100.0	87.8	100.0	87.8	90.9	85.0	8760	100.0
1998	8516.8	1125.0	90.4	87.9	90.4	87.9	86.4	85.1	7913	90.3
1999	8596.4	1125.0	87.8	87.9	87.8	87.9	87.2	85.2	7707	88.0
2000	9991.8	1125.0	100.0	88.7	99.7	88.7	101.1	86.2	8762	99.7
2001	8384.1	1125.0	85.4	88.5	85.4	88.5	85.1	86.2	7500	85.6
2002	8386.6	1125.0	85.2	88.3	85.2	88.3	85.1	86.1	7484	85.4
2003	9699.7	1125.0	95.8	88.7	95.8	88.7	98.4	86.8	8397	95.9
2004	7842.4	1125.0	77.9	88.2	77.9	88.2	79.4	86.4	6856	78.1
2005	8021.2	1137.0	79.6	87.7	79.6	87.7	80.5	86.1	6966	79.5
2006	10098.9	1190.0	95.0	88.1	95.0	88.1	96.9	86.6	8324	95.0
2007	9372.0	1190.0	88.4	88.1	88.4	88.1	89.9	86.8	7742	88.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		98			156	
B. Refuelling without a maintenance					7	
C. Inspection, maintenance or repair combined with refuelling	918			686		
D. Inspection, maintenance or repair without refuelling				92	1	
E. Testing of plant systems or components				0		
H. Nuclear regulatory requirements					0	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					6	0
L. Human factor related					2	
Z. Others					1	
Subtotal	918	98	0	778	173	0
Total		1016			951	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		10
15. Reactor Cooling Systems		14
16. Steam generation systems	98	0
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		32
32. Feedwater and Main Steam System		29
33. Circulating Water System		15
35. All other I&C Systems		2
41. Main Generator Systems		10
42. Electrical Power Supply Systems		20
XX. Miscellaneous Systems		7
Total	98	140

US-317 CALVERT CLIFFS-1

Operator: CCNPP (Calvert Cliffs Nuclear Power Plant Inc.)

Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 873.0 MW(e)
Design Net Capacity: 845.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7545.4 GW(e).h
Energy Availability Factor: 99.3%
Load Factor: 98.7%
Operating Factor: 99.3%
Energy Unavailability Factor: 0.7%
Total Off-line Time: 59 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	646.0	499.6	661.3	643.8	649.9	625.3	637.9	631.2	614.7	636.4	637.8	661.5	7545.4
EAF (%)	96.8	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.9	100.0	100.0	99.3
UCF (%)	96.8	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.9	100.0	100.0	99.3
LF (%)	99.5	85.2	102.0	102.4	100.1	99.5	98.2	97.2	97.8	98.0	101.3	101.8	98.7
OF (%)	97.8	98.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.8	100.0	100.0	99.3
EUf (%)	3.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.7
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.3
UCLF (%)	3.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 07 Jul 1969
Date of First Criticality: 07 Oct 1974
Date of Grid Connection: 03 Jan 1975
Date of Commercial Operation: 08 May 1975

Lifetime Generation: 171295.0 GW(e).h
Cumulative Energy Availability Factor: 76.6%
Cumulative Load Factor: 77.3%
Cumulative Unit Capability Factor: 76.9%
Cumulative Energy Unavailability Factor: 23.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	3641.1	800.0	77.2	77.2	77.2	77.2	77.4	77.4	4807	81.8
1976	6303.9	800.0	89.7	84.7	89.7	84.7	89.7	84.8	8356	95.1
1977	4882.0	807.0	68.6	78.6	68.6	78.6	69.1	78.9	6313	72.1
1978	4676.1	810.0	65.9	75.2	65.9	75.2	65.9	75.3	6150	70.2
1979	4194.1	810.0	59.1	71.7	59.1	71.7	59.1	71.8	6154	70.3
1980	4542.5	810.0	77.0	72.6	72.2	71.8	63.8	70.4	6349	72.3
1981	6109.6	821.0	86.4	74.7	86.4	74.0	85.0	72.6	7544	86.1
1982	5362.1	825.0	73.9	74.6	73.9	74.0	74.2	72.8	6419	73.3
1983	5570.7	825.0	77.0	74.9	77.0	74.4	77.1	73.3	6719	76.7
1984	6221.6	825.0	86.7	76.1	84.3	75.4	85.9	74.6	7422	84.5
1985	4359.7	825.0	58.8	74.5	58.8	73.8	60.3	73.3	5186	59.2
1986	5830.7	825.0	78.2	74.8	78.2	74.2	80.7	73.9	6855	78.3
1987	5268.5	825.0	70.9	74.5	70.9	73.9	72.9	73.8	6233	71.2
1988	5164.2	825.0	71.0	74.2	71.0	73.7	71.3	73.7	6263	71.3
1989	1345.6	825.0	18.8	70.4	18.8	69.9	18.6	69.9	1727	19.7
1990	1344.4	825.0	20.1	67.2	20.1	66.7	18.6	66.6	1840	21.0
1991	5465.3	825.0	75.5	67.7	75.5	67.3	75.6	67.1	6638	75.8
1992	4113.9	825.0	55.6	67.0	55.6	66.6	56.8	66.5	4927	56.1
1993	7334.9	827.0	98.2	68.7	98.2	68.3	101.2	68.4	8599	98.2
1994	4686.4	832.0	64.6	68.5	64.6	68.1	64.2	68.2	5656	64.6
1995	7030.2	835.0	96.9	69.9	96.9	69.5	96.1	69.6	8487	96.9
1996	4846.9	835.0	65.7	69.7	65.7	69.3	66.1	69.4	5762	65.6
1997	7158.4	835.0	95.9	70.9	95.9	70.5	97.9	70.7	8400	95.9
1998	6116.8	835.0	82.0	71.3	82.0	71.0	83.6	71.2	7184	82.0
1999	6994.3	835.0	96.8	72.4	94.0	72.0	95.6	72.2	8231	94.0
2000	6449.6	827.0	86.2	72.9	86.2	72.5	88.7	72.9	7580	86.3
2001	7454.8	825.0	99.6	73.9	99.6	73.5	103.2	74.0	8727	99.6
2002	4645.2	825.0	62.8	73.5	62.8	73.2	64.3	73.7	5506	62.9
2003	7532.5	825.0	100.0	74.4	100.0	74.1	104.2	74.7	8760	100.0
2004	6974.0	870.0	91.5	75.0	91.5	74.7	93.3	75.4	8034	91.5
2005	7626.3	845.0	99.6	75.9	99.6	75.5	103.0	76.3	8726	99.6
2006	6449.8	873.0	84.3	76.1	84.3	75.8	84.3	76.6	7386	84.3
2007	7545.4	873.0	99.3	76.9	99.3	76.6	98.7	77.3	8701	99.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		27			301	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling				996		
D. Inspection, maintenance or repair without refuelling	30			506		
E. Testing of plant systems or components				48		
H. Nuclear regulatory requirements					6	21
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					66	13
Subtotal	30	27	0	1550	381	34
Total		57			1965	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		11
12. Reactor I&C Systems		9
13. Reactor Auxiliary Systems		24
14. Safety Systems		38
15. Reactor Cooling Systems		68
16. Steam generation systems		0
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries	27	66
32. Feedwater and Main Steam System		50
33. Circulating Water System		1
35. All other I&C Systems		2
41. Main Generator Systems		2
42. Electrical Power Supply Systems		14
XX. Miscellaneous Systems		0
Total	27	286

US-318 CALVERT CLIFFS-2

Operator: CCNPP (Calvert Cliffs Nuclear Power Plant Inc.)

Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 862.0 MW(e)
Design Net Capacity: 845.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6807.8 GW(e).h
Energy Availability Factor: 90.2%
Load Factor: 90.2%
Operating Factor: 90.2%
Energy Unavailability Factor: 9.8%
Total Off-line Time: 858 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	652.0	586.5	0.0	538.2	653.3	615.9	628.6	620.2	608.5	628.1	625.0	651.4	6807.8
EAF (%)	100.0	85.7	-0.1	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.2
UCF (%)	100.0	85.7	-0.1	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.2
LF (%)	101.7	101.2	0.0	86.7	101.9	99.2	98.0	96.7	98.0	97.9	100.6	101.6	90.2
OF (%)	100.0	88.8	0.0	94.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.2
EUf (%)	0.0	14.3	100.1	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8
PUf (%)	0.0	14.3	100.1	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 07 Jul 1969
Date of First Criticality: 30 Nov 1976
Date of Grid Connection: 07 Dec 1976
Date of Commercial Operation: 01 Apr 1977

Lifetime Generation: 168285.8 GW(e).h
Cumulative Energy Availability Factor: 80.3%
Cumulative Load Factor: 80.1%
Cumulative Unit Capability Factor: 80.4%
Cumulative Energy Unavailability Factor: 19.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	4541.5	810.0	100.0	100.0	100.0	100.0	85.0	85.0	5676	86.0
1978	5226.6	810.0	72.8	84.5	72.8	84.5	73.7	78.5	7129	81.4
1979	5489.0	812.0	76.6	81.6	76.6	81.6	77.2	78.0	6792	77.5
1980	6412.3	825.0	98.9	86.3	96.2	85.6	88.5	80.9	8425	95.9
1981	5416.0	825.0	80.1	85.0	80.1	84.4	74.9	79.6	7005	80.0
1982	5005.2	825.0	74.2	83.1	74.2	82.6	69.3	77.8	6496	74.2
1983	6113.1	825.0	86.4	83.6	86.4	83.2	84.6	78.8	7567	86.4
1984	5338.4	825.0	73.7	82.3	73.7	82.0	73.7	78.1	6502	74.0
1985	5608.0	825.0	77.4	81.7	77.4	81.4	77.6	78.1	6789	77.5
1986	7006.7	825.0	96.0	83.2	96.0	82.9	97.0	80.0	8405	95.9
1987	4832.0	825.0	66.3	81.6	66.3	81.4	66.9	78.8	5859	66.9
1988	6602.7	825.0	88.8	82.2	88.8	82.0	91.1	79.8	7813	88.9
1989	1448.5	825.0	18.3	77.2	18.3	77.0	20.0	75.1	1731	19.8
1990	0.0	825.0	0.0	71.6	0.0	71.4	0.0	69.7	0	0.0
1991	3635.6	825.0	51.3	70.2	51.3	70.0	50.3	68.3	4515	51.5
1992	6590.3	825.0	89.3	71.4	89.3	71.3	90.9	69.8	7855	89.4
1993	4975.2	827.0	67.4	71.2	67.4	71.0	68.6	69.7	5939	67.8
1994	6576.5	835.0	90.6	72.3	90.6	72.1	89.8	70.9	7925	90.5
1995	5911.1	840.0	81.4	72.8	81.4	72.6	80.3	71.4	7121	81.3
1996	7247.7	840.0	97.5	74.1	97.5	73.9	98.2	72.8	8561	97.5
1997	5979.9	840.0	81.1	74.4	81.1	74.3	81.3	73.2	7100	81.1
1998	7225.5	840.0	95.8	75.4	95.8	75.3	98.2	74.3	8393	95.8
1999	6332.7	840.0	84.5	75.8	84.5	75.7	86.1	74.9	7400	84.5
2000	7391.0	835.0	98.1	76.8	98.1	76.6	100.7	76.0	8614	98.1
2001	6201.5	835.0	83.3	77.0	83.3	76.9	84.8	76.3	7297	83.3
2002	7480.6	835.0	100.0	77.9	100.0	77.8	102.3	77.3	8760	100.0
2003	6156.9	835.0	81.4	78.0	81.4	77.9	84.2	77.6	7124	81.3
2004	7552.2	858.0	99.4	78.8	99.4	78.7	101.3	78.5	8729	99.4
2005	7114.3	858.0	94.2	79.4	94.2	79.3	94.6	79.1	8249	94.2
2006	7406.3	862.0	98.4	80.1	98.4	80.0	98.1	79.7	8621	98.4
2007	6807.8	862.0	90.2	80.4	90.2	80.3	90.2	80.1	7902	90.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					235	
B. Refuelling without a maintenance					14	
C. Inspection, maintenance or repair combined with refuelling	857			1304		
D. Inspection, maintenance or repair without refuelling				88		
E. Testing of plant systems or components				10	1	
H. Nuclear regulatory requirements					1	7
J. Grid failure or grid unavailability					0	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					12	
L. Human factor related					4	
Subtotal	857	0	0	1402	267	7
Total		857			1676	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		15
13. Reactor Auxiliary Systems		27
14. Safety Systems		1
15. Reactor Cooling Systems		70
16. Steam generation systems		3
31. Turbine and auxiliaries		28
32. Feedwater and Main Steam System		46
35. All other I&C Systems		3
41. Main Generator Systems		16
42. Electrical Power Supply Systems		19
Total	0	230

US-413 CATAWBA-1**Operator:** DUKE (DUKE POWER CO.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1129.0 MW(e)
Design Net Capacity: 1145.0 MW(e)
Design Discharge Burnup: 40200 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10070.9 GW(e).h
Energy Availability Factor: 99.6%
Load Factor: 101.8%
Operating Factor: 99.6%
Energy Unavailability Factor: 0.4%
Total Off-line Time: 32 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	827.5	787.6	825.4	839.1	862.9	828.7	854.4	850.2	826.9	860.3	840.4	867.6	10070.9
EAF (%)	97.5	100.0	98.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6
UCF (%)	97.5	100.0	98.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6
LF (%)	98.5	103.8	98.4	103.2	102.7	102.0	101.7	101.2	101.7	102.4	103.2	103.3	101.8
OF (%)	97.4	100.0	98.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6
EUf (%)	2.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	2.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 07 Aug 1975 **Lifetime Generation:** 167867.7 GW(e).h
Date of First Criticality: 07 Jan 1985 **Cumulative Energy Availability Factor:** 83.8%
Date of Grid Connection: 22 Jan 1985 **Cumulative Load Factor:** 82.6%
Date of Commercial Operation: 29 Jun 1985 **Cumulative Unit Capability Factor:** 83.8%
Cumulative Energy Unavailability Factor: 16.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	3440.5	1138.0	78.8	78.8	78.8	78.8	67.3	67.3	3513	78.7
1986	5199.1	1145.0	58.9	65.6	58.9	65.6	51.8	57.1	5151	58.8
1987	6406.0	1145.0	68.0	66.6	68.0	66.6	63.9	59.8	5924	67.6
1988	7640.0	1129.0	79.8	70.3	79.8	70.3	77.0	64.6	7003	79.7
1989	7775.4	1129.0	84.7	73.4	84.7	73.4	78.6	67.7	7278	83.1
1990	6900.5	1129.0	71.7	73.1	71.7	73.1	69.8	68.1	6277	71.7
1991	6681.1	1129.0	71.1	72.8	71.1	72.8	67.6	68.0	6227	71.1
1992	7050.9	1129.0	72.1	72.7	72.1	72.7	71.1	68.4	6338	72.2
1993	7597.1	1129.0	79.0	73.5	79.0	73.5	76.8	69.4	6916	78.9
1994	9778.8	1129.0	99.6	76.2	99.6	76.2	98.9	72.5	8722	99.6
1995	8721.6	1129.0	88.1	77.3	88.1	77.3	88.2	74.0	7712	88.0
1996	6341.1	1129.0	66.2	76.4	66.2	76.4	63.9	73.1	5806	66.1
1997	9192.5	1129.0	90.7	77.5	90.7	77.5	92.9	74.7	7966	90.9
1998	8903.7	1129.0	90.5	78.5	90.5	78.5	90.0	75.8	7923	90.4
1999	9073.7	1129.0	91.2	79.3	91.2	79.3	91.7	76.9	7987	91.2
2000	8923.0	1129.0	89.3	80.0	89.3	80.0	90.0	77.8	7844	89.3
2001	9977.0	1129.0	99.6	81.2	99.6	81.2	100.9	79.2	8722	99.6
2002	9481.6	1129.0	94.2	81.9	94.2	81.9	95.9	80.1	8250	94.2
2003	8198.5	1129.0	81.7	81.9	81.7	81.9	82.9	80.3	7157	81.7
2004	9711.1	1129.0	98.0	82.7	98.0	82.7	97.9	81.2	8608	98.0
2005	9177.3	1129.0	91.7	83.1	91.7	83.1	92.8	81.7	8027	91.6
2006	8115.0	1129.0	80.7	83.0	80.7	83.0	82.1	81.7	7066	80.7
2007	10070.9	1129.0	99.6	83.8	99.6	83.8	101.8	82.6	8728	99.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		30		2	339	
B. Refuelling without a maintenance					7	
C. Inspection, maintenance or repair combined with refuelling				955		
D. Inspection, maintenance or repair without refuelling				62		
E. Testing of plant systems or components				2	4	
H. Nuclear regulatory requirements					5	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				2	7	
Subtotal	0	30	0	1023	362	0
Total		30			1385	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		6
12. Reactor I&C Systems		32
13. Reactor Auxiliary Systems		11
14. Safety Systems		25
15. Reactor Cooling Systems		111
16. Steam generation systems		1
31. Turbine and auxiliaries	12	15
32. Feedwater and Main Steam System	18	67
33. Circulating Water System		13
41. Main Generator Systems		12
42. Electrical Power Supply Systems		33
XX. Miscellaneous Systems		9
Total	30	335

US-414 CATAWBA-2**Operator:** DUKE (DUKE POWER CO.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1129.0 MW(e)
Design Net Capacity: 1145.0 MW(e)
Design Discharge Burnup: 40200 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8351.6 GW(e).h
Energy Availability Factor: 82.9%
Load Factor: 84.4%
Operating Factor: 82.9%
Energy Unavailability Factor: 17.1%
Total Off-line Time: 1498 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	870.4	784.9	865.5	838.7	861.8	808.7	856.1	852.5	379.9	0.0	361.0	872.0	8351.6
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-5.6	2.4	98.6	100.0	82.9
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-5.6	2.4	98.6	100.0	82.9
LF (%)	103.6	103.5	103.2	103.2	102.6	99.5	101.9	101.5	46.7	0.0	44.4	103.8	84.4
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	46.7	0.0	48.7	100.0	82.9
EUUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.6	97.6	1.4	0.0	17.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.2	0.0	0.5	0.0	4.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.3	97.6	0.9	0.0	12.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 07 Aug 1975 **Lifetime Generation:** 160409.6 GW(e).h
Date of First Criticality: 08 May 1986 **Cumulative Energy Availability Factor:** 84.3%
Date of Grid Connection: 18 May 1986 **Cumulative Load Factor:** 83.1%
Date of Commercial Operation: 19 Aug 1986 **Cumulative Unit Capability Factor:** 84.3%
Cumulative Energy Unavailability Factor: 15.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	1324.2	1135.0	41.8	41.8	41.8	41.8	35.7	35.7	1325	40.9
1987	7169.5	1145.0	80.2	69.8	80.2	69.8	71.5	61.8	7014	80.1
1988	5435.0	1129.0	71.8	70.6	71.8	70.6	54.8	58.9	5571	63.4
1989	6527.1	1129.0	72.0	71.0	72.0	71.0	66.0	61.0	6302	71.9
1990	6503.0	1129.0	69.0	70.6	69.0	70.6	65.8	62.1	5984	68.3
1991	7274.9	1129.0	75.6	71.5	75.6	71.5	73.6	64.2	6621	75.6
1992	9273.5	1129.0	94.3	75.1	94.3	75.1	93.5	68.8	8281	94.3
1993	8177.4	1129.0	82.6	76.1	82.6	76.1	82.7	70.7	7233	82.6
1994	7691.7	1129.0	79.7	76.5	79.7	76.5	77.8	71.5	6978	79.7
1995	7960.2	1129.0	80.8	77.0	80.8	77.0	80.5	72.5	7074	80.8
1996	9233.6	1129.0	92.3	78.5	92.3	78.5	93.1	74.5	8107	92.3
1997	8593.4	1129.0	87.1	79.2	87.1	79.2	86.9	75.6	7623	87.0
1998	8672.3	1129.0	86.5	79.8	86.5	79.8	87.7	76.5	7580	86.5
1999	8855.4	1129.0	88.2	80.4	88.2	80.4	89.5	77.5	7727	88.2
2000	8981.4	1129.0	90.3	81.1	90.3	81.1	90.6	78.4	7928	90.3
2001	8574.1	1129.0	85.7	81.4	85.7	81.4	86.7	78.9	7507	85.7
2002	10172.3	1129.0	100.0	82.6	100.0	82.6	102.9	80.4	8760	100.0
2003	9318.2	1129.0	92.7	83.1	92.7	83.1	94.2	81.2	8117	92.7
2004	8835.7	1129.0	87.4	83.4	87.4	83.4	89.1	81.6	7672	87.3
2005	10099.1	1129.0	99.7	84.2	99.7	84.2	102.1	82.7	8737	99.7
2006	8779.2	1129.0	87.9	84.4	87.9	84.4	88.8	83.0	7696	87.9
2007	8351.6	1129.0	82.9	84.3	82.9	84.3	84.4	83.1	7262	82.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1117		16	387	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	376			774		
D. Inspection, maintenance or repair without refuelling				64	0	
E. Testing of plant systems or components	3			3	2	
H. Nuclear regulatory requirements					4	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	11	
Subtotal	379	1117	0	857	406	0
Total		1496			1263	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		6
13. Reactor Auxiliary Systems		27
14. Safety Systems		9
15. Reactor Cooling Systems		53
16. Steam generation systems		5
17. Safety I&C Systems (excluding reactor I&C)		15
31. Turbine and auxiliaries	1117	18
32. Feedwater and Main Steam System		94
41. Main Generator Systems		131
42. Electrical Power Supply Systems		40
XX. Miscellaneous Systems		0
Total	1117	398

US-461 CLINTON-1**Operator:** AMERGENE (AMERGEN ENERGY GENERATING CO.)**Contractor:** GE (GENERAL ELECTRIC CO.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1043.0 MW(e)
Design Net Capacity: 950.0 MW(e)
Design Discharge Burnup: 36000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9250.4 GW(e).h
Energy Availability Factor: 99.5%
Load Factor: 101.2%
Operating Factor: 99.5%
Energy Unavailability Factor: 0.5%
Total Off-line Time: 46 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	796.3	719.6	781.7	777.2	794.2	705.5	791.4	787.3	762.7	795.1	773.9	765.5	9250.4
EAF (%)	100.0	100.0	100.0	100.0	100.0	93.6	100.0	100.0	100.0	100.0	100.0	100.0	99.5
UCF (%)	100.0	100.0	100.0	100.0	100.0	93.6	100.0	100.0	100.0	100.0	100.0	100.0	99.5
LF (%)	102.6	102.7	100.9	103.5	102.3	94.0	102.0	101.5	101.6	102.5	102.9	98.6	101.2
OF (%)	100.0	100.0	100.0	100.0	100.0	93.6	100.0	100.0	100.0	100.0	100.0	100.0	99.5
EUf (%)	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 24 Feb 1976 **Lifetime Generation:** 103669.6 GW(e).h
Date of First Criticality: 27 Feb 1987 **Cumulative Energy Availability Factor:** 73.6%
Date of Grid Connection: 24 Apr 1987 **Cumulative Load Factor:** 70.1%
Date of Commercial Operation: 24 Nov 1987 **Cumulative Unit Capability Factor:** 73.7%
Cumulative Energy Unavailability Factor: 26.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	684.1	932.0	100.0	100.0	100.0	100.0	50.1	50.1	898	61.3
1988	5860.7	930.0	82.5	85.0	82.5	85.0	71.7	68.6	7244	82.5
1989	2861.9	931.0	45.1	66.6	45.1	66.6	35.1	53.2	3947	45.1
1990	3596.6	930.0	52.6	62.2	52.6	62.2	44.1	50.3	4604	52.6
1991	6048.0	930.0	79.1	66.2	79.1	66.2	74.2	56.1	6927	79.1
1992	4935.3	930.0	66.3	66.3	66.3	66.3	60.4	56.9	5824	66.3
1993	5879.2	930.0	77.1	68.0	77.1	68.0	72.2	59.4	6750	77.1
1994	7410.3	930.0	93.8	71.6	93.8	71.6	91.0	63.8	8217	93.8
1995	6109.2	930.0	81.6	72.8	81.6	72.8	75.0	65.1	7140	81.5
1996	5312.9	930.0	66.5	72.1	66.5	72.1	65.0	65.1	5833	66.4
1997	0.0	930.0	0.0	65.1	0.0	65.0	0.0	58.7	0	0.0
1998	0.0	930.0	0.0	59.2	0.0	59.2	0.0	53.5	0	0.0
1999	4704.2	930.0	60.2	59.3	60.2	59.3	57.7	53.8	5270	60.2
2000	6888.8	930.0	85.9	61.3	85.9	61.3	84.3	56.1	7542	85.9
2001	7877.2	930.0	97.8	63.9	97.8	63.9	96.7	59.0	8565	97.8
2002	7657.5	1022.0	89.8	65.7	89.8	65.7	88.8	61.1	7805	89.1
2003	8700.8	1022.0	98.6	67.9	98.6	67.9	97.2	63.5	8634	98.6
2004	8000.4	1022.0	91.5	69.4	90.0	69.3	89.1	65.1	7911	90.1
2005	8688.7	1026.0	97.0	71.0	97.0	71.0	96.7	67.0	8497	97.0
2006	8233.3	1052.0	91.1	72.2	91.1	72.1	89.3	68.3	7974	91.0
2007	9250.4	1043.0	99.5	73.7	99.5	73.6	101.2	70.1	8714	99.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		45			356	
B. Refuelling without a maintenance					19	
C. Inspection, maintenance or repair combined with refuelling				1737		
D. Inspection, maintenance or repair without refuelling				199		
E. Testing of plant systems or components				2		
H. Nuclear regulatory requirements					9	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					59	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						6
Subtotal	0	45	0	1938	443	6
Total		45			2387	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		9
14. Safety Systems		9
15. Reactor Cooling Systems		100
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		44
32. Feedwater and Main Steam System	45	25
41. Main Generator Systems		7
42. Electrical Power Supply Systems		24
Total	45	220

US-397 COLUMBIA

Operator: ENERGINW (Energy Northwest)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1131.0 MW(e)
Design Net Capacity: 1100.0 MW(e)
Design Discharge Burnup: 42000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8108.6 GW(e).h
Energy Availability Factor: 85.4%
Load Factor: 81.8%
Operating Factor: 85.4%
Energy Unavailability Factor: 14.6%
Total Off-line Time: 1279 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	838.2	758.8	811.1	619.5	254.8	42.4	768.7	764.7	783.6	831.1	795.9	839.8	8108.6
EAF (%)	100.0	100.0	100.0	84.6	35.5	10.0	99.1	95.9	100.0	100.0	100.0	100.0	85.4
UCF (%)	100.0	100.0	100.0	84.6	35.5	10.0	99.1	95.9	100.0	100.0	100.0	100.0	85.4
LF (%)	99.6	99.8	96.5	76.1	30.3	5.2	91.3	90.9	96.2	98.8	97.6	99.8	81.8
OF (%)	100.0	100.0	100.0	84.4	35.5	12.4	96.6	95.8	100.0	100.0	100.0	100.0	85.4
EUUF (%)	0.0	0.0	0.0	15.4	64.5	90.0	0.9	4.1	0.0	0.0	0.0	0.0	14.6
PUF (%)	0.0	0.0	0.0	0.0	64.5	80.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1
UCLF (%)	0.0	0.0	0.0	15.5	0.0	10.0	0.9	4.1	0.0	0.0	0.0	0.0	2.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 19 Feb 1972
Date of First Criticality: 19 Jan 1984
Date of Grid Connection: 27 May 1984
Date of Commercial Operation: 13 Dec 1984

Lifetime Generation: 143000.1 GW(e).h
Cumulative Energy Availability Factor: 77.0%
Cumulative Load Factor: 70.8%
Cumulative Unit Capability Factor: 77.7%
Cumulative Energy Unavailability Factor: 23.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	410.4	1104.0	90.5	90.5	90.5	90.5	84.6	84.6	399	90.7
1985	5176.4	1100.0	77.1	77.7	77.1	77.7	53.7	55.2	6624	75.6
1986	5183.2	1095.0	74.1	76.0	74.1	76.0	54.0	54.6	6133	70.0
1987	5398.0	1095.0	67.9	73.3	67.9	73.3	56.3	55.2	5979	68.3
1988	6000.4	1095.0	68.2	72.1	68.2	72.1	62.4	56.9	6020	68.5
1989	6127.9	1095.0	76.1	72.9	76.1	72.9	63.9	58.3	6680	76.3
1990	5791.3	1095.0	65.3	71.6	65.3	71.6	60.4	58.7	5752	65.7
1991	4272.5	1090.0	47.1	68.2	47.1	68.2	44.7	56.7	4194	47.9
1992	5705.4	1085.0	62.0	67.4	62.0	67.4	59.9	57.1	5505	62.7
1993	7142.0	1107.0	77.2	68.5	77.2	68.5	73.6	58.9	6757	77.1
1994	6753.8	1086.0	73.7	69.0	73.7	69.0	71.0	60.1	6500	74.2
1995	6948.0	1091.0	76.0	69.6	76.0	69.6	72.7	61.3	6680	76.3
1996	5562.6	1106.0	79.7	70.5	68.3	69.5	57.2	60.9	5999	68.3
1997	6129.9	1107.0	77.4	71.0	71.3	69.7	63.2	61.1	6248	71.3
1998	6922.8	1107.0	72.8	71.1	72.8	69.9	71.4	61.8	6373	72.8
1999	6099.7	1107.0	68.5	71.0	68.5	69.8	62.9	61.9	6018	68.7
2000	8605.2	1107.0	95.4	72.5	95.4	71.4	88.5	63.6	8385	95.5
2001	8257.7	1107.0	86.1	73.3	86.1	72.3	85.2	64.9	7553	86.2
2002	8981.3	1107.0	97.4	74.6	97.4	73.7	92.6	66.4	8528	97.4
2003	7614.9	1107.0	80.4	74.9	80.4	74.0	78.5	67.0	7039	80.4
2004	8981.6	1107.0	93.6	75.9	93.6	75.0	92.4	68.3	8222	93.6
2005	8242.3	1108.0	86.1	76.4	86.1	75.5	84.9	69.1	7537	86.0
2006	9328.3	1131.0	97.8	77.4	97.8	76.6	94.2	70.3	8568	97.8
2007	8108.6	1131.0	85.4	77.7	85.4	77.0	81.8	70.8	7481	85.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		220			284	
B. Refuelling without a maintenance					16	
C. Inspection, maintenance or repair combined with refuelling	1056			1089		
D. Inspection, maintenance or repair without refuelling				124		
E. Testing of plant systems or components				27	0	
H. Nuclear regulatory requirements					43	
J. Grid failure or grid unavailability						63
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				77	142	
L. Human factor related					5	
Subtotal	1056	220	0	1317	490	63
Total		1276			1870	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		1
13. Reactor Auxiliary Systems		2
14. Safety Systems		18
15. Reactor Cooling Systems		34
17. Safety I&C Systems (excluding reactor I&C)		28
21. Fuel Handling and Storage Facilities		16
31. Turbine and auxiliaries		93
32. Feedwater and Main Steam System	79	32
35. All other I&C Systems		6
41. Main Generator Systems		1
42. Electrical Power Supply Systems	141	48
Total	220	279

US-445 COMANCHE PEAK-1**Operator:** TXU (TXU Electric Co.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1150.0 MW(e)
Design Net Capacity: 1150.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8596.7 GW(e).h
Energy Availability Factor: 84.9%
Load Factor: 85.3%
Operating Factor: 84.9%
Energy Unavailability Factor: 15.1%
Total Off-line Time: 1323 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	873.9	653.0	0.0	237.3	870.7	837.8	861.3	859.1	832.8	866.7	845.2	859.1	8596.7
EAF (%)	100.0	82.1	-0.1	36.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.9
UCF (%)	100.0	82.1	-0.1	36.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.9
LF (%)	102.1	84.5	0.0	28.7	101.8	101.2	100.7	100.4	100.6	101.3	101.9	100.4	85.3
OF (%)	100.0	83.9	0.0	34.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.9
EUUF (%)	0.0	17.9	100.1	63.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.1
PUF (%)	0.0	17.9	100.1	63.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.1
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 19 Dec 1974 **Lifetime Generation:** 129757.1 GW(e).h
Date of First Criticality: 03 Apr 1990 **Cumulative Energy Availability Factor:** 88.1%
Date of Grid Connection: 24 Apr 1990 **Cumulative Load Factor:** 83.7%
Date of Commercial Operation: 13 Aug 1990 **Cumulative Unit Capability Factor:** 88.1%
Cumulative Energy Unavailability Factor: 11.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1990	2513.5	1140.0	78.9	78.9	78.9	78.9	65.5	65.5	2865	84.8
1991	5360.5	1150.0	60.5	65.6	60.5	65.6	53.2	56.6	5341	61.0
1992	6937.5	1150.0	79.1	71.3	79.1	71.3	68.7	61.7	6947	79.1
1993	7150.4	1150.0	79.1	73.6	79.1	73.6	71.0	64.4	6932	79.1
1994	9367.6	1150.0	98.8	79.3	98.8	79.3	93.0	70.9	8653	98.8
1995	7803.7	1150.0	85.0	80.4	85.0	80.4	77.5	72.2	7444	85.0
1996	7756.2	1150.0	83.0	80.8	82.7	80.8	76.8	72.9	7265	82.7
1997	9478.9	1150.0	98.8	83.2	98.8	83.2	94.1	75.8	8656	98.8
1998	8506.0	1150.0	89.6	84.0	89.6	84.0	84.4	76.8	7848	89.6
1999	8601.5	1150.0	90.4	84.7	90.4	84.7	85.4	77.7	7922	90.4
2000	9619.8	1150.0	100.0	86.2	100.0	86.1	95.2	79.4	8784	100.0
2001	8444.3	1150.0	88.9	86.4	88.9	86.4	83.8	79.8	7781	88.8
2002	7785.3	1150.0	83.0	86.1	83.0	86.1	77.3	79.6	7213	82.3
2003	9626.0	1150.0	98.9	87.1	98.9	87.1	95.6	80.8	8653	98.8
2004	9018.1	1150.0	89.8	87.3	89.8	87.2	89.3	81.4	7877	89.7
2005	9217.8	1084.0	91.4	87.5	91.4	87.5	97.1	82.3	8004	91.4
2006	10298.0	1150.0	100.0	88.3	100.0	88.3	102.2	83.5	8760	100.0
2007	8596.7	1150.0	84.9	88.1	84.9	88.1	85.3	83.7	7437	84.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1990 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					161	
B. Refuelling without a maintenance					18	
C. Inspection, maintenance or repair combined with refuelling	1322			675		
D. Inspection, maintenance or repair without refuelling				122		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					2	1
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)					4	
Subtotal	1322	0	0	797	185	1
Total		1322			983	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1990 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		20
13. Reactor Auxiliary Systems		0
15. Reactor Cooling Systems		6
16. Steam generation systems		9
31. Turbine and auxiliaries		40
32. Feedwater and Main Steam System		16
35. All other I&C Systems		9
41. Main Generator Systems		20
42. Electrical Power Supply Systems		22
Total	0	142

US-446 COMANCHE PEAK-2

Operator: TXU (TXU Electric Co.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1150.0 MW(e)
Design Net Capacity: 1150.0 MW(e)
Design Discharge Burnup: 36000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10249.0 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 101.7%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	878.4	792.8	875.8	846.2	870.4	839.1	862.4	860.1	834.9	867.3	845.8	875.8	10249.0
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	102.7	102.6	102.5	102.2	101.7	101.3	100.8	100.5	100.8	101.4	102.0	102.4	101.7
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 19 Dec 1974
Date of First Criticality: 24 Mar 1993
Date of Grid Connection: 09 Apr 1993
Date of Commercial Operation: 03 Aug 1993

Lifetime Generation: 108783.0 GW(e).h
Cumulative Energy Availability Factor: 90.3%
Cumulative Load Factor: 87.0%
Cumulative Unit Capability Factor: 90.4%
Cumulative Energy Unavailability Factor: 9.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1993	3441.8	1150.0	89.7	89.7	89.7	89.7	82.8	82.8	3245	89.7
1994	5263.2	1150.0	65.1	72.3	65.1	72.3	52.2	61.2	5697	65.0
1995	9166.6	1150.0	95.7	82.0	95.7	82.0	91.0	73.5	8382	95.7
1996	7370.4	1150.0	79.4	81.2	78.7	81.0	73.0	73.4	6911	78.7
1997	8062.1	1150.0	86.2	82.4	86.2	82.2	80.0	74.9	7554	86.2
1998	9345.3	1150.0	99.8	85.6	99.8	85.4	92.8	78.2	8741	99.8
1999	8756.0	1150.0	90.2	86.3	90.2	86.2	86.9	79.5	7901	90.2
2000	8868.0	1150.0	90.2	86.8	90.2	86.7	87.8	80.7	7927	90.2
2001	9877.9	1150.0	99.7	88.4	99.7	88.3	98.1	82.7	8731	99.7
2002	8793.8	1150.0	90.1	88.5	90.1	88.5	87.3	83.2	7888	90.0
2003	8123.4	1150.0	83.8	88.1	83.8	88.0	80.6	83.0	7307	83.4
2004	10038.9	1150.0	100.0	89.1	100.0	89.1	99.4	84.4	8784	100.0
2005	9225.4	1124.0	91.1	89.3	91.1	89.2	93.7	85.1	7979	91.1
2006	9598.2	1150.0	94.3	89.7	94.3	89.6	95.3	85.9	8260	94.3
2007	10249.0	1150.0	100.0	90.4	100.0	90.3	101.7	87.0	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1993 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					196	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling				524		
D. Inspection, maintenance or repair without refuelling				85		
E. Testing of plant systems or components				69		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				14	3	4
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)					23	
Z. Others					0	
Subtotal	0	0	0	692	222	4
Total	0			918		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1993 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		1
13. Reactor Auxiliary Systems		2
14. Safety Systems		45
15. Reactor Cooling Systems		61
16. Steam generation systems		2
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries		17
32. Feedwater and Main Steam System		49
41. Main Generator Systems		6
42. Electrical Power Supply Systems		4
Total	0	187

US-298 COOPER

Operator: NPPD (NEBRASKA PUBLIC POWER DISTRICT)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 760.0 MW(e)
Design Net Capacity: 778.0 MW(e)
Design Discharge Burnup: 17349 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6671.2 GW(e).h
Energy Availability Factor: 99.1%
Load Factor: 100.2%
Operating Factor: 99.1%
Energy Unavailability Factor: 0.9%
Total Off-line Time: 75 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	551.2	528.4	581.9	561.0	498.0	554.0	562.4	556.5	556.2	581.3	556.1	584.3	6671.2
EAF (%)	100.0	100.0	100.0	100.0	89.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1
UCF (%)	100.0	100.0	100.0	100.0	89.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1
LF (%)	97.5	103.5	103.0	102.5	88.1	101.2	99.5	98.4	101.6	102.8	101.5	103.3	100.2
OF (%)	100.0	100.0	100.0	100.0	89.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1
EUF (%)	0.0	0.0	0.0	0.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 04 Jun 1968
Date of First Criticality: 21 Feb 1974
Date of Grid Connection: 10 May 1974
Date of Commercial Operation: 01 Jul 1974

Lifetime Generation: 146013.4 GW(e).h
Cumulative Energy Availability Factor: 74.9%
Cumulative Load Factor: 70.1%
Cumulative Unit Capability Factor: 75.0%
Cumulative Energy Unavailability Factor: 25.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	1740.5	778.0	100.0	100.0	100.0	100.0	50.7	50.7	3240	73.4
1975	3363.2	764.0	50.3	67.2	50.3	67.2	50.3	50.4	7320	83.6
1976	3642.6	764.0	54.3	62.0	54.3	62.0	54.3	51.9	6626	75.4
1977	4540.1	764.0	67.9	63.7	67.9	63.7	67.8	56.5	7546	86.1
1978	4886.8	764.0	73.0	65.8	73.0	65.8	73.0	60.1	7966	90.9
1979	4995.0	764.0	74.6	67.4	74.6	67.4	74.6	62.8	7670	87.6
1980	3787.5	764.0	71.6	68.0	70.6	67.9	56.4	61.8	6240	71.0
1981	3851.1	764.0	71.0	68.4	71.0	68.3	57.5	61.2	6239	71.2
1982	5276.1	764.0	84.4	70.3	84.4	70.2	78.8	63.3	7412	84.6
1983	3343.3	764.0	62.7	69.5	62.7	69.4	50.0	61.9	5544	63.3
1984	3470.0	764.0	67.6	69.3	67.1	69.2	51.7	60.9	5901	67.2
1985	1067.7	764.0	20.1	65.1	20.1	64.9	16.0	57.0	1884	21.5
1986	4052.1	764.0	74.7	65.8	74.7	65.7	60.5	57.3	6546	74.7
1987	5522.1	764.0	94.6	68.0	94.6	67.8	82.5	59.2	8291	94.6
1988	4200.6	764.0	66.5	67.8	66.5	67.7	62.6	59.4	5887	67.0
1989	4790.9	764.0	74.9	68.3	74.9	68.2	71.6	60.2	6594	75.3
1990	5111.4	764.0	78.5	68.9	78.5	68.8	76.4	61.2	6908	78.9
1991	4803.8	764.0	77.9	69.4	77.9	69.3	71.8	61.8	6830	78.0
1992	6227.9	764.0	96.0	70.9	96.0	70.8	92.8	63.4	8436	96.0
1993	3712.9	764.0	56.8	70.1	56.8	70.1	55.5	63.0	5041	57.5
1994	2227.3	764.0	33.4	68.4	33.4	68.3	33.3	61.6	3033	34.6
1995	4127.8	764.0	64.0	68.2	64.0	68.1	61.7	61.6	5663	64.6
1996	6338.9	764.0	97.2	69.5	97.2	69.4	94.5	63.1	8540	97.2
1997	5455.7	764.0	83.6	70.1	83.6	70.0	81.5	63.8	7336	83.7
1998	4869.9	764.0	74.4	70.2	74.4	70.2	72.8	64.2	6544	74.7
1999	6510.4	764.0	97.7	71.3	97.7	71.2	97.3	65.5	8563	97.8
2000	4735.9	764.0	73.1	71.4	73.1	71.3	70.6	65.7	6414	73.0
2001	5206.5	764.0	79.9	71.7	79.9	71.6	77.8	66.1	7009	80.0
2002	6318.2	764.0	96.8	72.6	96.8	72.5	94.4	67.1	8478	96.8
2003	4492.3	764.0	71.3	72.5	71.3	72.5	67.1	67.1	6236	71.2
2004	6171.8	764.0	94.6	73.3	94.6	73.2	92.0	67.9	8299	94.5
2005	5891.9	757.0	88.8	73.7	88.8	73.7	88.8	68.6	7774	88.7
2006	5910.5	760.0	89.3	74.2	89.3	74.2	88.8	69.2	7823	89.3
2007	6671.2	760.0	99.1	75.0	99.1	74.9	100.2	70.1	8685	99.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		74		3	218	1
B. Refuelling without a maintenance					9	
C. Inspection, maintenance or repair combined with refuelling				1267		
D. Inspection, maintenance or repair without refuelling				140		
E. Testing of plant systems or components				0	1	
H. Nuclear regulatory requirements				5	7	5
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					236	0
P. Fire					3	
Subtotal	0	74	0	1415	474	8
Total		74			1897	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		3
12. Reactor I&C Systems	74	7
13. Reactor Auxiliary Systems		23
14. Safety Systems		7
15. Reactor Cooling Systems		13
31. Turbine and auxiliaries		103
32. Feedwater and Main Steam System		14
35. All other I&C Systems		6
41. Main Generator Systems		7
42. Electrical Power Supply Systems		12
XX. Miscellaneous Systems		7
Total	74	202

US-302 CRYSTAL RIVER-3

Operator: PROGRESS (Progress Energy Corporation)

Contractor: B&W (BABCOCK & WILCOX CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 838.0 MW(e)
Design Net Capacity: 825.0 MW(e)
Design Discharge Burnup: 36000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6672.9 GW(e).h
Energy Availability Factor: 90.2%
Load Factor: 90.9%
Operating Factor: 90.1%
Energy Unavailability Factor: 9.8%
Total Off-line Time: 864 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	640.7	497.4	639.7	619.4	637.5	611.8	626.9	627.6	613.5	621.9	38.4	498.2	6672.9
EAF (%)	100.0	94.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	6.8	79.8	90.2
UCF (%)	100.0	94.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	6.8	79.8	90.2
LF (%)	102.8	88.3	102.7	102.7	102.2	101.4	100.5	100.7	101.7	99.8	6.4	79.9	90.9
OF (%)	100.0	93.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	6.7	79.8	90.1
EUF (%)	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.2	20.2	9.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.2	20.2	9.4
UCLF (%)	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Sep 1968
Date of First Criticality: 14 Jan 1977
Date of Grid Connection: 30 Jan 1977
Date of Commercial Operation: 13 Mar 1977

Lifetime Generation: 142640.9 GW(e).h
Cumulative Energy Availability Factor: 72.2%
Cumulative Load Factor: 70.0%
Cumulative Unit Capability Factor: 72.3%
Cumulative Energy Unavailability Factor: 27.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	4037.7	818.0	67.2	67.2	67.2	67.2	67.2	67.2	5916	80.6
1978	2603.0	797.0	37.3	51.1	37.3	51.1	37.3	51.1	3627	41.4
1979	3761.8	797.0	53.9	52.1	53.9	52.1	53.9	52.1	5153	58.8
1980	3353.5	785.0	51.7	52.0	51.7	52.0	48.6	51.2	4663	53.1
1981	4083.7	782.0	62.8	54.2	62.4	54.1	59.6	52.9	5444	62.1
1982	4915.7	806.0	76.1	58.0	76.1	57.9	69.6	55.8	6651	75.9
1983	3772.3	806.0	59.1	58.2	59.1	58.1	53.4	55.5	5149	58.8
1984	6478.9	821.0	94.6	62.9	94.5	62.9	89.8	60.0	8295	94.4
1985	2863.6	821.0	48.2	61.2	48.2	61.2	39.8	57.6	4171	47.6
1986	2653.2	821.0	42.3	59.3	42.3	59.2	36.9	55.5	3659	41.8
1987	3620.8	821.0	60.2	59.4	60.2	59.3	50.3	55.0	5263	60.1
1988	5768.1	821.0	84.1	61.5	84.1	61.4	80.0	57.1	7375	84.0
1989	2930.0	821.0	48.4	60.5	48.4	60.4	40.7	55.9	4190	47.8
1990	4142.9	821.0	62.3	60.6	62.3	60.6	57.6	56.0	5421	61.9
1991	5457.2	821.0	82.2	62.1	81.5	62.0	75.9	57.3	7136	81.5
1992	5315.9	821.0	75.9	63.0	75.9	62.9	73.7	58.4	6633	75.5
1993	6080.0	821.0	84.8	64.3	84.8	64.2	84.5	60.0	7409	84.6
1994	5939.9	818.0	83.4	65.4	83.4	65.3	82.8	61.2	7292	83.2
1995	7234.9	818.0	99.7	67.2	99.7	67.1	101.0	63.4	8733	99.7
1996	2417.4	818.0	35.9	65.6	35.9	65.5	33.6	61.9	3107	35.4
1997	0.0	818.0	0.0	62.4	0.0	62.4	0.0	58.9	0	0.0
1998	6481.9	818.0	88.8	63.6	88.8	63.6	90.5	60.3	7777	88.8
1999	6373.1	818.0	87.6	64.7	87.6	64.6	88.9	61.6	7677	87.6
2000	7197.7	843.0	97.5	66.1	97.5	66.1	97.2	63.1	8555	97.4
2001	6514.2	834.0	88.9	67.1	88.9	67.0	89.2	64.2	7784	88.9
2002	7300.3	834.0	99.2	68.3	99.2	68.3	99.9	65.6	8692	99.2
2003	6579.4	834.0	90.3	69.2	90.3	69.1	90.1	66.5	7911	90.3
2004	7303.3	838.0	99.2	70.3	97.7	70.2	99.2	67.8	8584	97.7
2005	6350.9	838.0	87.6	70.9	87.6	70.8	86.5	68.4	7672	87.6
2006	6953.7	838.0	93.8	71.7	93.8	71.6	94.7	69.3	8220	93.8
2007	6672.9	838.0	90.2	72.3	90.2	72.2	90.9	70.0	7896	90.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		40		0	628	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	822			908		
D. Inspection, maintenance or repair without refuelling				332		
E. Testing of plant systems or components				1		
H. Nuclear regulatory requirements				21	349	
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				5	85	1
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						4
Subtotal	822	40	0	1267	1070	7
Total		862			2344	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		69
14. Safety Systems		25
15. Reactor Cooling Systems		217
16. Steam generation systems		6
17. Safety I&C Systems (excluding reactor I&C)	40	
21. Fuel Handling and Storage Facilities		153
31. Turbine and auxiliaries		71
32. Feedwater and Main Steam System		50
33. Circulating Water System		5
42. Electrical Power Supply Systems		17
XX. Miscellaneous Systems		1
Total	40	614

US-346 DAVIS BESSE-1

Operator: FENOC (FIRST ENERGY NUCLEAR OPERATING CO.)

Contractor: B&W (BABCOCK & WILCOX CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 889.0 MW(e)
Design Net Capacity: 906.0 MW(e)
Design Discharge Burnup: 50000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7705.8 GW(e).h
Energy Availability Factor: 99.5%
Load Factor: 98.9%
Operating Factor: 99.5%
Energy Unavailability Factor: 0.5%
Total Off-line Time: 48 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	668.9	601.8	640.0	643.5	630.0	640.5	661.8	659.0	629.8	663.6	646.5	620.3	7705.8
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.6	99.5
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.6	99.5
LF (%)	101.1	100.7	96.9	100.5	95.3	100.1	100.1	99.6	98.4	100.3	100.9	93.8	98.9
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.5	99.5
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	0.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	0.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	24 Mar 1971	Lifetime Generation:	135415.2 GW(e).h
Date of First Criticality:	12 Aug 1977	Cumulative Energy Availability Factor:	67.3%
Date of Grid Connection:	28 Aug 1977	Cumulative Load Factor:	64.5%
Date of Commercial Operation:	31 Jul 1978	Cumulative Unit Capability Factor:	67.4%
		Cumulative Energy Unavailability Factor:	32.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	1306.7	906.0	32.6	32.6	32.6	32.6	32.7	32.7	2090	47.3
1979	3129.1	906.0	39.4	37.2	39.4	37.2	39.4	37.2	4139	47.2
1980	2093.6	892.0	35.0	36.3	35.0	36.3	26.7	33.0	3171	36.1
1981	4363.4	888.0	67.4	45.1	67.4	45.1	56.1	39.5	5902	67.4
1982	3218.1	874.0	51.5	46.5	51.5	46.5	42.0	40.1	4508	51.5
1983	4883.3	874.0	72.3	51.1	72.3	51.1	63.8	44.3	6389	72.9
1984	4291.6	874.0	62.5	52.8	62.5	52.8	55.9	46.1	5486	62.5
1985	1942.9	862.0	30.9	50.0	30.9	50.0	25.7	43.4	2729	31.2
1986	3.5	860.0	1.3	44.4	1.3	44.4	0.0	38.4	116	1.3
1987	5064.0	860.0	82.8	48.3	82.8	48.3	67.2	41.4	7308	83.4
1988	1164.4	860.0	20.3	45.7	20.3	45.7	15.4	39.0	1891	21.5
1989	7322.1	870.0	97.1	50.2	97.1	50.2	96.0	43.9	8506	97.1
1990	4161.5	874.0	55.6	50.6	55.6	50.6	54.4	44.7	4867	55.6
1991	5843.9	874.0	78.6	52.7	78.6	52.7	76.3	47.1	6962	79.5
1992	7650.5	877.0	99.5	55.9	99.5	55.9	99.3	50.7	8742	99.5
1993	6083.4	871.0	82.7	57.6	82.7	57.6	79.7	52.5	7246	82.7
1994	6385.0	868.0	86.9	59.4	86.9	59.4	84.0	54.4	7667	87.5
1995	7670.6	869.0	100.0	61.7	100.0	61.7	100.8	57.1	8760	100.0
1996	6456.3	872.0	84.8	62.9	84.8	62.9	84.3	58.5	7452	84.8
1997	7183.4	873.0	93.4	64.5	93.4	64.5	93.9	60.3	8184	93.4
1998	6130.7	873.0	85.4	65.5	82.0	65.3	80.2	61.3	7181	82.0
1999	7370.0	873.0	94.9	66.9	94.9	66.7	96.4	62.9	8311	94.9
2000	6770.5	876.0	87.0	67.8	87.0	67.6	87.9	64.0	7633	86.9
2001	7690.8	882.0	99.8	69.1	99.8	69.0	99.5	65.6	8738	99.7
2002	929.0	882.0	12.4	66.8	12.4	66.7	12.0	63.4	1081	12.3
2003	0.0	882.0	0.0	64.2	0.0	64.0	0.0	60.9	0	0.0
2004	5778.4	882.0	75.6	64.6	75.6	64.5	74.6	61.4	6628	75.5
2005	7177.4	873.0	92.8	65.6	92.8	65.5	93.9	62.6	8125	92.8
2006	6375.4	891.0	83.0	66.2	83.0	66.1	81.7	63.2	7265	82.9
2007	7705.8	889.0	99.5	67.4	99.5	67.3	98.9	64.5	8712	99.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					845	
B. Refuelling without a maintenance					14	
C. Inspection, maintenance or repair combined with refuelling	47			1553		
D. Inspection, maintenance or repair without refuelling				232		
E. Testing of plant systems or components				12	0	
H. Nuclear regulatory requirements					0	55
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					18	9
Subtotal	47	0	0	1797	877	64
Total		47			2738	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		70
13. Reactor Auxiliary Systems		6
15. Reactor Cooling Systems		53
16. Steam generation systems		0
17. Safety I&C Systems (excluding reactor I&C)		4
31. Turbine and auxiliaries		15
32. Feedwater and Main Steam System		493
35. All other I&C Systems		3
41. Main Generator Systems		1
42. Electrical Power Supply Systems		85
XX. Miscellaneous Systems		1
Total	0	731

US-275 DIABLO CANYON-1

Operator: PGE (PACIFIC GAS & ELECTRIC CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1122.0 MW(e)
Design Net Capacity: 1084.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8868.3 GW(e).h
Energy Availability Factor: 89.9%
Load Factor: 90.2%
Operating Factor: 89.8%
Energy Unavailability Factor: 10.1%
Total Off-line Time: 890 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	848.0	764.3	849.3	792.3	18.8	816.2	850.7	629.5	823.8	850.2	816.1	809.2	8868.3
EAF (%)	100.0	100.0	100.0	96.7	7.1	100.0	100.0	76.8	100.0	100.0	100.0	100.0	89.9
UCF (%)	100.0	100.0	100.0	96.7	7.1	100.0	100.0	76.8	100.0	100.0	100.0	100.0	89.9
LF (%)	101.6	101.4	101.9	98.1	2.2	101.0	101.9	75.4	102.0	101.8	100.9	96.9	90.2
OF (%)	100.0	100.0	100.0	96.8	6.7	100.0	100.0	76.7	100.0	100.0	100.0	100.0	89.8
EUf (%)	0.0	0.0	0.0	3.3	92.9	0.0	0.0	23.2	0.0	0.0	0.0	0.0	10.1
PUF (%)	0.0	0.0	0.0	3.3	92.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	0.0	0.0	0.0	0.0	2.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 23 Apr 1968
Date of First Criticality: 29 Apr 1984
Date of Grid Connection: 11 Nov 1984
Date of Commercial Operation: 07 May 1985

Lifetime Generation: 164323.5 GW(e).h
Cumulative Energy Availability Factor: 85.7%
Cumulative Load Factor: 84.5%
Cumulative Unit Capability Factor: 85.8%
Cumulative Energy Unavailability Factor: 14.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	5234.2	1073.0	90.8	90.8	90.8	90.8	85.1	85.1	5206	90.8
1986	5316.2	1073.0	65.7	75.7	65.7	75.7	56.6	67.8	5757	65.7
1987	8284.2	1073.0	95.3	83.0	95.3	83.0	88.1	75.5	8340	95.2
1988	5276.1	1073.0	34.6	69.8	34.6	69.8	56.0	70.1	5555	63.2
1989	7199.9	1073.0	80.7	72.1	80.7	72.1	76.6	71.5	7069	80.7
1990	8713.5	1073.0	96.2	76.4	96.2	76.4	92.7	75.3	8425	96.2
1991	7366.3	1073.0	80.4	77.0	80.4	77.0	78.4	75.7	7125	81.3
1992	7454.7	1073.0	82.3	77.7	82.3	77.7	79.1	76.2	7224	82.2
1993	9028.0	1073.0	98.5	80.1	98.5	80.1	96.0	78.5	8630	98.5
1994	7372.0	1073.0	79.9	80.1	79.9	80.1	78.4	78.5	6991	79.8
1995	7451.8	1073.0	81.9	80.2	81.9	80.2	79.3	78.5	7175	81.9
1996	8786.8	1073.0	94.7	81.5	94.7	81.5	93.2	79.8	8316	94.7
1997	8195.0	1073.0	87.9	82.0	87.9	82.0	87.2	80.4	7700	87.9
1998	8967.8	1073.0	97.8	83.1	97.8	83.1	95.4	81.5	8564	97.8
1999	8224.8	1073.0	90.3	83.6	88.7	83.5	87.5	81.9	7764	88.6
2000	7853.5	1073.0	85.2	83.7	85.2	83.6	83.3	82.0	7485	85.2
2001	9504.6	1087.0	99.4	84.7	99.4	84.6	100.0	83.1	8708	99.4
2002	7048.2	1087.0	76.0	84.2	76.0	84.1	74.0	82.6	6652	75.9
2003	9585.4	1087.0	100.0	85.0	100.0	85.0	100.7	83.5	8760	100.0
2004	7233.9	1087.0	78.2	84.7	78.2	84.6	75.8	83.1	6869	78.2
2005	8323.4	1087.0	88.8	84.9	88.8	84.8	87.4	83.4	7775	88.8
2006	9945.0	1122.0	100.0	85.6	100.0	85.5	101.2	84.2	8760	100.0
2007	8868.3	1122.0	89.9	85.8	89.9	85.7	90.2	84.5	7870	89.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		172			221	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling	715			828		
D. Inspection, maintenance or repair without refuelling				82		
E. Testing of plant systems or components				0		
H. Nuclear regulatory requirements					2	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					10	5
Subtotal	715	172	0	910	245	5
Total		887			1160	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		3
14. Safety Systems		6
15. Reactor Cooling Systems		8
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries	172	7
32. Feedwater and Main Steam System		113
33. Circulating Water System		11
35. All other I&C Systems		1
41. Main Generator Systems		2
42. Electrical Power Supply Systems		46
Total	172	198

US-323 DIABLO CANYON-2**Operator:** PGE (PACIFIC GAS & ELECTRIC CO.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1118.0 MW(e)
Design Net Capacity: 1106.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9720.1 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 99.2%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	845.2	760.8	841.3	762.1	833.4	811.8	837.9	825.2	808.0	833.7	798.7	762.1	9720.1
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	101.6	101.3	101.3	94.7	100.2	100.8	100.7	99.2	100.4	100.2	99.1	91.6	99.2
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 09 Dec 1970 **Lifetime Generation:** 164336.7 GW(e).h
Date of First Criticality: 19 Aug 1985 **Cumulative Energy Availability Factor:** 88.9%
Date of Grid Connection: 20 Oct 1985 **Cumulative Load Factor:** 86.7%
Date of Commercial Operation: 13 Mar 1986 **Cumulative Unit Capability Factor:** 89.0%
Cumulative Energy Unavailability Factor: 11.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	6548.2	1080.0	95.4	95.4	95.4	95.4	86.2	86.2	6729	95.4
1987	5728.8	1079.0	65.4	78.8	65.4	78.8	60.6	72.0	5752	65.7
1988	6243.3	1087.0	69.3	75.4	69.3	75.4	65.4	69.6	6086	69.3
1989	8616.0	1087.0	92.2	79.8	92.2	79.8	90.5	75.1	8072	92.1
1990	7578.1	1087.0	83.2	80.5	83.2	80.5	79.6	76.1	7284	83.2
1991	7718.5	1087.0	84.7	81.2	84.7	81.2	81.1	76.9	7420	84.7
1992	9247.7	1087.0	98.5	83.8	98.5	83.8	96.9	79.9	8651	98.5
1993	7796.2	1087.0	83.6	83.8	83.6	83.8	81.9	80.1	7324	83.6
1994	7896.1	1087.0	85.0	83.9	85.0	83.9	82.9	80.4	7439	84.9
1995	8821.0	1087.0	96.3	85.2	96.3	85.2	92.6	81.7	8430	96.2
1996	7932.9	1087.0	85.0	85.1	85.0	85.1	83.1	81.8	7459	84.9
1997	8883.5	1087.0	96.4	86.1	96.4	86.1	93.3	82.8	8441	96.4
1998	8159.0	1087.0	87.1	86.2	87.1	86.2	85.7	83.0	7624	87.0
1999	8443.7	1087.0	91.3	86.5	90.2	86.5	88.7	83.4	7902	90.2
2000	9188.5	1087.0	96.9	87.2	96.9	87.2	96.2	84.3	8512	96.9
2001	8658.4	1087.0	91.9	87.5	91.9	87.5	90.9	84.7	8051	91.9
2002	9286.1	1087.0	99.6	88.3	98.9	88.2	97.5	85.5	8663	98.9
2003	7725.2	1087.0	82.5	87.9	82.5	87.8	81.1	85.2	7225	82.5
2004	8017.9	1087.0	85.8	87.8	85.8	87.7	84.0	85.2	7535	85.8
2005	9441.7	1087.0	100.0	88.4	100.0	88.3	99.1	85.9	8760	100.0
2006	8529.6	1087.0	88.3	88.4	88.3	88.3	89.6	86.0	7734	88.3
2007	9720.1	1118.0	100.0	89.0	100.0	88.9	99.2	86.7	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					150	
B. Refuelling without a maintenance					13	
C. Inspection, maintenance or repair combined with refuelling				712		
D. Inspection, maintenance or repair without refuelling				17		
E. Testing of plant systems or components				1		
H. Nuclear regulatory requirements					11	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					30	6
Subtotal	0	0	0	730	204	6
Total	0			940		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		11
13. Reactor Auxiliary Systems		8
15. Reactor Cooling Systems		6
31. Turbine and auxiliaries		24
32. Feedwater and Main Steam System		24
33. Circulating Water System		2
35. All other I&C Systems		9
41. Main Generator Systems		11
42. Electrical Power Supply Systems		52
Total	0	147

US-315 DONALD COOK-1

Operator: IMPCO (INDIANA MICHIGAN POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1029.0 MW(e)
Design Net Capacity: 1030.0 MW(e)
Design Discharge Burnup: 38000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9252.7 GW(e).h
Energy Availability Factor: 99.6%
Load Factor: 102.6%
Operating Factor: 99.6%
Energy Unavailability Factor: 0.4%
Total Off-line Time: 32 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	811.7	732.2	812.6	779.8	786.3	748.6	754.0	715.8	746.2	780.9	774.1	810.4	9252.7
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.8	100.0	100.0	100.0	100.0	99.6
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.8	100.0	100.0	100.0	100.0	99.6
LF (%)	106.0	105.9	106.3	105.3	102.7	101.0	98.5	93.5	100.7	102.0	104.3	105.9	102.6
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.7	100.0	100.0	100.0	100.0	99.6
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Mar 1969
Date of First Criticality: 18 Jan 1975
Date of Grid Connection: 10 Feb 1975
Date of Commercial Operation: 28 Aug 1975

Lifetime Generation: 178301.3 GW(e).h
Cumulative Energy Availability Factor: 69.8%
Cumulative Load Factor: 66.4%
Cumulative Unit Capability Factor: 70.0%
Cumulative Energy Unavailability Factor: 30.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	2557.1	848.0	84.7	84.7	84.7	84.7	83.4	83.4	3141	85.5
1976	6804.9	983.0	79.2	80.6	79.2	80.6	78.8	80.0	7298	83.1
1977	4785.8	1044.0	52.4	68.2	52.4	68.2	52.3	67.9	6658	76.0
1978	6286.9	1044.0	68.7	68.4	68.7	68.4	68.7	68.1	6438	73.5
1979	5660.2	1044.0	61.9	66.9	61.9	66.9	61.9	66.7	5666	64.7
1980	6461.3	1044.0	79.5	69.3	74.8	68.4	70.5	67.4	6470	73.7
1981	6781.5	1044.0	77.1	70.5	77.1	69.8	74.2	68.5	6663	76.1
1982	5352.7	1044.0	64.2	69.6	64.2	69.0	58.5	67.1	5487	62.6
1983	5286.7	1030.0	64.3	69.0	64.3	68.4	58.6	66.1	5628	64.2
1984	7550.8	1020.0	91.3	71.4	91.3	70.9	84.3	68.0	8016	91.3
1985	2116.1	1020.0	29.9	67.4	29.9	66.9	23.7	63.8	2489	28.4
1986	6650.1	1020.0	85.5	69.0	85.5	68.6	74.4	64.7	7464	85.2
1987	5033.8	1020.0	68.2	68.9	68.2	68.5	56.3	64.0	5917	67.5
1988	7467.8	1020.0	95.5	70.9	95.5	70.5	83.3	65.5	8379	95.4
1989	5433.0	1020.0	69.9	70.8	69.9	70.5	60.8	65.2	6069	69.3
1990	6301.6	1020.0	79.2	71.4	79.2	71.1	70.5	65.5	6939	79.2
1991	7338.2	1013.0	86.0	72.3	86.0	72.0	82.7	66.5	7524	85.9
1992	4990.7	1008.0	65.1	71.9	65.1	71.6	56.3	66.0	5690	64.8
1993	8759.4	1006.0	100.0	73.4	100.0	73.1	99.3	67.7	8760	100.0
1994	5759.5	1000.0	71.0	73.2	71.0	73.0	65.7	67.6	6214	70.9
1995	5396.8	1000.0	66.4	72.9	66.4	72.7	61.6	67.4	5809	66.3
1996	8373.3	1000.0	97.6	74.0	97.6	73.8	95.3	68.6	8574	97.6
1997	4545.9	1000.0	52.4	73.1	52.4	72.9	51.9	67.9	4608	52.6
1998	0.0	1000.0	0.0	70.0	0.0	69.8	0.0	65.1	0	0.0
1999	0.0	1000.0	0.0	67.2	0.0	67.0	0.0	62.4	0	0.0
2000	129.8	1000.0	2.8	64.7	2.8	64.5	1.5	60.1	242	2.8
2001	7797.9	1000.0	90.6	65.7	89.5	65.4	89.0	61.1	7840	89.5
2002	7740.9	1000.0	88.9	66.5	88.9	66.3	88.4	62.1	7782	88.8
2003	6570.1	1000.0	74.1	66.8	74.1	66.6	75.0	62.6	6489	74.1
2004	8831.5	1000.0	97.7	67.8	97.7	67.6	100.5	63.8	8588	97.8
2005	8055.8	1016.0	90.7	68.6	90.7	68.4	90.5	64.7	7940	90.6
2006	7296.2	1016.0	82.9	69.0	82.9	68.8	82.0	65.3	7256	82.8
2007	9252.7	1029.0	99.6	70.0	99.6	69.8	102.6	66.4	8728	99.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		31			237	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling	1187					
D. Inspection, maintenance or repair without refuelling	135					
E. Testing of plant systems or components	9				6	
F. Major back-fitting, refurbishment or upgrading activities with refuelling	2					
H. Nuclear regulatory requirements					3	23
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					881	2
P. Fire					14	
Subtotal	0	31	0	1333	1153	25
Total		31			2511	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		20
14. Safety Systems		9
15. Reactor Cooling Systems		37
16. Steam generation systems		8
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		61
32. Feedwater and Main Steam System	31	19
33. Circulating Water System		39
35. All other I&C Systems		0
41. Main Generator Systems		21
42. Electrical Power Supply Systems		17
Total	31	232

US-316 DONALD COOK-2

Operator: IMPCO (INDIANA MICHIGAN POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1077.0 MW(e)
Design Net Capacity: 1100.0 MW(e)
Design Discharge Burnup: 48000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8124.5 GW(e).h
Energy Availability Factor: 85.5%
Load Factor: 86.1%
Operating Factor: 85.5%
Energy Unavailability Factor: 14.5%
Total Off-line Time: 1268 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	830.0	748.0	824.7	792.6	814.6	775.8	788.8	788.7	325.7	0.0	601.4	834.2	8124.5
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	46.7	0.0	80.6	100.0	85.5
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	46.7	0.0	80.6	100.0	85.5
LF (%)	103.6	103.4	103.1	102.2	101.7	100.0	98.4	98.4	42.0	0.0	77.4	104.1	86.1
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	46.7	0.0	80.6	100.0	85.5
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.3	100.0	19.4	0.0	14.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.3	100.0	19.4	0.0	14.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Mar 1969
Date of First Criticality: 10 Mar 1978
Date of Grid Connection: 22 Mar 1978
Date of Commercial Operation: 01 Jul 1978

Lifetime Generation: 160824.7 GW(e).h
Cumulative Energy Availability Factor: 67.2%
Cumulative Load Factor: 63.4%
Cumulative Unit Capability Factor: 67.4%
Cumulative Energy Unavailability Factor: 32.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	3122.8	1078.0	65.4	65.4	65.4	65.4	65.3	65.3	3411	77.2
1979	5953.5	1082.0	62.8	63.7	62.8	63.7	62.8	63.7	5773	65.9
1980	6691.2	1082.0	80.1	70.3	74.8	68.1	70.4	66.4	6535	74.4
1981	6384.8	1082.0	71.2	70.5	71.2	69.0	67.4	66.6	6178	70.5
1982	6995.6	1082.0	77.2	72.0	77.2	70.8	73.8	68.2	6738	76.9
1983	7013.6	1071.0	78.3	73.1	78.3	72.2	74.8	69.4	6835	78.0
1984	5364.4	1060.0	59.2	71.0	59.2	70.2	57.6	67.6	5196	59.2
1985	5683.6	1060.0	66.9	70.5	66.9	69.8	61.2	66.8	5852	66.8
1986	4335.6	1060.0	61.5	69.4	61.5	68.8	46.7	64.4	5389	61.5
1987	5026.6	1060.0	71.4	69.6	71.4	69.1	54.1	63.4	6248	71.3
1988	2323.3	1060.0	30.9	66.0	30.9	65.5	25.0	59.7	2715	30.9
1989	6661.0	1060.0	74.4	66.7	74.4	66.2	71.7	60.8	6518	74.4
1990	4813.3	1060.0	55.4	65.8	55.4	65.4	51.8	60.1	4854	55.4
1991	8185.9	1065.0	92.2	67.8	91.5	67.3	87.7	62.1	8013	91.5
1992	1427.3	1072.0	20.5	64.5	20.5	64.1	15.2	58.9	1714	19.5
1993	7553.8	1070.0	96.6	66.6	96.6	66.2	80.6	60.3	8459	96.6
1994	3531.5	1060.0	54.4	65.8	54.4	65.5	38.0	58.9	4757	54.3
1995	8602.5	1060.0	94.5	67.4	94.5	67.1	92.6	60.8	8268	94.4
1996	8022.6	1060.0	87.0	68.5	87.0	68.2	86.2	62.2	7641	87.0
1997	5875.2	1060.0	64.9	68.3	64.9	68.0	63.3	62.2	5705	65.1
1998	0.0	1060.0	0.0	65.0	0.0	64.7	0.0	59.2	0	0.0
1999	0.0	1060.0	0.0	62.0	0.0	61.7	0.0	56.5	0	0.0
2000	4789.8	1060.0	51.9	61.6	51.9	61.3	51.4	56.3	4557	51.9
2001	7963.4	1060.0	87.8	62.7	87.8	62.4	85.8	57.5	7690	87.8
2002	7687.7	1060.0	83.8	63.5	83.8	63.3	82.8	58.5	7335	83.7
2003	7112.2	1060.0	75.5	64.0	75.5	63.7	76.6	59.2	6610	75.5
2004	7938.5	1060.0	84.3	64.8	84.3	64.5	85.3	60.2	7407	84.3
2005	9415.5	1077.0	98.2	66.0	98.2	65.8	99.8	61.7	8603	98.2
2006	8388.8	1077.0	88.3	66.8	88.3	66.6	88.9	62.6	7732	88.3
2007	8124.5	1077.0	85.5	67.4	85.5	67.2	86.1	63.4	7492	85.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					552	
B. Refuelling without a maintenance					16	
C. Inspection, maintenance or repair combined with refuelling	1267			1153		
D. Inspection, maintenance or repair without refuelling				119	131	
E. Testing of plant systems or components				0		
H. Nuclear regulatory requirements					3	22
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					746	
Z. Others					15	
Subtotal	1267	0	0	1272	1463	23
Total		1267			2758	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1978 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems		14
13. Reactor Auxiliary Systems		51
15. Reactor Cooling Systems		89
16. Steam generation systems		180
17. Safety I&C Systems (excluding reactor I&C)		9
31. Turbine and auxiliaries		26
32. Feedwater and Main Steam System		22
33. Circulating Water System		37
35. All other I&C Systems		14
41. Main Generator Systems		46
42. Electrical Power Supply Systems		47
Total	0	535

US-237 DRESDEN-2

Operator: EXELON (Exelon Generation)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 867.0 MW(e)
Design Net Capacity: 794.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6972.7 GW(e).h
Energy Availability Factor: 92.8%
Load Factor: 91.8%
Operating Factor: 92.8%
Energy Unavailability Factor: 7.2%
Total Off-line Time: 628 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	644.9	583.9	645.5	626.1	554.4	623.6	646.3	638.2	626.5	582.1	155.4	645.8	6972.7
EAF (%)	100.0	100.0	100.0	100.0	88.0	100.0	100.0	100.0	100.0	90.3	35.5	100.0	92.8
UCF (%)	100.0	100.0	100.0	100.0	88.0	100.0	100.0	100.0	100.0	90.3	35.5	100.0	92.8
LF (%)	100.0	100.2	100.2	100.3	85.9	99.9	100.2	98.9	100.4	90.2	24.9	100.1	91.8
OF (%)	100.0	100.0	100.0	100.0	87.9	100.0	100.0	100.0	100.0	90.3	35.4	100.0	92.8
EUF (%)	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	9.7	64.5	0.0	7.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7	64.5	0.0	6.1
UCLF (%)	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 10 Jan 1966
Date of First Criticality: 07 Jan 1970
Date of Grid Connection: 13 Apr 1970
Date of Commercial Operation: 09 Jun 1970

Lifetime Generation: 159414.8 GW(e).h
Cumulative Energy Availability Factor: 76.6%
Cumulative Load Factor: 66.1%
Cumulative Unit Capability Factor: 76.7%
Cumulative Energy Unavailability Factor: 23.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1970	1002.0	804.0	100.0	100.0	100.0	100.0	23.9	23.9	1945	37.9
1971	2806.3	815.0	100.0	100.0	100.0	100.0	39.3	33.6	5694	65.0
1972	3370.5	815.0	100.0	100.0	100.0	100.0	47.1	38.8	5240	59.7
1973	5014.5	800.0	90.8	97.5	90.8	97.5	71.6	47.8	7672	87.6
1974	3376.0	800.0	58.3	89.0	58.3	89.0	48.2	47.9	5113	58.4
1975	2957.0	800.0	42.2	80.7	42.2	80.7	42.2	46.9	4826	55.1
1976	4374.4	781.0	64.1	78.3	64.1	78.3	63.8	49.4	6660	75.8
1977	3538.1	772.0	52.4	75.0	52.4	75.0	52.3	49.8	6297	71.9
1978	5704.5	772.0	84.4	76.0	84.4	76.0	84.4	53.7	8244	94.1
1979	4942.9	772.0	73.1	75.7	73.1	75.7	73.1	55.6	7141	81.5
1980	4580.4	772.0	93.5	77.4	93.5	77.4	67.5	56.7	8193	93.3
1981	3416.0	772.0	60.7	76.0	60.1	75.9	50.5	56.2	5260	60.0
1982	5123.1	772.0	93.0	77.3	92.4	77.2	75.8	57.7	8094	92.4
1983	3402.2	772.0	59.2	76.0	58.9	75.9	50.3	57.2	5076	57.9
1984	4468.4	772.0	72.9	75.8	72.9	75.7	65.9	57.8	6402	72.9
1985	3106.0	772.0	54.5	74.4	54.5	74.3	45.9	57.0	4678	53.4
1986	4655.7	772.0	77.2	74.6	77.2	74.5	68.8	57.7	6761	77.2
1987	3362.6	772.0	61.0	73.8	61.0	73.8	49.7	57.3	5342	61.0
1988	4325.2	772.0	78.9	74.1	78.9	74.0	63.8	57.6	6931	78.9
1989	4751.7	772.0	80.2	74.4	80.2	74.3	70.3	58.3	7023	80.2
1990	4116.9	772.0	67.6	74.1	67.6	74.0	60.9	58.4	5920	67.6
1991	2984.2	772.0	58.0	73.4	58.0	73.3	44.1	57.7	5031	57.4
1992	4185.8	772.0	84.5	73.8	84.5	73.8	61.7	57.9	7419	84.5
1993	3058.6	772.0	54.7	73.0	54.7	73.0	45.2	57.4	4790	54.7
1994	4086.1	772.0	66.3	72.8	66.3	72.7	60.4	57.5	5808	66.3
1995	1890.5	772.0	33.5	71.3	33.5	71.2	28.0	56.4	2938	33.5
1996	2161.4	772.0	42.5	70.2	42.5	70.1	31.9	55.4	3731	42.5
1997	5578.4	772.0	89.4	70.9	89.4	70.8	82.5	56.4	7738	88.3
1998	5632.9	772.0	85.6	71.4	85.6	71.3	83.3	57.4	7496	85.6
1999	6229.5	772.0	92.7	72.1	92.7	72.0	92.1	58.5	8122	92.7
2000	6867.4	772.0	99.6	73.0	99.6	72.9	101.3	59.9	8747	99.6
2001	6072.7	772.0	91.2	73.6	91.2	73.5	89.8	60.8	8005	91.4
2002	7527.5	850.0	100.0	74.4	100.0	74.4	101.1	62.2	8760	100.0
2003	6703.1	850.0	92.0	75.0	92.0	75.0	90.0	63.1	7999	91.3
2004	5909.3	850.0	80.2	75.2	80.2	75.1	79.1	63.6	7045	80.2
2005	6590.1	850.0	88.0	75.6	88.0	75.5	88.5	64.3	7710	88.0
2006	7273.2	867.0	96.9	76.2	96.9	76.2	95.8	65.3	8485	96.9
2007	6972.7	867.0	92.8	76.7	92.8	76.6	91.8	66.1	8132	92.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		89			607	
B. Refuelling without a maintenance					19	
C. Inspection, maintenance or repair combined with refuelling	519			1288		
D. Inspection, maintenance or repair without refuelling	18			70	1	
E. Testing of plant systems or components				10	7	
H. Nuclear regulatory requirements					5	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					67	3
Subtotal	537	89	0	1368	706	3
Total		626			2077	

7. Equipment Related Full Outages, Analysis by System

System	2007	1971 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		10
12. Reactor I&C Systems		78
13. Reactor Auxiliary Systems		11
14. Safety Systems		21
15. Reactor Cooling Systems	89	107
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		143
32. Feedwater and Main Steam System		25
35. All other I&C Systems		21
41. Main Generator Systems		54
42. Electrical Power Supply Systems		28
XX. Miscellaneous Systems		12
Total	89	511

US-249 DRESDEN-3

Operator: EXELON (Exelon Generation)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 867.0 MW(e)
Design Net Capacity: 794.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7558.1 GW(e).h
Energy Availability Factor: 99.5%
Load Factor: 99.5%
Operating Factor: 99.5%
Energy Unavailability Factor: 0.5%
Total Off-line Time: 45 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	649.4	579.7	648.0	627.4	645.3	625.3	645.6	643.5	576.4	646.1	628.6	642.9	7558.1
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.8	100.0	100.0	100.0	99.5
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.8	100.0	100.0	100.0	99.5
LF (%)	100.7	99.5	100.6	100.5	100.0	100.2	100.1	99.8	92.3	100.2	100.6	99.7	99.5
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.8	100.0	100.0	100.0	99.5
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.5
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 14 Oct 1966
Date of First Criticality: 12 Jan 1971
Date of Grid Connection: 22 Jul 1971
Date of Commercial Operation: 16 Nov 1971

Lifetime Generation: 152637.0 GW(e).h
Cumulative Energy Availability Factor: 73.0%
Cumulative Load Factor: 66.2%
Cumulative Unit Capability Factor: 73.0%
Cumulative Energy Unavailability Factor: 27.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1971	590.0	794.0	100.0	100.0	100.0	100.0	49.4	49.4	814	55.6
1972	5175.6	815.0	100.0	100.0	100.0	100.0	72.3	69.0	7549	85.9
1973	3703.6	800.0	69.2	85.9	69.2	85.9	52.8	61.6	5905	67.4
1974	3608.9	800.0	65.8	79.6	65.8	79.6	51.5	58.5	5778	66.0
1975	2211.2	800.0	31.5	68.2	31.5	68.2	31.6	52.0	4505	51.4
1976	4037.2	781.0	58.7	66.4	58.7	66.4	58.8	53.3	7231	82.3
1977	5186.4	773.0	76.6	68.0	76.6	68.0	76.6	57.0	8072	92.1
1978	3835.3	773.0	56.6	66.4	56.6	66.4	56.6	56.9	6280	71.7
1979	3482.9	773.0	51.4	64.6	51.4	64.6	51.4	56.3	5930	67.7
1980	4335.5	773.0	72.3	65.5	72.3	65.5	63.9	57.1	6307	71.8
1981	5177.7	773.0	95.1	68.3	94.5	68.3	76.5	59.0	8256	94.2
1982	3896.4	773.0	64.3	68.0	63.8	67.9	57.5	58.8	5562	63.5
1983	4159.7	773.0	73.1	68.4	73.1	68.3	61.4	59.1	6401	73.1
1984	2135.5	773.0	37.7	66.1	37.7	66.0	31.5	57.0	3309	37.7
1985	4401.3	773.0	75.6	66.8	75.6	66.7	65.0	57.5	6618	75.5
1986	1498.3	773.0	28.1	64.2	28.1	64.2	22.1	55.2	2456	28.0
1987	4395.5	773.0	75.3	64.9	75.3	64.8	64.9	55.8	6591	75.2
1988	4168.4	773.0	71.5	65.3	71.5	65.2	61.4	56.1	6278	71.5
1989	5119.5	773.0	82.6	66.2	82.6	66.2	75.6	57.2	7235	82.6
1990	5149.8	773.0	83.0	67.1	83.0	67.0	76.1	58.2	7272	83.0
1991	2584.2	773.0	59.9	66.7	59.9	66.7	38.2	57.2	5247	59.9
1992	3077.1	773.0	61.1	66.5	61.1	66.4	45.3	56.6	5364	61.1
1993	4969.0	773.0	80.4	67.1	80.4	67.1	73.4	57.4	7040	80.4
1994	1666.4	773.0	34.3	65.7	34.3	65.7	24.6	56.0	3009	34.3
1995	3477.3	773.0	59.5	65.4	59.5	65.4	51.4	55.8	5209	59.5
1996	2962.1	773.0	48.9	64.8	48.9	64.7	43.6	55.3	4273	48.6
1997	4046.2	773.0	68.6	64.9	68.6	64.9	59.8	55.5	5900	67.4
1998	6234.6	773.0	93.1	66.0	93.1	65.9	92.1	56.8	8157	93.1
1999	6130.0	773.0	91.1	66.8	91.1	66.8	90.5	58.0	7978	91.1
2000	6365.1	773.0	93.8	67.8	93.8	67.7	93.7	59.2	8243	93.8
2001	6466.0	773.0	95.4	68.7	95.4	68.6	95.5	60.4	8359	95.4
2002	6060.9	850.0	90.5	69.4	90.5	69.4	87.3	61.3	7915	90.4
2003	6963.9	850.0	94.2	70.2	94.2	70.2	93.5	62.4	8206	93.7
2004	6436.9	850.0	85.9	70.7	85.9	70.7	86.2	63.2	7544	85.9
2005	7032.4	850.0	93.3	71.5	93.3	71.4	94.4	64.2	8169	93.2
2006	7171.9	867.0	94.7	72.2	94.7	72.2	94.4	65.1	8298	94.7
2007	7558.1	867.0	99.5	73.0	99.5	73.0	99.5	66.2	8715	99.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					672	
B. Refuelling without a maintenance					24	
C. Inspection, maintenance or repair combined with refuelling				1358		
D. Inspection, maintenance or repair without refuelling	44			93		
E. Testing of plant systems or components				1	5	
H. Nuclear regulatory requirements				9	1	1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				9	10	1
Z. Others					2	
Subtotal	44	0	0	1470	714	2
Total		44			2186	

7. Equipment Related Full Outages, Analysis by System

System	2007	1971 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		7
12. Reactor I&C Systems		18
13. Reactor Auxiliary Systems		2
14. Safety Systems		56
15. Reactor Cooling Systems		55
17. Safety I&C Systems (excluding reactor I&C)		66
31. Turbine and auxiliaries		192
32. Feedwater and Main Steam System		62
33. Circulating Water System		6
35. All other I&C Systems		1
41. Main Generator Systems		16
42. Electrical Power Supply Systems		92
XX. Miscellaneous Systems		71
Total	0	644

US-331 DUANE ARNOLD-1**Operator:** FPLDUANE (FPL ENERGY DUANE ARNOLD)**Contractor:** GE (GENERAL ELECTRIC CO.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 581.0 MW(e)
Design Net Capacity: 538.0 MW(e)
Design Discharge Burnup: 27800 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4518.9 GW(e).h
Energy Availability Factor: 86.8%
Load Factor: 88.8%
Operating Factor: 86.7%
Energy Unavailability Factor: 13.2%
Total Off-line Time: 1162 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	447.6	39.1	112.4	389.1	450.5	424.5	446.5	442.4	429.8	445.4	437.7	453.8	4518.9
EAF (%)	100.0	7.1	37.1	90.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	86.8
UCF (%)	100.0	7.1	37.2	90.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	86.8
LF (%)	103.6	10.0	26.0	93.0	104.2	101.5	103.3	102.3	102.7	103.0	104.5	105.0	88.8
OF (%)	100.0	10.6	33.8	90.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	86.7
EUF (%)	0.0	92.9	62.9	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2
PUF (%)	0.0	92.9	62.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5
UCLF (%)	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 22 Jun 1970
Date of First Criticality: 23 Mar 1974
Date of Grid Connection: 19 May 1974
Date of Commercial Operation: 01 Feb 1975

Lifetime Generation: 104480.8 GW(e).h
Cumulative Energy Availability Factor: 77.7%
Cumulative Load Factor: 73.2%
Cumulative Unit Capability Factor: 77.8%
Cumulative Energy Unavailability Factor: 22.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	2099.6	515.0	79.4	79.4	79.4	79.4	50.9	50.9	6298	78.6
1976	2489.4	515.0	55.1	66.7	55.1	66.7	55.0	53.0	6847	77.9
1977	2897.8	515.0	64.3	65.9	64.3	65.9	64.2	56.9	6908	78.9
1978	1227.5	515.0	27.2	56.0	27.2	56.0	27.2	49.3	2902	33.1
1979	2898.9	515.0	64.3	57.7	64.3	57.7	64.3	52.3	6830	78.0
1980	2796.3	515.0	74.8	60.6	73.2	60.3	61.8	53.9	6456	73.5
1981	2219.5	515.0	69.3	61.8	69.3	61.6	49.2	53.3	6108	69.7
1982	2280.4	515.0	74.2	63.4	74.2	63.2	50.5	52.9	6543	74.7
1983	2324.3	515.0	61.8	63.2	61.8	63.0	51.5	52.8	5503	62.8
1984	2717.6	515.0	72.2	64.1	72.2	64.0	60.1	53.5	6402	72.9
1985	1940.5	515.0	52.6	63.1	52.6	62.9	43.0	52.5	4711	53.8
1986	3192.8	515.0	81.5	64.6	81.5	64.5	70.8	54.1	7495	85.6
1987	2546.6	515.0	62.0	64.4	62.0	64.3	56.4	54.3	5513	62.9
1988	3520.2	520.0	72.3	65.0	72.3	64.9	77.0	55.9	7128	81.1
1989	3143.6	536.0	62.5	64.8	62.5	64.7	66.9	56.7	6561	74.9
1990	3021.0	538.0	74.7	65.5	74.7	65.4	64.1	57.2	6498	74.2
1991	4146.8	532.0	93.9	67.2	93.9	67.1	88.9	59.1	8217	93.8
1992	3434.6	515.0	80.5	67.9	80.5	67.8	75.9	60.0	7112	81.0
1993	3241.4	515.0	76.6	68.4	76.5	68.3	71.8	60.6	6755	77.1
1994	4108.4	515.0	92.0	69.6	92.0	69.5	91.1	62.2	8078	92.2
1995	3737.0	515.0	82.4	70.2	82.4	70.1	82.8	63.1	7253	82.8
1996	3938.5	520.0	89.9	71.1	89.9	71.0	86.2	64.2	7906	90.0
1997	4155.5	520.0	92.7	72.0	92.7	71.9	91.2	65.4	8125	92.8
1998	3839.2	520.0	85.2	72.6	85.2	72.5	84.3	66.2	7477	85.4
1999	3649.0	520.0	83.0	73.0	83.0	72.9	80.1	66.7	7267	83.0
2000	4455.7	520.0	97.4	73.9	97.4	73.9	97.5	67.9	8553	97.4
2001	3860.6	565.0	85.4	74.4	85.4	74.3	84.1	68.5	7473	85.3
2002	4581.1	565.0	95.1	75.2	93.6	75.0	92.7	69.5	8147	93.0
2003	3998.6	565.0	83.8	75.5	83.8	75.4	80.8	69.9	7209	82.3
2004	4929.9	565.0	97.9	76.3	97.9	76.2	99.3	71.0	8596	97.9
2005	4544.5	562.0	90.0	76.8	90.0	76.7	92.3	71.7	7882	90.0
2006	5095.4	581.0	98.9	77.5	98.9	77.4	100.1	72.7	8664	98.9
2007	4518.9	581.0	86.8	77.8	86.8	77.7	88.8	73.2	7598	86.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		68			432	
B. Refuelling without a maintenance					45	
C. Inspection, maintenance or repair combined with refuelling	1009			858		
D. Inspection, maintenance or repair without refuelling	80			243	0	
E. Testing of plant systems or components	1			21	3	
H. Nuclear regulatory requirements				48	19	10
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				9	42	4
Subtotal	1090	68	0	1179	541	14
Total		1158			1734	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		5
13. Reactor Auxiliary Systems		12
14. Safety Systems		17
15. Reactor Cooling Systems		241
17. Safety I&C Systems (excluding reactor I&C)		6
31. Turbine and auxiliaries		47
32. Feedwater and Main Steam System		36
35. All other I&C Systems		2
41. Main Generator Systems		6
42. Electrical Power Supply Systems	68	20
XX. Miscellaneous Systems		2
Total	68	394

US-341 ENRICO FERMI-2

Operator: DETED (DETROIT EDISON CO.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
 Net Reference Unit Power at the beginning of 2007: 1122.0 MW(e)
 Design Net Capacity: 1093.0 MW(e)
 Design Discharge Burnup: 19404 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8318.4 GW(e).h
 Energy Availability Factor: 86.1%
 Load Factor: 84.6%
 Operating Factor: 86.1%
 Energy Unavailability Factor: 13.9%
 Total Off-line Time: 1218 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	834.9	758.8	833.8	803.1	824.8	787.2	809.7	808.9	733.4	0.0	295.4	828.4	8318.4
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.3	0.0	41.1	100.0	86.1
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.3	0.0	41.1	100.0	86.1
LF (%)	100.0	100.6	100.0	99.4	98.8	97.4	97.0	96.9	90.8	0.0	36.5	99.2	84.6
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.9	0.0	40.4	100.0	86.1
EUUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	100.0	58.9	0.0	13.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	100.0	58.9	0.0	13.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 26 Sep 1972 Lifetime Generation: 123479.6 GW(e).h
 Date of First Criticality: 21 Jun 1985 Cumulative Energy Availability Factor: 76.8%
 Date of Grid Connection: 21 Sep 1986 Cumulative Load Factor: 73.7%
 Date of Commercial Operation: 23 Jan 1988 Cumulative Unit Capability Factor: 76.8%
 Cumulative Energy Unavailability Factor: 23.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	4060.1	1093.0	57.0	57.0	57.0	57.0	45.0	45.0	4719	57.2
1989	5230.7	1093.0	63.4	60.3	63.4	60.3	54.6	50.0	5575	63.6
1990	7118.3	1059.0	82.3	67.6	82.3	67.6	76.7	58.9	7266	82.9
1991	6180.9	1059.0	72.8	68.9	72.8	68.9	66.6	60.8	6466	73.8
1992	7356.8	1060.0	79.1	71.0	79.1	71.0	79.0	64.5	7019	79.9
1993	8284.7	1085.0	92.1	74.6	92.1	74.6	87.2	68.3	8076	92.2
1994	0.0	1085.0	0.0	63.7	0.0	63.7	0.0	58.4	0	0.0
1995	5132.0	997.0	71.7	64.7	71.7	64.7	58.7	58.4	6509	74.3
1996	4790.0	876.0	58.2	64.1	58.2	64.1	62.3	58.8	5859	66.7
1997	5579.9	1000.0	70.5	64.7	70.5	64.7	63.6	59.3	5461	62.3
1998	7146.8	1098.0	78.4	66.0	78.4	66.0	74.3	60.7	6868	78.4
1999	9484.7	1081.0	99.3	68.9	99.3	68.9	100.1	64.1	8698	99.3
2000	8237.8	1083.0	85.7	70.2	85.7	70.2	86.6	65.9	7514	85.5
2001	8564.0	1089.0	89.3	71.6	89.3	71.6	89.8	67.7	7837	89.5
2002	9302.9	1089.0	98.5	73.5	98.5	73.5	97.5	69.7	8630	98.5
2003	8127.8	1089.0	85.3	74.2	85.3	74.2	85.2	70.7	7479	85.4
2004	8453.1	1089.0	88.2	75.1	88.2	75.1	88.4	71.8	7764	88.4
2005	8767.6	1111.0	90.8	76.0	90.8	76.0	90.1	72.9	7955	90.8
2006	7497.3	1101.0	80.9	76.3	80.9	76.3	77.7	73.1	7095	81.0
2007	8318.4	1122.0	86.1	76.8	86.1	76.8	84.6	73.7	7542	86.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				10	1052	
B. Refuelling without a maintenance					9	
C. Inspection, maintenance or repair combined with refuelling	1217			648		
D. Inspection, maintenance or repair without refuelling				224	2	
H. Nuclear regulatory requirements					3	
J. Grid failure or grid unavailability					6	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	
Subtotal	1217	0	0	882	1073	0
Total		1217			1955	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		40
12. Reactor I&C Systems		24
13. Reactor Auxiliary Systems		59
14. Safety Systems		17
15. Reactor Cooling Systems		22
17. Safety I&C Systems (excluding reactor I&C)		20
31. Turbine and auxiliaries		495
32. Feedwater and Main Steam System		6
33. Circulating Water System		2
35. All other I&C Systems		17
41. Main Generator Systems		173
42. Electrical Power Supply Systems		115
XX. Miscellaneous Systems		56
Total	0	1046

US-348 FARLEY-1

Operator: ALP (ALABAMA POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 851.0 MW(e)
Design Net Capacity: 829.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6530.8 GW(e).h
Energy Availability Factor: 87.5%
Load Factor: 87.6%
Operating Factor: 87.5%
Energy Unavailability Factor: 12.5%
Total Off-line Time: 1097 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	642.2	581.5	640.7	607.8	640.2	618.2	636.3	629.4	572.0	0.0	319.6	642.8	6530.8
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.3	0.0	57.8	100.0	87.5
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.3	0.0	57.8	100.0	87.5
LF (%)	101.4	101.7	101.3	99.2	101.1	100.9	100.5	99.4	93.4	0.0	52.1	101.5	87.6
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.3	0.0	57.7	100.0	87.5
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	100.0	42.2	0.0	12.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	100.0	42.2	0.0	12.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 16 Aug 1972
Date of First Criticality: 09 Aug 1977
Date of Grid Connection: 18 Aug 1977
Date of Commercial Operation: 01 Dec 1977

Lifetime Generation: 164135.4 GW(e).h
Cumulative Energy Availability Factor: 82.5%
Cumulative Load Factor: 80.7%
Cumulative Unit Capability Factor: 82.7%
Cumulative Energy Unavailability Factor: 17.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	395.9	820.0	100.0	100.0	100.0	100.0	64.2	64.2	512	68.8
1978	5919.8	829.0	81.5	83.0	81.5	83.0	81.5	80.2	7568	86.4
1979	1732.4	829.0	23.9	54.6	23.9	54.6	23.9	53.2	2502	28.6
1980	4607.8	814.0	74.4	61.0	70.2	59.6	64.4	56.8	6110	69.6
1981	2653.0	804.0	41.5	56.3	41.5	55.3	37.7	52.2	3624	41.4
1982	5233.3	804.0	79.3	60.7	79.3	59.9	74.3	56.5	6936	79.2
1983	5268.6	804.0	77.7	63.5	77.7	62.8	74.8	59.4	6832	78.0
1984	5432.7	804.0	78.5	65.6	78.5	65.0	76.9	61.9	6920	78.8
1985	5868.7	816.0	84.3	67.9	84.3	67.4	82.1	64.4	7378	84.2
1986	5738.6	827.0	82.4	69.5	82.4	69.1	79.2	66.1	7247	82.7
1987	6444.9	825.0	93.7	72.0	93.7	71.5	89.2	68.4	8201	93.6
1988	5908.2	813.0	83.8	73.0	83.8	72.6	82.7	69.7	7363	83.8
1989	6022.6	824.0	86.0	74.1	86.0	73.8	83.4	70.8	7520	85.8
1990	6908.6	824.0	99.1	76.0	99.1	75.7	95.7	72.7	8681	99.1
1991	5416.1	814.0	78.9	76.2	78.4	75.9	76.0	73.0	6870	78.4
1992	5667.9	812.0	81.0	76.6	81.0	76.2	79.5	73.4	7119	81.0
1993	6873.9	812.0	97.3	77.8	97.3	77.5	96.6	74.8	8522	97.3
1994	6059.8	812.0	86.1	78.3	86.1	78.0	85.2	75.4	7546	86.1
1995	5752.0	812.0	82.4	78.5	82.4	78.3	80.9	75.7	7220	82.4
1996	7142.3	812.0	99.5	79.6	99.5	79.4	100.1	77.0	8740	99.5
1997	5434.0	821.0	77.7	79.5	77.7	79.3	75.5	76.9	6803	77.7
1998	5237.9	822.0	74.8	79.3	74.8	79.1	72.7	76.7	6539	74.6
1999	7226.5	847.0	99.3	80.2	99.3	80.0	97.4	77.7	8695	99.3
2000	5204.1	828.0	76.8	80.1	76.8	79.9	71.6	77.4	6775	77.1
2001	6392.5	833.0	88.3	80.4	88.3	80.3	87.6	77.9	7736	88.3
2002	7221.8	833.0	98.7	81.2	98.7	81.0	99.0	78.7	8641	98.6
2003	6609.9	830.0	90.3	81.5	90.3	81.4	90.9	79.2	7909	90.3
2004	6423.9	851.0	87.0	81.7	87.0	81.6	86.8	79.5	7627	86.8
2005	7402.2	833.0	99.4	82.4	99.4	82.2	101.4	80.3	8709	99.4
2006	6419.3	851.0	86.5	82.5	86.5	82.4	86.1	80.5	7578	86.5
2007	6530.8	851.0	87.5	82.7	87.5	82.5	87.6	80.7	7663	87.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					241	
B. Refuelling without a maintenance					14	
C. Inspection, maintenance or repair combined with refuelling	1096			1074		
D. Inspection, maintenance or repair without refuelling				65		
E. Testing of plant systems or components				2	0	
H. Nuclear regulatory requirements					7	11
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					3	5
Subtotal	1096	0	0	1141	265	16
Total		1096			1422	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		11
13. Reactor Auxiliary Systems		1
14. Safety Systems		4
15. Reactor Cooling Systems		7
16. Steam generation systems		16
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		111
32. Feedwater and Main Steam System		17
35. All other I&C Systems		2
41. Main Generator Systems		6
42. Electrical Power Supply Systems		56
XX. Miscellaneous Systems		1
Total	0	235

US-364 FARLEY-2**Operator:** ALP (ALABAMA POWER CO.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 860.0 MW(e)
Design Net Capacity: 829.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6572.1 GW(e).h
Energy Availability Factor: 87.5%
Load Factor: 87.2%
Operating Factor: 87.4%
Energy Unavailability Factor: 12.5%
Total Off-line Time: 1100 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	651.9	587.8	646.1	146.4	152.0	625.1	644.0	634.1	623.1	582.3	629.4	649.8	6572.1
EAF (%)	100.0	100.0	100.0	26.7	31.2	100.0	100.0	100.0	100.0	92.2	100.0	100.0	87.5
UCF (%)	100.0	100.0	100.0	26.7	31.2	100.0	100.0	100.0	100.0	92.2	100.0	100.0	87.5
LF (%)	101.9	101.7	101.1	23.6	23.8	101.0	100.7	99.1	100.6	91.0	101.5	101.6	87.2
OF (%)	100.0	100.0	100.0	26.7	31.0	100.0	100.0	100.0	100.0	92.1	100.0	100.0	87.4
EUF (%)	0.0	0.0	0.0	73.3	68.8	0.0	0.0	0.0	0.0	7.8	0.0	0.0	12.5
PUF (%)	0.0	0.0	0.0	73.3	68.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0	0.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 16 Aug 1972
Date of First Criticality: 05 May 1981
Date of Grid Connection: 25 May 1981
Date of Commercial Operation: 30 Jul 1981

Lifetime Generation: 150270.9 GW(e).h
Cumulative Energy Availability Factor: 87.1%
Cumulative Load Factor: 84.6%
Cumulative Unit Capability Factor: 87.1%
Cumulative Energy Unavailability Factor: 12.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	2920.8	825.0	95.3	95.3	95.3	95.3	80.1	80.1	3665	83.0
1982	5311.3	814.0	79.4	84.8	79.4	84.8	74.5	76.4	6931	79.1
1983	5984.1	814.0	87.7	86.0	87.7	86.0	83.9	79.4	7696	87.9
1984	6618.9	814.0	94.4	88.4	94.2	88.3	92.6	83.1	8276	94.2
1985	5474.2	809.0	77.8	86.1	77.4	85.9	77.2	81.8	6813	77.8
1986	5959.9	829.0	85.2	85.9	85.2	85.8	82.1	81.9	7455	85.1
1987	4910.4	824.0	73.0	83.9	73.0	83.8	68.0	79.7	6396	73.0
1988	6550.4	823.0	100.0	86.1	100.0	86.0	90.6	81.2	8039	91.5
1989	5621.6	830.0	80.5	85.4	80.5	85.3	77.3	80.7	7037	80.3
1990	5277.0	828.0	71.8	84.0	71.8	83.9	72.8	79.9	6478	73.9
1991	6739.9	824.0	96.0	85.1	95.6	85.0	93.4	81.2	8376	95.6
1992	5409.9	824.0	79.5	84.6	79.5	84.5	74.7	80.6	6987	79.5
1993	5248.5	822.0	75.8	83.9	75.8	83.8	72.9	80.0	6644	75.8
1994	7147.2	822.0	98.9	85.0	98.9	84.9	99.3	81.4	8660	98.9
1995	5091.4	822.0	79.7	84.7	79.7	84.6	70.7	80.7	6984	79.7
1996	5741.3	822.0	81.5	84.4	81.5	84.4	79.5	80.6	7160	81.5
1997	7280.9	822.0	100.0	85.4	100.0	85.3	101.1	81.8	8760	100.0
1998	6271.4	824.0	85.8	85.4	85.8	85.4	86.8	82.1	7514	85.8
1999	5356.2	852.0	82.7	85.3	82.7	85.2	71.8	81.6	7242	82.7
2000	7362.6	839.0	99.4	86.0	99.4	85.9	99.9	82.5	8736	99.5
2001	5777.7	842.0	79.0	85.7	79.0	85.6	78.3	82.3	6921	79.0
2002	6463.4	842.0	87.7	85.8	87.7	85.7	87.6	82.6	7682	87.7
2003	7379.4	839.0	99.2	86.4	99.2	86.3	100.4	83.4	8687	99.2
2004	6724.1	849.0	90.5	86.5	90.5	86.5	90.7	83.7	7949	90.5
2005	6351.7	842.0	86.4	86.5	86.4	86.5	86.1	83.8	7566	86.4
2006	7620.3	860.0	100.0	87.1	100.0	87.0	101.2	84.5	8760	100.0
2007	6572.1	860.0	87.5	87.1	87.5	87.1	87.2	84.6	7660	87.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					157	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling	1040			855		
D. Inspection, maintenance or repair without refuelling				26		
E. Testing of plant systems or components				8		
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				8	4	2
L. Human factor related		58				
Subtotal	1040	58	0	897	173	2
Total		1098			1072	

7. Equipment Related Full Outages, Analysis by System

System	2007	1981 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		19
13. Reactor Auxiliary Systems		10
14. Safety Systems		20
15. Reactor Cooling Systems		47
16. Steam generation systems		18
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries		16
32. Feedwater and Main Steam System		6
35. All other I&C Systems		1
41. Main Generator Systems		5
42. Electrical Power Supply Systems		1
Total	0	146

US-333 FITZPATRICK

Operator: ENTERGY (ENTERGY NUCLEAR)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 852.0 MW(e)
Design Net Capacity: 821.0 MW(e)
Design Discharge Burnup: 31800 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6918.4 GW(e).h
Energy Availability Factor: 95.0%
Load Factor: 92.7%
Operating Factor: 95.0%
Energy Unavailability Factor: 5.0%
Total Off-line Time: 442 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	639.3	542.8	637.7	617.2	584.4	615.7	630.4	561.6	542.8	477.5	430.7	638.3	6918.4
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.5	90.5	78.5	78.3	100.0	95.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.5	100.0	100.0	81.1	100.0	97.8
LF (%)	100.9	94.8	100.7	100.6	92.2	100.4	99.4	88.6	88.5	75.3	70.1	100.7	92.7
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.5	90.4	78.6	78.1	100.0	95.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	9.5	21.5	21.7	0.0	5.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.9	0.0	1.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	21.5	2.8	0.0	2.8

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 20 May 1970
Date of First Criticality: 17 Nov 1974
Date of Grid Connection: 01 Feb 1975
Date of Commercial Operation: 28 Jul 1975

Lifetime Generation: 153227.5 GW(e).h
Cumulative Energy Availability Factor: 76.2%
Cumulative Load Factor: 72.9%
Cumulative Unit Capability Factor: 76.3%
Cumulative Energy Unavailability Factor: 23.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	1824.1	819.0	100.0	100.0	100.0	100.0	50.3	50.3	3230	73.1
1976	4156.4	670.0	70.5	81.7	70.5	81.7	70.6	62.9	6284	71.5
1977	3893.4	770.0	57.7	71.8	57.7	71.8	57.7	60.7	5986	68.3
1978	4197.4	800.0	59.9	68.2	59.9	68.2	59.9	60.5	6311	72.0
1979	2964.7	800.0	42.3	62.2	42.3	62.2	42.3	56.3	4450	50.8
1980	4334.1	802.0	71.0	63.9	70.4	63.7	61.5	57.3	6162	70.2
1981	4779.7	810.0	74.7	65.6	74.7	65.5	67.4	58.9	6539	74.6
1982	4959.7	810.0	75.3	66.9	75.3	66.9	69.9	60.4	6570	75.0
1983	4634.3	810.0	70.7	67.4	70.7	67.3	65.3	61.0	6183	70.6
1984	4899.4	810.0	76.9	68.4	76.9	68.3	68.9	61.8	6745	76.8
1985	4166.5	810.0	64.1	68.0	64.1	67.9	58.7	61.5	5576	63.7
1986	6015.6	797.0	90.5	70.0	90.5	69.9	86.1	63.7	7931	90.5
1987	4198.3	795.0	67.1	69.7	67.1	69.7	60.3	63.4	5891	67.2
1988	4356.9	780.0	66.5	69.5	66.5	69.5	63.5	63.4	5844	66.5
1989	6155.3	757.0	90.3	70.9	90.3	70.8	92.8	65.4	7944	90.7
1990	4601.9	782.0	68.4	70.7	68.4	70.7	67.2	65.5	6045	69.0
1991	3376.8	780.0	56.0	69.8	56.0	69.8	49.4	64.5	4534	51.8
1992	0.0	780.0	0.0	65.9	0.0	65.8	0.0	60.9	0	0.0
1993	4746.5	780.0	71.6	66.2	71.6	66.1	69.5	61.3	6301	71.9
1994	4972.6	774.0	81.9	67.0	81.9	66.9	73.3	61.9	7224	82.5
1995	4804.0	777.0	71.6	67.2	71.6	67.2	70.5	62.3	6336	72.3
1996	5290.4	765.0	79.3	67.7	79.3	67.7	78.6	63.1	7036	80.1
1997	6624.6	799.0	96.3	69.0	94.9	68.9	94.6	64.5	8310	94.9
1998	4930.5	785.0	75.2	69.3	75.2	69.2	71.7	64.8	6613	75.5
1999	6567.4	799.0	93.5	70.3	93.5	70.2	93.7	66.0	8205	93.7
2000	6024.8	813.0	86.6	71.0	86.6	70.9	84.4	66.8	7617	86.7
2001	7090.5	813.0	98.6	72.0	98.6	72.0	99.6	68.0	8639	98.6
2002	6595.0	813.0	92.4	72.8	92.4	72.7	92.6	69.0	8112	92.6
2003	6966.0	813.0	96.2	73.6	96.2	73.6	97.8	70.0	8435	96.3
2004	6455.9	813.0	90.8	74.2	90.8	74.2	90.4	70.7	7984	90.9
2005	7052.3	825.0	95.9	75.0	95.9	74.9	97.6	71.6	8403	95.9
2006	6758.7	852.0	92.6	75.6	92.6	75.5	90.6	72.3	8108	92.6
2007	6918.4	852.0	97.8	76.3	95.0	76.2	92.7	72.9	8318	95.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		136			419	
B. Refuelling without a maintenance					57	
C. Inspection, maintenance or repair combined with refuelling				1154		
D. Inspection, maintenance or repair without refuelling	55			240		
E. Testing of plant systems or components				2	1	
H. Nuclear regulatory requirements					11	129
J. Grid failure or grid unavailability						2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				4	23	3
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)			248			
Subtotal	55	136	248	1400	511	134
Total		439			2045	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		16
13. Reactor Auxiliary Systems		8
14. Safety Systems		86
15. Reactor Cooling Systems	136	52
31. Turbine and auxiliaries		66
32. Feedwater and Main Steam System		40
35. All other I&C Systems		6
41. Main Generator Systems		22
42. Electrical Power Supply Systems		49
XX. Miscellaneous Systems		19
Total	136	366

US-285 FORT CALHOUN-1

Operator: OPPD (OMAHA PUBLIC POWER DISTRICT)

Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 478.0 MW(e)
Design Net Capacity: 478.0 MW(e)
Design Discharge Burnup: 13500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4370.3 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 103.9%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	379.0	342.4	375.4	363.6	360.7	354.2	360.1	361.3	356.6	372.0	366.4	378.6	4370.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	106.6	106.6	105.7	105.7	101.4	102.9	100.4	100.8	102.8	103.7	105.4	105.6	103.9
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 07 Jun 1968
Date of First Criticality: 06 Aug 1973
Date of Grid Connection: 25 Aug 1973
Date of Commercial Operation: 26 Sep 1973

Lifetime Generation: 100306.1 GW(e).h
Cumulative Energy Availability Factor: 80.2%
Cumulative Load Factor: 75.3%
Cumulative Unit Capability Factor: 80.2%
Cumulative Energy Unavailability Factor: 19.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	601.4	468.0	96.2	96.2	96.2	96.2	44.9	44.9	2642	90.2
1974	2416.3	457.0	83.5	86.7	83.5	86.7	60.4	56.5	7304	83.4
1975	2080.8	457.0	52.0	71.8	52.0	71.8	52.0	54.6	5905	67.4
1976	2195.5	443.0	56.5	67.3	56.5	67.3	56.4	55.1	6101	69.5
1977	2922.7	444.0	75.1	69.1	75.1	69.1	75.1	59.7	6958	79.4
1978	2849.4	456.0	71.4	69.5	71.4	69.5	71.3	61.9	6580	75.1
1979	3666.1	457.0	91.6	73.0	91.6	73.0	91.6	66.6	8382	95.7
1980	2010.3	465.0	59.7	71.2	59.7	71.2	49.2	64.2	5307	60.4
1981	2149.7	480.0	72.7	71.4	72.7	71.4	51.1	62.5	6327	72.2
1982	3482.1	478.0	89.8	73.4	89.8	73.4	83.2	64.8	7856	89.7
1983	2749.9	461.0	73.1	73.4	73.1	73.4	68.1	65.1	6404	73.1
1984	2331.8	478.0	60.1	72.2	60.1	72.2	55.5	64.3	5262	59.9
1985	3066.3	478.0	73.7	72.3	73.7	72.3	73.2	65.0	6454	73.7
1986	3605.6	478.0	94.3	74.0	94.3	74.0	86.1	66.6	8263	94.3
1987	3060.6	478.0	74.7	74.0	74.7	74.0	73.1	67.1	6531	74.6
1988	2627.4	478.0	74.0	74.0	74.0	74.0	62.6	66.8	6496	74.0
1989	3296.0	478.0	87.8	74.9	87.8	74.9	78.7	67.5	7589	86.6
1990	2417.2	478.0	62.1	74.1	62.1	74.1	57.7	67.0	5420	61.9
1991	3249.0	478.0	92.9	75.2	92.9	75.2	77.6	67.6	7946	90.7
1992	2537.1	478.0	64.9	74.6	64.9	74.6	60.4	67.2	5683	64.7
1993	3102.2	478.0	80.0	74.9	80.0	74.9	74.1	67.5	6996	79.9
1994	4118.7	478.0	99.5	76.1	99.5	76.1	98.4	69.0	8711	99.4
1995	3365.6	478.0	82.4	76.4	82.4	76.4	80.4	69.5	7204	82.2
1996	3128.7	478.0	78.5	76.5	78.5	76.5	74.5	69.7	6886	78.4
1997	3818.2	478.0	92.9	77.2	92.9	77.2	91.2	70.6	8131	92.8
1998	3396.6	478.0	82.2	77.4	82.2	77.4	81.1	71.1	7195	82.1
1999	3584.4	478.0	88.9	77.8	88.9	77.8	85.6	71.6	7785	88.9
2000	3898.1	478.0	93.2	78.4	93.2	78.4	92.8	72.4	8185	93.2
2001	3524.1	478.0	88.0	78.7	88.0	78.7	84.2	72.8	7702	87.9
2002	3808.5	478.0	92.1	79.2	92.1	79.2	91.0	73.4	8061	92.0
2003	3510.1	478.0	86.8	79.4	86.8	79.4	83.8	73.8	7596	86.7
2004	4071.3	478.0	96.8	80.0	96.8	80.0	97.0	74.5	8503	96.8
2005	2919.6	476.0	71.7	79.7	71.7	79.7	70.0	74.4	6277	71.6
2006	3100.5	478.0	74.8	79.6	74.8	79.6	74.0	74.4	6553	74.8
2007	4370.3	480.0	100.0	80.2	100.0	80.2	103.9	75.3	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1973 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					175	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	1294					
D. Inspection, maintenance or repair without refuelling	77				13	
E. Testing of plant systems or components	28					
G. Major back-fitting, refurbishment or upgrading activities without refuelling						0
H. Nuclear regulatory requirements						4
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)	5				15	0
Subtotal	0	0	0	1404	204	4
Total	0			1612		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1973 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		11
13. Reactor Auxiliary Systems		7
14. Safety Systems		14
15. Reactor Cooling Systems		56
16. Steam generation systems		4
31. Turbine and auxiliaries		16
32. Feedwater and Main Steam System		15
42. Electrical Power Supply Systems		38
XX. Miscellaneous Systems		6
Total	0	167

US-416 GRAND GULF-1

Operator: ENTERGY (ENTERGY NUCLEAR)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
 Net Reference Unit Power
 at the beginning of 2007: 1266.0 MW(e)
 Design Net Capacity: 1250.0 MW(e)
 Design Discharge Burnup: 28000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9358.8 GW(e).h
 Energy Availability Factor: 87.3%
 Load Factor: 84.4%
 Operating Factor: 87.2%
 Energy Unavailability Factor: 12.7%
 Total Off-line Time: 1117 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	949.3	853.8	470.6	478.5	740.3	908.6	945.6	770.4	434.6	946.5	916.1	944.6	9358.8
EAF (%)	100.0	100.0	54.8	65.3	80.7	100.0	100.0	93.5	53.2	100.0	100.0	100.0	87.3
UCF (%)	100.0	100.0	54.8	65.3	80.7	100.0	100.0	93.6	53.2	100.0	100.0	100.0	87.3
LF (%)	100.8	100.4	50.0	52.5	78.6	99.7	100.4	81.8	47.7	100.5	100.4	100.3	84.4
OF (%)	100.0	100.0	57.5	62.4	80.6	100.0	100.0	93.4	53.2	100.0	100.0	100.0	87.2
EUUF (%)	0.0	0.0	45.2	34.7	19.3	0.0	0.0	6.5	46.8	0.0	0.0	0.0	12.7
PUF (%)	0.0	0.0	45.2	34.7	0.0	0.0	0.0	0.0	46.8	0.0	0.0	0.0	10.5
UCLF (%)	0.0	0.0	0.0	0.0	19.3	0.0	0.0	6.5	0.0	0.0	0.0	0.0	2.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 04 Sep 1974 Lifetime Generation: 185218.5 GW(e).h
 Date of First Criticality: 18 Aug 1982 Cumulative Energy Availability Factor: 86.5%
 Date of Grid Connection: 20 Oct 1984 Cumulative Load Factor: 86.6%
 Date of Commercial Operation: 01 Jul 1985 Cumulative Unit Capability Factor: 86.7%
 Cumulative Energy Unavailability Factor: 13.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	2654.1	1108.0	58.7	58.7	58.7	58.7	54.2	54.2	2691	60.9
1986	4098.1	1108.0	60.5	59.9	60.5	59.9	42.2	46.2	5326	60.8
1987	7727.0	1130.0	80.9	68.4	80.9	68.4	78.0	59.1	7098	81.0
1988	9591.0	1142.0	93.8	75.8	93.8	75.8	95.6	69.7	8250	93.9
1989	7846.3	1142.0	76.9	76.0	76.9	76.0	78.4	71.7	6815	77.8
1990	7404.0	1142.0	76.6	76.1	76.6	76.1	74.0	72.1	6765	77.2
1991	9118.7	1142.0	89.6	78.2	88.4	78.0	91.1	75.0	8035	91.7
1992	8171.1	1143.0	81.1	78.6	81.1	78.4	81.4	75.9	7163	81.5
1993	7898.5	1143.0	77.6	78.5	77.6	78.3	78.9	76.2	6845	78.1
1994	9614.8	1143.0	94.5	80.2	94.5	80.1	96.0	78.3	8284	94.6
1995	7809.7	1153.0	77.7	79.9	77.7	79.8	77.3	78.2	6829	78.0
1996	9224.7	1175.0	87.7	80.6	87.7	80.5	89.3	79.2	7696	87.6
1997	10817.6	1200.0	100.0	82.3	100.0	82.2	102.9	81.2	8760	100.0
1998	9190.8	1200.0	87.5	82.7	87.5	82.6	87.4	81.7	7641	87.2
1999	8428.4	1204.0	79.3	82.4	79.3	82.3	79.9	81.6	6944	79.3
2000	10694.6	1208.0	99.2	83.6	98.3	83.4	100.7	82.9	8634	98.3
2001	9924.0	1210.0	92.3	84.1	91.8	83.9	93.6	83.5	8040	91.8
2002	10059.5	1207.0	93.8	84.7	92.9	84.5	95.1	84.2	8139	92.9
2003	10902.5	1207.0	97.9	85.4	97.9	85.2	103.1	85.3	8574	97.9
2004	10235.1	1207.0	91.2	85.7	91.2	85.5	96.5	85.9	8047	91.6
2005	10077.8	1263.0	91.7	86.0	91.1	85.8	91.1	86.2	7974	91.0
2006	10807.3	1266.0	97.8	86.6	97.8	86.4	97.4	86.7	8570	97.8
2007	9358.8	1266.0	87.3	86.7	87.3	86.5	84.4	86.6	7643	87.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		191			220	
B. Refuelling without a maintenance					30	
C. Inspection, maintenance or repair combined with refuelling	586			670	19	
D. Inspection, maintenance or repair without refuelling	337			107	2	
E. Testing of plant systems or components				0	0	
H. Nuclear regulatory requirements					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					36	12
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)					6	2
Subtotal	923	191	0	777	314	14
Total		1114			1105	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		5
13. Reactor Auxiliary Systems		25
14. Safety Systems		2
15. Reactor Cooling Systems		40
17. Safety I&C Systems (excluding reactor I&C)		13
31. Turbine and auxiliaries	143	26
32. Feedwater and Main Steam System	48	16
33. Circulating Water System		2
35. All other I&C Systems		5
41. Main Generator Systems		13
42. Electrical Power Supply Systems		38
XX. Miscellaneous Systems		27
Total	191	212

US-261 H.B. ROBINSON-2

Operator: PROGRESS (Progress Energy Corporation)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 710.0 MW(e)
Design Net Capacity: 700.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5737.9 GW(e).h
Energy Availability Factor: 89.3%
Load Factor: 92.3%
Operating Factor: 89.3%
Energy Unavailability Factor: 10.7%
Total Off-line Time: 935 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	560.1	508.1	549.3	92.2	257.3	525.4	525.1	535.7	525.7	550.4	544.2	564.3	5737.9
EAF (%)	100.0	100.0	100.0	20.0	51.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.3
UCF (%)	100.0	100.0	100.0	20.0	51.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.3
LF (%)	106.0	106.5	104.1	18.0	48.7	102.8	99.4	101.4	102.8	104.2	106.3	106.8	92.3
OF (%)	100.0	100.0	100.0	20.0	51.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.3
EUF (%)	0.0	0.0	0.0	80.0	48.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7
PUF (%)	0.0	0.0	0.0	80.0	41.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1
UCLF (%)	0.0	0.0	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 13 Apr 1967
Date of First Criticality: 20 Sep 1970
Date of Grid Connection: 26 Sep 1970
Date of Commercial Operation: 07 Mar 1971

Lifetime Generation: 155507.6 GW(e).h
Cumulative Energy Availability Factor: 78.3%
Cumulative Load Factor: 75.5%
Cumulative Unit Capability Factor: 78.5%
Cumulative Energy Unavailability Factor: 21.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1971	2337.3	739.0	100.0	100.0	100.0	100.0	43.1	43.1	3534	48.1
1972	5082.4	739.0	100.0	100.0	100.0	100.0	78.3	62.3	7487	85.2
1973	3765.5	715.0	75.7	91.6	75.7	91.6	60.1	61.5	6591	75.2
1974	4813.1	700.0	83.3	89.5	83.3	89.5	78.5	65.8	7297	83.3
1975	4170.9	665.0	71.0	86.0	71.0	86.0	71.6	66.9	6316	72.1
1976	4874.2	667.0	82.5	85.4	82.5	85.4	83.2	69.6	7435	84.6
1977	4130.2	665.0	70.8	83.4	70.8	83.4	70.9	69.8	7462	85.2
1978	3980.0	665.0	68.2	81.5	68.2	81.5	68.3	69.6	6307	72.0
1979	4005.1	665.0	68.7	80.1	68.7	80.1	68.8	69.5	6172	70.5
1980	3210.9	665.0	61.9	78.3	61.9	78.3	55.0	68.1	5464	62.2
1981	3510.8	665.0	81.1	78.6	73.4	77.9	60.3	67.4	6391	73.0
1982	2268.4	665.0	47.9	76.0	47.9	75.4	38.9	65.0	4278	48.8
1983	3347.5	665.0	75.5	76.0	75.5	75.4	57.5	64.5	6609	75.4
1984	224.3	665.0	7.0	71.1	7.0	70.6	3.8	60.2	615	7.0
1985	5239.9	665.0	87.6	72.2	87.6	71.7	89.9	62.1	7697	87.9
1986	4799.6	665.0	79.7	72.7	79.7	72.2	82.4	63.4	7028	80.2
1987	4235.5	665.0	70.3	72.5	70.3	72.1	72.7	63.9	6224	71.1
1988	3182.4	665.0	64.2	72.1	64.2	71.7	54.5	63.4	5717	65.1
1989	2790.5	665.0	45.5	70.7	45.5	70.3	47.9	62.6	4107	46.9
1990	3319.2	665.0	63.1	70.3	63.1	69.9	57.0	62.3	5614	64.1
1991	4792.2	672.0	80.2	70.8	80.2	70.4	81.3	63.2	7048	80.5
1992	4062.9	683.0	66.2	70.6	66.2	70.2	67.7	63.4	5812	66.2
1993	4193.3	683.0	70.1	70.6	70.1	70.2	70.1	63.7	6137	70.1
1994	4655.1	683.0	78.2	70.9	78.2	70.6	77.8	64.3	6845	78.1
1995	5033.8	683.0	84.0	71.4	84.0	71.1	84.1	65.1	7356	84.0
1996	5460.1	683.0	88.2	72.1	88.2	71.8	91.0	66.1	7745	88.2
1997	6197.6	683.0	98.9	73.1	98.9	72.8	103.6	67.5	8662	98.9
1998	5505.6	683.0	88.5	73.6	88.5	73.4	92.0	68.4	7751	88.5
1999	5684.5	683.0	91.4	74.3	91.4	74.0	95.0	69.4	8009	91.4
2000	6237.1	683.0	99.6	75.1	99.6	74.9	104.0	70.5	8750	99.6
2001	5515.0	683.0	90.4	75.6	90.4	75.4	92.2	71.2	7919	90.4
2002	5606.1	683.0	90.9	76.1	90.9	75.9	93.7	71.9	7960	90.9
2003	6439.9	710.0	100.0	76.9	100.0	76.6	103.5	72.9	8760	100.0
2004	5742.2	710.0	88.9	77.2	88.9	77.0	92.1	73.5	7811	88.9
2005	5770.1	710.0	89.5	77.6	89.5	77.4	92.8	74.1	7839	89.5
2006	6442.7	710.0	99.4	78.2	99.4	78.0	103.6	75.0	8705	99.4
2007	5737.9	710.0	89.3	78.5	89.3	78.3	92.3	75.5	7825	89.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		48			519	
B. Refuelling without a maintenance					61	
C. Inspection, maintenance or repair combined with refuelling	885			1162		
D. Inspection, maintenance or repair without refuelling				41		
E. Testing of plant systems or components				0	0	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				1		
H. Nuclear regulatory requirements					110	17
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					37	0
Subtotal	885	48	0	1204	727	17
Total		933			1948	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		38
13. Reactor Auxiliary Systems		2
14. Safety Systems		37
15. Reactor Cooling Systems		64
16. Steam generation systems		120
31. Turbine and auxiliaries		92
32. Feedwater and Main Steam System		39
35. All other I&C Systems		0
41. Main Generator Systems		0
42. Electrical Power Supply Systems	48	83
XX. Miscellaneous Systems		14
Total	48	489

US-321 HATCH-1

Operator: SOUTH (Southern Nuclear Operating Co.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 876.0 MW(e)
Design Net Capacity: 777.0 MW(e)
Design Discharge Burnup: 17000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7499.1 GW(e).h
Energy Availability Factor: 97.6%
Load Factor: 97.7%
Operating Factor: 97.6%
Energy Unavailability Factor: 2.4%
Total Off-line Time: 210 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	519.8	505.6	664.0	641.8	650.4	633.4	654.4	641.1	633.0	657.6	636.5	661.6	7499.1
EAF (%)	83.9	86.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.6
UCF (%)	83.9	86.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.6
LF (%)	79.8	85.9	102.0	101.7	99.8	100.4	100.4	98.4	100.4	100.9	100.8	101.5	97.7
OF (%)	84.0	86.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.6
EUF (%)	16.1	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
PUF (%)	16.1	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 30 Sep 1969
Date of First Criticality: 12 Sep 1974
Date of Grid Connection: 11 Nov 1974
Date of Commercial Operation: 31 Dec 1975

Lifetime Generation: 159971.1 GW(e).h
Cumulative Energy Availability Factor: 79.7%
Cumulative Load Factor: 77.1%
Cumulative Unit Capability Factor: 79.8%
Cumulative Energy Unavailability Factor: 20.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	38.3	786.0	100.0	100.0	100.0	100.0	6.5	6.5	134	18.0
1976	4133.8	786.0	60.0	63.1	60.0	63.1	59.9	55.7	7299	83.1
1977	3716.7	700.0	60.2	61.8	60.2	61.8	60.6	57.9	5802	66.2
1978	4277.2	717.0	68.1	63.8	68.1	63.8	68.1	61.1	6370	72.7
1979	3349.5	739.0	51.7	60.8	51.7	60.8	51.7	58.8	4781	54.6
1980	4790.2	764.0	82.3	65.2	82.1	65.1	71.4	61.4	7174	81.7
1981	2770.7	757.0	50.6	62.7	50.6	62.7	41.8	58.1	4384	50.0
1982	2893.9	758.0	49.4	60.8	49.4	60.8	43.6	56.0	4313	49.2
1983	3968.9	764.0	71.5	62.2	71.5	62.2	59.3	56.4	6240	71.2
1984	3609.2	752.0	62.5	62.2	62.3	62.2	54.6	56.2	5473	62.3
1985	4761.4	752.0	76.5	63.6	76.5	63.6	72.3	57.8	6694	76.4
1986	3645.4	768.0	59.0	63.2	59.0	63.2	54.2	57.5	5162	58.9
1987	5080.7	750.0	80.4	64.6	80.4	64.6	77.3	59.1	7043	80.4
1988	4115.8	756.0	66.0	64.7	66.0	64.7	62.0	59.4	5802	66.1
1989	6479.7	757.0	100.0	67.3	100.0	67.2	97.7	62.1	8760	100.0
1990	4103.4	753.0	65.1	67.1	65.1	67.1	62.2	62.1	5722	65.3
1991	4707.5	741.0	74.6	67.6	74.0	67.5	72.5	62.7	6530	74.5
1992	6157.2	741.0	96.1	69.2	96.1	69.2	94.6	64.6	8444	96.1
1993	4956.7	737.0	78.4	69.7	78.4	69.7	76.8	65.2	6913	78.9
1994	5512.2	741.0	85.8	70.6	85.8	70.5	84.9	66.3	7542	86.1
1995	6465.8	741.0	100.0	72.0	100.0	71.9	99.6	67.9	8760	100.0
1996	5726.7	788.0	87.8	72.8	87.8	72.7	82.6	68.6	7666	87.3
1997	6009.0	800.0	87.9	73.5	87.9	73.5	85.7	69.5	7637	87.2
1998	6951.8	800.0	99.9	74.7	99.9	74.7	99.2	70.8	8751	99.9
1999	5968.8	808.0	82.2	75.1	82.2	75.0	84.3	71.4	7153	81.7
2000	6413.4	860.0	86.2	75.6	86.2	75.5	84.8	72.0	7530	85.7
2001	7496.2	863.0	99.1	76.6	99.1	76.5	99.2	73.2	8689	99.2
2002	6627.1	856.0	88.8	77.1	88.8	77.0	88.4	73.8	7778	88.8
2003	7146.9	856.0	96.3	77.8	96.3	77.8	95.3	74.7	8438	96.3
2004	6896.1	869.0	91.7	78.4	91.7	78.3	90.8	75.3	8046	91.6
2005	6993.5	856.0	92.7	78.9	92.7	78.9	93.3	75.9	8121	92.7
2006	6422.8	849.0	85.4	79.1	85.4	79.1	86.3	76.3	7516	85.8
2007	7499.1	876.0	97.6	79.8	97.6	79.7	97.7	77.1	8550	97.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					373	0
B. Refuelling without a maintenance					21	
C. Inspection, maintenance or repair combined with refuelling				1147		
D. Inspection, maintenance or repair without refuelling	208			99	0	
E. Testing of plant systems or components				0	3	
H. Nuclear regulatory requirements						0
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				3	51	
P. Fire					12	
Subtotal	208	0	0	1249	460	1
Total		208			1710	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1976 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		20
13. Reactor Auxiliary Systems		46
14. Safety Systems		36
15. Reactor Cooling Systems		50
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		68
32. Feedwater and Main Steam System		67
33. Circulating Water System		1
35. All other I&C Systems		8
41. Main Generator Systems		30
42. Electrical Power Supply Systems		17
XX. Miscellaneous Systems		9
Total	0	355

US-366 HATCH-2

Operator: SOUTH (Southern Nuclear Operating Co.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 883.0 MW(e)
Design Net Capacity: 784.0 MW(e)
Design Discharge Burnup: 18750 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6749.0 GW(e).h
Energy Availability Factor: 88.4%
Load Factor: 87.3%
Operating Factor: 88.4%
Energy Unavailability Factor: 11.6%
Total Off-line Time: 1016 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	663.9	94.5	247.3	643.0	661.1	629.5	654.8	589.4	629.8	655.8	619.5	660.4	6749.0
EAF (%)	100.0	17.9	45.3	100.0	100.0	100.0	100.0	92.4	100.0	100.0	100.0	100.0	88.4
UCF (%)	100.0	17.9	45.3	100.0	100.0	100.0	100.0	92.4	100.0	100.0	100.0	100.0	88.4
LF (%)	101.1	15.9	37.7	101.1	100.6	99.0	99.7	89.7	99.1	99.8	97.3	100.5	87.3
OF (%)	100.0	17.9	45.2	100.0	100.0	100.0	100.0	92.3	100.0	100.0	100.0	100.0	88.4
EUf (%)	0.0	82.1	54.7	0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	0.0	11.6
PUf (%)	0.0	82.1	54.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	0.0	0.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 27 Dec 1972
Date of First Criticality: 04 Jul 1978
Date of Grid Connection: 22 Sep 1978
Date of Commercial Operation: 05 Sep 1979

Lifetime Generation: 144698.3 GW(e).h
Cumulative Energy Availability Factor: 82.0%
Cumulative Load Factor: 78.2%
Cumulative Unit Capability Factor: 82.1%
Cumulative Energy Unavailability Factor: 18.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1979	1757.0	749.0	100.0	100.0	100.0	100.0	80.1	80.1	2480	84.7
1980	3653.1	767.0	61.0	70.6	59.1	69.2	54.2	60.6	5269	60.0
1981	4481.5	772.0	78.7	74.1	78.7	73.3	66.3	63.0	6872	78.4
1982	3734.2	771.0	63.9	71.0	63.9	70.5	55.3	60.7	5588	63.8
1983	3817.2	771.0	66.1	69.9	66.1	69.5	56.5	59.7	5774	65.9
1984	1893.5	748.0	26.7	62.0	26.7	61.6	28.8	54.1	2833	32.3
1985	5376.1	748.0	82.6	65.2	82.6	64.9	82.0	58.4	7239	82.6
1986	3618.7	777.0	70.4	65.9	70.4	65.6	53.2	57.7	6169	70.4
1987	5755.6	761.0	95.7	69.4	95.7	69.2	86.3	61.1	8388	95.8
1988	4254.5	768.0	65.7	69.0	65.7	68.8	63.1	61.3	5917	67.4
1989	4147.2	768.0	68.6	69.0	68.6	68.8	61.6	61.3	6155	70.3
1990	6527.8	766.0	98.7	71.6	98.7	71.5	97.3	64.5	8649	98.7
1991	4932.2	761.0	74.4	71.8	74.4	71.7	74.0	65.3	6656	76.0
1992	4692.4	764.0	74.5	72.0	74.5	71.9	69.9	65.6	6668	75.9
1993	4999.7	757.0	87.4	73.1	87.4	73.0	75.4	66.3	7734	88.3
1994	5275.6	765.0	85.2	73.9	85.2	73.8	78.7	67.1	7534	86.0
1995	5055.5	768.0	77.4	74.1	77.4	74.0	75.1	67.6	6888	78.6
1996	7021.7	809.0	98.4	75.6	98.4	75.5	98.8	69.5	8639	98.3
1997	6033.6	818.0	86.4	76.2	86.4	76.1	84.2	70.4	7560	86.3
1998	5829.9	821.0	82.8	76.6	82.8	76.5	81.0	70.9	7247	82.7
1999	7073.6	855.0	93.3	77.5	93.3	77.4	94.4	72.2	8173	93.3
2000	6900.3	873.0	89.6	78.1	89.6	78.0	89.9	73.1	7884	89.8
2001	6584.5	878.0	86.3	78.5	86.3	78.5	85.6	73.8	7618	87.0
2002	7423.3	870.0	97.3	79.4	97.3	79.3	97.4	74.9	8544	97.5
2003	6962.5	883.0	91.9	80.0	91.9	79.9	91.1	75.6	8052	91.9
2004	7520.6	883.0	97.8	80.8	97.8	80.7	97.0	76.6	8589	97.8
2005	6727.8	883.0	88.2	81.1	88.2	81.0	87.0	77.0	7724	88.2
2006	7641.8	883.0	99.3	81.8	99.3	81.7	98.8	77.9	8694	99.2
2007	6749.0	883.0	88.4	82.1	88.4	82.0	87.3	78.2	7744	88.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		56			227	
B. Refuelling without a maintenance					44	
C. Inspection, maintenance or repair combined with refuelling	956			1047		
D. Inspection, maintenance or repair without refuelling				129	2	
E. Testing of plant systems or components	2			10	89	
H. Nuclear regulatory requirements				2		5
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	41	
Subtotal	958	56	0	1188	403	5
Total		1014			1596	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1978 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		6
12. Reactor I&C Systems		16
14. Safety Systems		5
15. Reactor Cooling Systems		53
21. Fuel Handling and Storage Facilities		26
31. Turbine and auxiliaries		30
32. Feedwater and Main Steam System	56	39
33. Circulating Water System		1
41. Main Generator Systems		28
42. Electrical Power Supply Systems		13
Total	56	217

US-354 HOPE CREEK-1

Operator: PSEG (PUBLIC SERVICE ELECTRIC & GAS CO.)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1061.0 MW(e)
Design Net Capacity: 1067.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8104.5 GW(e).h
Energy Availability Factor: 88.8%
Load Factor: 87.2%
Operating Factor: 88.7%
Energy Unavailability Factor: 11.2%
Total Off-line Time: 986 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	671.5	721.8	813.1	783.6	730.6	737.5	778.0	773.9	729.2	257.1	308.9	799.5	8104.5
EAF (%)	84.5	100.0	100.0	100.0	91.8	100.0	100.0	100.0	100.0	38.7	51.3	100.0	88.8
UCF (%)	84.5	100.0	100.0	100.0	91.9	100.0	100.0	100.0	100.0	38.7	51.3	100.0	88.8
LF (%)	85.1	101.2	103.1	102.6	92.6	96.5	98.6	98.0	95.5	32.6	40.4	101.3	87.2
OF (%)	84.4	100.0	100.0	100.0	91.8	100.0	100.0	100.0	100.0	39.9	49.8	100.0	88.7
EUf (%)	15.5	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0	61.3	48.7	0.0	11.2
PUf (%)	10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.3	48.7	0.0	10.1
UCLF (%)	5.3	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Mar 1976 **Lifetime Generation:** 142222.3 GW(e).h
Date of First Criticality: 28 Jun 1986 **Cumulative Energy Availability Factor:** 84.6%
Date of Grid Connection: 01 Aug 1986 **Cumulative Load Factor:** 82.2%
Date of Commercial Operation: 20 Dec 1986 **Cumulative Unit Capability Factor:** 84.6%
Cumulative Energy Unavailability Factor: 15.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	Data not provided									
1987	7308.7	1067.0	92.7	92.7	92.7	92.7	78.2	78.2	7457	85.1
1988	6470.9	1061.0	79.0	85.9	79.0	85.9	69.4	73.8	6369	72.5
1989	6614.3	1031.0	76.7	82.9	76.7	82.9	73.2	73.6	6717	76.7
1990	8100.1	1031.0	90.7	84.8	90.7	84.8	89.7	77.6	7940	90.6
1991	7402.7	1031.0	83.1	84.5	83.1	84.5	82.0	78.4	7280	83.1
1992	7059.1	1031.0	78.9	83.5	78.9	83.5	77.9	78.4	6930	78.9
1993	8825.3	1031.0	97.4	85.5	97.4	85.5	97.7	81.1	8526	97.3
1994	7125.6	1031.0	79.6	84.8	79.6	84.8	78.9	80.8	6969	79.6
1995	7072.3	1031.0	79.2	84.2	79.2	84.2	78.3	80.5	6937	79.2
1996	6770.7	1031.0	75.4	83.3	75.4	83.3	74.8	80.0	6618	75.3
1997	6417.8	1031.0	74.3	82.5	74.3	82.5	71.1	79.2	6511	74.3
1998	8700.4	1031.0	97.5	83.7	97.5	83.7	96.3	80.6	8539	97.5
1999	7701.1	1031.0	86.1	83.9	86.1	83.9	85.3	80.9	7538	86.1
2000	7271.7	1031.0	82.6	83.8	82.6	83.8	80.3	80.9	7259	82.6
2001	8065.3	1049.0	89.8	84.2	89.8	84.2	88.7	81.4	7859	89.7
2002	8843.1	1049.0	97.7	85.0	97.7	85.0	96.2	82.4	8555	97.7
2003	7260.6	1049.0	81.5	84.8	81.5	84.8	79.0	82.2	7137	81.5
2004	6048.9	1049.0	69.7	84.0	69.7	84.0	65.6	81.2	6123	69.7
2005	7684.8	1049.0	84.2	84.0	84.2	84.0	83.6	81.4	7379	84.2
2006	8617.8	1059.0	91.8	84.4	91.8	84.4	92.9	81.9	8042	91.8
2007	8104.5	1061.0	88.8	84.6	88.8	84.6	87.2	82.2	7774	88.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		60			274	
B. Refuelling without a maintenance					18	
C. Inspection, maintenance or repair combined with refuelling	807			878		
D. Inspection, maintenance or repair without refuelling	75			123		
E. Testing of plant systems or components				0	5	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					6	
L. Human factor related		39				
Subtotal	882	99	0	1001	303	0
Total		981			1304	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		14
12. Reactor I&C Systems		10
13. Reactor Auxiliary Systems		35
15. Reactor Cooling Systems	60	40
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries		57
32. Feedwater and Main Steam System		39
33. Circulating Water System		3
41. Main Generator Systems		24
42. Electrical Power Supply Systems		36
Total	60	261

US-247 INDIAN POINT-2

Operator: ENTERGY (ENTERGY NUCLEAR)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1020.0 MW(e)
Design Net Capacity: 873.0 MW(e)
Design Discharge Burnup: 36000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8842.6 GW(e).h
Energy Availability Factor: 99.1%
Load Factor: 99.0%
Operating Factor: 99.1%
Energy Unavailability Factor: 0.9%
Total Off-line Time: 81 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	767.3	675.9	759.8	739.6	686.9	731.3	748.9	745.7	726.2	757.1	741.4	762.6	8842.6
EAF (%)	100.0	97.0	100.0	100.0	92.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1
UCF (%)	100.0	97.0	100.0	100.0	92.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1
LF (%)	101.1	98.6	100.3	100.7	90.5	99.6	98.7	98.3	98.9	99.8	100.8	100.5	99.0
OF (%)	100.0	97.3	99.6	100.0	91.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1
EUF (%)	0.0	3.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	3.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 14 Oct 1966
Date of First Criticality: 22 May 1973
Date of Grid Connection: 26 Jun 1973
Date of Commercial Operation: 01 Aug 1974

Lifetime Generation: 170722.4 GW(e).h
Cumulative Energy Availability Factor: 71.2%
Cumulative Load Factor: 69.4%
Cumulative Unit Capability Factor: 71.3%
Cumulative Energy Unavailability Factor: 28.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	2037.0	873.0	79.8	79.8	79.8	79.8	63.5	63.5	2933	79.9
1975	4646.0	865.0	61.3	66.8	61.3	66.8	61.3	62.0	6545	74.7
1976	2287.1	864.0	30.2	51.7	30.2	51.7	30.1	48.8	3054	34.8
1977	5210.3	864.0	68.9	56.7	68.9	56.7	68.8	54.7	6626	75.6
1978	4372.9	859.0	58.2	57.0	58.2	57.0	58.1	55.4	5503	62.8
1979	4808.4	856.0	64.1	58.3	64.1	58.3	64.1	57.0	6156	70.3
1980	4273.2	856.0	66.8	59.6	63.9	59.2	56.8	57.0	5689	64.8
1981	3065.0	856.0	44.9	57.7	44.9	57.3	40.9	54.8	4027	46.0
1982	4458.6	862.0	65.0	58.5	65.0	58.2	59.0	55.3	5726	65.4
1983	5895.3	859.0	83.5	61.2	83.5	60.9	78.3	57.8	7354	83.9
1984	2891.6	864.0	48.4	59.9	48.4	59.7	38.1	55.9	4552	51.8
1985	6665.0	855.0	95.5	63.0	95.5	62.8	89.0	58.8	8382	95.7
1986	3827.4	855.0	52.6	62.2	52.6	62.0	51.1	58.1	4924	56.2
1987	5149.6	852.0	69.8	62.8	69.8	62.5	68.9	58.9	6331	72.3
1988	6064.0	856.0	81.0	64.0	81.0	63.8	80.6	60.4	7247	82.5
1989	4476.9	856.0	60.4	63.8	60.4	63.6	59.7	60.4	5556	63.4
1990	5222.1	886.0	64.3	63.8	64.3	63.6	67.2	60.8	5779	66.0
1991	3873.4	929.0	51.2	63.0	51.2	62.9	47.6	60.0	4495	51.3
1992	7880.6	939.0	96.7	65.0	96.7	64.9	95.5	62.1	8494	96.7
1993	5931.7	941.0	75.3	65.6	75.3	65.4	72.0	62.6	6570	75.0
1994	7634.6	941.0	100.0	67.4	100.0	67.3	92.6	64.2	8760	100.0
1995	4896.9	941.0	63.6	67.2	63.6	67.1	59.4	64.0	5533	63.2
1996	7831.8	941.0	94.2	68.5	94.2	68.4	94.7	65.4	8261	94.0
1997	3179.7	936.0	41.7	67.3	41.7	67.2	38.8	64.2	3639	41.5
1998	2512.5	932.0	30.9	65.7	30.9	65.6	30.8	62.8	2698	30.8
1999	7300.4	937.0	87.6	66.6	87.6	66.5	88.9	63.9	7665	87.5
2000	1062.3	941.0	12.5	64.5	12.5	64.4	12.9	61.8	1099	12.5
2001	7792.7	951.0	96.2	65.7	96.2	65.6	94.5	63.1	8429	96.2
2002	7556.6	951.0	90.2	66.6	90.2	66.5	91.7	64.1	7931	90.5
2003	8370.8	956.0	98.1	67.7	98.1	67.6	100.3	65.5	8597	98.1
2004	7513.1	956.0	89.3	68.5	89.3	68.4	89.5	66.3	7851	89.4
2005	8847.1	965.0	99.7	69.6	99.7	69.5	104.6	67.6	8730	99.6
2006	7984.7	1020.0	90.6	70.3	90.6	70.2	89.4	68.4	7937	90.6
2007	8842.6	1020.0	99.1	71.3	99.1	71.2	99.0	69.4	8679	99.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1973 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		79			1000	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling				1085		
D. Inspection, maintenance or repair without refuelling				198		
E. Testing of plant systems or components				25		
H. Nuclear regulatory requirements				4	2	
J. Grid failure or grid unavailability						6
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				87	13	0
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)					1	
Subtotal	0	79	0	1399	1024	6
Total		79			2429	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1973 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		52
13. Reactor Auxiliary Systems		9
14. Safety Systems		10
15. Reactor Cooling Systems		64
16. Steam generation systems		82
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries		63
32. Feedwater and Main Steam System	79	345
35. All other I&C Systems		2
41. Main Generator Systems		46
42. Electrical Power Supply Systems		235
XX. Miscellaneous Systems		0
Total	79	913

US-286 INDIAN POINT-3

Operator: ENTERGY (ENTERGY NUCLEAR)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1025.0 MW(e)
Design Net Capacity: 965.0 MW(e)
Design Discharge Burnup: 14000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7797.3 GW(e).h
Energy Availability Factor: 86.8%
Load Factor: 86.8%
Operating Factor: 86.8%
Energy Unavailability Factor: 13.2%
Total Off-line Time: 1158 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	770.6	695.9	149.2	89.2	736.6	751.1	772.5	770.1	748.8	777.0	755.9	780.3	7797.3
EAF (%)	100.0	100.0	21.3	21.4	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	86.8
UCF (%)	100.0	100.0	21.3	21.4	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	86.8
LF (%)	101.1	101.0	19.6	12.1	96.6	101.8	101.3	101.0	101.5	101.9	102.3	102.3	86.8
OF (%)	100.0	100.0	21.3	21.4	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	86.8
EUF (%)	0.0	0.0	78.7	78.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2
PUF (%)	0.0	0.0	78.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
UCLF (%)	0.0	0.0	0.0	78.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 13 Aug 1969
Date of First Criticality: 06 Apr 1976
Date of Grid Connection: 27 Apr 1976
Date of Commercial Operation: 30 Aug 1976

Lifetime Generation: 154904.4 GW(e).h
Cumulative Energy Availability Factor: 67.1%
Cumulative Load Factor: 64.0%
Cumulative Unit Capability Factor: 67.1%
Cumulative Energy Unavailability Factor: 32.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	2257.5	899.0	100.0	100.0	100.0	100.0	70.4	70.4	2871	78.2
1977	5520.8	873.0	72.1	80.3	72.1	80.3	72.2	71.7	6556	74.8
1978	5457.6	911.0	68.3	75.3	68.3	75.3	68.4	70.3	6365	72.7
1979	4794.6	965.0	56.7	69.5	56.7	69.5	56.7	66.1	5824	66.5
1980	3070.4	965.0	53.6	65.7	53.6	65.7	36.2	59.0	4667	53.1
1981	3033.4	965.0	59.4	64.5	59.4	64.5	35.9	54.6	5236	59.8
1982	1436.1	891.0	22.5	58.2	22.5	58.2	18.4	49.2	1967	22.5
1983	60.7	934.0	2.4	50.6	2.4	50.6	0.7	42.6	229	2.6
1984	6041.7	965.0	76.2	53.8	76.2	53.8	71.3	46.1	6703	76.3
1985	4728.5	965.0	65.5	55.1	65.5	55.1	55.9	47.2	5782	66.0
1986	5525.6	959.0	72.9	56.8	72.9	56.8	65.8	49.0	6431	73.4
1987	4850.6	950.0	60.5	57.2	60.5	57.2	58.3	49.8	5396	61.6
1988	6711.9	965.0	81.9	59.2	81.9	59.2	79.2	52.3	7217	82.2
1989	4968.7	965.0	59.7	59.2	59.7	59.2	58.8	52.8	5279	60.3
1990	5031.8	965.0	60.8	59.4	60.8	59.4	59.5	53.2	5374	61.3
1991	7300.8	965.0	88.8	61.3	88.8	61.3	86.4	55.4	7577	86.5
1992	4760.6	965.0	59.2	61.2	59.2	61.2	56.2	55.5	5248	59.7
1993	1192.6	965.0	13.4	58.4	13.4	58.4	14.1	53.1	1292	14.7
1994	0.0	965.0	0.0	55.2	0.0	55.2	0.0	50.1	0	0.0
1995	1471.5	965.0	18.2	53.2	18.2	53.2	17.4	48.4	1696	19.4
1996	5872.5	965.0	72.4	54.2	72.4	54.2	69.3	49.5	6390	72.7
1997	4337.3	965.0	57.4	54.3	57.4	54.3	51.3	49.5	4650	53.1
1998	7656.5	965.0	93.6	56.1	93.6	56.1	90.6	51.4	8197	93.6
1999	7269.2	965.0	87.4	57.5	87.4	57.5	86.0	52.9	7659	87.4
2000	8432.2	965.0	97.9	59.1	97.9	59.1	99.5	54.8	8600	97.9
2001	7940.2	965.0	92.8	60.5	92.8	60.5	93.9	56.4	8130	92.8
2002	8432.6	979.0	98.3	61.9	98.3	61.9	99.6	58.1	8611	98.3
2003	7608.4	979.0	88.4	62.9	88.4	62.9	88.7	59.2	7748	88.4
2004	8747.3	979.0	100.0	64.3	100.0	64.3	101.7	60.7	8784	100.0
2005	8037.2	985.0	91.0	65.2	91.0	65.2	93.1	61.9	7969	91.0
2006	8974.5	1025.0	99.4	66.4	99.4	66.4	100.0	63.2	8705	99.4
2007	7797.3	1025.0	86.8	67.1	86.8	67.1	86.8	64.0	7602	86.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		572			1327	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling	584			1127		
D. Inspection, maintenance or repair without refuelling				270	1	
E. Testing of plant systems or components				2	11	
J. Grid failure or grid unavailability					5	0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					13	
P. Fire					0	
Subtotal	584	572	0	1399	1362	0
Total		1156			2761	

7. Equipment Related Full Outages, Analysis by System

System	2007	1976 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		20
13. Reactor Auxiliary Systems		10
14. Safety Systems		640
15. Reactor Cooling Systems		38
16. Steam generation systems		77
17. Safety I&C Systems (excluding reactor I&C)		0
31. Turbine and auxiliaries	6	110
32. Feedwater and Main Steam System	20	55
33. Circulating Water System		0
41. Main Generator Systems		328
42. Electrical Power Supply Systems	544	35
XX. Miscellaneous Systems		3
Total	570	1316

US-305 KEWAUNEE

Operator: DOMENGY (DOMINION ENERGY KEWAUNEE)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 556.0 MW(e)
Design Net Capacity: 535.0 MW(e)
Design Discharge Burnup: 38900 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4625.8 GW(e).h
Energy Availability Factor: 94.1%
Load Factor: 95.0%
Operating Factor: 94.0%
Energy Unavailability Factor: 5.9%
Total Off-line Time: 522 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	359.0	364.4	288.7	411.1	421.2	391.8	422.0	419.5	411.0	300.3	411.5	425.3	4625.8
EAF (%)	90.2	92.9	72.8	100.0	100.0	100.0	100.0	100.0	100.0	73.6	100.0	100.0	94.1
UCF (%)	90.2	92.9	72.8	100.0	100.0	100.0	100.0	100.0	100.0	73.6	100.0	100.0	94.1
LF (%)	86.8	97.5	69.9	102.7	101.8	97.9	102.0	101.4	102.7	72.6	102.6	102.8	95.0
OF (%)	90.2	96.3	69.4	100.0	100.0	100.0	100.0	100.0	100.0	73.5	100.0	100.0	94.0
EUF (%)	9.8	7.1	27.2	0.0	0.0	0.0	0.0	0.0	0.0	26.4	0.0	0.0	5.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.4	0.0	0.0	2.2
UCLF (%)	9.8	7.1	27.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 06 Aug 1968
Date of First Criticality: 07 Mar 1974
Date of Grid Connection: 08 Apr 1974
Date of Commercial Operation: 16 Jun 1974

Lifetime Generation: 117831.8 GW(e).h
Cumulative Energy Availability Factor: 82.7%
Cumulative Load Factor: 82.2%
Cumulative Unit Capability Factor: 82.7%
Cumulative Energy Unavailability Factor: 17.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	1719.7	531.0	76.4	76.4	76.4	76.4	62.6	62.6	3918	76.3
1975	3340.1	535.0	71.3	73.2	71.3	73.2	71.3	68.1	7730	88.2
1976	3382.5	522.0	73.7	73.4	73.7	73.4	73.8	70.2	6924	78.8
1977	3546.6	522.0	77.4	74.5	77.4	74.5	77.6	72.3	6985	79.7
1978	3890.6	519.0	85.6	76.9	85.6	76.9	85.6	75.1	7835	89.4
1979	3439.2	520.0	75.5	76.6	75.5	76.6	75.5	75.2	6921	79.0
1980	3631.2	522.0	82.3	77.5	82.3	77.5	79.2	75.8	7207	82.0
1981	3769.2	516.0	86.6	78.7	86.6	78.7	83.4	76.8	7596	86.7
1982	3824.9	514.0	87.4	79.7	87.4	79.7	84.9	77.7	7669	87.5
1983	3706.9	510.0	83.7	80.1	83.7	80.1	83.0	78.3	7334	83.7
1984	3810.0	503.0	85.3	80.6	85.3	80.6	86.2	79.0	7527	85.7
1985	3699.2	503.0	81.8	80.7	81.8	80.7	84.0	79.4	7213	82.3
1986	3854.7	503.0	85.3	81.0	85.3	81.0	87.5	80.0	7514	85.8
1987	4008.6	503.0	88.8	81.6	88.8	81.6	91.0	80.8	7809	89.1
1988	3914.8	503.0	87.1	82.0	87.1	82.0	88.6	81.3	7679	87.4
1989	3741.8	503.0	83.9	82.1	83.9	82.1	84.9	81.6	7390	84.4
1990	3900.8	503.0	87.2	82.4	87.2	82.4	88.5	82.0	7668	87.5
1991	3674.8	507.0	80.3	82.3	80.3	82.3	82.7	82.0	7247	82.7
1992	3938.1	511.0	87.3	82.5	87.3	82.5	87.7	82.3	7682	87.5
1993	3816.9	511.0	86.0	82.7	86.0	82.7	85.3	82.5	7548	86.2
1994	3961.5	511.0	88.2	83.0	88.2	83.0	88.5	82.8	7738	88.3
1995	3793.4	511.0	87.1	83.2	87.1	83.2	84.7	82.9	7645	87.3
1996	3171.1	511.0	71.3	82.6	71.3	82.6	70.6	82.3	6299	71.7
1997	2363.8	511.0	55.5	81.5	55.5	81.5	52.8	81.1	4866	55.5
1998	3705.4	511.0	86.6	81.7	86.6	81.7	82.8	81.1	7584	86.6
1999	4424.7	511.0	100.0	82.4	100.0	82.4	98.8	81.8	8760	100.0
2000	3799.9	511.0	88.5	82.6	88.5	82.6	84.7	81.9	7760	88.3
2001	3461.7	511.0	80.1	82.5	80.1	82.5	77.3	81.8	7009	80.0
2002	4468.7	511.0	97.3	83.1	97.3	83.1	99.8	82.4	8514	97.2
2003	4159.1	526.0	90.5	83.3	90.5	83.3	91.6	82.7	7893	90.1
2004	3873.9	556.0	80.4	83.2	80.4	83.2	80.4	82.6	7049	80.2
2005	3043.1	539.0	62.3	82.5	62.3	82.5	64.4	82.0	5451	62.2
2006	3673.8	556.0	76.0	82.3	76.0	82.3	75.4	81.8	6653	75.9
2007	4625.8	556.0	94.1	82.7	94.1	82.7	95.0	82.2	8238	94.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					250	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling				1065		
D. Inspection, maintenance or repair without refuelling	196			70		
E. Testing of plant systems or components				2		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				2		
H. Nuclear regulatory requirements					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	1
L. Human factor related		323				
Subtotal	196	323	0	1139	254	1
Total		519			1394	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		12
12. Reactor I&C Systems		8
14. Safety Systems		104
15. Reactor Cooling Systems		14
16. Steam generation systems		4
31. Turbine and auxiliaries		27
32. Feedwater and Main Steam System		26
33. Circulating Water System		7
35. All other I&C Systems		1
41. Main Generator Systems		3
42. Electrical Power Supply Systems		17
XX. Miscellaneous Systems		20
Total	0	243

US-373 LASALLE-1

Operator: EXELON (Exelon Generation)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1118.0 MW(e)
Design Net Capacity: 1078.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9664.6 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 98.7%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	849.4	766.4	852.2	823.7	835.5	770.0	829.3	824.8	803.8	837.5	754.3	717.7	9664.6
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	102.1	102.0	102.6	102.3	100.4	95.7	99.7	99.2	99.9	100.7	93.6	86.3	98.7
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 10 Sep 1973 **Lifetime Generation:** 145789.3 GW(e).h
Date of First Criticality: 21 Jun 1982 **Cumulative Energy Availability Factor:** 74.4%
Date of Grid Connection: 04 Sep 1982 **Cumulative Load Factor:** 71.8%
Date of Commercial Operation: 01 Jan 1984 **Cumulative Unit Capability Factor:** 74.4%
Cumulative Energy Unavailability Factor: 25.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	5206.2	1078.0	69.4	69.4	69.4	69.4	55.0	55.0	6052	68.9
1985	4827.5	1036.0	64.3	66.9	63.7	66.6	53.2	54.1	5581	63.7
1986	2100.8	1036.0	25.8	53.4	25.8	53.2	23.1	43.9	2331	26.6
1987	4108.1	1036.0	61.9	55.5	61.9	55.3	45.3	44.3	5455	62.3
1988	5453.7	1036.0	65.9	57.6	65.9	57.4	59.9	47.4	5818	66.2
1989	6180.6	1036.0	69.7	59.6	69.7	59.5	68.1	50.8	6103	69.7
1990	8637.4	1036.0	95.0	64.6	95.0	64.5	95.2	57.1	8329	95.1
1991	6841.4	1036.0	75.4	65.9	75.4	65.9	75.4	59.4	6627	75.7
1992	6469.3	1036.0	74.0	66.8	74.0	66.8	71.1	60.7	6528	74.3
1993	7207.5	1036.0	81.0	68.2	81.0	68.2	79.4	62.5	7102	81.1
1994	4945.3	1036.0	57.8	67.3	57.8	67.2	54.5	61.8	5095	58.2
1995	8239.6	1036.0	93.9	69.5	93.9	69.5	90.8	64.2	8226	93.9
1996	3300.4	1036.0	37.5	67.0	37.5	67.0	36.3	62.1	3349	38.1
1997	0.0	1036.0	0.0	62.3	0.0	62.2	0.0	57.7	0	0.0
1998	3336.7	1036.0	36.3	60.5	36.3	60.5	36.8	56.3	3174	36.2
1999	8013.7	1036.0	90.8	62.4	90.8	62.4	88.3	58.3	7963	90.9
2000	9745.4	1078.0	100.0	64.7	100.0	64.7	102.8	61.0	8784	100.0
2001	9850.4	1111.0	99.4	66.8	99.4	66.7	101.0	63.3	8708	99.4
2002	8927.6	1111.0	90.6	68.1	90.6	68.1	91.7	64.9	7945	90.7
2003	9739.0	1111.0	99.5	69.8	99.5	69.7	100.1	66.8	8716	99.5
2004	9051.5	1111.0	91.5	70.9	91.5	70.8	92.8	68.1	8059	91.7
2005	9812.0	1146.0	100.0	72.3	100.0	72.3	97.7	69.5	8760	100.0
2006	9092.1	1118.0	92.8	73.2	92.8	73.2	92.8	70.6	8129	92.8
2007	9664.6	1118.0	100.0	74.4	100.0	74.4	98.7	71.8	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					472	
B. Refuelling without a maintenance					39	
C. Inspection, maintenance or repair combined with refuelling				1096		
D. Inspection, maintenance or repair without refuelling				448		
E. Testing of plant systems or components				65	1	
H. Nuclear regulatory requirements					214	
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					17	
Subtotal	0	0	0	1609	743	1
Total	0			2353		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		36
12. Reactor I&C Systems		26
13. Reactor Auxiliary Systems		5
14. Safety Systems		48
15. Reactor Cooling Systems		136
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		115
32. Feedwater and Main Steam System		19
33. Circulating Water System		9
35. All other I&C Systems		5
41. Main Generator Systems		14
42. Electrical Power Supply Systems		36
Total	0	451

US-374 LASALLE-2

Operator: EXELON (Exelon Generation)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1120.0 MW(e)
Design Net Capacity: 1078.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9315.5 GW(e).h
Energy Availability Factor: 94.6%
Load Factor: 94.9%
Operating Factor: 94.6%
Energy Unavailability Factor: 5.4%
Total Off-line Time: 473 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	839.9	619.5	360.4	828.0	849.0	813.9	828.3	827.5	809.4	852.1	831.7	855.9	9315.5
EAF (%)	100.0	89.3	46.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.6
UCF (%)	100.0	89.3	46.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.6
LF (%)	100.8	82.3	43.3	102.7	101.9	100.9	99.4	99.3	100.4	102.3	103.0	102.7	94.9
OF (%)	100.0	89.3	46.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.6
EUUF (%)	0.0	10.7	53.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
PUF (%)	0.0	10.7	53.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 10 Sep 1973
Date of First Criticality: 10 Mar 1984
Date of Grid Connection: 20 Apr 1984
Date of Commercial Operation: 19 Oct 1984

Lifetime Generation: 138848.7 GW(e).h
Cumulative Energy Availability Factor: 73.1%
Cumulative Load Factor: 71.8%
Cumulative Unit Capability Factor: 73.2%
Cumulative Energy Unavailability Factor: 26.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	1392.1	1039.0	86.4	86.4	86.4	86.4	75.7	75.7	1536	86.5
1985	3477.0	1036.0	41.8	49.3	41.8	49.3	38.3	44.6	3698	42.2
1986	5727.8	1036.0	75.0	61.0	74.6	60.8	63.1	53.0	6533	74.6
1987	4573.3	1036.0	53.1	58.5	53.1	58.4	50.4	52.2	4699	53.6
1988	5662.8	1036.0	75.1	62.5	75.1	62.4	62.2	54.6	6593	75.1
1989	6506.8	1036.0	75.1	64.9	75.1	64.8	71.7	57.9	6591	75.2
1990	6216.8	1036.0	70.0	65.7	70.0	65.7	68.5	59.6	6162	70.3
1991	8712.4	1036.0	95.3	69.8	95.3	69.8	96.0	64.6	8357	95.4
1992	5797.9	1036.0	66.3	69.4	66.3	69.4	63.7	64.5	5850	66.6
1993	5859.2	1036.0	66.1	69.0	66.1	69.0	64.6	64.5	5825	66.5
1994	8428.9	1036.0	92.4	71.3	92.4	71.3	92.9	67.3	8101	92.5
1995	5905.7	1036.0	66.5	70.9	66.5	70.9	65.1	67.1	5855	66.8
1996	5642.3	1036.0	64.5	70.4	64.5	70.3	62.0	66.7	5649	64.3
1997	0.0	1036.0	0.0	65.1	0.0	65.0	0.0	61.6	0	0.0
1998	0.0	1036.0	0.0	60.5	0.0	60.4	0.0	57.3	0	0.0
1999	6632.3	1036.0	71.1	61.2	71.1	61.1	73.1	58.3	6231	71.1
2000	9040.4	1072.0	93.1	63.2	93.1	63.2	96.0	60.7	8229	93.7
2001	9683.4	1111.0	97.2	65.3	97.2	65.3	99.3	63.1	8515	97.2
2002	8995.6	1111.0	92.1	66.9	92.1	66.9	92.4	64.8	8078	92.2
2003	8709.1	1111.0	88.4	68.1	88.4	68.0	89.5	66.2	7762	88.6
2004	9940.4	1111.0	99.8	69.7	99.8	69.7	101.9	68.1	8764	99.8
2005	8901.2	1147.0	89.7	70.7	89.7	70.7	88.6	69.1	7857	89.7
2006	10015.7	1120.0	100.0	72.1	100.0	72.1	102.1	70.7	8760	100.0
2007	9315.5	1120.0	94.6	73.2	94.6	73.1	94.9	71.8	8287	94.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					287	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	471			1255		
D. Inspection, maintenance or repair without refuelling				194		
E. Testing of plant systems or components	1			1		
H. Nuclear regulatory requirements					465	
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				50	23	
Subtotal	472	0	0	1500	783	1
Total	472			2284		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		69
12. Reactor I&C Systems		69
15. Reactor Cooling Systems		18
31. Turbine and auxiliaries		31
32. Feedwater and Main Steam System		5
35. All other I&C Systems		13
41. Main Generator Systems		0
42. Electrical Power Supply Systems		26
XX. Miscellaneous Systems		17
Total	0	248

US-352 LIMERICK-1

Operator: EXELON (Exelon Generation)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1134.0 MW(e)
Design Net Capacity: 1055.0 MW(e)
Design Discharge Burnup: 22200 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9994.4 GW(e).h
Energy Availability Factor: 99.8%
Load Factor: 100.6%
Operating Factor: 99.8%
Energy Unavailability Factor: 0.2%
Total Off-line Time: 16 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	864.8	786.8	861.0	831.6	837.1	814.1	837.4	800.7	813.8	847.5	836.4	863.1	9994.4
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.9	100.0	100.0	100.0	100.0	99.8
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.9	100.0	100.0	100.0	100.0	99.8
LF (%)	102.5	103.2	102.2	101.8	99.2	99.7	99.3	94.9	99.7	100.5	102.3	102.3	100.6
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.8	100.0	100.0	100.0	100.0	99.8
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 19 Jun 1974
Date of First Criticality: 22 Dec 1984
Date of Grid Connection: 13 Apr 1985
Date of Commercial Operation: 01 Feb 1986

Lifetime Generation: 164571.8 GW(e).h
Cumulative Energy Availability Factor: 89.3%
Cumulative Load Factor: 85.9%
Cumulative Unit Capability Factor: 89.3%
Cumulative Energy Unavailability Factor: 10.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	6848.9	1055.0	82.8	82.8	82.8	82.8	81.0	81.0	6634	82.8
1987	5341.3	1055.0	67.7	74.9	67.7	74.9	57.8	68.9	5924	67.6
1988	6674.8	1055.0	96.4	82.3	96.4	82.3	72.0	70.0	8470	96.4
1989	5244.3	1055.0	69.4	79.0	69.4	79.0	56.7	66.6	5638	64.4
1990	5633.1	1055.0	65.3	76.2	65.3	76.2	61.0	65.4	5724	65.3
1991	8133.8	1055.0	91.8	78.9	91.8	78.9	88.0	69.3	8043	91.8
1992	6239.6	1055.0	69.6	77.5	69.6	77.5	67.3	69.0	6115	69.6
1993	8745.5	1055.0	98.5	80.2	98.5	80.2	94.6	72.2	8626	98.5
1994	7858.0	1055.0	89.5	81.2	89.5	81.2	85.0	73.7	7840	89.5
1995	8147.5	1055.0	91.1	82.2	91.1	82.2	88.2	75.1	7973	91.0
1996	8141.6	1096.0	88.8	82.8	88.8	82.8	84.5	76.0	7758	88.3
1997	9227.5	1105.0	97.5	84.1	97.5	84.1	95.3	77.7	8534	97.4
1998	7449.1	1112.0	81.6	83.9	81.6	83.9	76.4	77.6	7061	80.6
1999	9744.0	1134.0	98.0	85.0	98.0	85.0	98.1	79.1	8588	98.0
2000	8988.1	1139.0	90.9	85.4	90.9	85.4	89.8	79.9	7982	90.9
2001	10133.1	1143.0	99.7	86.4	99.7	86.4	101.2	81.3	8735	99.7
2002	9286.8	1134.0	94.1	86.8	94.1	86.8	93.5	82.1	8244	94.1
2003	10057.5	1134.0	99.0	87.5	99.0	87.5	101.2	83.2	8672	99.0
2004	9539.1	1134.0	95.0	88.0	95.0	88.0	95.8	83.9	8345	95.0
2005	9926.9	1134.0	98.7	88.5	98.7	88.5	99.9	84.7	8642	98.6
2006	9320.4	1134.0	93.9	88.8	93.9	88.8	93.8	85.2	8224	93.9
2007	9994.4	1134.0	99.8	89.3	99.8	89.3	100.6	85.9	8744	99.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		15				
C. Inspection, maintenance or repair combined with refuelling				721	165	
D. Inspection, maintenance or repair without refuelling				143	0	
E. Testing of plant systems or components				24	2	
H. Nuclear regulatory requirements				108		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				114	39	
Subtotal	0	15	0	1110	206	0
Total		15			1316	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		4
13. Reactor Auxiliary Systems		9
14. Safety Systems		14
15. Reactor Cooling Systems		36
21. Fuel Handling and Storage Facilities		8
31. Turbine and auxiliaries		48
32. Feedwater and Main Steam System		9
41. Main Generator Systems		4
42. Electrical Power Supply Systems	15	17
XX. Miscellaneous Systems		12
Total	15	161

US-353 LIMERICK-2

Operator: EXELON (Exelon Generation)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1134.0 MW(e)
Design Net Capacity: 1055.0 MW(e)
Design Discharge Burnup: 22200 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9059.2 GW(e).h
Energy Availability Factor: 91.4%
Load Factor: 91.2%
Operating Factor: 91.4%
Energy Unavailability Factor: 8.6%
Total Off-line Time: 753 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	865.7	770.1	235.4	484.7	846.9	813.9	838.3	833.7	812.2	849.7	838.4	870.0	9059.2
EAF (%)	100.0	100.0	28.9	68.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.4
UCF (%)	100.0	100.0	28.9	68.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.4
LF (%)	102.6	101.1	27.9	59.4	100.4	99.7	99.4	98.8	99.5	100.7	102.5	103.1	91.2
OF (%)	100.0	100.0	29.3	68.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.4
EUUF (%)	0.0	0.0	71.1	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6
PUF (%)	0.0	0.0	71.1	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9
UCLF (%)	0.0	0.0	0.0	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 19 Jun 1974 **Lifetime Generation:** 141829.3 GW(e).h
Date of First Criticality: 12 Aug 1989 **Cumulative Energy Availability Factor:** 92.7%
Date of Grid Connection: 01 Sep 1989 **Cumulative Load Factor:** 91.1%
Date of Commercial Operation: 08 Jan 1990 **Cumulative Unit Capability Factor:** 92.7%
Cumulative Energy Unavailability Factor: 7.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1990	7232.6	1055.0	81.8	81.8	81.8	81.8	79.8	79.8	7174	83.5
1991	7146.9	1055.0	77.8	79.8	77.8	79.8	77.3	78.5	6919	79.0
1992	8489.2	1055.0	97.4	85.7	97.4	85.7	91.6	82.9	8557	97.4
1993	7468.7	1055.0	82.3	84.9	82.3	84.9	80.8	82.4	7289	83.2
1994	8571.5	1055.0	98.8	87.6	98.8	87.6	92.7	84.5	8657	98.8
1995	8401.4	1110.0	91.2	88.3	91.2	88.3	86.4	84.8	7984	91.1
1996	9001.1	1115.0	95.7	89.4	95.1	89.3	91.9	85.9	8346	95.0
1997	8307.5	1115.0	89.3	89.4	89.3	89.3	85.1	85.8	7840	89.5
1998	9257.9	1115.0	95.3	90.0	95.3	90.0	94.8	86.8	8346	95.3
1999	8561.0	1135.0	88.4	89.9	88.4	89.8	86.1	86.7	7726	88.2
2000	9940.7	1145.0	98.6	90.7	98.6	90.7	98.8	87.9	8661	98.6
2001	9243.4	1143.0	93.9	91.0	93.9	90.9	92.3	88.3	8230	93.9
2002	10009.5	1134.0	99.0	91.6	99.0	91.6	100.8	89.3	8672	99.0
2003	9387.1	1134.0	94.2	91.8	94.2	91.8	94.5	89.6	8252	94.2
2004	9952.0	1134.0	99.4	92.3	99.4	92.3	99.9	90.3	8734	99.4
2005	9124.7	1134.0	92.3	92.3	92.3	92.3	91.9	90.4	8085	92.3
2006	10015.1	1134.0	99.4	92.8	99.4	92.7	100.8	91.1	8710	99.4
2007	9059.2	1134.0	91.4	92.7	91.4	92.7	91.2	91.1	8007	91.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1990 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		62			127	
B. Refuelling without a maintenance					16	
C. Inspection, maintenance or repair combined with refuelling	618			364		
D. Inspection, maintenance or repair without refuelling	71			74		
E. Testing of plant systems or components				0		
J. Grid failure or grid unavailability						3
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					8	
Subtotal	689	62	0	438	151	3
Total		751			592	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1990 to 2007 Average Hours Lost Per Year
15. Reactor Cooling Systems	62	7
17. Safety I&C Systems (excluding reactor I&C)		4
31. Turbine and auxiliaries		66
32. Feedwater and Main Steam System		9
35. All other I&C Systems		9
41. Main Generator Systems		12
42. Electrical Power Supply Systems		8
Total	62	115

US-369 MCGUIRE-1

Operator: DUKE (DUKE POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1100.0 MW(e)
Design Net Capacity: 1180.0 MW(e)
Design Discharge Burnup: 40200 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7656.1 GW(e).h
Energy Availability Factor: 78.2%
Load Factor: 79.5%
Operating Factor: 78.2%
Energy Unavailability Factor: 21.8%
Total Off-line Time: 1908 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	860.5	775.8	249.5	0.0	14.2	763.3	831.2	830.3	802.8	840.5	828.4	859.6	7656.1
EAF (%)	100.0	100.0	28.9	0.0	11.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	78.2
UCF (%)	100.0	100.0	28.9	0.0	11.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	78.2
LF (%)	105.1	105.0	30.5	0.0	1.7	96.4	101.6	101.5	101.4	102.7	104.5	105.0	79.5
OF (%)	100.0	100.0	29.9	0.0	10.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	78.2
EUF (%)	0.0	0.0	71.1	100.0	88.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8
PUF (%)	0.0	0.0	71.1	100.0	88.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 23 Feb 1973
Date of First Criticality: 08 Aug 1981
Date of Grid Connection: 12 Sep 1981
Date of Commercial Operation: 01 Dec 1981

Lifetime Generation: 179907.9 GW(e).h
Cumulative Energy Availability Factor: 79.5%
Cumulative Load Factor: 75.9%
Cumulative Unit Capability Factor: 79.9%
Cumulative Energy Unavailability Factor: 20.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	19.1	1146.0	10.2	10.2	10.2	10.2	2.2	2.2	45	6.0
1982	4302.3	1180.0	81.6	76.0	81.6	76.0	41.6	38.5	7043	80.4
1983	4650.0	1180.0	57.3	67.0	57.3	67.0	45.0	41.6	4852	55.4
1984	6434.3	1180.0	78.1	70.6	69.3	67.8	62.1	48.3	6011	68.4
1985	6780.1	1180.0	77.1	72.2	77.1	70.1	65.6	52.5	6747	77.0
1986	5181.1	1150.0	56.2	69.1	56.2	67.4	51.4	52.3	4912	56.1
1987	7352.9	1150.0	76.7	70.3	76.7	68.9	73.0	55.6	6713	76.6
1988	7406.4	1129.0	77.0	71.3	77.0	70.0	74.7	58.3	6763	77.0
1989	7807.2	1129.0	84.5	72.9	84.5	71.7	78.9	60.7	7187	82.0
1990	4755.3	1129.0	56.9	71.1	56.9	70.2	48.1	59.4	4718	53.9
1991	6851.1	1129.0	71.4	71.2	71.4	70.3	69.3	60.3	6259	71.4
1992	7485.3	1129.0	77.9	71.8	77.9	71.0	75.5	61.7	6839	77.9
1993	5537.1	1129.0	58.2	70.7	58.2	69.9	56.0	61.2	5095	58.2
1994	6877.3	1129.0	71.9	70.8	71.9	70.1	69.5	61.8	6291	71.8
1995	8860.2	1129.0	91.6	72.2	91.6	71.6	89.6	63.8	8017	91.5
1996	8558.3	1129.0	89.5	73.3	89.5	72.7	86.3	65.3	7858	89.5
1997	7011.3	1129.0	72.7	73.3	72.7	72.7	70.9	65.6	6361	72.6
1998	8822.6	1119.0	90.0	74.3	90.0	73.7	90.0	67.0	7889	90.1
1999	8593.3	1100.0	86.6	74.9	86.6	74.4	89.2	68.2	7584	86.6
2000	9995.0	1100.0	99.5	76.2	99.5	75.7	103.4	70.0	8741	99.5
2001	8684.9	1100.0	88.0	76.7	88.0	76.3	90.1	70.9	7708	88.0
2002	9100.8	1100.0	91.8	77.4	91.8	77.0	94.4	72.0	8042	91.8
2003	9912.5	1100.0	100.0	78.4	100.0	78.0	102.9	73.4	8760	100.0
2004	8238.5	1100.0	83.4	78.6	83.4	78.2	85.3	73.9	7321	83.3
2005	8968.6	1100.0	90.9	79.1	90.9	78.7	93.1	74.7	7963	90.9
2006	9967.2	1100.0	100.0	79.9	100.0	79.6	103.4	75.8	8760	100.0
2007	7656.1	1100.0	78.2	79.9	78.2	79.5	79.5	75.9	6852	78.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					520	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	1906			863		
D. Inspection, maintenance or repair without refuelling				151	39	
E. Testing of plant systems or components				20		
H. Nuclear regulatory requirements					9	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				15	4	28
Subtotal	1906	0	0	1049	575	28
Total		1906			1652	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		7
12. Reactor I&C Systems		16
13. Reactor Auxiliary Systems		23
14. Safety Systems		29
15. Reactor Cooling Systems		79
16. Steam generation systems		86
17. Safety I&C Systems (excluding reactor I&C)		1
21. Fuel Handling and Storage Facilities		35
31. Turbine and auxiliaries		57
32. Feedwater and Main Steam System		131
41. Main Generator Systems		5
42. Electrical Power Supply Systems		14
XX. Miscellaneous Systems		28
Total	0	511

US-370 MCGUIRE-2**Operator:** DUKE (DUKE POWER CO.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1100.0 MW(e)
Design Net Capacity: 1180.0 MW(e)
Design Discharge Burnup: 40600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9967.6 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 103.4%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	864.9	781.1	805.3	834.6	854.9	820.5	837.0	829.9	806.1	843.2	829.1	861.2	9967.6
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	105.7	105.7	98.5	105.4	104.5	103.6	102.3	101.4	101.8	103.0	104.5	105.2	103.4
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 23 Feb 1973 **Lifetime Generation:** 177785.1 GW(e).h
Date of First Criticality: 08 May 1983 **Cumulative Energy Availability Factor:** 83.9%
Date of Grid Connection: 23 May 1983 **Cumulative Load Factor:** 82.8%
Date of Commercial Operation: 01 Mar 1984 **Cumulative Unit Capability Factor:** 83.9%
Cumulative Energy Unavailability Factor: 16.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	6557.8	1171.0	83.0	83.0	83.0	83.0	75.7	75.7	6086	82.9
1985	5609.3	1180.0	61.0	71.0	61.0	71.0	54.3	64.0	5171	59.0
1986	6216.6	1150.0	64.5	68.8	64.5	68.8	61.7	63.2	5601	63.9
1987	7577.4	1150.0	80.2	71.7	80.2	71.7	75.2	66.3	6954	79.4
1988	8058.0	1129.0	82.3	73.9	82.3	73.9	81.3	69.3	7229	82.3
1989	7418.3	1129.0	78.4	74.6	78.4	74.6	75.0	70.3	6867	78.4
1990	6496.2	1129.0	69.5	73.9	69.5	73.9	65.7	69.6	5873	67.0
1991	9516.0	1129.0	97.6	76.9	97.6	76.9	96.2	73.0	8548	97.6
1992	6785.0	1129.0	70.0	76.1	70.0	76.1	68.4	72.5	6141	69.9
1993	6821.1	1129.0	72.8	75.8	72.8	75.8	69.0	72.1	6378	72.8
1994	8660.0	1129.0	88.0	76.9	88.0	76.9	87.6	73.5	7708	88.0
1995	9090.0	1129.0	93.0	78.2	93.0	78.2	91.9	75.1	8144	93.0
1996	7265.1	1129.0	74.6	77.9	74.6	77.9	73.3	74.9	6543	74.5
1997	6648.4	1129.0	71.0	77.4	71.0	77.4	67.2	74.4	6214	70.9
1998	9928.3	1119.0	99.5	78.9	99.5	78.9	101.3	76.1	8715	99.5
1999	8596.7	1100.0	90.5	79.6	90.5	79.6	89.2	76.9	7927	90.5
2000	8452.4	1100.0	88.3	80.1	88.3	80.1	87.5	77.6	7757	88.3
2001	9878.0	1100.0	99.3	81.2	99.3	81.2	102.5	78.9	8698	99.3
2002	8913.5	1100.0	90.7	81.7	90.7	81.7	92.5	79.6	7940	90.6
2003	9027.8	1100.0	91.6	82.1	91.6	82.1	93.7	80.3	8024	91.6
2004	9994.0	1100.0	100.0	83.0	100.0	83.0	103.4	81.4	8784	100.0
2005	8545.6	1100.0	86.7	83.1	86.7	83.1	88.7	81.7	7589	86.6
2006	8430.3	1100.0	84.7	83.2	84.7	83.2	87.5	82.0	7418	84.7
2007	9967.6	1100.0	100.0	83.9	100.0	83.9	103.4	82.8	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				1	282	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling				989		
D. Inspection, maintenance or repair without refuelling				101	0	
E. Testing of plant systems or components				0	0	
H. Nuclear regulatory requirements					11	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	4	
Subtotal	0	0	0	1091	300	0
Total	0			1391		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		21
13. Reactor Auxiliary Systems		22
14. Safety Systems		19
15. Reactor Cooling Systems		79
16. Steam generation systems		15
17. Safety I&C Systems (excluding reactor I&C)		2
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries		8
32. Feedwater and Main Steam System		47
41. Main Generator Systems		30
42. Electrical Power Supply Systems		8
XX. Miscellaneous Systems		1
Total	0	255

US-336 MILLSTONE-2**Operator:** DOMIN (DOMINION VIRGINIA POWER)**Contractor:** CE (COMBUSTION ENGINEERING CO.)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 882.0 MW(e)
Design Net Capacity: 870.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7686.8 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 99.5%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	655.2	592.1	654.4	633.8	652.0	631.3	651.3	650.4	631.1	652.1	633.4	649.7	7686.8
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	99.8	99.9	99.9	99.8	99.4	99.4	99.2	99.1	99.4	99.4	99.6	99.0	99.5
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 11 Dec 1970
Date of First Criticality: 17 Oct 1975
Date of Grid Connection: 09 Nov 1975
Date of Commercial Operation: 26 Dec 1975

Lifetime Generation: 140848.5 GW(e).h
Cumulative Energy Availability Factor: 65.4%
Cumulative Load Factor: 63.6%
Cumulative Unit Capability Factor: 66.1%
Cumulative Energy Unavailability Factor: 34.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1975	115.7	851.0	100.0	100.0	100.0	100.0	20.9	20.9	414	55.6
1976	4543.2	780.0	66.4	68.9	66.4	68.9	66.3	62.9	6815	77.6
1977	4345.7	790.0	62.9	66.0	62.9	66.0	62.8	62.9	5756	65.7
1978	4507.2	802.0	64.1	65.4	64.1	65.4	64.2	63.3	5756	65.7
1979	4370.9	837.0	59.6	63.9	59.6	63.9	59.6	62.3	5385	61.5
1980	4884.3	864.0	80.8	67.4	68.2	64.8	64.4	62.8	5947	67.7
1981	6091.7	864.0	82.7	70.1	82.7	67.9	80.5	65.8	7229	82.5
1982	5015.6	864.0	70.5	70.1	70.5	68.3	66.3	65.9	6183	70.6
1983	2474.4	861.0	34.1	65.5	34.1	63.9	32.8	61.7	2993	34.2
1984	6608.3	860.0	93.4	68.7	93.4	67.2	87.5	64.6	8209	93.5
1985	3515.6	841.0	59.4	67.8	47.7	65.3	47.7	62.9	4322	49.3
1986	5164.9	857.0	72.5	68.2	72.5	66.0	68.8	63.5	6352	72.5
1987	6892.5	857.0	93.3	70.3	93.3	68.3	91.8	65.8	8177	93.3
1988	5735.9	860.0	77.2	70.9	77.2	69.0	75.9	66.6	6810	77.5
1989	4763.6	863.0	66.9	70.6	66.9	68.8	63.0	66.4	5705	65.1
1990	5309.9	863.0	72.8	70.7	72.8	69.1	70.2	66.6	6389	72.9
1991	3948.1	863.0	55.3	69.7	55.3	68.2	52.2	65.7	4820	55.0
1992	2725.0	870.0	36.1	67.7	36.1	66.3	35.6	63.9	3187	36.3
1993	6295.9	873.0	84.8	68.7	84.8	67.3	82.3	64.9	7431	84.8
1994	3676.5	873.0	49.0	67.6	49.0	66.3	48.1	64.0	4289	49.0
1995	2740.5	873.0	37.4	66.1	37.4	64.9	35.8	62.6	3273	37.4
1996	1046.5	871.0	13.7	63.5	13.7	62.4	13.7	60.2	1222	13.9
1997	0.0	871.0	0.0	60.6	0.0	59.5	0.0	57.4	0	0.0
1998	0.0	871.0	0.0	57.9	0.0	56.9	0.0	54.9	0	0.0
1999	4433.2	870.0	60.6	58.0	60.6	57.0	58.2	55.0	5310	60.6
2000	6268.5	872.0	83.7	59.1	83.7	58.1	81.8	56.1	7353	83.7
2001	7284.0	869.0	98.0	60.6	98.0	59.7	95.4	57.7	8587	98.0
2002	6209.3	871.0	83.2	61.4	83.2	60.6	81.5	58.6	7285	83.2
2003	6109.8	866.0	80.9	62.1	80.9	61.3	80.2	59.3	7083	80.9
2004	7596.0	877.0	98.8	63.4	98.8	62.6	98.7	60.7	8677	98.8
2005	6843.0	866.0	89.2	64.3	89.2	63.5	90.2	61.7	7812	89.2
2006	6519.5	882.0	85.1	65.0	85.1	64.2	84.4	62.5	7453	85.1
2007	7686.8	882.0	100.0	66.1	100.0	65.4	99.5	63.6	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					558	
B. Refuelling without a maintenance					28	
C. Inspection, maintenance or repair combined with refuelling				1300		
D. Inspection, maintenance or repair without refuelling				49		
E. Testing of plant systems or components				10	221	
H. Nuclear regulatory requirements					626	33
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				25	7	32
Subtotal	0	0	0	1384	1440	65
Total	0			2889		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		1
12. Reactor I&C Systems		47
13. Reactor Auxiliary Systems		13
14. Safety Systems		18
15. Reactor Cooling Systems		127
16. Steam generation systems		96
31. Turbine and auxiliaries		71
32. Feedwater and Main Steam System		100
33. Circulating Water System		5
35. All other I&C Systems		1
41. Main Generator Systems		2
42. Electrical Power Supply Systems		59
XX. Miscellaneous Systems		0
Total	0	540

US-423 MILLSTONE-3**Operator:** DOMIN (DOMINION VIRGINIA POWER)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1155.0 MW(e)
Design Net Capacity: 1159.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8699.4 GW(e).h
Energy Availability Factor: 87.8%
Load Factor: 86.0%
Operating Factor: 87.8%
Energy Unavailability Factor: 12.2%
Total Off-line Time: 1066 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	758.0	773.2	856.0	156.3	307.1	823.3	847.5	842.7	815.4	845.3	823.0	851.7	8699.4
EAF (%)	93.6	100.0	100.0	20.0	40.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.8
UCF (%)	93.6	100.0	100.0	20.0	40.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.8
LF (%)	88.2	99.6	99.7	18.8	35.7	99.0	98.6	98.1	98.1	98.4	98.8	99.1	86.0
OF (%)	93.5	100.0	100.0	20.0	40.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.8
EUUF (%)	6.4	0.0	0.0	80.0	59.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2
PUF (%)	0.0	0.0	0.0	80.0	59.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6
UCLF (%)	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 09 Aug 1974 **Lifetime Generation:** 139571.6 GW(e).h
Date of First Criticality: 23 Jan 1986 **Cumulative Energy Availability Factor:** 74.1%
Date of Grid Connection: 12 Feb 1986 **Cumulative Load Factor:** 71.9%
Date of Commercial Operation: 23 Apr 1986 **Cumulative Unit Capability Factor:** 74.1%
Cumulative Energy Unavailability Factor: 25.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	Data not provided									
1987	6748.2	1142.0	71.4	71.4	71.4	71.4	67.5	67.5	6235	71.2
1988	7683.6	1142.0	79.5	75.4	79.5	75.4	76.6	72.0	6954	79.2
1989	7082.6	1142.0	75.9	75.6	75.9	75.6	70.8	71.6	6636	75.8
1990	8218.2	1137.0	89.2	79.0	89.2	79.0	82.5	74.3	7798	89.0
1991	2876.7	1137.0	33.6	69.9	33.6	69.9	28.9	65.3	2850	32.5
1992	6593.8	1137.0	72.1	70.3	72.1	70.3	66.0	65.4	6311	71.8
1993	6502.8	1137.0	70.1	70.3	70.1	70.3	65.3	65.4	6106	69.7
1994	9416.2	1137.0	96.3	73.5	96.3	73.5	94.5	69.0	8426	96.2
1995	7993.6	1137.0	81.2	74.4	81.2	74.4	80.3	70.3	7083	80.9
1996	2476.7	1137.0	25.7	69.5	25.7	69.5	24.8	65.7	2156	24.5
1997	0.0	1137.0	0.0	63.2	0.0	63.2	0.0	59.8	0	0.0
1998	3392.1	1137.0	38.9	61.2	38.9	61.2	34.1	57.6	3402	38.8
1999	8307.5	1139.0	83.7	62.9	83.7	62.9	83.2	59.6	7329	83.7
2000	10125.7	1151.0	100.0	65.6	100.0	65.6	100.1	62.5	8784	100.0
2001	8169.7	1136.0	84.3	66.8	84.3	66.8	81.3	63.8	7392	84.4
2002	8746.2	1130.0	89.0	68.2	89.0	68.2	88.1	65.3	7803	89.1
2003	10005.7	1130.0	99.6	70.0	99.6	70.0	101.1	67.4	8729	99.6
2004	8983.7	1148.0	90.1	71.2	90.1	71.2	89.9	68.6	7905	90.0
2005	8767.0	1131.0	88.0	72.0	87.6	72.0	88.5	69.7	7677	87.6
2006	10111.1	1155.0	100.0	73.5	100.0	73.4	99.9	71.2	8760	100.0
2007	8699.4	1155.0	87.8	74.1	87.8	74.1	86.0	71.9	7694	87.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		47			610	
B. Refuelling without a maintenance					7	
C. Inspection, maintenance or repair combined with refuelling	1014			682		
D. Inspection, maintenance or repair without refuelling				73		
E. Testing of plant systems or components	3			3		
H. Nuclear regulatory requirements					417	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					438	
L. Human factor related					0	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Subtotal	1017	47	0	758	1472	1
Total		1064			2231	

7. Equipment Related Full Outages, Analysis by System

System	2007	1987 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		20
13. Reactor Auxiliary Systems		23
14. Safety Systems		214
15. Reactor Cooling Systems	47	43
17. Safety I&C Systems (excluding reactor I&C)		11
31. Turbine and auxiliaries		15
32. Feedwater and Main Steam System		22
33. Circulating Water System		6
41. Main Generator Systems		11
42. Electrical Power Supply Systems		6
XX. Miscellaneous Systems		182
Total	47	553

US-263 MONTICELLO**Operator:** NORTHERN (Northern States Power Co.)**Contractor:** GE (GENERAL ELECTRIC CO.)**1. Station Details**

Type: BWR
Net Reference Unit Power at the beginning of 2007: 572.0 MW(e)
Design Net Capacity: 545.0 MW(e)
Design Discharge Burnup: 27000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4192.3 GW(e).h
Energy Availability Factor: 83.7%
Load Factor: 83.7%
Operating Factor: 83.6%
Energy Unavailability Factor: 16.3%
Total Off-line Time: 1433 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	232.8	391.5	173.0	6.2	420.5	414.8	424.6	425.4	420.7	439.7	407.9	435.0	4192.3
EAF (%)	55.2	100.0	41.9	7.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.7
UCF (%)	55.2	100.0	41.9	7.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.7
LF (%)	54.7	101.9	40.7	1.5	98.8	100.7	99.8	100.0	102.1	103.3	98.9	102.2	83.7
OF (%)	55.1	100.0	41.9	7.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.6
EUF (%)	44.8	0.0	58.1	92.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3
PUF (%)	0.0	0.0	58.1	92.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5
UCLF (%)	44.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 19 Jun 1967
Date of First Criticality: 10 Dec 1970
Date of Grid Connection: 05 Mar 1971
Date of Commercial Operation: 30 Jun 1971

Lifetime Generation: 131426.7 GW(e).h
Cumulative Energy Availability Factor: 84.3%
Cumulative Load Factor: 79.5%
Cumulative Unit Capability Factor: 84.3%
Cumulative Energy Unavailability Factor: 15.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1971	1361.1	564.0	100.0	100.0	100.0	100.0	46.7	46.7	2850	55.5
1972	3717.9	580.0	100.0	100.0	100.0	100.0	73.0	63.4	6975	79.4
1973	3271.6	580.0	100.0	100.0	100.0	100.0	64.4	63.8	6242	71.3
1974	2925.2	538.0	75.0	93.4	75.0	93.4	62.1	63.3	6567	75.0
1975	2881.4	538.0	61.0	86.6	61.0	86.6	61.1	62.9	6322	72.2
1976	3986.2	537.0	84.3	86.2	84.3	86.2	84.5	66.6	8033	91.5
1977	3570.7	536.0	75.9	84.7	75.9	84.7	76.0	68.0	7001	79.9
1978	3856.2	536.0	81.7	84.3	81.7	84.3	82.1	69.8	7638	87.2
1979	4399.7	536.0	93.4	85.4	93.4	85.4	93.7	72.5	8549	97.6
1980	3455.5	536.0	79.0	84.7	78.2	84.6	73.4	72.6	6876	78.3
1981	3262.3	536.0	72.3	83.6	72.3	83.5	69.5	72.3	6362	72.6
1982	2425.1	525.0	62.2	81.8	62.2	81.7	52.7	70.7	5543	63.3
1983	4147.7	525.0	96.3	82.9	96.3	82.8	90.2	72.2	8438	96.3
1984	279.1	525.0	9.2	77.6	9.2	77.6	6.1	67.5	808	9.2
1985	4287.0	536.0	91.6	78.6	91.6	78.5	91.3	69.1	8028	91.6
1986	3379.9	536.0	78.8	78.6	78.8	78.5	72.0	69.3	6926	79.1
1987	3535.6	536.0	80.2	78.7	80.2	78.6	75.3	69.6	7051	80.5
1988	4573.6	536.0	99.7	79.9	99.7	79.8	97.1	71.2	8759	99.7
1989	2650.4	536.0	74.7	79.6	74.7	79.6	56.4	70.4	6578	75.1
1990	4505.9	536.0	96.0	80.4	96.0	80.4	96.0	71.7	8414	96.1
1991	3596.5	536.0	79.6	80.4	79.6	80.4	76.6	71.9	6996	79.9
1992	4453.7	536.0	97.0	81.2	97.0	81.1	94.6	73.0	8527	97.1
1993	3864.4	536.0	83.4	81.3	83.4	81.2	82.3	73.4	7322	83.6
1994	3956.2	536.0	85.6	81.4	85.6	81.4	84.3	73.8	7508	85.7
1995	4756.3	536.0	100.0	82.2	100.0	82.2	101.3	75.0	8760	100.0
1996	3872.9	541.0	84.8	82.3	84.8	82.3	81.4	75.2	7443	84.7
1997	3661.6	544.0	75.2	82.0	75.2	82.0	76.8	75.3	6609	75.4
1998	4118.9	553.0	87.7	82.2	87.7	82.2	84.9	75.6	7659	87.4
1999	4649.3	578.0	92.4	82.6	92.4	82.6	91.8	76.2	8092	92.4
2000	4251.4	578.0	83.5	82.6	83.5	82.6	83.7	76.5	7332	83.5
2001	3880.6	578.0	76.9	82.4	76.9	82.4	76.6	76.5	6774	77.3
2002	5015.6	578.0	98.4	83.0	98.4	83.0	99.1	77.3	8620	98.4
2003	4592.5	578.0	90.7	83.2	90.7	83.2	90.7	77.7	7969	91.0
2004	5034.9	578.0	98.9	83.7	98.9	83.7	99.2	78.4	8689	98.9
2005	4474.9	569.0	89.4	83.9	89.4	83.9	89.8	78.7	7826	89.3
2006	5072.6	572.0	100.0	84.4	100.0	84.3	101.2	79.4	8760	100.0
2007	4192.3	572.0	83.7	84.3	83.7	84.3	83.7	79.5	7327	83.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		333			223	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling	1098			956		
D. Inspection, maintenance or repair without refuelling				116		
E. Testing of plant systems or components				0	1	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				0	2	
H. Nuclear regulatory requirements						8
J. Grid failure or grid unavailability					0	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				1	89	
Subtotal	1098	333	0	1073	320	8
Total		1431			1401	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		10
12. Reactor I&C Systems		15
13. Reactor Auxiliary Systems		10
14. Safety Systems		17
15. Reactor Cooling Systems		23
16. Steam generation systems		3
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries	333	24
32. Feedwater and Main Steam System		52
33. Circulating Water System		0
35. All other I&C Systems		6
41. Main Generator Systems		13
42. Electrical Power Supply Systems		19
XX. Miscellaneous Systems		21
Total	333	216

US-220 NINE MILE POINT-1

Operator: NMPNSLLC (Nine Mile Point Nuclear Station, LLC)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 621.0 MW(e)
Design Net Capacity: 620.0 MW(e)
Design Discharge Burnup: 26000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4762.9 GW(e).h
Energy Availability Factor: 90.3%
Load Factor: 87.6%
Operating Factor: 90.3%
Energy Unavailability Factor: 9.7%
Total Off-line Time: 850 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	466.1	392.9	203.1	213.7	376.5	444.9	448.2	444.9	404.4	455.0	444.9	468.3	4762.9
EAF (%)	100.0	100.0	51.5	49.8	82.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3
UCF (%)	100.0	100.0	51.6	49.8	82.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3
LF (%)	100.9	94.1	44.0	47.8	81.5	99.5	97.0	96.3	90.5	98.5	99.4	101.4	87.6
OF (%)	100.0	100.0	51.5	49.7	82.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.3
EUF (%)	0.0	0.0	48.5	50.2	17.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7
PUF (%)	0.0	0.0	48.5	50.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
UCLF (%)	0.0	0.0	0.0	0.0	17.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 12 Apr 1965
Date of First Criticality: 05 Sep 1969
Date of Grid Connection: 09 Nov 1969
Date of Commercial Operation: 01 Dec 1969

Lifetime Generation: 126605.7 GW(e).h
Cumulative Energy Availability Factor: 73.3%
Cumulative Load Factor: 68.2%
Cumulative Unit Capability Factor: 73.3%
Cumulative Energy Unavailability Factor: 26.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1969	0.0	617.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1970	1581.0	525.0	100.0	100.0	100.0	100.0	34.4	31.3	3443	39.3
1971	3033.1	592.0	100.0	100.0	100.0	100.0	58.5	45.0	5963	68.1
1972	3344.8	630.0	100.0	100.0	100.0	100.0	60.4	50.4	6101	69.5
1973	3494.2	610.0	76.4	94.0	76.4	94.0	65.4	54.2	6682	76.3
1974	3278.7	610.0	70.5	89.3	70.5	89.3	61.4	55.7	6177	70.5
1975	3044.9	610.0	57.0	83.9	57.0	83.9	57.0	55.9	6235	71.2
1976	4112.8	610.0	76.8	82.8	76.8	82.8	76.8	58.9	7724	87.9
1977	2956.8	610.0	55.4	79.4	55.4	79.4	55.3	58.4	5171	59.0
1978	4467.4	610.0	83.6	79.9	83.6	79.9	83.6	61.3	8329	95.1
1979	3005.4	610.0	56.2	77.5	56.2	77.5	56.2	60.8	5785	66.0
1980	4537.3	610.0	92.2	78.8	92.2	78.8	84.7	62.9	8097	92.2
1981	3270.3	610.0	65.6	77.7	65.6	77.7	61.2	62.8	5780	66.0
1982	1134.8	610.0	21.5	73.4	21.5	73.4	21.2	59.6	1872	21.4
1983	2802.0	610.0	56.2	72.2	56.2	72.2	52.4	59.1	4925	56.2
1984	3635.2	610.0	71.6	72.1	71.6	72.1	67.8	59.7	6316	71.9
1985	4932.3	610.0	96.4	73.6	96.4	73.6	92.3	61.7	8441	96.4
1986	3146.9	610.0	64.9	73.1	64.9	73.1	58.9	61.5	5722	65.3
1987	4615.2	610.0	92.8	74.2	92.8	74.2	86.4	62.9	8130	92.8
1988	0.0	610.0	0.0	70.3	0.0	70.3	0.0	59.6	0	0.0
1989	0.0	610.0	0.0	66.8	0.0	66.8	0.0	56.6	0	0.0
1990	1316.7	612.0	34.2	65.2	34.2	65.2	24.6	55.1	3043	34.7
1991	3873.5	615.0	78.2	65.8	78.2	65.8	71.9	55.9	6853	78.2
1992	2930.1	615.0	57.4	65.4	57.4	65.4	54.2	55.8	5052	57.5
1993	4353.4	615.0	84.1	66.2	84.1	66.2	80.8	56.8	7370	84.1
1994	4918.0	565.0	95.4	67.3	95.4	67.3	99.4	58.4	8390	95.8
1995	4127.6	565.0	82.9	67.9	82.9	67.9	83.4	59.3	7381	84.3
1996	4676.2	565.0	92.0	68.7	92.0	68.7	94.2	60.5	8133	92.6
1997	2698.6	565.0	51.8	68.1	51.8	68.1	54.5	60.3	4620	52.7
1998	4846.0	565.0	92.3	68.9	92.3	68.9	97.9	61.5	8085	92.3
1999	3564.9	565.0	68.4	68.9	68.4	68.9	72.0	61.9	6162	70.3
2000	4681.8	565.0	91.0	69.6	91.0	69.6	94.3	62.9	8060	91.8
2001	4378.0	565.0	83.5	70.0	83.5	70.0	88.5	63.6	7376	84.2
2002	4904.6	565.0	92.9	70.6	92.9	70.6	99.1	64.6	8194	93.5
2003	4361.4	565.0	83.6	71.0	83.6	71.0	88.1	65.3	7373	84.2
2004	4988.2	565.0	93.5	71.6	93.5	71.6	100.5	66.2	8258	94.0
2005	4589.8	621.0	87.5	72.1	87.5	72.1	84.4	66.8	7667	87.5
2006	5346.9	621.0	99.5	72.8	99.5	72.8	98.3	67.6	8713	99.5
2007	4762.9	621.0	90.3	73.3	90.3	73.3	87.6	68.2	7910	90.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		127		0	740	
B. Refuelling without a maintenance					30	
C. Inspection, maintenance or repair combined with refuelling	719			1266		
D. Inspection, maintenance or repair without refuelling				146		
E. Testing of plant systems or components	2			3	0	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				2		
H. Nuclear regulatory requirements				1	4	5
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				5	145	
Subtotal	721	127	0	1423	919	5
Total	848			2347		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		13
12. Reactor I&C Systems		35
13. Reactor Auxiliary Systems		27
14. Safety Systems		60
15. Reactor Cooling Systems		336
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries	127	44
32. Feedwater and Main Steam System		56
35. All other I&C Systems		3
41. Main Generator Systems		18
42. Electrical Power Supply Systems		30
Total	127	623

US-410 NINE MILE POINT-2

Operator: NMPNSLLC (Nine Mile Point Nuclear Station, LLC)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1140.0 MW(e)
Design Net Capacity: 1100.0 MW(e)
Design Discharge Burnup: 32300 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9201.1 GW(e).h
Energy Availability Factor: 94.6%
Load Factor: 92.1%
Operating Factor: 94.6%
Energy Unavailability Factor: 5.4%
Total Off-line Time: 474 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	851.3	760.8	623.2	819.1	842.3	801.5	828.5	799.7	804.2	836.8	402.9	830.8	9201.1
EAF (%)	100.0	100.0	77.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	57.9	100.0	94.6
UCF (%)	100.0	100.0	77.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	57.9	100.0	94.6
LF (%)	100.4	99.3	73.6	99.8	99.3	97.6	97.7	94.3	98.0	98.7	49.0	98.0	92.1
OF (%)	100.0	100.0	77.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	57.8	100.0	94.6
EUUF (%)	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.1	0.0	5.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.1	0.0	3.5
UCLF (%)	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 24 Jun 1974
Date of First Criticality: 23 May 1987
Date of Grid Connection: 08 Aug 1987
Date of Commercial Operation: 11 Mar 1988

Lifetime Generation: 134295.2 GW(e).h
Cumulative Energy Availability Factor: 82.3%
Cumulative Load Factor: 79.2%
Cumulative Unit Capability Factor: 82.3%
Cumulative Energy Unavailability Factor: 17.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	2540.6	1040.0	49.1	49.1	49.1	49.1	33.6	33.6	2800	38.6
1989	4288.3	1068.0	56.4	53.2	56.4	53.2	45.8	40.4	4824	55.1
1990	4140.4	1082.0	54.4	53.6	54.4	53.6	43.7	41.5	4697	53.6
1991	6562.9	1092.0	75.1	59.3	75.1	59.3	68.6	48.7	6484	74.0
1992	5145.0	1075.0	61.8	59.9	61.8	59.9	54.5	49.9	5169	58.8
1993	7191.1	1048.0	82.2	63.6	82.2	63.6	78.3	54.7	7195	82.1
1994	8355.9	994.0	93.9	67.8	93.9	67.8	96.0	60.4	8243	94.1
1995	7253.7	1061.0	78.9	69.2	78.9	69.2	78.0	62.6	6848	78.2
1996	8698.5	1106.0	89.7	71.6	89.7	71.6	89.5	65.8	7811	88.9
1997	8878.0	1105.0	94.9	74.1	94.9	74.1	91.7	68.5	8279	94.5
1998	7307.2	1105.0	80.8	74.7	80.8	74.7	75.5	69.2	7028	80.2
1999	8782.3	1128.0	89.1	76.0	89.1	76.0	88.9	70.9	7810	89.2
2000	8001.5	1123.0	81.7	76.5	81.7	76.5	81.1	71.8	7204	82.0
2001	8858.8	1119.0	90.7	77.5	90.7	77.5	90.4	73.1	7964	90.9
2002	8417.5	1119.0	85.1	78.1	85.1	78.1	85.9	74.0	7473	85.3
2003	9566.9	1119.0	96.4	79.2	96.4	79.2	97.6	75.6	8448	96.4
2004	8643.5	1119.0	88.5	79.8	88.5	79.8	87.9	76.3	7788	88.7
2005	9961.0	1135.0	100.0	81.0	100.0	81.0	100.2	77.7	8760	100.0
2006	9081.6	1135.0	92.5	81.6	92.5	81.6	91.3	78.5	8100	92.5
2007	9201.1	1140.0	94.6	82.3	94.6	82.3	92.1	79.2	8286	94.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		169			423	
B. Refuelling without a maintenance					21	
C. Inspection, maintenance or repair combined with refuelling				736		
D. Inspection, maintenance or repair without refuelling	303			323	2	
E. Testing of plant systems or components				2		
J. Grid failure or grid unavailability					3	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					47	
Subtotal	303	169	0	1061	496	0
Total		472			1557	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	169	
13. Reactor Auxiliary Systems		0
14. Safety Systems		12
15. Reactor Cooling Systems		66
17. Safety I&C Systems (excluding reactor I&C)		4
31. Turbine and auxiliaries		36
32. Feedwater and Main Steam System		63
33. Circulating Water System		16
35. All other I&C Systems		54
41. Main Generator Systems		35
42. Electrical Power Supply Systems		71
Total	169	357

US-338 NORTH ANNA-1

Operator: VEPCO (VIRGINIA ELECTRIC POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 924.0 MW(e)
Design Net Capacity: 907.0 MW(e)
Design Discharge Burnup: 39000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7215.1 GW(e).h
Energy Availability Factor: 89.7%
Load Factor: 89.1%
Operating Factor: 89.7%
Energy Unavailability Factor: 10.3%
Total Off-line Time: 906 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	662.4	625.3	690.0	667.3	688.0	664.7	685.1	683.5	168.9	339.5	659.9	680.6	7215.1
EAF (%)	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	26.7	52.8	100.0	100.0	89.7
UCF (%)	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	26.7	52.8	100.0	100.0	89.7
LF (%)	96.4	100.7	100.5	100.3	100.1	99.9	99.7	99.4	25.4	49.4	99.0	99.0	89.1
OF (%)	96.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	26.7	52.6	100.0	100.0	89.7
EUF (%)	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.3	47.2	0.0	0.0	10.3
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.3	47.2	0.0	0.0	10.0
UCLF (%)	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	19 Feb 1971	Lifetime Generation:	170646.1 GW(e).h
Date of First Criticality:	05 Apr 1978	Cumulative Energy Availability Factor:	81.3%
Date of Grid Connection:	17 Apr 1978	Cumulative Load Factor:	78.6%
Date of Commercial Operation:	06 Jun 1978	Cumulative Unit Capability Factor:	81.3%
		Cumulative Energy Unavailability Factor:	18.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1978	3664.5	896.0	81.4	81.4	81.4	81.4	79.5	79.5	4769	92.9
1979	4188.7	898.0	53.2	63.7	53.2	63.7	53.2	62.9	5399	61.6
1980	5631.0	878.0	87.2	72.7	87.2	72.7	73.0	66.8	7589	86.4
1981	4637.9	860.0	65.6	70.7	65.6	70.7	61.6	65.4	5703	65.1
1982	2397.9	865.0	34.7	63.0	34.7	63.0	31.6	58.1	3027	34.6
1983	5310.4	872.0	71.6	64.5	71.6	64.5	69.5	60.2	6277	71.7
1984	3784.8	883.0	50.3	62.4	50.3	62.4	48.8	58.4	4425	50.4
1985	5798.9	892.0	77.9	64.4	77.9	64.4	74.2	60.5	6820	77.9
1986	6310.7	893.0	83.7	66.7	83.7	66.7	80.7	62.9	7327	83.6
1987	3568.9	913.0	52.1	65.1	52.1	65.1	44.6	60.9	4523	51.6
1988	6897.3	915.0	88.6	67.4	88.6	67.4	85.8	63.4	7760	88.3
1989	4303.3	915.0	57.8	66.6	57.8	66.6	53.7	62.5	4978	56.8
1990	7233.5	912.0	99.6	69.3	99.6	69.3	90.5	64.8	8726	99.6
1991	5625.8	911.0	75.2	69.7	75.2	69.7	70.5	65.2	6549	74.8
1992	5358.1	858.0	81.5	70.5	81.5	70.5	71.1	65.6	7225	82.3
1993	5692.6	890.0	73.5	70.7	73.5	70.7	73.0	66.1	6444	73.6
1994	6795.7	900.0	91.6	71.9	91.6	71.9	86.2	67.3	8012	91.5
1995	7839.2	896.0	99.7	73.5	99.7	73.5	99.8	69.2	8733	99.7
1996	6945.5	893.0	91.0	74.5	91.0	74.5	88.5	70.2	7985	90.9
1997	7157.5	893.0	91.3	75.3	91.3	75.3	91.5	71.3	7992	91.2
1998	7217.1	893.0	92.4	76.2	92.4	76.2	92.3	72.3	8091	92.4
1999	8124.5	893.0	100.0	77.3	100.0	77.3	103.9	73.8	8760	100.0
2000	7213.1	893.0	91.1	77.9	91.1	77.9	92.0	74.6	7997	91.0
2001	7120.8	925.0	91.5	78.5	91.5	78.5	87.9	75.2	8010	91.4
2002	8164.3	925.0	100.0	79.4	100.0	79.4	100.8	76.2	8760	100.0
2003	6519.9	925.0	82.2	79.5	82.2	79.5	80.5	76.4	7200	82.2
2004	7418.4	925.0	91.4	80.0	91.4	80.0	91.3	77.0	8023	91.3
2005	8091.9	925.0	99.8	80.7	99.8	80.7	99.9	77.8	8744	99.8
2006	7142.7	924.0	89.8	81.0	89.8	81.0	88.2	78.2	7861	89.7
2007	7215.1	924.0	89.7	81.3	89.7	81.3	89.1	78.6	7854	89.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1978 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		24			421	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	879			1004		
D. Inspection, maintenance or repair without refuelling				120		
E. Testing of plant systems or components				10	3	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	2	
Subtotal	879	24	0	1134	430	0
Total		903			1564	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1978 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		15
12. Reactor I&C Systems		3
13. Reactor Auxiliary Systems		8
14. Safety Systems		19
15. Reactor Cooling Systems		48
16. Steam generation systems		118
31. Turbine and auxiliaries		56
32. Feedwater and Main Steam System	24	19
33. Circulating Water System		3
41. Main Generator Systems		10
42. Electrical Power Supply Systems		93
Total	24	392

US-339 NORTH ANNA-2

Operator: VEPCO (VIRGINIA ELECTRIC POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 910.0 MW(e)
Design Net Capacity: 907.0 MW(e)
Design Discharge Burnup: 39000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6771.8 GW(e).h
Energy Availability Factor: 85.9%
Load Factor: 84.9%
Operating Factor: 85.9%
Energy Unavailability Factor: 14.1%
Total Off-line Time: 1236 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	679.4	600.2	363.6	120.5	677.9	626.0	494.5	672.5	654.9	677.8	659.1	545.4	6771.8
EAF (%)	100.0	100.0	54.8	26.1	100.0	93.3	77.2	100.0	100.0	100.0	100.0	80.3	85.9
UCF (%)	100.0	100.0	54.8	26.1	100.0	93.3	77.2	100.0	100.0	100.0	100.0	80.3	85.9
LF (%)	100.3	98.1	53.8	18.4	100.1	95.5	73.0	99.3	100.0	100.1	100.5	80.6	84.9
OF (%)	100.0	100.0	54.8	26.0	100.0	95.7	74.6	100.0	100.0	100.0	100.0	80.2	85.9
EUF (%)	0.0	0.0	45.2	73.9	0.0	6.7	22.8	0.0	0.0	0.0	0.0	19.7	14.1
PUF (%)	0.0	0.0	45.2	73.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	6.7	22.9	0.0	0.0	0.0	0.0	19.7	4.2
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	19 Feb 1971	Lifetime Generation:	164340.7 GW(e).h
Date of First Criticality:	12 Jun 1980	Cumulative Energy Availability Factor:	85.4%
Date of Grid Connection:	25 Aug 1980	Cumulative Load Factor:	82.7%
Date of Commercial Operation:	14 Dec 1980	Cumulative Unit Capability Factor:	85.5%
		Cumulative Energy Unavailability Factor:	14.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1980	349.6	897.0	97.5	97.5	97.5	97.5	90.1	90.1	412	95.4
1981	5652.7	883.0	78.4	79.3	78.4	79.3	73.1	73.9	6813	77.8
1982	4047.2	890.0	57.3	68.5	57.3	68.5	51.9	63.1	4990	57.0
1983	5802.5	890.0	80.7	72.5	80.7	72.5	74.4	66.8	7052	80.5
1984	4717.2	890.0	67.1	71.2	67.1	71.2	60.3	65.2	5896	67.1
1985	6813.6	892.0	94.2	75.8	94.2	75.8	87.2	69.6	8252	94.2
1986	6022.1	893.0	82.2	76.9	82.2	76.9	77.0	70.8	7208	82.3
1987	5653.4	905.0	77.4	76.9	77.4	76.9	71.2	70.9	6783	77.4
1988	7884.0	915.0	99.2	79.8	99.2	79.8	98.1	74.3	8708	99.1
1989	5896.5	915.0	80.2	79.8	80.2	79.8	73.6	74.3	6887	78.6
1990	5976.6	910.0	80.0	79.8	80.0	79.8	74.9	74.3	6982	79.7
1991	7684.3	909.0	97.5	81.4	97.5	81.4	96.5	76.3	8539	97.5
1992	6324.7	909.0	82.6	81.5	82.6	81.5	79.2	76.6	7237	82.4
1993	6225.2	909.0	83.6	81.7	83.6	81.7	78.2	76.7	7303	83.4
1994	7490.3	887.0	97.2	82.8	97.2	82.8	96.4	78.1	8517	97.2
1995	6031.7	892.0	80.8	82.7	80.8	82.7	77.2	78.0	7086	80.9
1996	6121.5	897.0	78.1	82.4	78.1	82.4	77.7	78.0	6859	78.1
1997	7834.8	897.0	99.7	83.4	99.7	83.4	99.7	79.3	8738	99.7
1998	7086.1	897.0	92.1	83.9	91.9	83.9	90.2	79.9	8049	91.9
1999	7185.1	897.0	91.7	84.3	91.7	84.3	91.4	80.5	8034	91.7
2000	8018.9	897.0	99.4	85.0	99.4	85.0	101.8	81.5	8729	99.4
2001	5975.8	917.0	77.4	84.7	77.4	84.7	74.4	81.2	6776	77.4
2002	5509.7	917.0	68.5	83.9	68.5	83.9	68.6	80.6	6000	68.5
2003	7262.8	917.0	90.8	84.2	90.8	84.2	90.4	81.1	7950	90.8
2004	7388.1	917.0	92.0	84.6	92.0	84.5	91.7	81.5	8077	92.0
2005	7293.5	917.0	92.1	84.9	91.7	84.8	90.8	81.9	8034	91.7
2006	7950.4	910.0	99.7	85.4	99.7	85.4	99.7	82.6	8732	99.7
2007	6771.8	910.0	85.9	85.5	85.9	85.4	84.9	82.7	7524	85.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1980 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		365			230	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling	859			807		
D. Inspection, maintenance or repair without refuelling	9			75		
E. Testing of plant systems or components				2		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					64	0
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Subtotal	868	365	0	884	306	1
Total		1233			1191	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1980 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		3
13. Reactor Auxiliary Systems		2
14. Safety Systems	218	14
15. Reactor Cooling Systems	146	11
16. Steam generation systems		39
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		9
32. Feedwater and Main Steam System		19
33. Circulating Water System		0
41. Main Generator Systems		47
42. Electrical Power Supply Systems		78
Total	364	223

US-269 OCONEE-1

Operator: DUKE (DUKE POWER CO.)
Contractor: B&W (BABCOCK & WILCOX CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 846.0 MW(e)
Design Net Capacity: 887.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7335.7 GW(e).h
Energy Availability Factor: 97.7%
Load Factor: 99.0%
Operating Factor: 97.7%
Energy Unavailability Factor: 2.3%
Total Off-line Time: 198 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	645.1	398.7	645.2	623.4	641.4	620.1	636.3	630.5	606.5	625.8	620.0	642.6	7335.7
EAF (%)	100.0	70.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.7
UCF (%)	100.0	70.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.7
LF (%)	102.5	70.1	102.6	102.4	101.9	101.8	101.1	100.2	99.6	99.4	101.6	102.1	99.0
OF (%)	100.0	70.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.7
EUF (%)	0.0	29.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	29.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 06 Nov 1967
Date of First Criticality: 19 Apr 1973
Date of Grid Connection: 06 May 1973
Date of Commercial Operation: 15 Jul 1973

Lifetime Generation: 184022.6 GW(e).h
Cumulative Energy Availability Factor: 79.3%
Cumulative Load Factor: 76.0%
Cumulative Unit Capability Factor: 79.6%
Cumulative Energy Unavailability Factor: 20.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	1959.1	721.0	70.5	70.5	70.5	70.5	67.3	67.3	3350	75.9
1974	4230.3	920.0	100.0	92.2	100.0	92.2	52.5	56.4	5141	58.7
1975	5299.3	871.0	69.5	82.9	69.5	82.9	69.5	61.8	6672	76.2
1976	4003.5	871.0	52.4	74.0	52.4	74.0	52.3	59.0	5029	57.3
1977	3949.0	860.0	52.5	69.2	52.5	69.2	52.4	57.5	5455	62.3
1978	5054.4	860.0	67.1	68.8	67.1	68.8	67.1	59.3	6299	71.9
1979	5003.1	860.0	66.4	68.4	66.4	68.4	66.4	60.4	6220	71.0
1980	5118.3	860.0	86.3	70.8	76.2	69.5	67.8	61.4	6634	75.5
1981	3023.2	860.0	42.9	67.5	42.9	66.4	40.1	58.9	3657	41.7
1982	5152.8	860.0	73.5	68.2	73.5	67.1	68.4	59.9	6335	72.3
1983	5672.0	860.0	78.4	69.2	78.4	68.2	75.3	61.3	6804	77.7
1984	6173.7	860.0	83.6	70.4	83.6	69.5	81.7	63.1	7312	83.2
1985	7066.0	860.0	96.2	72.5	96.2	71.7	93.8	65.6	8424	96.2
1986	4793.9	860.0	70.2	72.3	70.2	71.6	63.6	65.4	5870	67.0
1987	5031.1	860.0	76.8	72.6	76.8	71.9	66.8	65.5	6693	76.4
1988	7192.2	846.0	99.5	74.3	99.5	73.7	96.8	67.5	8742	99.5
1989	5943.1	846.0	82.9	74.9	82.9	74.2	80.2	68.3	7264	82.9
1990	6454.8	846.0	88.5	75.6	88.5	75.0	87.1	69.3	7751	88.5
1991	6022.5	846.0	82.7	76.0	82.7	75.4	81.3	70.0	7245	82.7
1992	6277.7	846.0	85.3	76.5	85.3	76.0	84.5	70.7	7494	85.3
1993	6525.1	846.0	89.4	77.1	89.4	76.6	88.0	71.5	7833	89.4
1994	6088.7	846.0	83.4	77.4	83.4	76.9	82.2	72.0	7302	83.4
1995	6360.5	846.0	86.1	77.8	86.1	77.3	85.8	72.6	7537	86.0
1996	5567.0	846.0	75.2	77.7	75.2	77.2	74.9	72.7	6606	75.2
1997	3194.2	846.0	51.3	76.6	51.3	76.2	43.1	71.5	4482	51.2
1998	5996.4	846.0	82.8	76.8	82.8	76.4	80.9	71.9	7255	82.8
1999	6212.6	846.0	85.1	77.1	85.1	76.8	83.8	72.4	7383	84.3
2000	6312.7	846.0	84.8	77.4	84.8	77.1	84.9	72.8	7445	84.8
2001	6962.6	846.0	94.0	78.0	94.0	77.6	94.0	73.5	8210	93.7
2002	6607.5	846.0	88.9	78.4	88.9	78.0	89.2	74.1	7788	88.9
2003	5258.6	846.0	71.8	78.2	71.8	77.8	71.0	74.0	6288	71.8
2004	7260.2	846.0	97.3	78.8	97.3	78.4	97.7	74.7	8549	97.3
2005	6728.6	846.0	90.0	79.1	90.0	78.8	90.8	75.2	7879	89.9
2006	5819.4	846.0	78.6	79.1	78.6	78.8	78.5	75.3	6884	78.6
2007	7335.7	846.0	97.7	79.6	97.7	79.3	99.0	76.0	8562	97.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1973 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		197			575	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	903					
D. Inspection, maintenance or repair without refuelling	161				2	
E. Testing of plant systems or components	23				0	
F. Major back-fitting, refurbishment or upgrading activities with refuelling	0					
H. Nuclear regulatory requirements	2				0	32
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	0
Subtotal	0	197	0	1089	578	32
Total		197			1699	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1973 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		45
12. Reactor I&C Systems		65
13. Reactor Auxiliary Systems		2
14. Safety Systems		42
15. Reactor Cooling Systems		124
16. Steam generation systems		161
17. Safety I&C Systems (excluding reactor I&C)		0
21. Fuel Handling and Storage Facilities		0
31. Turbine and auxiliaries		50
32. Feedwater and Main Steam System		20
41. Main Generator Systems	197	11
42. Electrical Power Supply Systems		16
XX. Miscellaneous Systems		20
Total	197	556

US-270 OCONEE-2

Operator: DUKE (DUKE POWER CO.)
Contractor: B&W (BABCOCK & WILCOX CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 846.0 MW(e)
Design Net Capacity: 887.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6769.0 GW(e).h
Energy Availability Factor: 90.0%
Load Factor: 91.3%
Operating Factor: 89.9%
Energy Unavailability Factor: 10.0%
Total Off-line Time: 882 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	649.6	499.7	647.9	545.9	4.6	623.5	646.0	628.4	607.0	641.1	627.5	647.9	6769.0
EAF (%)	100.0	86.6	100.0	90.0	3.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.0
UCF (%)	100.0	86.6	100.0	90.0	3.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.0
LF (%)	103.2	87.9	103.1	89.6	0.7	102.4	102.6	99.8	99.6	101.9	102.9	102.9	91.3
OF (%)	100.0	86.5	100.0	90.0	3.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.9
EUF (%)	0.0	13.4	0.0	10.0	96.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
PUF (%)	0.0	0.0	0.0	10.0	96.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
UCLF (%)	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 06 Nov 1967
Date of First Criticality: 11 Nov 1973
Date of Grid Connection: 05 Dec 1973
Date of Commercial Operation: 09 Sep 1974

Lifetime Generation: 182917.2 GW(e).h
Cumulative Energy Availability Factor: 80.8%
Cumulative Load Factor: 78.2%
Cumulative Unit Capability Factor: 81.0%
Cumulative Energy Unavailability Factor: 19.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	1470.1	920.0	100.0	100.0	100.0	100.0	54.6	54.6	1812	61.9
1975	4970.6	871.0	65.2	74.3	65.2	74.3	65.1	62.4	6398	73.0
1976	4232.6	871.0	55.4	66.2	55.4	66.2	55.3	59.4	5483	62.4
1977	3830.0	860.0	50.9	61.7	50.9	61.7	50.8	56.9	5315	60.7
1978	4786.2	860.0	63.5	62.1	63.5	62.1	63.5	58.4	6155	70.3
1979	5968.2	860.0	79.2	65.3	79.2	65.3	79.2	62.2	7532	86.0
1980	3882.0	860.0	69.6	66.0	62.0	64.8	51.4	60.5	5397	61.4
1981	5198.9	860.0	81.0	68.0	81.0	67.0	69.0	61.7	7050	80.5
1982	3447.7	860.0	53.5	66.3	53.5	65.4	45.8	59.8	4580	52.3
1983	5147.0	860.0	73.2	67.0	73.2	66.2	68.3	60.7	6348	72.5
1984	7298.0	860.0	100.0	70.2	100.0	69.5	96.6	64.2	8784	100.0
1985	5060.0	860.0	76.3	70.7	76.3	70.1	67.2	64.4	6654	76.0
1986	5803.1	860.0	81.4	71.6	81.4	71.0	77.0	65.4	7169	81.8
1987	6228.7	860.0	98.0	73.6	98.0	73.0	82.7	66.7	8565	97.8
1988	5540.0	846.0	78.3	73.9	78.3	73.4	74.5	67.3	6880	78.3
1989	6013.1	846.0	83.1	74.5	83.1	74.0	81.1	68.2	7272	83.0
1990	6269.4	846.0	85.3	75.1	85.3	74.7	84.6	69.1	7469	85.3
1991	7427.9	846.0	100.0	76.5	100.0	76.1	100.2	70.9	8760	100.0
1992	5946.9	846.0	80.9	76.8	80.9	76.4	80.0	71.4	7103	80.9
1993	6236.3	846.0	83.9	77.1	83.9	76.7	84.1	72.1	7352	83.9
1994	6148.5	846.0	83.3	77.4	83.3	77.1	83.0	72.6	7292	83.2
1995	6973.9	846.0	94.3	78.2	94.3	77.9	94.1	73.6	8263	94.3
1996	4432.0	846.0	60.4	77.4	60.4	77.1	59.6	73.0	5304	60.4
1997	5876.8	846.0	79.7	77.5	79.7	77.2	79.3	73.2	6974	79.6
1998	5654.7	846.0	77.4	77.5	77.4	77.2	76.3	73.4	6776	77.4
1999	6257.6	846.0	84.2	77.8	84.2	77.5	84.4	73.8	7374	84.2
2000	7499.5	846.0	100.0	78.6	100.0	78.3	100.9	74.8	8784	100.0
2001	6688.4	846.0	89.5	79.0	89.5	78.7	90.3	75.4	7836	89.5
2002	6611.1	846.0	88.4	79.3	88.4	79.1	89.2	75.8	7743	88.4
2003	7568.7	846.0	100.0	80.0	100.0	79.8	102.1	76.7	8760	100.0
2004	5676.1	846.0	75.8	79.9	75.8	79.6	76.4	76.7	6652	75.7
2005	6672.3	846.0	89.1	80.2	89.1	79.9	90.0	77.1	7808	89.1
2006	7391.9	846.0	97.6	80.7	97.6	80.5	99.7	77.8	8552	97.6
2007	6769.0	846.0	90.0	81.0	90.0	80.8	91.3	78.2	7878	89.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		90		0	572	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	790			884		
D. Inspection, maintenance or repair without refuelling				68	2	
E. Testing of plant systems or components				5	1	
H. Nuclear regulatory requirements				0		31
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					0	
Subtotal	790	90	0	957	576	31
Total		880			1564	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		42
12. Reactor I&C Systems		62
13. Reactor Auxiliary Systems		10
14. Safety Systems		46
15. Reactor Cooling Systems		106
16. Steam generation systems		116
31. Turbine and auxiliaries		155
32. Feedwater and Main Steam System		8
33. Circulating Water System		2
41. Main Generator Systems	90	4
42. Electrical Power Supply Systems		14
Total	90	565

US-287 OCONEE-3

Operator: DUKE (DUKE POWER CO.)
Contractor: B&W (BABCOCK & WILCOX CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 846.0 MW(e)
Design Net Capacity: 887.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6461.9 GW(e).h
Energy Availability Factor: 85.6%
Load Factor: 87.2%
Operating Factor: 85.6%
Energy Unavailability Factor: 14.4%
Total Off-line Time: 1262 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	653.9	589.8	653.5	632.0	651.4	628.8	644.8	638.5	614.8	518.8	0.0	235.5	6461.9
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.9	0.1	43.4	85.6
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.9	0.1	43.4	85.6
LF (%)	103.9	103.7	104.0	103.8	103.5	103.2	102.4	101.4	100.9	82.4	0.0	37.4	87.2
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.0	0.0	43.3	85.6
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	99.9	56.6	14.4
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	99.9	56.6	14.4
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 06 Nov 1967
Date of First Criticality: 05 Sep 1974
Date of Grid Connection: 18 Sep 1974
Date of Commercial Operation: 16 Dec 1974

Lifetime Generation: 179656.8 GW(e).h
Cumulative Energy Availability Factor: 79.1%
Cumulative Load Factor: 77.4%
Cumulative Unit Capability Factor: 79.4%
Cumulative Energy Unavailability Factor: 20.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	0.0	854.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1975	5037.4	871.0	66.1	68.7	66.1	68.7	66.0	60.9	6761	77.2
1976	4758.0	871.0	62.3	65.6	62.3	65.6	62.2	61.5	6072	69.1
1977	5268.7	860.0	69.9	67.0	69.9	67.0	69.9	64.2	6545	74.7
1978	6064.3	860.0	80.5	70.3	80.5	70.3	80.5	68.2	7444	85.0
1979	3278.9	860.0	43.5	65.0	43.5	65.0	43.5	63.3	4038	46.1
1980	5224.6	860.0	84.8	68.3	73.8	66.5	69.2	64.3	6414	73.0
1981	5641.4	860.0	78.6	69.7	78.6	68.2	74.9	65.8	6835	78.0
1982	2128.4	860.0	33.5	65.3	33.5	63.9	28.3	61.2	2826	32.3
1983	7099.1	860.0	96.5	68.7	96.5	67.5	94.2	64.8	8436	96.3
1984	5355.5	860.0	74.2	69.2	74.2	68.2	70.9	65.4	6474	73.7
1985	4860.8	860.0	69.7	69.3	69.7	68.3	64.5	65.3	6071	69.3
1986	6064.3	860.0	90.0	71.0	90.0	70.1	80.5	66.6	7781	88.8
1987	5094.4	860.0	69.8	70.9	69.8	70.1	67.6	66.6	6068	69.3
1988	5965.8	846.0	81.9	71.7	81.9	70.9	80.3	67.6	7190	81.9
1989	6337.4	846.0	86.6	72.6	86.6	71.9	85.5	68.8	7585	86.6
1990	7427.8	846.0	99.5	74.3	99.5	73.6	100.2	70.7	8712	99.5
1991	5594.6	846.0	86.6	75.0	86.6	74.3	75.5	71.0	6691	76.4
1992	5448.2	846.0	75.5	75.0	75.5	74.4	73.3	71.1	6634	75.5
1993	7393.8	846.0	98.7	76.2	98.7	75.7	99.8	72.6	8647	98.7
1994	5670.8	846.0	77.5	76.3	77.5	75.8	76.5	72.8	6781	77.4
1995	6467.8	846.0	87.1	76.8	87.1	76.3	87.3	73.5	7625	87.0
1996	5454.0	846.0	73.2	76.6	73.2	76.1	73.4	73.5	6429	73.2
1997	4652.6	846.0	64.6	76.1	64.6	75.7	62.8	73.0	5633	64.3
1998	5786.4	846.0	80.1	76.3	80.1	75.8	78.1	73.2	7026	80.2
1999	7369.5	846.0	99.0	77.2	99.0	76.8	99.4	74.2	8676	99.0
2000	6577.8	846.0	88.0	77.6	88.0	77.2	88.5	74.8	7729	88.0
2001	5398.5	846.0	72.6	77.4	72.6	77.0	72.8	74.7	6355	72.5
2002	7465.5	846.0	99.2	78.2	99.2	77.8	100.7	75.6	8688	99.2
2003	6318.0	846.0	85.2	78.4	85.2	78.0	85.3	76.0	7467	85.2
2004	5747.0	846.0	76.3	78.4	76.3	78.0	77.3	76.0	6698	76.3
2005	7237.0	846.0	95.9	78.9	95.9	78.6	97.6	76.7	8395	95.8
2006	6716.2	846.0	89.1	79.2	89.1	78.9	90.6	77.1	7804	89.1
2007	6461.9	846.0	85.6	79.4	85.6	79.1	87.2	77.4	7498	85.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				4	531	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	1260			909		
D. Inspection, maintenance or repair without refuelling				122	0	
E. Testing of plant systems or components	1			7	5	
H. Nuclear regulatory requirements					83	34
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	15	0
Subtotal	1261	0	0	1042	637	34
Total		1261			1713	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		15
12. Reactor I&C Systems		97
13. Reactor Auxiliary Systems		37
14. Safety Systems		24
15. Reactor Cooling Systems		71
16. Steam generation systems		138
21. Fuel Handling and Storage Facilities		1
31. Turbine and auxiliaries		72
32. Feedwater and Main Steam System		22
41. Main Generator Systems		5
42. Electrical Power Supply Systems		6
XX. Miscellaneous Systems		18
Total	0	506

US-219 OYSTER CREEK

Operator: AMERGEN (AMERGEN ENERGY Co.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 619.0 MW(e)
Design Net Capacity: 650.0 MW(e)
Design Discharge Burnup: 2800 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5077.9 GW(e).h
Energy Availability Factor: 96.3%
Load Factor: 93.6%
Operating Factor: 96.3%
Energy Unavailability Factor: 3.7%
Total Off-line Time: 325 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	470.6	426.1	408.5	411.2	402.1	441.3	322.4	441.8	437.1	461.6	455.7	399.4	5077.9
EAF (%)	100.0	100.0	100.0	90.0	91.3	100.0	82.0	100.0	100.0	100.0	100.0	92.9	96.3
UCF (%)	100.0	100.0	100.0	90.0	91.3	100.0	82.1	100.0	100.0	100.0	100.0	92.9	96.3
LF (%)	102.2	102.4	88.8	92.3	87.3	99.0	70.0	95.9	98.1	100.2	102.1	86.7	93.6
OF (%)	100.0	100.0	100.0	92.6	88.6	100.0	82.0	100.0	100.0	100.0	100.0	92.9	96.3
EUF (%)	0.0	0.0	0.0	10.0	8.7	0.0	18.0	0.0	0.0	0.0	0.0	7.1	3.7
PUF (%)	0.0	0.0	0.0	10.0	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0	0.0	0.0	7.1	2.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 15 Dec 1964
Date of First Criticality: 03 May 1969
Date of Grid Connection: 23 Sep 1969
Date of Commercial Operation: 01 Dec 1969

Lifetime Generation: 134298.1 GW(e).h
Cumulative Energy Availability Factor: 74.5%
Cumulative Load Factor: 69.2%
Cumulative Unit Capability Factor: 74.5%
Cumulative Energy Unavailability Factor: 25.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1969	0.0	619.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1970	3591.0	540.0	100.0	100.0	100.0	100.0	75.9	69.2	6788	77.5
1971	3972.6	595.0	100.0	100.0	100.0	100.0	76.2	72.7	7046	80.4
1972	4503.8	670.0	100.0	100.0	100.0	100.0	76.5	74.1	7137	81.3
1973	3589.0	620.0	73.8	93.5	73.8	93.5	66.1	72.1	6401	73.1
1974	3679.6	650.0	66.6	87.9	66.6	87.9	64.6	70.5	6163	70.4
1975	3148.7	610.0	59.1	83.2	59.1	83.2	58.9	68.6	6414	73.2
1976	3860.1	620.0	70.9	81.4	70.9	81.4	70.9	69.0	6966	79.3
1977	3249.2	620.0	59.9	78.7	59.9	78.7	59.8	67.8	6136	70.0
1978	3645.7	620.0	66.5	77.4	66.5	77.4	67.1	67.7	6508	74.3
1979	4563.3	620.0	83.8	78.0	83.8	78.0	84.0	69.4	7520	85.8
1980	1957.3	620.0	41.8	74.7	41.8	74.7	35.9	66.3	3662	41.7
1981	2628.9	620.0	59.9	73.5	59.9	73.5	48.4	64.8	5237	59.8
1982	2013.0	620.0	62.5	72.7	62.5	72.7	37.1	62.7	5474	62.5
1983	225.5	620.0	11.5	68.3	11.5	68.3	4.2	58.5	1007	11.5
1984	305.2	620.0	9.6	64.4	9.6	64.4	5.6	55.0	842	9.6
1985	3746.0	620.0	74.5	65.0	74.5	65.0	69.0	55.9	6518	74.4
1986	1317.7	620.0	26.7	62.8	26.7	62.8	24.3	54.0	2310	26.4
1987	3113.4	620.0	62.0	62.7	62.0	62.7	57.3	54.2	5421	61.9
1988	3547.3	620.0	65.5	62.9	65.5	62.9	65.1	54.8	5749	65.4
1989	2410.1	620.0	53.6	62.4	53.6	62.4	44.4	54.3	4686	53.5
1990	4305.1	620.0	87.7	63.6	87.7	63.6	79.3	55.5	7678	87.6
1991	2954.8	619.0	59.0	63.4	59.0	63.4	54.5	55.4	5167	59.0
1992	4531.8	610.0	84.9	64.3	84.9	64.3	84.6	56.7	7463	85.0
1993	4667.5	610.0	87.4	65.3	87.4	65.3	87.3	57.9	7654	87.4
1994	3633.3	610.0	69.2	65.4	69.2	65.4	67.9	58.3	6096	69.6
1995	5194.1	619.0	97.2	66.7	97.2	66.7	95.8	59.7	8511	97.2
1996	4339.4	619.0	80.9	67.2	80.9	67.2	79.8	60.5	7104	80.9
1997	5073.3	619.0	93.2	68.1	93.2	68.1	93.6	61.7	8164	93.2
1998	4302.2	619.0	81.0	68.6	81.0	68.6	79.3	62.3	7094	81.0
1999	5388.5	619.0	100.0	69.6	100.0	69.6	99.4	63.5	8760	100.0
2000	3908.2	619.0	80.6	70.0	80.6	70.0	71.9	63.8	7073	80.5
2001	5226.4	619.0	97.0	70.8	97.0	70.8	96.4	64.8	8497	97.0
2002	5031.3	619.0	93.8	71.5	93.8	71.5	92.8	65.6	8215	93.8
2003	5256.3	619.0	96.7	72.2	96.7	72.2	96.9	66.6	8468	96.7
2004	4847.0	619.0	90.8	72.8	90.8	72.8	89.1	67.2	7973	90.8
2005	5374.9	619.0	100.0	73.5	99.4	73.5	99.1	68.1	8706	99.4
2006	4644.5	619.0	88.8	73.9	88.8	73.9	85.7	68.6	7775	88.8
2007	5077.9	619.0	96.3	74.5	96.3	74.5	93.6	69.2	8435	96.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		170			613	
B. Refuelling without a maintenance					33	
C. Inspection, maintenance or repair combined with refuelling				1396		
D. Inspection, maintenance or repair without refuelling	137			93		
E. Testing of plant systems or components				4	29	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				0		
H. Nuclear regulatory requirements					14	8
J. Grid failure or grid unavailability					1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					62	
L. Human factor related		16				
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Subtotal	137	186	0	1493	752	9
Total		323			2254	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		13
13. Reactor Auxiliary Systems		9
14. Safety Systems		168
15. Reactor Cooling Systems		158
31. Turbine and auxiliaries	36	37
32. Feedwater and Main Steam System	133	64
33. Circulating Water System		7
35. All other I&C Systems		6
41. Main Generator Systems		31
42. Electrical Power Supply Systems		22
XX. Miscellaneous Systems		5
Total	169	520

US-255 PALISADES

Operator: CONSENEC (Consumers Energy Co.)
Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 778.0 MW(e)
Design Net Capacity: 805.0 MW(e)
Design Discharge Burnup: 33205 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5826.0 GW(e).h
Energy Availability Factor: 84.8%
Load Factor: 85.5%
Operating Factor: 84.8%
Energy Unavailability Factor: 15.2%
Total Off-line Time: 1333 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	603.1	497.8	485.1	584.0	465.2	569.2	585.4	582.3	149.1	118.6	581.4	604.7	5826.0
EAF (%)	100.0	89.3	85.1	100.0	80.8	100.0	100.0	100.0	26.7	35.9	100.0	100.0	84.8
UCF (%)	100.0	89.3	85.1	100.0	80.8	100.0	100.0	100.0	26.7	35.9	100.0	100.0	84.8
LF (%)	104.2	95.2	83.9	104.3	80.4	101.6	101.1	100.6	26.6	20.5	103.7	104.5	85.5
OF (%)	100.0	91.4	83.0	100.0	80.8	100.0	100.0	100.0	28.2	34.3	100.0	100.0	84.8
EUF (%)	0.0	10.7	14.9	0.0	19.2	0.0	0.0	0.0	73.3	64.1	0.0	0.0	15.2
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.3	64.1	0.0	0.0	11.5
UCLF (%)	0.0	10.7	14.9	0.0	19.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 14 Mar 1967
Date of First Criticality: 24 May 1971
Date of Grid Connection: 31 Dec 1971
Date of Commercial Operation: 31 Dec 1971

Lifetime Generation: 131259.9 GW(e).h
Cumulative Energy Availability Factor: 67.7%
Cumulative Load Factor: 64.4%
Cumulative Unit Capability Factor: 68.8%
Cumulative Energy Unavailability Factor: 32.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1971	Data not provided									
1972	1899.1	400.0	100.0	100.0	100.0	100.0	54.0	54.0	4990	56.8
1973	2411.3	700.0	100.0	100.0	100.0	100.0	39.3	44.7	3829	43.7
1974	93.3	722.0	100.0	100.0	100.0	100.0	1.5	27.6	317	3.6
1975	2427.8	684.0	40.5	83.8	40.5	83.8	40.5	31.1	5649	64.5
1976	2846.9	684.0	47.4	76.0	47.4	76.0	47.4	34.6	4847	55.2
1977	5084.6	635.0	90.2	78.3	90.2	78.3	91.4	44.0	8004	91.4
1978	2624.2	635.0	46.0	73.7	46.0	73.7	47.2	44.5	4346	49.6
1979	3433.4	635.0	58.7	71.9	58.7	71.9	61.7	46.6	5241	59.8
1980	2379.1	635.0	80.0	72.8	39.7	68.3	42.7	46.2	3764	42.9
1981	3462.7	635.0	55.8	71.1	55.8	67.0	62.2	47.8	5009	57.2
1982	3345.0	635.0	49.3	69.1	49.3	65.4	60.1	48.9	4788	54.7
1983	3770.0	635.0	60.1	68.3	60.1	65.0	67.8	50.5	5282	60.3
1984	811.5	635.0	10.0	63.9	10.0	60.8	14.5	47.7	1334	15.2
1985	5301.8	658.0	82.0	65.2	82.0	62.3	91.8	51.0	7342	83.8
1986	841.2	730.0	14.9	61.4	14.9	58.7	13.2	48.1	1323	15.1
1987	2634.4	730.0	45.2	60.3	45.2	57.8	41.2	47.6	3980	45.4
1988	3435.2	730.0	53.7	59.8	53.7	57.5	53.6	48.0	4853	55.2
1989	3637.8	730.0	67.4	60.3	67.4	58.1	56.9	48.6	6019	68.7
1990	3008.1	730.0	56.1	60.0	56.1	58.0	47.0	48.5	5073	57.9
1991	4873.8	730.0	75.4	60.9	75.4	59.0	76.2	50.0	6693	76.4
1992	4865.1	730.0	70.5	61.4	70.5	59.6	75.9	51.3	6293	71.6
1993	3545.7	730.0	50.4	60.8	50.4	59.1	55.4	51.5	4595	52.5
1994	4513.8	730.0	65.5	61.1	65.5	59.4	70.6	52.4	5860	66.9
1995	4663.5	730.0	73.0	61.6	73.0	60.0	72.9	53.4	6491	74.1
1996	5314.3	730.0	79.7	62.4	79.7	60.9	82.9	54.6	7068	80.5
1997	5803.5	730.0	87.6	63.4	87.6	62.0	90.8	56.1	7714	88.1
1998	5390.6	730.0	81.1	64.1	81.1	62.7	84.3	57.2	7142	81.5
1999	5128.4	730.0	78.4	64.7	78.4	63.3	80.2	58.1	6910	78.9
2000	5748.0	730.0	86.8	65.5	86.8	64.2	89.6	59.3	7672	87.3
2001	2355.6	730.0	35.2	64.4	35.2	63.2	36.8	58.5	3118	35.6
2002	6369.4	730.0	94.2	65.4	93.2	64.2	99.6	59.9	8187	93.5
2003	6158.2	730.0	90.0	66.2	90.0	65.0	96.3	61.1	7914	90.3
2004	5346.1	730.0	81.1	66.7	81.1	65.6	83.4	61.8	7164	81.6
2005	6645.8	767.0	96.4	67.7	96.4	66.6	98.9	63.0	8443	96.4
2006	5917.1	778.0	85.6	68.2	85.6	67.2	86.8	63.8	7498	85.6
2007	5826.0	778.0	84.8	68.8	84.8	67.7	85.5	64.4	7427	84.8

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		183			1633	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling	1005			1142		
D. Inspection, maintenance or repair without refuelling				160		
E. Testing of plant systems or components				1		
F. Major back-fitting, refurbishment or upgrading activities with refuelling					6	
H. Nuclear regulatory requirements					11	98
J. Grid failure or grid unavailability						6
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					25	
L. Human factor related		142				
P. Fire					1	
Subtotal	1005	325	0	1303	1681	104
Total		1330			3088	

7. Equipment Related Full Outages, Analysis by System

System	2007	1972 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems	183	137
13. Reactor Auxiliary Systems		142
14. Safety Systems		97
15. Reactor Cooling Systems		128
16. Steam generation systems		439
31. Turbine and auxiliaries		106
32. Feedwater and Main Steam System		92
33. Circulating Water System		35
35. All other I&C Systems		0
41. Main Generator Systems		58
42. Electrical Power Supply Systems		258
XX. Miscellaneous Systems		1
Total	183	1493

US-528 PALO VERDE-1

Operator: AZPSCO (ARIZONA PUBLIC SERVICE CO.)

Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 1311.0 MW(e)
 Design Net Capacity: 1221.0 MW(e)
 Design Discharge Burnup: 38000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8844.9 GW(e).h
 Energy Availability Factor: 78.0%
 Load Factor: 77.0%
 Operating Factor: 78.0%
 Energy Unavailability Factor: 22.0%
 Total Off-line Time: 1926 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	990.2	892.6	986.7	953.1	566.8	0.0	300.8	972.3	943.8	660.1	611.2	967.4	8844.9
EAF (%)	100.0	100.0	100.0	100.0	58.1	0.0	41.3	100.0	100.0	67.7	70.1	100.0	78.0
UCF (%)	100.0	100.0	100.0	100.0	58.1	0.0	41.3	100.0	100.0	67.7	70.1	100.0	78.0
LF (%)	101.5	101.3	101.2	101.0	58.1	0.0	30.8	99.7	100.0	67.7	64.7	99.2	77.0
OF (%)	100.0	100.0	100.0	100.0	58.1	0.0	41.1	100.0	100.0	68.4	69.3	100.0	78.0
EUf (%)	0.0	0.0	0.0	0.0	41.9	100.0	58.7	0.0	0.0	32.3	29.9	0.0	22.0
PUF (%)	0.0	0.0	0.0	0.0	41.9	100.0	58.7	0.0	0.0	32.3	8.2	0.0	20.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.7	0.0	1.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 25 May 1976 Lifetime Generation: 165202.3 GW(e).h
 Date of First Criticality: 25 May 1985 Cumulative Energy Availability Factor: 76.4%
 Date of Grid Connection: 10 Jun 1985 Cumulative Load Factor: 74.0%
 Date of Commercial Operation: 28 Jan 1986 Cumulative Unit Capability Factor: 76.6%
 Cumulative Energy Unavailability Factor: 23.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	6264.7	1221.0	66.6	66.6	66.6	66.6	60.5	60.5	5349	63.1
1987	5268.3	1221.0	50.9	58.6	50.9	58.6	49.3	54.8	4500	51.4
1988	6668.7	1221.0	62.8	60.0	62.8	60.0	62.2	57.3	5585	63.6
1989	1796.6	1221.0	14.1	48.5	14.1	48.5	16.8	47.1	1522	17.4
1990	4719.5	1221.0	42.6	47.3	42.6	47.3	44.1	46.5	3925	44.8
1991	9312.1	1221.0	87.1	54.0	85.8	53.7	87.1	53.3	7567	86.4
1992	7118.8	1221.0	67.2	55.9	67.2	55.7	66.4	55.2	6010	68.4
1993	7514.8	1221.0	76.1	58.4	76.1	58.2	70.3	57.1	6665	76.1
1994	9772.5	1221.0	98.8	62.9	98.8	62.7	91.4	60.9	8656	98.8
1995	8526.8	1224.0	82.1	64.8	82.1	64.7	79.5	62.8	7244	82.7
1996	8713.0	1227.0	84.4	66.6	82.0	66.3	80.8	64.4	7246	82.5
1997	10737.7	1244.0	98.8	69.3	98.8	69.0	98.5	67.3	8658	98.8
1998	9575.0	1243.0	89.0	70.9	89.0	70.6	87.9	68.9	7819	89.3
1999	9653.9	1243.0	88.8	72.2	88.8	71.9	88.7	70.4	7774	88.7
2000	10966.6	1243.0	99.8	74.1	99.8	73.8	100.4	72.4	8770	99.8
2001	9559.6	1243.0	88.0	74.9	88.0	74.7	87.8	73.4	7712	88.0
2002	9705.0	1243.0	90.1	75.8	90.1	75.6	89.1	74.3	7890	90.1
2003	10587.1	1243.0	98.2	77.1	98.2	76.9	97.2	75.6	8604	98.2
2004	9235.8	1243.0	88.5	77.7	87.3	77.5	84.6	76.1	7669	87.3
2005	7212.3	1243.0	70.7	77.4	70.7	77.1	66.2	75.6	6194	70.7
2006	4868.2	1314.0	60.4	76.5	60.4	76.3	42.3	73.9	5292	60.4
2007	8844.9	1311.0	78.0	76.6	78.0	76.4	77.0	74.0	6834	78.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		155			576	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling	1467			1146		
D. Inspection, maintenance or repair without refuelling	299			192		
E. Testing of plant systems or components	1			3	12	
J. Grid failure or grid unavailability						6
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					24	11
Subtotal	1767	155	0	1341	620	17
Total		1922			1978	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		103
13. Reactor Auxiliary Systems		4
14. Safety Systems		16
15. Reactor Cooling Systems	155	73
16. Steam generation systems		52
31. Turbine and auxiliaries		5
32. Feedwater and Main Steam System		133
33. Circulating Water System		3
35. All other I&C Systems		2
41. Main Generator Systems		9
42. Electrical Power Supply Systems		75
XX. Miscellaneous Systems		1
Total	155	476

US-529 PALO VERDE-2

Operator: AZPSCO (ARIZONA PUBLIC SERVICE CO.)
Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1314.0 MW(e)
Design Net Capacity: 1304.0 MW(e)
Design Discharge Burnup: 38000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10957.6 GW(e).h
Energy Availability Factor: 95.7%
Load Factor: 95.2%
Operating Factor: 95.7%
Energy Unavailability Factor: 4.3%
Total Off-line Time: 376 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	993.6	564.8	981.2	960.4	975.3	939.1	930.0	976.4	950.0	733.8	958.4	994.5	10957.6
EAF (%)	100.0	68.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	77.7	100.0	100.0	95.7
UCF (%)	100.0	68.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	77.7	100.0	100.0	95.7
LF (%)	101.6	64.0	100.4	101.5	99.8	99.3	95.1	99.9	100.4	75.1	101.3	101.7	95.2
OF (%)	100.0	68.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	77.7	100.0	100.0	95.7
EUUF (%)	0.0	31.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.3	0.0	0.0	4.3
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	31.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.3	0.0	0.0	4.3
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Jun 1976 **Lifetime Generation:** 167461.8 GW(e).h
Date of First Criticality: 18 Apr 1986 **Cumulative Energy Availability Factor:** 80.4%
Date of Grid Connection: 20 May 1986 **Cumulative Load Factor:** 79.9%
Date of Commercial Operation: 19 Sep 1986 **Cumulative Unit Capability Factor:** 80.5%
Cumulative Energy Unavailability Factor: 19.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	Data not provided									
1987	8190.0	1221.0	77.6	77.6	77.6	77.6	76.6	76.6	6860	78.3
1988	6747.2	1221.0	62.6	70.1	62.6	70.1	62.9	69.7	5613	63.9
1989	4698.8	1221.0	44.3	61.5	44.3	61.5	43.9	61.1	4003	45.7
1990	6242.2	1221.0	58.6	60.8	58.6	60.8	58.4	60.4	5276	60.2
1991	8265.2	1221.0	76.3	63.9	76.3	63.9	77.3	63.8	6690	76.4
1992	10104.5	1221.0	94.9	69.0	94.9	69.0	94.2	68.9	8341	95.0
1993	5125.3	1221.0	50.9	66.5	50.9	66.5	47.9	65.9	4621	52.8
1994	6573.9	1221.0	66.8	66.5	66.8	66.5	61.5	65.3	5919	67.6
1995	9070.9	1224.0	84.2	68.5	84.2	68.5	84.6	67.5	7420	84.7
1996	9346.1	1227.0	85.5	70.2	85.5	70.2	86.7	69.4	7548	85.9
1997	9322.7	1244.0	87.2	71.8	87.2	71.8	85.5	70.9	7661	87.4
1998	11084.8	1243.0	100.0	74.1	100.0	74.1	101.8	73.5	8760	100.0
1999	9797.3	1243.0	89.7	75.4	89.7	75.4	90.0	74.8	7857	89.7
2000	9525.3	1243.0	88.2	76.3	88.2	76.3	87.2	75.7	7743	88.1
2001	10083.5	1243.0	91.4	77.3	91.4	77.3	92.6	76.8	8002	91.3
2002	10019.2	1243.0	91.1	78.2	91.1	78.2	92.0	77.8	7981	91.1
2003	8444.4	1243.0	77.7	78.1	77.7	78.1	77.6	77.8	6809	77.7
2004	10662.1	1335.0	94.9	79.1	92.6	79.0	92.0	78.6	8138	92.6
2005	9427.2	1335.0	83.2	79.4	83.2	79.2	80.6	78.7	7284	83.2
2006	9808.2	1314.0	86.0	79.7	86.0	79.6	85.2	79.1	7535	86.0
2007	10957.6	1314.0	95.7	80.5	95.7	80.4	95.2	79.9	8384	95.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1987 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		375			185	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling				1067		
D. Inspection, maintenance or repair without refuelling				234		
E. Testing of plant systems or components				0		
J. Grid failure or grid unavailability						6
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				125	42	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						3
Subtotal	0	375	0	1426	239	9
Total		375			1674	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1987 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		27
13. Reactor Auxiliary Systems		7
14. Safety Systems	157	16
15. Reactor Cooling Systems		11
16. Steam generation systems	165	26
17. Safety I&C Systems (excluding reactor I&C)		4
31. Turbine and auxiliaries	52	12
32. Feedwater and Main Steam System		6
35. All other I&C Systems		2
41. Main Generator Systems		5
42. Electrical Power Supply Systems		17
Total	374	133

US-530 PALO VERDE-3

Operator: AZPSCO (ARIZONA PUBLIC SERVICE CO.)
Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1247.0 MW(e)
Design Net Capacity: 1304.0 MW(e)
Design Discharge Burnup: 38000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6993.7 GW(e).h
Energy Availability Factor: 67.4%
Load Factor: 64.0%
Operating Factor: 67.4%
Energy Unavailability Factor: 32.6%
Total Off-line Time: 2857 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	766.3	809.1	916.8	310.8	791.0	850.1	884.2	893.4	772.0	0.0	0.0	0.0	6993.7
EAF (%)	84.0	100.0	100.0	36.7	96.9	100.0	100.0	100.0	93.3	0.0	0.0	0.0	67.4
UCF (%)	84.0	100.0	100.0	36.7	96.9	100.0	100.0	100.0	93.3	0.0	0.0	0.0	67.4
LF (%)	82.6	96.6	98.8	34.6	85.3	94.7	95.3	96.3	86.0	0.0	0.0	0.0	64.0
OF (%)	83.9	100.0	100.0	37.1	96.2	100.0	100.0	100.0	93.3	0.0	0.0	0.0	67.4
EUUF (%)	16.0	0.0	0.0	63.3	3.1	0.0	0.0	0.0	6.7	100.0	100.0	100.0	32.6
PUF (%)	16.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	6.7	100.0	100.0	100.0	27.1
UCLF (%)	0.0	0.0	0.0	63.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Jun 1976 **Lifetime Generation:** 162153.7 GW(e).h
Date of First Criticality: 25 Oct 1987 **Cumulative Energy Availability Factor:** 82.3%
Date of Grid Connection: 28 Nov 1987 **Cumulative Load Factor:** 81.7%
Date of Commercial Operation: 08 Jan 1988 **Cumulative Unit Capability Factor:** 82.6%
Cumulative Energy Unavailability Factor: 17.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	10035.5	1221.0	94.9	94.9	94.9	94.9	95.4	95.4	8177	94.9
1989	1328.0	1221.0	9.0	51.6	9.0	51.6	12.4	53.6	1096	12.5
1990	9636.0	1221.0	91.6	65.0	91.6	65.0	90.1	65.8	8048	91.9
1991	7518.5	1221.0	75.3	67.6	70.8	66.5	70.3	66.9	6272	71.6
1992	8386.2	1221.0	78.7	69.8	78.7	68.9	78.2	69.2	6923	78.8
1993	9393.9	1221.0	90.1	73.2	90.1	72.5	87.8	72.3	7898	90.2
1994	6824.5	1221.0	66.4	72.2	66.4	71.6	63.8	71.1	5920	67.6
1995	9386.8	1225.0	86.6	74.0	86.6	73.5	87.4	73.1	7628	87.1
1996	10789.6	1230.0	99.5	76.9	99.0	76.3	99.9	76.1	8699	99.0
1997	9456.1	1247.0	89.1	78.1	89.1	77.6	86.5	77.2	7820	89.3
1998	9600.9	1247.0	89.3	79.2	89.3	78.7	87.9	78.2	7835	89.4
1999	10956.5	1247.0	100.0	80.9	100.0	80.5	100.3	80.1	8760	100.0
2000	9888.7	1247.0	89.9	81.6	89.9	81.3	90.3	80.9	7898	89.9
2001	9170.4	1247.0	85.0	81.9	85.0	81.5	83.9	81.1	7439	84.9
2002	11137.7	1247.0	100.0	83.1	100.0	82.8	102.0	82.5	8760	100.0
2003	9554.7	1247.0	88.0	83.4	88.0	83.1	87.5	82.8	7712	88.0
2004	8223.3	1247.0	78.4	83.1	76.6	82.7	75.1	82.3	6729	76.6
2005	9164.0	1247.0	85.3	83.2	85.3	82.9	83.9	82.4	7471	85.3
2006	9335.8	1247.0	87.1	83.4	87.1	83.1	85.5	82.6	7625	87.0
2007	6993.7	1247.0	67.4	82.6	67.4	82.3	64.0	81.7	5903	67.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		477			137	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	2256			1041		
D. Inspection, maintenance or repair without refuelling				134	9	
E. Testing of plant systems or components	120			0		
H. Nuclear regulatory requirements					3	
J. Grid failure or grid unavailability						9
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					23	20
Subtotal	2376	477	0	1175	174	29
Total		2853			1378	

7. Equipment Related Full Outages, Analysis by System

System	2007	1988 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems		6
14. Safety Systems		21
16. Steam generation systems		1
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries	477	15
32. Feedwater and Main Steam System		7
41. Main Generator Systems		10
42. Electrical Power Supply Systems		34
Total	477	99

US-277 PEACH BOTTOM-2

Operator: EXELON (Exelon Generation)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1112.0 MW(e)
Design Net Capacity: 1065.0 MW(e)
Design Discharge Burnup: 38700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9867.9 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 101.6%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	849.4	759.6	847.6	813.3	845.1	810.9	834.0	833.7	759.3	842.5	823.9	848.5	9867.9
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	102.7	101.7	102.6	101.6	102.2	101.3	100.8	100.8	94.8	101.8	102.8	105.8	101.6
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 31 Jan 1968
Date of First Criticality: 16 Sep 1973
Date of Grid Connection: 18 Feb 1974
Date of Commercial Operation: 05 Jul 1974

Lifetime Generation: 205142.2 GW(e).h
Cumulative Energy Availability Factor: 73.0%
Cumulative Load Factor: 70.3%
Cumulative Unit Capability Factor: 73.0%
Cumulative Energy Unavailability Factor: 27.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	3659.4	1053.0	90.5	90.5	90.5	90.5	78.9	78.9	4000	90.6
1975	5082.5	1051.0	55.3	67.1	55.3	67.1	55.2	63.1	6638	75.8
1976	5580.4	1051.0	60.5	64.4	60.5	64.4	60.4	62.1	5998	68.3
1977	4051.6	1051.0	44.0	58.6	44.0	58.6	44.0	56.9	4836	55.2
1978	6793.6	1051.0	73.8	62.0	73.8	62.0	73.8	60.7	7299	83.3
1979	8574.4	1051.0	92.9	67.6	92.9	67.6	93.1	66.6	8295	94.7
1980	4372.6	1051.0	49.9	64.9	49.9	64.9	47.4	63.6	4529	51.6
1981	6635.3	1051.0	78.5	66.7	78.5	66.7	72.1	64.7	6938	79.2
1982	4816.8	1051.0	56.5	65.5	56.5	65.5	52.3	63.3	5089	58.1
1983	4481.1	1051.0	49.6	63.8	49.0	63.8	48.7	61.7	4461	50.9
1984	2465.8	1051.0	28.9	60.5	28.9	60.4	26.7	58.4	2544	29.0
1985	2378.2	1051.0	28.7	57.7	28.7	57.7	25.8	55.6	2570	29.3
1986	6896.6	1051.0	79.8	59.5	79.8	59.4	74.9	57.1	7010	80.0
1987	1599.9	1051.0	16.5	56.3	16.5	56.3	17.4	54.2	1724	19.7
1988	0.0	1051.0	0.0	52.4	0.0	52.4	0.0	50.4	0	0.0
1989	3880.9	1051.0	52.3	52.4	52.3	52.4	42.2	49.9	4735	54.1
1990	6699.8	1055.0	78.9	54.0	78.9	54.0	72.5	51.3	6977	79.6
1991	5121.0	1055.0	58.8	54.3	58.8	54.3	55.4	51.5	5277	60.2
1992	5677.9	1055.0	64.9	54.9	64.9	54.8	61.3	52.0	5811	66.2
1993	7704.1	1053.0	85.9	56.5	85.9	56.4	83.5	53.6	7571	86.4
1994	7450.7	1055.0	88.8	58.0	88.8	58.0	80.6	55.0	7783	88.8
1995	9363.4	1093.0	98.2	60.0	98.2	60.0	97.8	57.0	8598	98.2
1996	7660.6	1093.0	93.1	61.5	93.1	61.5	79.8	58.1	8176	93.1
1997	9570.3	1093.0	98.9	63.1	98.9	63.1	100.0	59.9	8663	98.9
1998	7658.8	1093.0	90.4	64.3	90.4	64.3	80.0	60.8	7923	90.4
1999	9462.3	1093.0	98.6	65.7	98.6	65.7	98.8	62.3	8635	98.6
2000	8523.0	1093.0	93.0	66.7	93.0	66.7	88.8	63.3	8169	93.0
2001	9369.2	1093.0	97.8	67.9	97.8	67.9	97.9	64.6	8563	97.8
2002	8838.9	1093.0	93.0	68.8	93.0	68.8	92.3	65.6	8149	93.0
2003	9265.8	1112.0	96.3	69.8	96.3	69.8	94.9	66.7	8430	96.2
2004	8886.1	1112.0	91.8	70.5	91.8	70.5	91.0	67.5	8066	91.8
2005	9615.1	1112.0	97.8	71.4	97.8	71.4	98.7	68.5	8569	97.8
2006	9088.3	1112.0	93.3	72.1	93.3	72.1	93.3	69.3	8172	93.3
2007	9867.9	1112.0	100.0	73.0	100.0	73.0	101.6	70.3	8737	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					421	
B. Refuelling without a maintenance					5	
C. Inspection, maintenance or repair combined with refuelling				1312		
D. Inspection, maintenance or repair without refuelling				235	0	
E. Testing of plant systems or components				5	0	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				0		
H. Nuclear regulatory requirements				119	44	13
J. Grid failure or grid unavailability					5	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				34	7	1
L. Human factor related					1	
Subtotal	0	0	0	1705	483	14
Total	0			2202		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		22
13. Reactor Auxiliary Systems		17
14. Safety Systems		47
15. Reactor Cooling Systems		108
31. Turbine and auxiliaries		52
32. Feedwater and Main Steam System		31
35. All other I&C Systems		1
41. Main Generator Systems		7
42. Electrical Power Supply Systems		55
XX. Miscellaneous Systems		6
Total	0	346

US-278 PEACH BOTTOM-3

Operator: EXELON (Exelon Generation)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1112.0 MW(e)
Design Net Capacity: 1065.0 MW(e)
Design Discharge Burnup: 36700 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9030.8 GW(e).h
Energy Availability Factor: 93.7%
Load Factor: 92.7%
Operating Factor: 93.7%
Energy Unavailability Factor: 6.3%
Total Off-line Time: 553 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	840.5	752.3	840.6	810.9	828.5	800.6	817.4	773.5	512.5	382.4	821.8	849.8	9030.8
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	73.3	51.6	100.0	100.0	93.7
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	73.3	51.6	100.0	100.0	93.7
LF (%)	101.6	100.7	101.7	101.3	100.1	100.0	98.8	93.5	64.0	46.2	102.5	102.7	92.7
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	76.3	48.7	100.0	100.0	93.7
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.7	48.4	0.0	0.0	6.3
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.7	48.4	0.0	0.0	6.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 31 Jan 1968
Date of First Criticality: 07 Aug 1974
Date of Grid Connection: 01 Sep 1974
Date of Commercial Operation: 23 Dec 1974

Lifetime Generation: 202840.8 GW(e).h
Cumulative Energy Availability Factor: 73.2%
Cumulative Load Factor: 71.4%
Cumulative Unit Capability Factor: 73.3%
Cumulative Energy Unavailability Factor: 26.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	396.1	1073.0	74.9	74.9	74.9	74.9	51.4	51.4	558	75.0
1975	5282.4	1035.0	58.2	59.5	58.2	59.5	58.3	57.7	7520	85.8
1976	6056.8	1035.0	66.7	62.9	66.7	62.9	66.6	62.0	6829	77.7
1977	4787.8	1035.0	52.8	59.7	52.8	59.7	52.8	59.0	5450	62.2
1978	6973.6	1035.0	76.9	63.9	76.9	63.9	76.9	63.4	7412	84.6
1979	6110.4	1035.0	67.2	64.5	67.2	64.5	67.4	64.2	6500	74.2
1980	7233.4	1035.0	80.1	67.1	79.7	67.0	79.6	66.7	7089	80.7
1981	3171.1	1035.0	33.0	62.3	33.0	62.2	35.0	62.2	3201	36.5
1982	8532.3	1035.0	95.3	66.4	95.3	66.3	94.1	66.2	8372	95.6
1983	2465.7	1035.0	27.5	62.1	27.1	62.0	27.2	61.9	2714	31.0
1984	7445.5	1035.0	86.2	64.5	85.2	64.3	81.9	63.9	7545	85.9
1985	3320.8	1035.0	45.1	62.8	45.1	62.6	36.6	61.4	3988	45.5
1986	4858.8	1035.0	60.9	62.6	60.9	62.5	53.6	60.8	5542	63.3
1987	1507.7	1035.0	14.4	58.9	14.4	58.8	16.6	57.4	1658	18.9
1988	0.0	1035.0	0.0	54.7	0.0	54.6	0.0	53.3	0	0.0
1989	247.3	1035.0	0.1	51.1	0.1	51.0	2.7	50.0	472	5.4
1990	7534.1	1035.0	87.1	53.3	87.1	53.2	83.1	52.0	7684	87.7
1991	5118.9	1035.0	59.1	53.7	57.3	53.5	56.5	52.3	5212	59.5
1992	7180.9	1035.0	83.6	55.3	83.6	55.1	79.0	53.8	7391	84.1
1993	6314.0	1035.0	73.9	56.3	73.9	56.1	69.6	54.6	6594	75.3
1994	8867.4	1035.0	97.9	58.4	97.9	58.2	97.8	56.7	8588	98.0
1995	7172.5	1049.0	90.1	59.9	90.1	59.7	78.0	57.8	7929	90.5
1996	9424.7	1093.0	98.2	61.7	98.2	61.6	98.2	59.7	8627	98.2
1997	7566.6	1093.0	90.3	63.0	90.3	62.9	79.0	60.6	7909	90.3
1998	8823.6	1093.0	93.3	64.4	93.3	64.2	92.2	61.9	8172	93.3
1999	8558.6	1093.0	92.5	65.5	92.5	65.4	89.4	63.1	8100	92.5
2000	9556.8	1093.0	99.3	66.9	99.3	66.7	99.5	64.6	8722	99.3
2001	8524.4	1093.0	93.1	67.9	93.1	67.8	89.0	65.5	8153	93.1
2002	9647.4	1093.0	99.8	69.1	99.8	68.9	100.8	66.8	8740	99.8
2003	8937.8	1112.0	92.4	69.9	92.4	69.8	92.9	67.7	8089	92.3
2004	9989.1	1112.0	100.0	71.0	100.0	70.8	102.3	69.0	8784	100.0
2005	8848.9	1112.0	92.5	71.7	92.5	71.6	90.8	69.7	8105	92.5
2006	9912.7	1112.0	100.0	72.6	100.0	72.5	101.8	70.7	8760	100.0
2007	9030.8	1112.0	93.7	73.3	93.7	73.2	92.7	71.4	8207	93.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				8	359	4
B. Refuelling without a maintenance					18	
C. Inspection, maintenance or repair combined with refuelling	552			1361		
D. Inspection, maintenance or repair without refuelling				94		
E. Testing of plant systems or components				17	1	
H. Nuclear regulatory requirements					194	6
J. Grid failure or grid unavailability					11	2
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				24	0	4
Subtotal	552	0	0	1504	583	16
Total		552			2103	

7. Equipment Related Full Outages, Analysis by System

System	2007	1974 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		27
13. Reactor Auxiliary Systems		11
14. Safety Systems		44
15. Reactor Cooling Systems		111
31. Turbine and auxiliaries		48
32. Feedwater and Main Steam System		46
33. Circulating Water System		2
41. Main Generator Systems		19
42. Electrical Power Supply Systems		53
Total	0	361

US-440 PERRY-1

Operator: FENOC (FIRST ENERGY NUCLEAR OPERATING CO.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
 Net Reference Unit Power
 at the beginning of 2007: 1231.0 MW(e)
 Design Net Capacity: 1205.0 MW(e)
 Design Discharge Burnup: 7614 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8058.2 GW(e).h
 Energy Availability Factor: 76.5%
 Load Factor: 74.7%
 Operating Factor: 76.5%
 Energy Unavailability Factor: 23.5%
 Total Off-line Time: 2056 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	925.6	841.1	906.7	8.9	294.3	684.1	168.8	931.0	898.1	929.1	837.8	632.7	8058.2
EAF (%)	100.0	100.0	100.0	3.3	46.7	83.5	24.9	100.0	100.0	100.0	90.0	71.3	76.5
UCF (%)	100.0	100.0	100.0	3.3	46.8	83.5	24.9	100.0	100.0	100.0	90.0	71.3	76.5
LF (%)	101.1	101.7	99.1	1.0	32.1	77.2	18.4	101.7	101.3	101.4	94.4	69.1	74.7
OF (%)	100.0	100.0	100.0	3.3	46.6	85.6	23.0	100.0	100.0	100.0	91.0	70.3	76.5
EUf (%)	0.0	0.0	0.0	96.7	53.3	16.5	75.1	0.0	0.0	0.0	10.0	28.7	23.5
PUF (%)	0.0	0.0	0.0	96.7	39.2	9.8	0.0	0.0	0.0	0.0	0.0	0.0	12.1
UCLF (%)	0.0	0.0	0.0	0.0	14.0	6.7	75.1	0.0	0.0	0.0	10.0	28.7	11.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 03 May 1977 Lifetime Generation: 144119.4 GW(e).h
 Date of First Criticality: 06 Jun 1986 Cumulative Energy Availability Factor: 79.3%
 Date of Grid Connection: 19 Dec 1986 Cumulative Load Factor: 77.1%
 Date of Commercial Operation: 18 Nov 1987 Cumulative Unit Capability Factor: 79.3%
 Cumulative Energy Unavailability Factor: 20.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	Data not provided									
1988	7233.8	1203.0	76.3	76.3	76.3	76.3	68.4	68.4	6664	75.9
1989	5357.6	1141.0	53.4	65.2	53.4	65.2	53.6	61.2	4776	54.5
1990	6638.9	1141.0	65.3	65.2	65.3	65.2	66.4	62.9	5723	65.3
1991	8975.7	1166.0	90.7	71.6	90.7	71.6	87.9	69.2	7949	90.7
1992	7168.6	1166.0	72.6	71.8	72.6	71.8	70.0	69.3	6383	72.7
1993	3973.2	1166.0	43.9	67.2	43.9	67.2	38.9	64.3	3853	44.0
1994	4591.9	1166.0	47.3	64.3	47.3	64.3	45.0	61.5	4151	47.4
1995	9112.1	1166.0	93.4	67.9	93.4	67.9	89.2	65.0	8174	93.3
1996	7482.0	1164.0	75.9	68.8	75.9	68.8	73.2	65.9	6673	76.0
1997	8151.8	1160.0	81.9	70.1	81.9	70.1	80.2	67.3	7178	81.9
1998	10188.9	1160.0	99.1	72.8	99.1	72.8	100.3	70.3	8684	99.1
1999	9124.9	1160.0	89.6	74.2	89.6	74.2	89.8	71.9	7850	89.6
2000	10085.7	1191.0	96.9	76.0	96.9	76.0	96.4	73.8	8506	96.8
2001	7781.8	1241.0	77.9	76.1	77.9	76.1	71.8	73.7	6708	76.6
2002	9974.8	1235.0	93.6	77.3	93.6	77.3	92.2	75.0	8196	93.6
2003	8553.2	1235.0	82.4	77.7	82.4	77.7	79.1	75.3	7217	82.4
2004	10227.3	1235.0	95.4	78.7	95.4	78.7	94.3	76.4	8378	95.4
2005	7667.5	1235.0	72.7	78.4	72.7	78.4	70.9	76.1	6363	72.6
2006	10475.4	1235.0	97.3	79.4	97.3	79.4	96.8	77.2	8521	97.3
2007	8058.2	1231.0	76.5	79.3	76.5	79.3	74.7	77.1	6704	76.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		994			448	
B. Refuelling without a maintenance					18	
C. Inspection, maintenance or repair combined with refuelling	988			1044		
D. Inspection, maintenance or repair without refuelling	70			198		
E. Testing of plant systems or components				0		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					8	
Z. Others					8	
Subtotal	1058	994	0	1242	482	0
Total		2052			1724	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	673	9
13. Reactor Auxiliary Systems	31	16
14. Safety Systems		0
15. Reactor Cooling Systems		82
31. Turbine and auxiliaries	4	65
32. Feedwater and Main Steam System	285	0
33. Circulating Water System		11
35. All other I&C Systems		8
41. Main Generator Systems		35
42. Electrical Power Supply Systems		62
XX. Miscellaneous Systems		130
Total	993	418

US-293 PILGRIM-1

Operator: ENTERGY (ENTERGY NUCLEAR)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 685.0 MW(e)
Design Net Capacity: 655.0 MW(e)
Design Discharge Burnup: 25000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5119.8 GW(e).h
Energy Availability Factor: 88.8%
Load Factor: 85.3%
Operating Factor: 88.7%
Energy Unavailability Factor: 11.2%
Total Off-line Time: 986 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	496.4	434.1	382.9	73.5	345.3	491.4	444.0	500.2	487.0	503.2	495.0	466.8	5119.8
EAF (%)	100.0	100.0	91.5	16.7	72.8	100.0	91.0	100.0	100.0	100.0	100.0	93.1	88.8
UCF (%)	100.0	100.0	91.5	16.7	72.9	100.0	91.0	100.0	100.0	100.0	100.0	93.1	88.8
LF (%)	97.4	94.3	75.2	14.9	67.8	99.6	87.1	98.2	98.7	98.7	100.2	91.6	85.3
OF (%)	100.0	100.0	91.4	19.3	70.2	100.0	91.0	100.0	100.0	100.0	100.0	93.0	88.7
EUF (%)	0.0	0.0	8.5	83.3	27.2	0.0	9.0	0.0	0.0	0.0	0.0	6.9	11.2
PUF (%)	0.0	0.0	0.0	83.3	27.2	0.0	0.0	0.0	0.0	0.0	0.0	6.9	9.7
UCLF (%)	0.0	0.0	8.5	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0	1.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 26 Aug 1968
Date of First Criticality: 16 Jun 1972
Date of Grid Connection: 19 Jul 1972
Date of Commercial Operation: 01 Dec 1972

Lifetime Generation: 124644.5 GW(e).h
Cumulative Energy Availability Factor: 69.2%
Cumulative Load Factor: 65.0%
Cumulative Unit Capability Factor: 69.4%
Cumulative Energy Unavailability Factor: 30.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1972	304.5	678.0	100.0	100.0	100.0	100.0	59.6	59.6	511	68.7
1973	4074.2	655.0	88.1	89.1	88.1	89.1	71.0	70.1	7574	86.5
1974	1973.1	670.0	39.2	64.9	39.2	64.9	33.6	52.4	3435	39.2
1975	2587.3	668.0	44.1	58.1	44.1	58.1	44.2	49.7	6239	71.2
1976	2415.5	665.0	41.1	54.0	41.1	54.0	41.4	47.7	5330	60.7
1977	2652.2	670.0	45.2	52.2	45.2	52.2	45.2	47.2	5379	61.4
1978	4376.7	669.0	74.8	55.9	74.8	55.9	74.7	51.7	7276	83.1
1979	4844.6	670.0	82.5	59.7	82.5	59.7	82.5	56.1	7828	89.4
1980	3044.1	670.0	56.5	59.3	56.5	59.3	51.7	55.5	4952	56.4
1981	3444.1	670.0	66.0	60.0	66.0	60.0	58.7	55.9	5767	65.8
1982	3287.1	670.0	64.1	60.4	64.1	60.4	56.0	55.9	5597	63.9
1983	4711.9	670.0	87.3	62.9	87.3	62.9	80.3	58.1	7640	87.2
1984	3.5	669.0	1.4	57.8	1.4	57.8	0.1	53.3	34	0.4
1985	4951.0	667.0	93.3	60.5	91.5	60.3	84.6	55.7	8013	91.5
1986	1027.5	670.0	18.9	57.5	18.9	57.4	17.5	53.0	1646	18.8
1987	0.0	670.0	0.0	53.7	0.0	53.6	0.0	49.4	0	0.0
1988	0.0	670.0	0.0	50.3	0.0	50.2	0.0	46.4	0	0.0
1989	1707.8	670.0	56.3	50.7	56.3	50.6	29.1	45.3	4919	56.2
1990	4243.2	670.0	77.5	52.2	77.5	52.1	72.3	46.8	6784	77.4
1991	3424.5	670.0	69.9	53.1	63.7	52.7	58.3	47.4	5572	63.6
1992	4742.0	670.0	84.3	54.7	84.3	54.3	80.6	49.1	7400	84.2
1993	4340.8	670.0	79.1	55.8	78.6	55.4	74.0	50.3	6880	78.5
1994	3824.1	670.0	69.4	56.4	69.4	56.1	65.2	51.0	6069	69.3
1995	4485.8	670.0	79.5	57.4	79.5	57.1	76.4	52.1	6962	79.5
1996	5324.3	670.0	95.0	59.0	95.0	58.7	90.5	53.7	8345	95.0
1997	4310.4	670.0	78.1	59.8	78.1	59.4	73.4	54.4	6840	78.1
1998	5698.4	670.0	100.0	61.3	100.0	61.0	97.1	56.1	8760	100.0
1999	4473.3	670.0	81.6	62.1	81.6	61.7	76.2	56.8	7141	81.5
2000	5512.3	670.0	96.3	63.3	96.3	63.0	93.7	58.1	8454	96.2
2001	5144.0	653.0	90.0	64.2	90.0	63.9	89.0	59.2	7884	90.0
2002	5769.1	653.0	100.0	65.3	100.0	65.1	100.9	60.5	8760	100.0
2003	4977.2	684.0	85.8	66.0	85.8	65.7	84.7	61.3	7548	86.2
2004	5939.3	684.0	99.3	67.1	99.3	66.8	98.9	62.5	8721	99.3
2005	5474.0	685.0	93.2	67.9	93.2	67.6	91.2	63.4	8166	93.2
2006	5829.2	685.0	99.1	68.8	99.1	68.6	97.1	64.4	8684	99.1
2007	5119.8	685.0	88.8	69.4	88.8	69.2	85.3	65.0	7774	88.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		129			591	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling	802			1385	2	
D. Inspection, maintenance or repair without refuelling	51			151	0	
E. Testing of plant systems or components				54	1	
F. Major back-fitting, refurbishment or upgrading activities with refuelling					0	
H. Nuclear regulatory requirements				41	5	148
J. Grid failure or grid unavailability						20
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					54	5
Subtotal	853	129	0	1631	665	173
Total		982			2469	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories	63	5
12. Reactor I&C Systems		33
13. Reactor Auxiliary Systems		107
14. Safety Systems		12
15. Reactor Cooling Systems		148
31. Turbine and auxiliaries	66	62
32. Feedwater and Main Steam System		54
35. All other I&C Systems		2
41. Main Generator Systems		44
42. Electrical Power Supply Systems		61
XX. Miscellaneous Systems		11
Total	129	539

US-266 POINT BEACH-1

Operator: WEP (WISCONSIN ELECTRIC POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 512.0 MW(e)
Design Net Capacity: 497.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 3822.3 GW(e).h
Energy Availability Factor: 86.6%
Load Factor: 85.2%
Operating Factor: 86.6%
Energy Unavailability Factor: 13.4%
Total Off-line Time: 1178 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	378.3	345.5	377.9	0.0	294.6	207.7	377.6	372.7	330.7	382.3	371.9	383.1	3822.3
EAF (%)	100.0	100.0	96.8	0.0	83.2	57.4	100.0	100.0	100.0	100.0	100.0	100.0	86.6
UCF (%)	100.0	100.0	96.8	0.0	83.2	57.4	100.0	100.0	100.0	100.0	100.0	100.0	86.6
LF (%)	99.3	100.4	99.3	0.0	77.3	56.3	99.1	97.8	89.7	100.4	100.7	100.6	85.2
OF (%)	100.0	100.0	99.7	0.0	80.1	57.2	100.0	100.0	100.0	100.0	100.0	100.0	86.6
EUF (%)	0.0	0.0	3.2	100.0	16.8	42.7	0.0	0.0	0.0	0.0	0.0	0.0	13.4
PUF (%)	0.0	0.0	3.2	100.0	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	42.7	0.0	0.0	0.0	0.0	0.0	0.0	3.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 19 Jul 1967
Date of First Criticality: 02 Nov 1970
Date of Grid Connection: 06 Nov 1970
Date of Commercial Operation: 21 Dec 1970

Lifetime Generation: 118285.2 GW(e).h
Cumulative Energy Availability Factor: 82.7%
Cumulative Load Factor: 77.9%
Cumulative Unit Capability Factor: 83.1%
Cumulative Energy Unavailability Factor: 17.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1970	0.0	498.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1971	3446.2	524.0	100.0	100.0	100.0	100.0	75.1	69.2	7699	87.9
1972	3085.5	524.0	100.0	100.0	100.0	100.0	67.0	68.2	6349	72.3
1973	2742.3	497.0	67.6	89.9	67.6	89.9	63.0	66.5	6867	78.4
1974	3144.3	497.0	81.4	87.9	81.4	87.9	72.2	67.9	7136	81.5
1975	2924.9	480.0	69.5	84.4	69.5	84.4	69.6	68.2	6297	71.9
1976	3392.5	492.0	78.4	83.5	78.4	83.5	78.5	69.9	7239	82.4
1977	3687.1	495.0	85.1	83.7	85.1	83.7	85.0	72.0	7733	88.3
1978	3794.5	495.0	87.5	84.2	87.5	84.2	87.5	73.9	7864	89.8
1979	3059.6	495.0	70.6	82.7	70.6	82.7	70.6	73.5	6455	73.7
1980	2479.3	495.0	91.0	83.5	77.0	82.1	57.0	71.9	6739	76.7
1981	2614.9	495.0	78.3	83.0	78.3	81.8	60.3	70.9	6834	78.0
1982	2701.7	495.0	81.5	82.9	81.5	81.8	62.3	70.2	7134	81.4
1983	2384.9	495.0	74.3	82.3	74.3	81.2	55.0	69.0	6498	74.2
1984	3109.2	485.0	72.6	81.6	72.6	80.6	73.0	69.3	6379	72.6
1985	3354.2	485.0	78.6	81.4	78.6	80.5	78.9	69.9	6917	79.0
1986	3770.1	485.0	88.7	81.8	88.7	81.0	88.7	71.0	7786	88.9
1987	3567.1	485.0	83.6	81.9	83.6	81.1	84.0	71.8	7348	83.9
1988	3831.0	485.0	88.5	82.3	88.5	81.5	89.9	72.8	7787	88.6
1989	3606.2	485.0	87.8	82.6	87.8	81.8	84.9	73.4	7706	88.0
1990	3531.7	485.0	83.8	82.6	83.8	81.9	83.1	73.9	7362	84.0
1991	3628.7	485.0	85.7	82.8	85.7	82.1	85.4	74.4	7524	85.9
1992	3605.6	485.0	84.1	82.8	84.1	82.2	84.6	74.9	7409	84.3
1993	3804.8	485.0	88.8	83.1	88.8	82.5	89.6	75.5	7799	89.0
1994	3905.1	485.0	92.0	83.5	92.0	82.9	91.9	76.2	8071	92.1
1995	3792.4	485.0	88.5	83.7	88.5	83.1	89.3	76.7	7768	88.7
1996	4003.3	485.0	93.0	84.0	93.0	83.5	94.0	77.3	8173	93.0
1997	853.5	485.0	21.3	81.7	21.3	81.2	20.1	75.2	1872	21.4
1998	2584.2	485.0	62.7	81.1	62.7	80.6	60.8	74.7	5489	62.7
1999	3489.3	489.0	80.0	81.0	80.0	80.5	81.4	75.0	7070	80.7
2000	4134.6	510.0	96.1	81.5	95.6	81.1	92.3	75.6	8391	95.5
2001	3702.1	510.0	87.0	81.7	87.0	81.3	82.9	75.8	7611	86.9
2002	3975.8	510.0	91.0	82.0	91.0	81.6	89.0	76.2	7964	90.9
2003	4343.0	516.0	97.5	82.5	97.5	82.1	96.2	76.9	8538	97.5
2004	3631.0	516.0	81.9	82.5	81.9	82.1	80.1	77.0	7186	81.8
2005	3641.0	512.0	82.6	82.5	82.6	82.1	81.2	77.1	7232	82.6
2006	4465.6	512.0	100.0	83.0	100.0	82.6	99.6	77.7	8760	100.0
2007	3822.3	512.0	86.6	83.1	86.6	82.7	85.2	77.9	7582	86.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		307			135	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	869			1091		
D. Inspection, maintenance or repair without refuelling				58		
E. Testing of plant systems or components				2		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				1		
H. Nuclear regulatory requirements						33
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	189	1
Subtotal	869	307	0	1152	325	35
Total		1176			1512	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		1
12. Reactor I&C Systems		0
15. Reactor Cooling Systems		9
16. Steam generation systems		63
31. Turbine and auxiliaries		17
32. Feedwater and Main Steam System	307	16
33. Circulating Water System		1
41. Main Generator Systems		8
42. Electrical Power Supply Systems		3
Total	307	118

US-301 POINT BEACH-2

Operator: WEP (WISCONSIN ELECTRIC POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 514.0 MW(e)
Design Net Capacity: 497.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4462.2 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 99.1%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	387.7	348.6	388.0	370.3	374.0	369.0	380.8	375.3	326.1	381.7	378.2	382.6	4462.2
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	101.4	100.9	101.6	100.0	97.8	99.7	99.6	98.1	88.1	99.8	102.1	100.1	99.1
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Jul 1968
Date of First Criticality: 30 May 1972
Date of Grid Connection: 02 Aug 1972
Date of Commercial Operation: 01 Oct 1972

Lifetime Generation: 116938.3 GW(e).h
Cumulative Energy Availability Factor: 84.3%
Cumulative Load Factor: 81.9%
Cumulative Unit Capability Factor: 84.3%
Cumulative Energy Unavailability Factor: 15.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1972	140.4	288.0	100.0	100.0	100.0	100.0	84.8	84.8	1799	81.5
1973	2991.0	497.0	80.2	80.9	80.2	80.9	68.7	69.3	8192	93.5
1974	3179.3	497.0	81.0	81.0	81.0	81.0	73.0	71.1	7100	81.1
1975	3741.4	485.0	87.9	83.2	87.9	83.2	88.1	76.6	8224	93.9
1976	3749.2	491.0	86.8	84.1	86.8	84.1	86.9	79.2	7959	90.6
1977	3622.3	495.0	83.5	84.0	83.5	84.0	83.5	80.0	7496	85.6
1978	3858.9	495.0	89.0	84.8	89.0	84.8	89.0	81.5	8039	91.8
1979	3707.5	495.0	85.5	84.9	85.5	84.9	85.5	82.1	7728	88.2
1980	3587.9	495.0	88.0	85.3	88.0	85.3	82.5	82.1	7569	86.2
1981	3720.3	495.0	89.9	85.8	89.9	85.8	85.8	82.5	7757	88.6
1982	3605.4	495.0	88.2	86.1	88.2	86.1	83.1	82.6	7595	86.7
1983	3016.3	495.0	74.5	85.0	74.5	85.0	69.6	81.4	6245	71.3
1984	3512.4	495.0	86.0	85.1	86.0	85.1	80.8	81.4	7405	84.3
1985	3603.1	485.0	86.8	85.2	86.8	85.2	84.8	81.6	7491	85.5
1986	3417.6	485.0	82.1	85.0	82.1	85.0	80.4	81.5	7186	82.0
1987	3606.1	485.0	85.9	85.1	85.5	85.0	84.9	81.8	7478	85.4
1988	3718.7	485.0	88.0	85.2	88.0	85.2	87.3	82.1	7626	86.8
1989	3485.1	485.0	82.9	85.1	82.9	85.1	82.0	82.1	7107	81.1
1990	3793.5	485.0	89.1	85.3	89.1	85.3	89.3	82.5	7713	88.0
1991	3689.2	485.0	87.6	85.4	87.6	85.4	86.8	82.7	7569	86.4
1992	3668.2	485.0	86.6	85.5	86.6	85.5	86.1	82.9	7492	85.3
1993	3844.5	485.0	90.9	85.8	90.9	85.7	90.5	83.2	7883	90.0
1994	3752.3	485.0	90.3	86.0	90.3	85.9	88.3	83.5	7827	89.3
1995	3386.0	485.0	83.4	85.9	83.4	85.8	79.7	83.3	7158	81.7
1996	2950.3	485.0	78.0	85.5	78.0	85.5	69.3	82.7	6653	75.7
1997	825.5	485.0	21.4	83.0	21.4	83.0	19.4	80.2	1788	20.4
1998	3123.8	485.0	75.5	82.7	75.5	82.7	73.5	80.0	6609	75.4
1999	3578.5	498.0	82.6	82.7	82.6	82.7	81.9	80.0	7195	82.1
2000	3527.4	512.0	80.9	82.6	80.9	82.6	78.4	80.0	7094	80.8
2001	4343.0	512.0	98.6	83.2	98.6	83.2	96.8	80.6	8631	98.5
2002	4004.3	512.0	90.7	83.5	90.7	83.4	89.3	80.9	7934	90.6
2003	3713.3	518.0	85.6	83.5	85.6	83.5	81.9	80.9	7469	85.3
2004	4384.9	518.0	97.5	84.0	97.5	84.0	96.4	81.4	8559	97.4
2005	3232.6	514.0	72.6	83.6	72.6	83.6	71.8	81.1	6355	72.5
2006	4094.8	514.0	91.0	83.9	91.0	83.8	90.9	81.4	7972	91.0
2007	4462.2	514.0	100.0	84.3	100.0	84.3	99.1	81.9	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					115	
B. Refuelling without a maintenance					0	
C. Inspection, maintenance or repair combined with refuelling	1124					
D. Inspection, maintenance or repair without refuelling	41				0	
E. Testing of plant systems or components	6					
F. Major back-fitting, refurbishment or upgrading activities with refuelling	3					
H. Nuclear regulatory requirements					4	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)	0				41	0
Z. Others					3	
Subtotal	0	0	0	1174	163	0
Total	0			1337		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		3
12. Reactor I&C Systems		31
14. Safety Systems		0
15. Reactor Cooling Systems		36
16. Steam generation systems		16
31. Turbine and auxiliaries		7
32. Feedwater and Main Steam System		10
42. Electrical Power Supply Systems		9
Total	0	112

US-282 PRAIRIE ISLAND-1

Operator: NORTHERN (Northern States Power Co.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 551.0 MW(e)
Design Net Capacity: 530.0 MW(e)
Design Discharge Burnup: 51000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4457.1 GW(e).h
Energy Availability Factor: 96.8%
Load Factor: 92.3%
Operating Factor: 96.7%
Energy Unavailability Factor: 3.2%
Total Off-line Time: 288 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	407.6	367.9	406.1	355.2	205.4	373.6	389.6	391.5	385.9	421.9	396.0	356.4	4457.1
EAF (%)	100.0	100.0	100.0	100.0	72.6	100.0	100.0	100.0	100.0	100.0	100.0	89.3	96.8
UCF (%)	100.0	100.0	100.0	100.0	72.6	100.0	100.0	100.0	100.0	100.0	100.0	89.3	96.8
LF (%)	99.4	99.4	99.2	89.5	50.1	94.2	95.0	95.5	97.3	102.9	99.7	86.9	92.3
OF (%)	100.0	100.0	100.0	100.0	72.6	100.0	100.0	100.0	100.0	100.0	100.0	88.7	96.7
EUF (%)	0.0	0.0	0.0	0.0	27.4	0.0	0.0	0.0	0.0	0.0	0.0	10.7	3.2
PUF (%)	0.0	0.0	0.0	0.0	27.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7	0.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Jun 1968
Date of First Criticality: 01 Dec 1973
Date of Grid Connection: 04 Dec 1973
Date of Commercial Operation: 16 Dec 1973

Lifetime Generation: 122584.9 GW(e).h
Cumulative Energy Availability Factor: 86.0%
Cumulative Load Factor: 85.2%
Cumulative Unit Capability Factor: 86.1%
Cumulative Energy Unavailability Factor: 14.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	7.2	514.0	100.0	100.0	100.0	100.0	2.1	2.1	312	46.4
1974	1452.2	520.0	43.9	47.9	43.9	47.9	31.9	29.8	3848	43.9
1975	3694.2	520.0	81.2	63.9	81.2	63.9	81.1	54.5	7560	86.3
1976	3268.7	520.0	71.5	66.4	71.5	66.4	71.6	60.0	6801	77.4
1977	3714.5	511.0	82.9	70.4	82.9	70.4	83.0	65.6	7453	85.1
1978	3810.7	507.0	85.9	73.4	85.9	73.4	85.8	69.5	8012	91.5
1979	2910.9	503.0	65.8	72.2	65.8	72.2	66.1	68.9	6402	73.1
1980	3105.7	503.0	77.8	73.0	77.8	73.0	70.3	69.1	6863	78.1
1981	3838.6	503.0	88.9	74.9	88.9	74.9	87.1	71.3	7803	89.1
1982	3918.0	503.0	90.9	76.6	90.9	76.6	88.9	73.2	7960	90.9
1983	3888.9	503.0	87.2	77.7	87.2	77.7	88.3	74.7	7621	87.0
1984	4159.4	503.0	94.3	79.2	94.3	79.2	94.1	76.4	8285	94.3
1985	3678.5	503.0	83.4	79.5	83.4	79.5	83.5	77.0	7333	83.7
1986	3819.6	503.0	89.6	80.3	89.6	80.3	86.7	77.8	7870	89.8
1987	3590.3	503.0	82.2	80.4	82.2	80.4	81.5	78.0	7232	82.6
1988	3823.4	503.0	89.3	81.0	89.3	81.0	86.5	78.6	7800	88.8
1989	4392.3	503.0	99.7	82.2	99.7	82.2	99.7	79.9	8737	99.7
1990	3829.7	503.0	81.7	82.1	81.7	82.1	86.9	80.3	7764	88.6
1991	3987.1	505.0	90.5	82.6	90.5	82.6	90.1	80.8	7943	90.7
1992	3497.8	503.0	77.4	82.3	77.4	82.3	79.2	80.7	6844	77.9
1993	4378.0	505.0	96.8	83.0	96.8	83.0	98.9	81.6	8480	96.8
1994	3718.2	513.0	82.8	83.0	82.8	83.0	82.7	81.7	7258	82.9
1995	4519.0	513.0	99.9	83.8	99.9	83.8	100.6	82.6	8752	99.9
1996	3741.6	513.0	92.9	84.2	92.2	84.2	83.0	82.6	7327	83.4
1997	3522.8	513.0	79.5	84.0	79.5	84.0	78.4	82.4	6965	79.5
1998	4209.2	514.0	90.8	84.3	90.8	84.3	93.5	82.8	7948	90.7
1999	4068.8	522.0	87.2	84.4	87.2	84.4	89.0	83.1	7643	87.2
2000	4536.5	522.0	96.7	84.9	96.7	84.8	98.9	83.7	8499	96.8
2001	3641.7	522.0	78.8	84.6	78.8	84.6	79.6	83.5	6890	78.7
2002	4373.2	522.0	94.4	85.0	94.4	85.0	95.6	84.0	8268	94.4
2003	4596.3	522.0	98.4	85.4	98.4	85.4	101.0	84.5	8619	98.4
2004	3602.1	522.0	79.9	85.3	79.9	85.2	78.6	84.3	7017	79.9
2005	4518.4	522.0	96.7	85.6	96.7	85.6	98.8	84.8	8465	96.6
2006	4103.2	523.0	88.9	85.7	88.9	85.7	89.6	85.0	7785	88.9
2007	4457.1	551.0	96.8	86.1	96.8	86.0	92.3	85.2	8472	96.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1973 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		83			303	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling				681		
D. Inspection, maintenance or repair without refuelling	203			84		
E. Testing of plant systems or components				7	1	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				0		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					26	1
Subtotal	203	83	0	772	331	1
Total		286			1104	

7. Equipment Related Full Outages, Analysis by System

System	2007	1973 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		15
12. Reactor I&C Systems		30
14. Safety Systems		10
15. Reactor Cooling Systems		8
16. Steam generation systems		39
31. Turbine and auxiliaries		129
32. Feedwater and Main Steam System		37
35. All other I&C Systems		8
41. Main Generator Systems		1
42. Electrical Power Supply Systems	83	8
XX. Miscellaneous Systems		0
Total	83	285

US-306 PRAIRIE ISLAND-2

Operator: NUCMAN (NUCLEAR MANAGEMENT CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 545.0 MW(e)
Design Net Capacity: 530.0 MW(e)
Design Discharge Burnup: 51000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4456.6 GW(e).h
Energy Availability Factor: 96.9%
Load Factor: 93.3%
Operating Factor: 96.9%
Energy Unavailability Factor: 3.1%
Total Off-line Time: 272 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	403.4	364.1	271.7	332.8	389.0	372.1	386.1	388.4	359.7	393.4	391.8	404.1	4456.6
EAF (%)	100.0	100.0	76.6	90.6	100.0	100.0	100.0	100.0	96.4	100.0	100.0	100.0	96.9
UCF (%)	100.0	100.0	76.6	90.6	100.0	100.0	100.0	100.0	96.4	100.0	100.0	100.0	96.9
LF (%)	99.5	99.4	67.1	84.8	95.9	94.8	95.2	95.8	91.7	97.0	99.7	99.7	93.3
OF (%)	100.0	100.0	76.6	90.1	100.0	100.0	100.0	100.0	96.3	100.0	100.0	100.0	96.9
EUF (%)	0.0	0.0	23.4	9.4	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	3.1
PUF (%)	0.0	0.0	23.4	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	2.3
UCLF (%)	0.0	0.0	0.0	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Jun 1969
Date of First Criticality: 17 Dec 1974
Date of Grid Connection: 21 Dec 1974
Date of Commercial Operation: 21 Dec 1974

Lifetime Generation: 121729.0 GW(e).h
Cumulative Energy Availability Factor: 87.9%
Cumulative Load Factor: 87.6%
Cumulative Unit Capability Factor: 87.9%
Cumulative Energy Unavailability Factor: 12.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	7.4	513.0	100.0	100.0	100.0	100.0	5.6	5.6	104	41.3
1975	3176.2	520.0	69.9	70.7	69.9	70.7	69.9	68.1	7035	80.5
1976	2660.6	520.0	58.2	64.6	58.2	64.6	58.2	63.2	6657	75.8
1977	3882.3	511.0	86.7	71.8	86.7	71.8	86.7	70.9	7807	89.1
1978	3924.4	507.0	88.2	75.8	88.2	75.8	88.4	75.2	8126	92.8
1979	4193.0	500.0	94.6	79.4	94.6	79.4	95.7	79.2	8661	98.9
1980	3468.7	500.0	81.5	79.8	81.4	79.8	79.0	79.1	7167	81.6
1981	3092.9	500.0	71.4	78.6	71.4	78.6	70.6	77.9	6292	71.8
1982	3857.7	500.0	90.0	80.0	89.8	80.0	88.1	79.2	7844	89.5
1983	3716.3	500.0	86.5	80.7	86.5	80.7	84.8	79.8	7574	86.5
1984	3906.0	500.0	89.2	81.6	89.2	81.5	88.9	80.7	7830	89.1
1985	3612.5	500.0	92.9	82.6	92.9	82.6	82.5	80.9	7378	84.2
1986	3854.0	500.0	90.6	83.2	90.6	83.2	88.0	81.5	7930	90.5
1987	4462.2	500.0	100.0	84.5	100.0	84.5	101.9	83.0	8760	100.0
1988	3886.2	500.0	88.2	84.8	88.2	84.8	88.5	83.4	7773	88.5
1989	3887.2	500.0	96.9	85.6	96.9	85.6	88.7	83.7	7798	89.0
1990	3803.7	500.0	83.3	85.4	83.3	85.4	86.8	83.9	7602	86.8
1991	4480.4	502.0	100.0	86.3	100.0	86.3	101.8	85.0	8760	100.0
1992	3223.5	500.0	73.5	85.6	73.5	85.6	73.4	84.3	6516	74.2
1993	3746.2	503.0	83.5	85.5	83.5	85.5	85.0	84.4	7338	83.8
1994	4553.0	512.0	99.7	86.2	99.7	86.2	101.5	85.3	8734	99.7
1995	3968.2	512.0	87.5	86.3	87.5	86.2	88.5	85.4	7666	87.5
1996	4485.1	512.0	99.2	86.9	98.6	86.8	99.7	86.1	8653	98.5
1997	3642.9	512.0	82.0	86.6	82.0	86.6	81.2	85.9	7180	82.0
1998	3333.7	512.0	74.8	86.1	74.8	86.1	74.3	85.4	6555	74.8
1999	4597.4	522.0	99.2	86.7	99.2	86.6	100.5	86.0	8690	99.2
2000	4182.3	522.0	89.0	86.8	89.0	86.7	91.2	86.2	7820	89.0
2001	4271.0	522.0	91.7	87.0	91.7	86.9	93.4	86.5	8031	91.7
2002	4296.0	522.0	92.4	87.2	92.4	87.1	93.9	86.7	8082	92.3
2003	4241.0	522.0	92.0	87.3	92.0	87.3	92.7	87.0	8058	92.0
2004	4660.3	522.0	99.5	87.7	99.5	87.7	101.6	87.5	8737	99.5
2005	3848.6	522.0	83.3	87.6	83.3	87.6	84.2	87.4	7296	83.3
2006	4012.4	522.0	87.5	87.6	87.5	87.6	87.7	87.4	7665	87.5
2007	4456.6	545.0	96.9	87.9	96.9	87.9	93.3	87.6	8488	96.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		70			225	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling				599		
D. Inspection, maintenance or repair without refuelling	199			90		
E. Testing of plant systems or components				4		
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					17	1
Subtotal	199	70	0	693	243	1
Total		269			937	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1974 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems		44
13. Reactor Auxiliary Systems		3
14. Safety Systems	70	3
15. Reactor Cooling Systems		38
16. Steam generation systems		6
31. Turbine and auxiliaries		74
32. Feedwater and Main Steam System		3
33. Circulating Water System		2
35. All other I&C Systems		0
41. Main Generator Systems		7
42. Electrical Power Supply Systems		30
Total	70	210

US-254 QUAD CITIES-1

Operator: EXELON (Exelon Generation)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 867.0 MW(e)
Design Net Capacity: 789.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6951.0 GW(e).h
Energy Availability Factor: 93.7%
Load Factor: 91.5%
Operating Factor: 93.7%
Energy Unavailability Factor: 6.3%
Total Off-line Time: 548 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	649.4	585.8	624.8	529.5	191.7	624.2	645.9	645.9	532.9	646.8	627.2	647.0	6951.0
EAF (%)	100.0	100.0	100.0	100.0	37.8	100.0	100.0	100.0	88.3	100.0	100.0	100.0	93.7
UCF (%)	100.0	100.0	100.0	100.0	37.8	100.0	100.0	100.0	88.3	100.0	100.0	100.0	93.7
LF (%)	100.7	100.5	97.0	84.8	29.7	100.0	100.1	100.1	85.4	100.3	100.3	100.3	91.5
OF (%)	100.0	100.0	100.0	100.0	37.8	100.0	100.0	100.0	88.2	100.0	100.0	100.0	93.7
EUF (%)	0.0	0.0	0.0	0.0	62.2	0.0	0.0	0.0	11.8	0.0	0.0	0.0	6.3
PUF (%)	0.0	0.0	0.0	0.0	62.2	0.0	0.0	0.0	11.8	0.0	0.0	0.0	6.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 15 Feb 1967
Date of First Criticality: 18 Oct 1971
Date of Grid Connection: 12 Apr 1972
Date of Commercial Operation: 18 Feb 1973

Lifetime Generation: 160970.2 GW(e).h
Cumulative Energy Availability Factor: 76.3%
Cumulative Load Factor: 71.0%
Cumulative Unit Capability Factor: 76.4%
Cumulative Energy Unavailability Factor: 23.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	4451.0	800.0	87.0	87.0	87.0	87.0	69.4	69.4	6667	83.2
1974	3464.1	800.0	61.4	73.6	61.4	73.6	49.4	59.0	5365	61.2
1975	4413.4	800.0	61.0	69.3	61.0	69.3	63.0	60.3	7531	86.0
1976	3401.7	769.0	50.4	64.6	50.4	64.6	50.4	57.9	5699	64.9
1977	3527.4	769.0	52.4	62.2	52.4	62.2	52.4	56.8	6176	70.5
1978	4782.0	769.0	71.0	63.7	71.0	63.7	71.0	59.1	8315	94.9
1979	4786.5	769.0	71.1	64.7	71.1	64.7	71.1	60.8	7096	81.0
1980	3468.8	769.0	67.4	65.1	66.7	65.0	51.4	59.6	5840	66.5
1981	5726.8	769.0	94.3	68.3	94.3	68.2	85.0	62.4	8244	94.1
1982	3258.0	769.0	68.5	68.3	68.5	68.2	48.4	61.0	5951	67.9
1983	5776.4	769.0	94.7	70.7	94.7	70.6	85.7	63.3	8258	94.3
1984	3358.5	769.0	53.4	69.3	53.4	69.2	49.7	62.2	4687	53.4
1985	6072.3	769.0	94.1	71.2	94.1	71.1	90.1	64.3	8242	94.1
1986	4426.2	769.0	68.9	71.0	68.9	70.9	65.7	64.4	6035	68.9
1987	4456.1	769.0	70.1	70.9	70.1	70.9	66.1	64.5	6141	70.1
1988	5662.0	769.0	93.4	72.3	93.4	72.3	83.8	65.7	8199	93.3
1989	4280.4	769.0	73.4	72.4	73.4	72.4	63.5	65.6	6428	73.4
1990	5345.6	769.0	83.1	73.0	83.1	73.0	79.4	66.4	7276	83.1
1991	3549.5	769.0	56.6	72.1	55.8	72.1	52.7	65.6	4882	55.7
1992	4166.1	769.0	70.1	72.0	70.1	72.0	61.7	65.4	6158	70.1
1993	5042.5	769.0	78.8	72.4	78.8	72.3	74.9	65.9	6902	78.8
1994	1670.2	769.0	28.9	70.4	28.9	70.3	24.8	64.0	2526	28.8
1995	5886.2	769.0	90.6	71.3	90.6	71.2	87.4	65.0	7934	90.6
1996	2680.6	769.0	42.9	70.1	42.9	70.0	39.7	64.0	3769	42.9
1997	5565.5	769.0	88.7	70.8	88.7	70.8	82.6	64.7	7764	88.6
1998	3142.9	769.0	49.1	70.0	49.1	69.9	46.7	64.0	4299	49.1
1999	6337.6	769.0	93.7	70.9	93.7	70.8	94.1	65.1	8210	93.7
2000	6168.1	769.0	93.8	71.7	93.8	71.6	91.3	66.1	8242	93.8
2001	6710.9	769.0	99.2	72.6	99.2	72.6	99.6	67.2	8691	99.2
2002	5709.5	855.0	86.6	73.1	86.6	73.1	84.0	67.8	7564	86.3
2003	6810.2	855.0	92.4	73.8	92.4	73.7	90.9	68.6	8013	91.5
2004	6502.8	855.0	100.0	74.7	100.0	74.7	86.6	69.2	8784	100.0
2005	6281.1	864.0	89.9	75.2	89.9	75.2	83.0	69.7	7875	89.9
2006	6747.3	867.0	93.2	75.8	93.2	75.8	88.8	70.3	8161	93.2
2007	6951.0	867.0	93.7	76.4	93.7	76.3	91.5	71.0	8212	93.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					398	
B. Refuelling without a maintenance					71	
C. Inspection, maintenance or repair combined with refuelling	461			1105		
D. Inspection, maintenance or repair without refuelling	84			164	4	
E. Testing of plant systems or components	1			7	8	
H. Nuclear regulatory requirements					5	1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	46	2
Subtotal	546	0	0	1276	532	3
Total	546			1811		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		21
13. Reactor Auxiliary Systems		3
14. Safety Systems		8
15. Reactor Cooling Systems		105
31. Turbine and auxiliaries		74
32. Feedwater and Main Steam System		23
41. Main Generator Systems		17
42. Electrical Power Supply Systems		37
XX. Miscellaneous Systems		12
Total	0	300

US-265 QUAD CITIES-2

Operator: EXELON (Exelon Generation)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 867.0 MW(e)
Design Net Capacity: 789.0 MW(e)
Design Discharge Burnup: 30000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7505.8 GW(e).h
Energy Availability Factor: 99.6%
Load Factor: 98.8%
Operating Factor: 99.5%
Energy Unavailability Factor: 0.4%
Total Off-line Time: 40 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	644.7	562.6	620.7	593.3	640.5	622.9	643.8	644.1	622.9	641.2	625.1	644.2	7505.8
EAF (%)	100.0	96.4	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6
UCF (%)	100.0	96.4	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6
LF (%)	99.9	96.6	96.3	95.0	99.3	99.8	99.8	99.8	99.8	99.4	100.0	99.9	98.8
OF (%)	100.0	96.6	97.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5
EUF (%)	0.0	3.6	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	3.6	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 15 Feb 1967
Date of First Criticality: 26 Apr 1972
Date of Grid Connection: 23 May 1972
Date of Commercial Operation: 10 Mar 1973

Lifetime Generation: 156624.3 GW(e).h
Cumulative Energy Availability Factor: 74.8%
Cumulative Load Factor: 69.6%
Cumulative Unit Capability Factor: 75.6%
Cumulative Energy Unavailability Factor: 25.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	4392.2	800.0	86.4	86.4	86.4	86.4	74.8	74.8	6238	84.9
1974	4643.8	800.0	82.6	84.3	82.6	84.3	66.3	70.1	7232	82.6
1975	2490.9	798.0	35.7	67.2	35.7	67.2	35.6	58.0	4555	52.0
1976	4320.0	769.0	64.0	66.4	64.0	66.4	64.0	59.5	7143	81.3
1977	4369.3	769.0	64.9	66.1	64.9	66.1	64.9	60.6	7118	81.3
1978	4429.1	769.0	65.7	66.0	65.7	66.0	65.7	61.5	7022	80.2
1979	3993.6	769.0	59.3	65.1	59.3	65.1	59.3	61.1	7686	87.7
1980	3651.6	769.0	62.8	64.8	62.5	64.7	54.1	60.3	5486	62.5
1981	3770.7	769.0	68.1	65.2	68.1	65.1	56.0	59.8	5957	68.0
1982	5062.3	769.0	84.0	67.0	84.0	67.0	75.1	61.3	7343	83.8
1983	3158.5	769.0	64.2	66.8	64.2	66.8	46.9	60.0	5620	64.2
1984	4984.4	769.0	77.9	67.7	77.9	67.7	73.8	61.2	6837	77.8
1985	4560.7	769.0	71.3	68.0	71.3	68.0	67.7	61.7	6247	71.3
1986	4728.0	769.0	74.2	68.4	74.2	68.4	70.2	62.3	6399	73.0
1987	4953.0	769.0	78.1	69.1	78.1	69.1	73.5	63.0	6832	78.0
1988	4178.9	769.0	70.5	69.2	70.5	69.2	61.9	63.0	6193	70.5
1989	5743.1	769.0	95.5	70.7	95.5	70.7	85.3	64.3	8363	95.5
1990	4373.6	769.0	70.4	70.7	70.4	70.7	64.9	64.3	6186	70.6
1991	5285.2	769.0	88.3	71.6	88.3	71.6	78.5	65.1	7731	88.3
1992	3464.2	769.0	64.0	71.2	64.0	71.2	51.3	64.4	5621	64.0
1993	3111.8	769.0	51.8	70.3	51.8	70.3	46.2	63.5	4538	51.8
1994	4013.3	769.0	65.7	70.1	65.7	70.1	59.6	63.3	5745	65.6
1995	2497.0	769.0	45.3	69.0	45.3	69.0	37.1	62.2	3966	45.3
1996	4666.8	769.0	98.8	70.3	72.3	69.2	69.1	62.5	6348	72.3
1997	2627.7	769.0	42.3	69.2	42.3	68.1	39.0	61.5	3718	42.4
1998	3819.6	769.0	59.0	68.8	58.2	67.7	56.7	61.3	5095	58.2
1999	6596.7	769.0	97.5	69.8	97.5	68.8	97.9	62.7	8537	97.5
2000	6220.6	769.0	92.9	70.7	92.9	69.7	92.1	63.7	8156	92.9
2001	6273.8	769.0	91.9	71.4	91.9	70.4	93.1	64.8	8058	92.0
2002	6556.8	855.0	90.4	72.1	90.4	71.2	89.8	65.7	7852	89.6
2003	6975.1	855.0	94.0	72.9	94.0	72.0	93.1	66.6	8181	93.4
2004	6179.4	855.0	90.5	73.5	90.5	72.6	82.3	67.2	7955	90.6
2005	7036.9	864.0	97.4	74.3	97.4	73.4	93.0	68.0	8533	97.4
2006	6611.0	867.0	91.3	74.8	91.3	74.0	87.0	68.7	8000	91.3
2007	7505.8	867.0	99.6	75.6	99.6	74.8	98.8	69.6	8720	99.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		39			512	
B. Refuelling without a maintenance					14	
C. Inspection, maintenance or repair combined with refuelling				998	62	
D. Inspection, maintenance or repair without refuelling				143		
E. Testing of plant systems or components				3	0	
H. Nuclear regulatory requirements					10	0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				97	68	66
Subtotal	0	39	0	1241	666	66
Total		39			1973	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		8
12. Reactor I&C Systems		13
13. Reactor Auxiliary Systems		4
14. Safety Systems		18
15. Reactor Cooling Systems		71
16. Steam generation systems		12
17. Safety I&C Systems (excluding reactor I&C)		7
21. Fuel Handling and Storage Facilities		19
31. Turbine and auxiliaries	39	87
32. Feedwater and Main Steam System		47
33. Circulating Water System		8
35. All other I&C Systems		1
41. Main Generator Systems		36
42. Electrical Power Supply Systems		74
XX. Miscellaneous Systems		46
Total	39	451

US-244 R.E. GINNA

Operator: CCNPP (Calvert Cliffs Nuclear Power Plant Inc.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 498.0 MW(e)
Design Net Capacity: 470.0 MW(e)
Design Discharge Burnup: 39000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4930.5 GW(e).h
Energy Availability Factor: 98.9%
Load Factor: 113.0%
Operating Factor: 99.0%
Energy Unavailability Factor: 1.1%
Total Off-line Time: 85 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	391.3	387.8	401.5	418.3	423.3	410.0	409.9	419.6	408.7	411.5	417.5	431.2	4930.5
EAF (%)	93.7	100.0	93.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.9
UCF (%)	93.7	100.0	93.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.9
LF (%)	105.6	115.9	108.5	116.7	114.2	114.3	110.6	113.3	114.0	111.1	116.3	116.4	113.0
OF (%)	94.4	100.0	94.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0
EUF (%)	6.3	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	6.3	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Apr 1966
Date of First Criticality: 08 Nov 1969
Date of Grid Connection: 02 Dec 1969
Date of Commercial Operation: 01 Jul 1970

Lifetime Generation: 120701.1 GW(e).h
Cumulative Energy Availability Factor: 84.2%
Cumulative Load Factor: 81.9%
Cumulative Unit Capability Factor: 84.2%
Cumulative Energy Unavailability Factor: 15.8%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1970	1597.0	448.0	100.0	100.0	100.0	100.0	80.7	80.7	3868	87.6
1971	2871.8	493.0	100.0	100.0	100.0	100.0	66.5	71.0	6592	75.3
1972	2572.1	504.0	100.0	100.0	100.0	100.0	58.1	65.7	6029	68.6
1973	3398.8	490.0	95.0	98.6	95.0	98.6	79.2	69.5	8325	95.0
1974	2097.2	490.0	48.9	87.5	48.9	87.5	48.9	64.9	5465	62.4
1975	3041.1	470.0	73.4	85.0	73.4	85.0	73.9	66.5	6709	76.6
1976	2060.8	470.0	49.7	79.8	49.7	79.8	49.9	64.0	5113	58.2
1977	3028.5	470.0	73.6	79.0	73.6	79.0	73.6	65.3	7489	85.5
1978	3218.7	470.0	77.5	78.8	77.5	78.8	78.2	66.7	7058	80.6
1979	2960.5	470.0	71.3	78.0	71.3	78.0	71.9	67.3	6375	72.8
1980	3093.5	470.0	76.0	77.8	76.0	77.8	74.9	68.0	6673	76.0
1981	3322.5	470.0	82.2	78.2	82.2	78.2	80.7	69.1	7194	82.1
1982	2408.0	470.0	58.9	76.7	58.9	76.7	58.5	68.2	5150	58.8
1983	3040.1	470.0	74.9	76.5	74.9	76.5	73.8	68.7	6529	74.5
1984	3156.8	470.0	77.2	76.6	77.2	76.6	76.5	69.2	6779	77.2
1985	3620.3	470.0	87.9	77.3	87.9	77.3	87.9	70.4	7700	87.9
1986	3610.3	470.0	87.4	77.9	87.4	77.9	87.7	71.4	7659	87.4
1987	3797.7	470.0	91.3	78.7	91.3	78.7	92.2	72.6	7994	91.3
1988	3533.2	470.0	86.5	79.1	86.5	79.1	85.6	73.3	7592	86.4
1989	3073.5	470.0	75.0	78.9	75.0	78.9	74.6	73.4	6569	75.0
1990	3451.4	470.0	83.6	79.1	83.6	79.1	83.8	73.9	7325	83.6
1991	3483.3	470.0	86.0	79.4	86.0	79.4	84.6	74.4	7536	86.0
1992	3483.4	470.0	85.8	79.7	85.8	79.7	84.4	74.8	7536	85.8
1993	3499.4	470.0	85.7	80.0	85.7	80.0	85.0	75.2	7509	85.7
1994	3373.7	470.0	82.4	80.1	82.4	80.1	81.9	75.5	7219	82.4
1995	3638.6	470.0	88.8	80.4	88.8	80.4	88.4	76.0	7776	88.8
1996	2898.1	470.0	70.4	80.0	70.4	80.0	70.2	75.8	6175	70.3
1997	3894.7	480.0	91.7	80.5	91.7	80.5	92.6	76.4	8011	91.4
1998	4308.6	480.0	100.0	81.2	100.0	81.2	102.5	77.3	8760	100.0
1999	3534.1	480.0	85.3	81.3	85.3	81.3	84.0	77.6	7444	85.0
2000	3814.1	480.0	91.0	81.6	91.0	81.6	90.5	78.0	8001	91.1
2001	4286.3	480.0	100.0	82.2	100.0	82.2	101.9	78.8	8760	100.0
2002	3843.3	480.0	90.4	82.5	90.4	82.5	91.4	79.2	7951	90.8
2003	3868.6	480.0	90.1	82.7	90.1	82.7	92.0	79.5	7925	90.5
2004	4308.5	480.0	99.4	83.2	99.4	83.2	102.2	80.2	8733	99.4
2005	3996.7	498.0	93.3	83.5	93.3	83.5	91.6	80.5	8166	93.2
2006	4119.2	493.0	92.2	83.7	92.2	83.7	95.3	81.0	8157	93.1
2007	4930.5	498.0	98.9	84.2	98.9	84.2	113.0	81.9	8675	99.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1971 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		83			207	
B. Refuelling without a maintenance					2	
C. Inspection, maintenance or repair combined with refuelling	1121					
D. Inspection, maintenance or repair without refuelling	76				1	
E. Testing of plant systems or components	1				0	
H. Nuclear regulatory requirements					0	18
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					11	
L. Human factor related					0	
Subtotal	0	83	0	1198	221	18
Total		83			1437	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1971 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		1
12. Reactor I&C Systems		15
13. Reactor Auxiliary Systems		2
14. Safety Systems	42	16
15. Reactor Cooling Systems		9
16. Steam generation systems		41
31. Turbine and auxiliaries	41	39
32. Feedwater and Main Steam System		36
33. Circulating Water System		5
35. All other I&C Systems		1
42. Electrical Power Supply Systems		18
Total	83	183

US-458 RIVER BEND-1

Operator: ENTGS (ENERGY GULF STATES INC.)
Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 967.0 MW(e)
Design Net Capacity: 966.0 MW(e)
Design Discharge Burnup: 29600 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7184.6 GW(e).h
Energy Availability Factor: 90.4%
Load Factor: 84.8%
Operating Factor: 90.4%
Energy Unavailability Factor: 9.6%
Total Off-line Time: 844 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	725.1	661.2	711.2	549.8	419.0	426.3	723.1	716.9	598.7	579.6	422.8	651.0	7184.6
EAF (%)	100.0	100.0	100.0	95.2	59.1	72.4	100.0	100.0	83.4	89.9	85.4	100.0	90.4
UCF (%)	100.0	100.0	100.0	95.2	59.1	72.4	100.0	100.0	83.4	89.9	85.4	100.0	90.4
LF (%)	100.8	101.7	99.0	79.0	58.2	61.2	100.5	99.6	86.0	80.6	60.6	90.5	84.8
OF (%)	100.0	100.0	100.0	95.1	62.0	69.0	100.0	100.0	86.4	86.7	85.3	100.0	90.4
EUUF (%)	0.0	0.0	0.0	4.8	40.9	27.6	0.0	0.0	16.6	10.1	14.6	0.0	9.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	4.8	40.9	27.6	0.0	0.0	16.7	10.1	14.6	0.0	9.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Mar 1977 **Lifetime Generation:** 128353.0 GW(e).h
Date of First Criticality: 31 Oct 1985 **Cumulative Energy Availability Factor:** 81.6%
Date of Grid Connection: 03 Dec 1985 **Cumulative Load Factor:** 78.8%
Date of Commercial Operation: 16 Jun 1986 **Cumulative Unit Capability Factor:** 81.6%
Cumulative Energy Unavailability Factor: 18.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1986	2310.4	936.0	54.1	54.1	54.1	54.1	48.0	48.0	2763	53.8
1987	4964.4	936.0	66.7	62.0	66.7	62.0	60.5	55.9	5836	66.6
1988	7249.0	936.0	92.8	73.9	92.8	73.9	88.2	68.4	8149	92.8
1989	4785.0	936.0	66.9	72.0	66.9	72.0	58.4	65.6	5853	66.8
1990	5592.6	936.0	75.8	72.8	75.8	72.8	68.2	66.2	6642	75.8
1991	6687.2	936.0	85.7	75.1	85.7	75.1	81.6	68.9	7507	85.7
1992	2762.7	936.0	36.5	69.3	36.5	69.3	33.6	63.6	3210	36.5
1993	5257.9	936.0	69.4	69.3	69.4	69.3	64.1	63.6	6076	69.4
1994	4886.2	936.0	62.3	68.5	62.3	68.5	59.6	63.2	5455	62.3
1995	7930.8	936.0	99.4	71.7	99.4	71.7	96.7	66.7	8704	99.4
1996	6860.3	936.0	84.2	72.9	84.2	72.9	83.4	68.2	7391	84.1
1997	6822.7	936.0	84.8	73.9	84.8	73.9	83.2	69.5	7427	84.8
1998	7833.5	936.0	95.9	75.7	95.9	75.7	95.5	71.6	8404	95.9
1999	5704.8	936.0	74.0	75.5	74.0	75.5	69.6	71.5	6476	73.9
2000	7352.7	936.0	88.8	76.4	88.8	76.4	89.4	72.7	7795	88.7
2001	7811.8	936.0	92.4	77.5	92.4	77.5	95.3	74.1	8120	92.7
2002	8472.4	966.0	97.9	78.7	97.9	78.7	100.1	75.7	8579	97.9
2003	7653.2	966.0	91.8	79.5	91.8	79.5	90.4	76.6	8050	91.9
2004	7427.4	966.0	88.2	80.0	88.2	80.0	87.5	77.2	7758	88.3
2005	7822.5	978.0	93.2	80.7	93.2	80.7	91.3	78.0	8162	93.2
2006	7478.3	966.0	90.4	81.2	90.4	81.2	88.4	78.5	7921	90.4
2007	7184.6	967.0	90.4	81.6	90.4	81.6	84.8	78.8	7916	90.4

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		839		5	359	
B. Refuelling without a maintenance					26	
C. Inspection, maintenance or repair combined with refuelling				826		
D. Inspection, maintenance or repair without refuelling				201	8	
E. Testing of plant systems or components				14	5	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				12	155	
Subtotal	0	839	0	1058	553	0
Total		839			1611	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	634	50
13. Reactor Auxiliary Systems		3
15. Reactor Cooling Systems		97
17. Safety I&C Systems (excluding reactor I&C)		12
31. Turbine and auxiliaries	34	50
32. Feedwater and Main Steam System	105	42
33. Circulating Water System		3
35. All other I&C Systems		11
41. Main Generator Systems		27
42. Electrical Power Supply Systems	64	32
XX. Miscellaneous Systems		5
Total	837	332

US-272 SALEM-1

Operator: PSEGPOWR (PSEG Power, Inc.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1174.0 MW(e)
Design Net Capacity: 1090.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9158.5 GW(e).h
Energy Availability Factor: 91.5%
Load Factor: 89.1%
Operating Factor: 91.5%
Energy Unavailability Factor: 8.5%
Total Off-line Time: 747 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	881.8	796.1	710.5	109.1	769.8	842.5	860.3	855.7	832.6	873.1	854.4	772.6	9158.5
EAF (%)	100.0	100.0	83.8	29.2	95.2	100.0	100.0	100.0	100.0	100.0	100.0	89.5	91.5
UCF (%)	100.0	100.0	83.9	29.2	95.2	100.0	100.0	100.0	100.0	100.0	100.0	89.5	91.5
LF (%)	101.0	100.9	81.4	12.9	88.1	99.7	98.5	98.0	98.5	100.0	100.9	88.5	89.1
OF (%)	100.0	100.0	86.5	28.3	93.0	100.0	100.0	100.0	100.0	100.0	100.0	89.4	91.5
EUf (%)	0.0	0.0	16.2	70.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	10.5	8.5
PUf (%)	0.0	0.0	16.2	62.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5
UCLF (%)	0.0	0.0	0.0	8.6	4.8	0.0	0.0	0.0	0.0	0.0	0.0	10.5	2.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Sep 1968
Date of First Criticality: 11 Dec 1976
Date of Grid Connection: 25 Dec 1976
Date of Commercial Operation: 30 Jun 1977

Lifetime Generation: 169372.7 GW(e).h
Cumulative Energy Availability Factor: 66.1%
Cumulative Load Factor: 62.8%
Cumulative Unit Capability Factor: 66.2%
Cumulative Energy Unavailability Factor: 33.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1977	2058.8	1079.0	50.8	50.8	50.8	50.8	37.2	37.2	2432	47.4
1978	4537.0	1079.0	48.0	49.0	48.0	49.0	48.0	44.0	4862	55.5
1979	2084.3	1079.0	22.0	38.6	22.0	38.6	22.1	35.5	2231	25.5
1980	5689.8	1079.0	74.2	48.6	69.5	47.2	60.0	42.4	6075	69.2
1981	6191.3	1079.0	78.5	55.1	78.5	54.0	65.5	47.4	6839	78.1
1982	4107.4	1079.0	47.0	53.6	47.0	52.8	43.5	46.7	4192	47.9
1983	5408.8	1079.0	57.6	54.2	57.6	53.5	57.2	48.3	5127	58.5
1984	2160.1	1079.0	27.1	50.6	27.1	50.0	22.8	44.9	2378	27.1
1985	9007.5	1079.0	95.2	55.8	95.2	55.3	95.3	50.8	8345	95.3
1986	7084.0	1083.0	78.6	58.2	78.6	57.7	74.6	53.3	6921	79.0
1987	6216.6	1106.0	73.1	59.6	72.6	59.2	64.2	54.3	6362	72.6
1988	7418.6	1106.0	77.9	61.3	77.9	60.8	76.4	56.3	6841	77.9
1989	6213.3	1106.0	69.2	61.9	69.2	61.5	64.1	56.9	6059	69.2
1990	5999.2	1106.0	67.0	62.3	67.0	61.9	61.9	57.3	5868	67.0
1991	6810.3	1106.0	74.0	63.1	74.0	62.7	70.3	58.2	6479	74.0
1992	5307.8	1106.0	58.0	62.8	58.0	62.4	54.6	58.0	5090	57.9
1993	5870.6	1106.0	65.6	62.9	65.6	62.6	60.6	58.1	5746	65.6
1994	5779.3	1106.0	67.0	63.2	67.0	62.9	59.7	58.2	5865	67.0
1995	2554.4	1106.0	30.1	61.4	30.1	61.1	26.4	56.5	2632	30.0
1996	0.0	1106.0	0.0	58.2	0.0	57.9	0.0	53.6	0	0.0
1997	0.0	1106.0	0.0	55.3	0.0	55.1	0.0	50.9	0	0.0
1998	6475.6	1106.0	70.8	56.1	70.8	55.8	66.8	51.7	6199	70.8
1999	8009.2	1106.0	87.5	57.5	87.5	57.2	82.7	53.1	7663	87.5
2000	8952.6	1106.0	94.8	59.1	94.8	58.8	92.2	54.7	8328	94.8
2001	7709.4	1096.0	80.9	59.9	80.9	59.7	80.8	55.8	7116	81.2
2002	8620.6	1096.0	89.5	61.1	89.5	60.9	89.8	57.1	7855	89.7
2003	9096.7	1096.0	95.8	62.4	95.8	62.2	94.7	58.5	8401	95.9
2004	7452.7	1159.0	77.6	63.0	77.6	62.8	75.2	59.2	6766	77.0
2005	9440.6	1111.0	92.5	64.0	92.5	63.8	97.0	60.5	8105	92.5
2006	10228.1	1174.0	99.6	65.3	99.6	65.1	99.5	61.9	8725	99.6
2007	9158.5	1174.0	91.5	66.2	91.5	66.1	89.1	62.8	8013	91.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1977 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		176			1381	
B. Refuelling without a maintenance					10	
C. Inspection, maintenance or repair combined with refuelling	568			1034		
D. Inspection, maintenance or repair without refuelling				105	38	
E. Testing of plant systems or components				1	1	
H. Nuclear regulatory requirements					122	35
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				14	103	0
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)					5	
Z. Others					9	
Subtotal	568	176	0	1154	1669	36
Total		744			2859	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1977 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		1
12. Reactor I&C Systems		85
13. Reactor Auxiliary Systems		6
14. Safety Systems		19
15. Reactor Cooling Systems		92
16. Steam generation systems		493
17. Safety I&C Systems (excluding reactor I&C)		4
31. Turbine and auxiliaries		257
32. Feedwater and Main Steam System		118
33. Circulating Water System	97	57
35. All other I&C Systems		6
41. Main Generator Systems		112
42. Electrical Power Supply Systems	78	31
XX. Miscellaneous Systems		3
Total	175	1284

US-311 SALEM-2

Operator: PSEGPOWER (PSEG Power, Inc.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1130.0 MW(e)
Design Net Capacity: 1115.0 MW(e)
Design Discharge Burnup: 40000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9669.4 GW(e).h
Energy Availability Factor: 97.1%
Load Factor: 97.7%
Operating Factor: 97.1%
Energy Unavailability Factor: 2.9%
Total Off-line Time: 254 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	860.6	776.5	859.2	827.0	623.2	750.9	837.8	791.7	806.9	845.0	831.6	859.0	9669.4
EAF (%)	100.0	100.0	100.0	100.0	74.2	94.7	100.0	97.0	100.0	100.0	100.0	100.0	97.1
UCF (%)	100.0	100.0	100.0	100.0	74.2	94.7	100.0	97.0	100.0	100.0	100.0	100.0	97.1
LF (%)	102.4	102.3	102.3	101.7	74.1	92.3	99.7	94.2	99.2	100.5	102.1	102.2	97.7
OF (%)	100.0	100.0	100.0	100.0	74.5	94.3	100.0	96.9	100.0	100.0	100.0	100.0	97.1
EUF (%)	0.0	0.0	0.0	0.0	25.8	5.3	0.0	3.0	0.0	0.0	0.0	0.0	2.9
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	25.8	5.3	0.0	3.0	0.0	0.0	0.0	0.0	2.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Sep 1968
Date of First Criticality: 08 Aug 1980
Date of Grid Connection: 03 Jun 1981
Date of Commercial Operation: 13 Oct 1981

Lifetime Generation: 148468.0 GW(e).h
Cumulative Energy Availability Factor: 68.8%
Cumulative Load Factor: 64.5%
Cumulative Unit Capability Factor: 68.8%
Cumulative Energy Unavailability Factor: 31.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	1632.1	1105.0	96.3	96.3	96.3	96.3	76.9	76.9	1817	94.6
1982	7941.7	1106.0	97.5	97.3	97.5	97.3	82.0	81.1	8517	97.2
1983	775.2	1106.0	12.6	59.2	12.6	59.2	8.0	48.1	1078	12.3
1984	3225.7	1106.0	36.4	52.1	36.4	52.1	33.2	43.5	3192	36.3
1985	5033.8	1106.0	56.2	53.1	56.2	53.1	52.0	45.5	4923	56.2
1986	5317.7	1106.0	61.6	54.7	61.6	54.7	54.9	47.3	5388	61.5
1987	6176.6	1106.0	72.4	57.5	72.4	57.5	63.8	49.9	6338	72.4
1988	5982.2	1106.0	66.5	58.8	66.5	58.8	61.6	51.6	5838	66.5
1989	7824.6	1106.0	84.7	61.9	84.7	61.9	80.8	55.1	7419	84.7
1990	5446.1	1106.0	72.2	63.0	72.2	63.0	56.2	55.2	5163	58.9
1991	7662.3	1106.0	82.1	64.9	82.1	64.9	79.1	57.6	7188	82.1
1992	4744.6	1106.0	53.1	63.8	53.1	63.8	48.8	56.8	4657	53.0
1993	5575.5	1106.0	60.9	63.6	60.9	63.6	57.5	56.8	5328	60.8
1994	5606.8	1106.0	69.4	64.0	69.4	64.0	57.9	56.9	6076	69.4
1995	2071.7	1106.0	25.8	61.4	25.8	61.4	21.4	54.4	2261	25.8
1996	0.0	1106.0	0.0	57.3	0.0	57.3	0.0	50.8	0	0.0
1997	2564.3	1106.0	32.4	55.8	32.4	55.8	26.5	49.3	2834	32.4
1998	7797.2	1106.0	83.2	57.4	83.2	57.4	80.5	51.1	7287	83.2
1999	7949.4	1106.0	84.8	58.9	84.8	58.9	82.0	52.8	7431	84.8
2000	8381.7	1106.0	89.0	60.4	89.0	60.4	86.3	54.6	7819	89.0
2001	9517.6	1092.0	99.7	62.4	99.7	62.4	100.0	56.8	8736	99.7
2002	8367.4	1092.0	86.8	63.5	86.8	63.5	87.5	58.2	7620	87.0
2003	8095.6	1116.0	83.7	64.4	83.7	64.4	84.5	59.4	7355	84.0
2004	8799.8	1116.0	90.3	65.5	90.3	65.5	89.8	60.7	7945	90.4
2005	8886.0	1129.0	90.1	66.6	90.1	66.6	89.8	61.9	7897	90.1
2006	9147.4	1130.0	93.9	67.7	93.9	67.7	92.4	63.2	8220	93.8
2007	9669.4	1130.0	97.1	68.8	97.1	68.8	97.7	64.5	8506	97.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		252			1171	
B. Refuelling without a maintenance					9	
C. Inspection, maintenance or repair combined with refuelling				967		
D. Inspection, maintenance or repair without refuelling				116	26	
E. Testing of plant systems or components				0	0	
H. Nuclear regulatory requirements					17	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				4	313	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)					5	
Z. Others					12	
Subtotal	0	252	0	1087	1553	0
Total		252			2640	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems		46
13. Reactor Auxiliary Systems		5
14. Safety Systems		55
15. Reactor Cooling Systems		82
16. Steam generation systems	230	214
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		113
32. Feedwater and Main Steam System	22	114
33. Circulating Water System		7
35. All other I&C Systems		10
41. Main Generator Systems		294
42. Electrical Power Supply Systems		210
XX. Miscellaneous Systems		9
Total	252	1161

US-361 SAN ONOFRE-2

Operator: SCE (SOUTHERN CALIFORNIA EDISON)

Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1070.0 MW(e)
Design Net Capacity: 1070.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8304.1 GW(e).h
Energy Availability Factor: 85.9%
Load Factor: 88.6%
Operating Factor: 85.9%
Energy Unavailability Factor: 14.1%
Total Off-line Time: 1234 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	829.3	757.4	839.4	812.4	833.6	483.3	807.1	821.1	803.8	649.9	666.8	0.0	8304.1
EAF (%)	100.0	100.0	100.0	100.0	100.0	66.0	100.0	100.0	100.0	81.8	83.4	1.6	85.9
UCF (%)	100.0	100.0	100.0	100.0	100.0	66.0	100.0	100.0	100.0	81.8	83.4	1.6	85.9
LF (%)	104.2	105.3	105.6	105.5	104.7	62.7	101.4	103.1	104.3	81.6	86.4	0.0	88.6
OF (%)	100.0	100.0	100.0	100.0	100.0	66.0	100.0	100.0	100.0	81.7	84.9	0.0	85.9
EUF (%)	0.0	0.0	0.0	0.0	0.0	34.0	0.0	0.0	0.0	18.2	16.6	98.4	14.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.0	16.6	98.4	10.2
UCLF (%)	0.0	0.0	0.0	0.0	0.0	27.7	0.0	0.0	0.0	18.2	0.0	0.0	3.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Mar 1974
Date of First Criticality: 26 Jul 1982
Date of Grid Connection: 20 Sep 1982
Date of Commercial Operation: 08 Aug 1983

Lifetime Generation: 173427.9 GW(e).h
Cumulative Energy Availability Factor: 81.0%
Cumulative Load Factor: 81.5%
Cumulative Unit Capability Factor: 81.0%
Cumulative Energy Unavailability Factor: 19.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	2775.6	1083.0	73.5	73.5	73.5	73.5	69.8	69.8	2560	69.7
1984	5272.6	1070.0	58.9	63.2	58.9	63.2	56.1	60.2	5167	58.8
1985	5174.0	1070.0	58.4	61.2	58.4	61.2	55.2	58.1	5114	58.4
1986	6371.3	1070.0	71.6	64.3	71.6	64.3	68.0	61.0	6266	71.5
1987	6247.3	1070.0	69.3	65.4	69.3	65.4	66.7	62.3	6067	69.3
1988	9002.7	1070.0	93.8	70.6	93.8	70.6	95.8	68.5	8237	93.8
1989	5237.7	1070.0	56.6	68.5	56.6	68.5	55.9	66.5	4956	56.6
1990	8309.7	1070.0	87.4	71.0	87.4	71.0	88.7	69.5	7657	87.4
1991	5769.4	1070.0	64.4	70.2	64.4	70.2	61.6	68.5	5637	64.3
1992	8795.2	1070.0	93.5	72.7	93.5	72.7	93.6	71.2	8214	93.5
1993	7655.0	1070.0	82.4	73.6	82.4	73.6	81.7	72.2	7213	82.3
1994	9309.2	1070.0	100.0	75.9	100.0	75.9	99.3	74.6	8760	100.0
1995	6496.0	1070.0	70.8	75.5	70.8	75.5	69.3	74.2	6197	70.7
1996	8550.2	1070.0	91.3	76.7	91.3	76.7	91.0	75.4	8016	91.3
1997	6656.3	1070.0	70.8	76.3	70.8	76.3	71.0	75.1	6197	70.7
1998	8430.2	1070.0	88.9	77.1	88.9	77.1	89.9	76.1	7792	88.9
1999	8243.5	1070.0	85.0	77.6	85.0	77.6	87.9	76.8	7447	85.0
2000	8524.2	1070.0	89.0	78.2	89.0	78.2	90.7	77.6	7818	89.0
2001	9492.0	1070.0	97.5	79.3	97.5	79.3	101.3	78.9	8538	97.5
2002	8510.5	1070.0	87.0	79.7	87.0	79.7	90.8	79.5	7618	87.0
2003	9712.5	1070.0	99.0	80.6	99.0	80.6	103.6	80.7	8671	99.0
2004	8068.0	1070.0	82.7	80.7	82.7	80.7	85.8	80.9	7263	82.7
2005	8931.7	1070.0	92.7	81.3	92.7	81.3	95.3	81.6	8117	92.6
2006	6769.3	1070.0	70.0	80.8	70.0	80.8	72.2	81.2	6134	70.0
2007	8304.1	1070.0	85.9	81.0	85.9	81.0	88.6	81.5	7526	85.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		334		2	339	
B. Refuelling without a maintenance					38	
C. Inspection, maintenance or repair combined with refuelling	852			1113		
D. Inspection, maintenance or repair without refuelling	45			123		
E. Testing of plant systems or components				5		
H. Nuclear regulatory requirements					31	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				28	25	
L. Human factor related					1	
Subtotal	897	334	0	1271	434	0
Total		1231			1705	

7. Equipment Related Full Outages, Analysis by System

System	2007	1983 to 2007
	Hours Lost	Average Hours Lost Per Year
11. Reactor and Accessories		2
12. Reactor I&C Systems		19
13. Reactor Auxiliary Systems		2
14. Safety Systems		2
15. Reactor Cooling Systems		80
16. Steam generation systems		72
31. Turbine and auxiliaries		15
32. Feedwater and Main Steam System	135	66
33. Circulating Water System		19
41. Main Generator Systems		37
42. Electrical Power Supply Systems		17
XX. Miscellaneous Systems	199	1
Total	334	332

US-362 SAN ONOFRE-3

Operator: SCE (SOUTHERN CALIFORNIA EDISON)

Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 1080.0 MW(e)
 Design Net Capacity: 1070.0 MW(e)
 Design Discharge Burnup: 33000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8905.6 GW(e).h
 Energy Availability Factor: 90.9%
 Load Factor: 94.1%
 Operating Factor: 90.9%
 Energy Unavailability Factor: 9.1%
 Total Off-line Time: 797 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	814.3	762.3	842.4	813.7	770.4	809.5	837.4	833.1	812.5	218.6	551.4	839.9	8905.6
EAF (%)	100.0	100.0	100.0	100.0	94.0	100.0	100.0	100.0	100.0	25.8	72.4	100.0	90.9
UCF (%)	100.0	100.0	100.0	100.0	94.0	100.0	100.0	100.0	100.0	25.8	72.4	100.0	90.9
LF (%)	101.3	105.0	105.0	104.6	95.9	104.1	104.2	103.7	104.5	27.2	70.8	104.5	94.1
OF (%)	100.0	100.0	100.0	100.0	94.0	100.0	100.0	100.0	100.0	27.4	70.6	100.0	90.9
EUf (%)	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	74.2	27.6	0.0	9.1
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.2	27.6	0.0	8.6
UCLF (%)	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Mar 1974 Lifetime Generation: 169294.2 GW(e).h
 Date of First Criticality: 29 Aug 1983 Cumulative Energy Availability Factor: 81.9%
 Date of Grid Connection: 25 Sep 1983 Cumulative Load Factor: 80.9%
 Date of Commercial Operation: 01 Apr 1984 Cumulative Unit Capability Factor: 81.9%
 Cumulative Energy Unavailability Factor: 18.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	4112.2	1080.0	62.9	62.9	62.9	62.9	57.7	57.7	4103	62.2
1985	3735.9	1080.0	53.8	57.7	53.8	57.7	39.5	47.3	4708	53.7
1986	6760.6	1080.0	80.7	66.1	80.7	66.1	71.5	56.1	7067	80.7
1987	7523.6	1080.0	79.8	69.7	79.8	69.7	79.5	62.3	6987	79.8
1988	6146.0	1080.0	65.1	68.7	65.1	68.7	64.8	62.8	5714	65.1
1989	8840.6	1080.0	93.9	73.1	93.9	73.1	93.4	68.2	8224	93.9
1990	6602.0	1080.0	70.3	72.7	70.3	72.7	69.8	68.4	6159	70.3
1991	8693.2	1080.0	92.4	75.2	92.4	75.2	91.9	71.4	8094	92.4
1992	6830.8	1080.0	74.4	75.1	74.4	75.1	72.0	71.5	6533	74.4
1993	7128.2	1080.0	76.4	75.3	76.4	75.3	75.3	71.9	6689	76.4
1994	9147.7	1080.0	99.8	77.5	99.8	77.5	96.7	74.2	8742	99.8
1995	7501.6	1080.0	81.9	77.9	81.9	77.9	79.3	74.6	7175	81.9
1996	8838.6	1080.0	94.6	79.2	94.6	79.2	93.2	76.1	8313	94.6
1997	6842.9	1080.0	72.6	78.7	72.6	78.7	72.3	75.8	6357	72.6
1998	9058.6	1080.0	94.8	79.8	94.8	79.8	95.7	77.2	8304	94.8
1999	8416.5	1080.0	87.4	80.3	87.4	80.3	89.0	77.9	7658	87.4
2000	9633.8	1080.0	100.0	81.5	100.0	81.5	101.5	79.3	8784	100.0
2001	5679.3	1080.0	58.9	80.2	58.9	80.2	60.0	78.2	5170	59.0
2002	9548.2	1080.0	98.8	81.2	98.8	81.2	100.9	79.4	8658	98.8
2003	8596.3	1080.0	88.4	81.6	88.4	81.6	90.9	80.0	7741	88.4
2004	6985.6	1080.0	72.8	81.2	72.2	81.1	73.6	79.7	6344	72.2
2005	9468.3	1080.0	98.4	81.9	98.4	81.9	100.1	80.7	8616	98.3
2006	6827.6	1080.0	72.0	81.5	72.0	81.5	72.2	80.3	6308	72.0
2007	8905.6	1080.0	90.9	81.9	90.9	81.9	94.1	80.9	7963	90.9

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		44			467	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling				940		
D. Inspection, maintenance or repair without refuelling				80		
E. Testing of plant systems or components				5		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					6	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						2
S. Fuel management limitation (including high flux tilt, stretch out or coast-down operation)	751					
Subtotal	751	44	0	1025	474	2
Total		795			1501	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		36
13. Reactor Auxiliary Systems		6
14. Safety Systems		91
15. Reactor Cooling Systems		67
16. Steam generation systems		56
31. Turbine and auxiliaries		10
32. Feedwater and Main Steam System		11
41. Main Generator Systems		37
42. Electrical Power Supply Systems	44	35
Total	44	349

US-443 SEABROOK-1**Operator:** FPL (FLORIDA POWER & LIGHT CO.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1244.0 MW(e)
Design Net Capacity: 1149.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10763.9 GW(e).h
Energy Availability Factor: 99.0%
Load Factor: 98.8%
Operating Factor: 99.0%
Energy Unavailability Factor: 1.0%
Total Off-line Time: 91 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	878.0	836.1	871.0	856.5	927.3	897.1	926.6	925.9	896.6	925.1	897.6	926.1	10763.9
EAF (%)	96.1	100.0	93.5	98.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0
UCF (%)	96.1	100.0	93.5	98.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0
LF (%)	94.9	100.0	94.2	95.6	100.2	100.2	100.1	100.0	100.1	100.0	100.1	100.1	98.8
OF (%)	96.0	100.0	95.6	96.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0
EUf (%)	3.9	0.0	6.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	3.9	0.0	6.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 07 Jul 1976 **Lifetime Generation:** 133871.7 GW(e).h
Date of First Criticality: 13 Jun 1989 **Cumulative Energy Availability Factor:** 86.5%
Date of Grid Connection: 29 May 1990 **Cumulative Load Factor:** 85.3%
Date of Commercial Operation: 19 Aug 1990 **Cumulative Unit Capability Factor:** 86.7%
Cumulative Energy Unavailability Factor: 13.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1990	3443.5	1151.0	85.2	85.2	85.2	85.2	81.5	81.5	3131	85.2
1991	6814.4	1150.0	73.0	76.6	73.0	76.6	67.6	71.7	6394	73.0
1992	7868.4	1150.0	80.3	78.1	80.3	78.1	77.9	74.3	7056	80.3
1993	9046.8	1150.0	92.4	82.3	92.4	82.3	89.8	78.8	8094	92.4
1994	6203.5	1150.0	62.3	77.8	62.3	77.8	61.6	74.9	5466	62.4
1995	8380.6	1150.0	85.2	79.1	85.2	79.1	83.1	76.4	7465	85.2
1996	9844.2	1158.0	99.0	82.2	99.0	82.2	96.8	79.6	8690	98.9
1997	7945.7	1158.0	79.2	81.8	79.2	81.8	78.3	79.5	6929	79.1
1998	8388.4	1158.0	83.3	82.0	83.3	82.0	82.7	79.8	7294	83.3
1999	8685.7	1156.0	86.3	82.5	86.3	82.5	85.8	80.5	7564	86.3
2000	7921.5	1155.0	78.7	82.1	78.7	82.1	78.1	80.2	6910	78.7
2001	8692.2	1155.0	90.6	82.8	87.9	82.6	85.9	80.7	7703	87.9
2002	9293.4	1155.0	92.2	83.6	92.2	83.4	91.9	81.6	8083	92.3
2003	9275.4	1155.0	92.7	84.3	92.7	84.1	91.7	82.4	8121	92.7
2004	10177.0	1155.0	100.0	85.4	100.0	85.2	100.3	83.6	8784	100.0
2005	9455.2	1159.0	90.5	85.7	90.5	85.5	93.1	84.2	7928	90.5
2006	9397.4	1224.0	87.9	85.9	87.9	85.7	87.6	84.5	7718	88.1
2007	10763.9	1244.0	99.0	86.7	99.0	86.5	98.8	85.3	8669	99.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1990 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		88			303	
C. Inspection, maintenance or repair combined with refuelling				828		
D. Inspection, maintenance or repair without refuelling				14	1	
E. Testing of plant systems or components				2	6	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	3	13
Subtotal	0	88	0	844	313	13
Total		88			1170	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1990 to 2007 Average Hours Lost Per Year
13. Reactor Auxiliary Systems		96
15. Reactor Cooling Systems		47
17. Safety I&C Systems (excluding reactor I&C)		4
31. Turbine and auxiliaries		36
32. Feedwater and Main Steam System		19
35. All other I&C Systems		21
41. Main Generator Systems	59	47
42. Electrical Power Supply Systems	29	26
Total	88	296

US-327 SEQUOYAH-1

Operator: TVA (TENNESSEE VALLEY AUTHORITY)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1150.0 MW(e)
Design Net Capacity: 1148.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8758.3 GW(e).h
Energy Availability Factor: 87.5%
Load Factor: 86.9%
Operating Factor: 87.5%
Energy Unavailability Factor: 12.5%
Total Off-line Time: 1092 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	873.8	790.0	873.6	840.0	867.9	833.0	853.6	846.3	728.4	59.3	316.9	875.5	8758.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	9.7	41.9	100.0	87.5
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	9.7	41.9	100.0	87.5
LF (%)	102.1	102.2	102.2	101.4	101.4	100.6	99.8	98.9	88.0	6.9	38.2	102.3	86.9
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	9.7	41.7	100.0	87.5
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.3	58.1	0.0	12.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.3	58.1	0.0	12.5
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 27 May 1970
Date of First Criticality: 05 Jul 1980
Date of Grid Connection: 22 Jul 1980
Date of Commercial Operation: 01 Jul 1981

Lifetime Generation: 165854.2 GW(e).h
Cumulative Energy Availability Factor: 70.1%
Cumulative Load Factor: 68.1%
Cumulative Unit Capability Factor: 70.1%
Cumulative Energy Unavailability Factor: 29.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1981	2526.9	1128.0	62.1	62.1	62.1	62.1	50.7	50.7	2688	60.9
1982	4909.7	1128.0	53.4	56.3	53.4	56.3	49.7	50.0	4626	52.8
1983	7340.9	1139.0	78.2	65.1	78.2	65.1	73.6	59.5	6791	77.5
1984	6104.7	1148.0	69.1	66.3	69.1	66.3	60.5	59.8	5992	68.2
1985	4076.1	1148.0	44.7	61.4	44.7	61.4	40.5	55.5	3760	42.9
1986	0.0	1148.0	0.0	50.2	0.0	50.2	0.0	45.3	0	0.0
1987	0.0	1148.0	0.0	42.4	0.0	42.4	0.0	38.3	0	0.0
1988	127.7	1148.0	6.3	37.6	6.3	37.6	1.3	33.4	282	3.2
1989	9550.6	1148.0	98.5	44.8	98.5	44.8	95.0	40.6	8624	98.4
1990	6840.7	1148.0	74.0	47.9	74.0	47.9	68.0	43.5	6406	73.1
1991	7270.1	1122.0	77.6	50.7	77.6	50.7	74.0	46.4	6774	77.3
1992	8402.5	1122.0	88.2	53.9	88.2	53.9	85.3	49.7	7734	88.0
1993	1290.5	1122.0	14.8	50.8	14.8	50.8	13.1	46.8	1219	13.9
1994	6111.6	1111.0	66.0	51.9	66.0	51.9	62.8	48.0	5774	65.9
1995	6829.5	1111.0	75.6	53.5	75.6	53.5	70.2	49.5	6620	75.6
1996	9293.5	1112.0	95.1	56.1	95.1	56.1	95.1	52.4	8344	95.0
1997	8324.3	1117.0	85.5	57.9	85.5	57.9	85.1	54.3	7486	85.5
1998	8905.7	1118.0	91.0	59.8	91.0	59.8	90.9	56.4	7966	90.9
1999	9987.0	1122.0	100.0	61.9	100.0	61.9	101.6	58.8	8760	100.0
2000	7720.5	1122.0	79.5	62.8	79.5	62.8	78.3	59.8	6988	79.6
2001	9019.0	1122.0	91.2	64.2	91.2	64.2	91.8	61.4	7988	91.2
2002	9953.5	1125.0	100.0	65.8	100.0	65.8	101.1	63.2	8760	100.0
2003	7351.1	1125.0	73.6	66.2	73.6	66.2	74.6	63.7	6443	73.6
2004	9290.5	1148.0	91.4	67.3	91.4	67.3	92.1	64.9	8027	91.4
2005	10076.5	1150.0	98.8	68.6	98.8	68.6	100.0	66.4	8658	98.8
2006	9086.0	1150.0	90.4	69.4	90.4	69.4	90.2	67.3	7915	90.4
2007	8758.3	1150.0	87.5	70.1	87.5	70.1	86.9	68.1	7668	87.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1981 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					624	
B. Refuelling without a maintenance					18	
C. Inspection, maintenance or repair combined with refuelling	1091			822		
D. Inspection, maintenance or repair without refuelling				13	26	
E. Testing of plant systems or components				1		
F. Major back-fitting, refurbishment or upgrading activities with refuelling					4	
H. Nuclear regulatory requirements				40	337	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				51	603	
L. Human factor related					3	
Subtotal	1091	0	0	927	1615	0
Total		1091			2542	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1981 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		21
13. Reactor Auxiliary Systems		16
14. Safety Systems		14
15. Reactor Cooling Systems		60
16. Steam generation systems		3
31. Turbine and auxiliaries		35
32. Feedwater and Main Steam System		320
35. All other I&C Systems		6
41. Main Generator Systems		96
42. Electrical Power Supply Systems		34
Total	0	605

US-328 SEQUOYAH-2

Operator: TVA (TENNESSEE VALLEY AUTHORITY)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1127.0 MW(e)
Design Net Capacity: 1148.0 MW(e)
Design Discharge Burnup: 45000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9892.4 GW(e).h
Energy Availability Factor: 99.2%
Load Factor: 100.2%
Operating Factor: 99.2%
Energy Unavailability Factor: 0.8%
Total Off-line Time: 68 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	804.1	781.2	799.8	828.1	855.2	821.0	837.9	829.8	805.9	839.3	826.5	863.6	9892.4
EAF (%)	94.5	100.0	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2
UCF (%)	94.6	100.0	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2
LF (%)	95.9	103.2	95.5	102.1	102.0	101.2	99.9	99.0	99.3	100.1	101.7	103.0	100.2
OF (%)	94.5	100.0	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2
EUF (%)	5.5	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	5.5	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 27 May 1970
Date of First Criticality: 05 Nov 1981
Date of Grid Connection: 23 Dec 1981
Date of Commercial Operation: 01 Jun 1982

Lifetime Generation: 165523.1 GW(e).h
Cumulative Energy Availability Factor: 74.7%
Cumulative Load Factor: 71.7%
Cumulative Unit Capability Factor: 74.7%
Cumulative Energy Unavailability Factor: 25.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1982	3926.3	1145.0	75.0	75.0	75.0	75.0	66.8	66.8	3804	74.1
1983	6691.4	1133.0	72.8	73.6	72.8	73.6	67.4	67.2	6346	72.4
1984	6403.3	1148.0	69.8	72.1	69.8	72.1	63.5	65.7	6112	69.6
1985	5625.0	1148.0	59.8	68.7	59.8	68.7	55.9	63.0	5223	59.6
1986	0.0	1148.0	0.0	53.7	0.0	53.7	0.0	49.2	0	0.0
1987	0.0	1148.0	0.0	44.0	0.0	44.0	0.0	40.4	0	0.0
1988	3934.7	1148.0	59.4	46.4	59.4	46.4	39.0	40.2	5097	58.0
1989	6067.7	1148.0	70.7	49.6	70.7	49.6	60.3	42.8	6103	69.7
1990	7185.5	1148.0	79.1	53.0	79.1	53.0	71.5	46.2	6864	78.4
1991	9318.9	1122.0	96.9	57.5	96.9	57.5	94.8	51.2	8482	96.8
1992	7276.1	1122.0	80.3	59.6	80.3	59.6	73.8	53.3	7031	80.0
1993	2094.4	1122.0	26.3	56.8	26.3	56.8	21.3	50.6	2213	25.3
1994	5849.4	1106.0	61.8	57.2	61.8	57.2	60.4	51.3	5415	61.8
1995	8887.7	1106.0	92.1	59.7	92.1	59.7	91.7	54.2	8064	92.1
1996	7682.5	1108.0	78.6	61.0	78.6	61.0	78.9	55.9	6894	78.5
1997	8725.6	1117.0	91.5	62.9	91.5	62.9	89.2	58.0	8001	91.3
1998	9799.6	1117.0	98.8	65.0	98.8	65.0	100.1	60.5	8656	98.8
1999	8979.0	1117.0	93.7	66.7	93.7	66.7	91.8	62.2	8203	93.6
2000	9058.3	1117.0	92.9	68.1	92.9	68.1	92.3	63.8	8158	92.9
2001	9939.9	1117.0	100.0	69.7	100.0	69.7	101.6	65.7	8760	100.0
2002	8542.0	1126.0	87.3	70.5	87.3	70.5	87.1	66.8	7640	87.2
2003	8258.3	1126.0	84.6	71.2	84.6	71.2	83.7	67.6	7401	84.5
2004	9464.9	1124.0	95.1	72.2	95.1	72.2	95.9	68.8	8353	95.1
2005	8922.6	1127.0	89.8	73.0	89.8	73.0	90.4	69.7	7867	89.8
2006	8914.7	1127.0	90.6	73.7	90.6	73.7	90.3	70.6	7931	90.5
2007	9892.4	1127.0	99.2	74.7	99.2	74.7	100.2	71.7	8692	99.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1982 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		67			497	
B. Refuelling without a maintenance					22	
C. Inspection, maintenance or repair combined with refuelling				734		
D. Inspection, maintenance or repair without refuelling				38		
E. Testing of plant systems or components				1		
H. Nuclear regulatory requirements					458	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					431	
Subtotal	0	67	0	773	1408	0
Total		67			2181	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1982 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		4
13. Reactor Auxiliary Systems		9
14. Safety Systems		1
15. Reactor Cooling Systems		51
16. Steam generation systems		27
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		28
32. Feedwater and Main Steam System	67	54
35. All other I&C Systems		2
41. Main Generator Systems		284
42. Electrical Power Supply Systems		20
Total	67	481

US-400 SHEARON HARRIS-1

Operator: PROGENG (Progress Energy Carolinas, Inc.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 900.0 MW(e)
Design Net Capacity: 900.0 MW(e)
Design Discharge Burnup: 31500 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7403.1 GW(e).h
Energy Availability Factor: 93.4%
Load Factor: 93.9%
Operating Factor: 93.3%
Energy Unavailability Factor: 6.6%
Total Off-line Time: 584 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	691.8	626.1	685.3	660.9	678.0	648.4	666.5	661.6	600.2	137.1	667.6	679.5	7403.1
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.1	28.4	100.0	100.0	93.4
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.1	28.4	100.0	100.0	93.4
LF (%)	103.3	103.5	102.5	102.0	101.3	100.1	99.5	98.8	92.6	20.5	102.9	101.5	93.9
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.1	28.2	100.0	100.0	93.3
EUUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	71.6	0.0	0.0	6.6
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	71.6	0.0	0.0	6.6
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 28 Jan 1978
Date of First Criticality: 03 Jan 1987
Date of Grid Connection: 19 Jan 1987
Date of Commercial Operation: 02 May 1987

Lifetime Generation: 118844.2 GW(e).h
Cumulative Energy Availability Factor: 87.4%
Cumulative Load Factor: 86.3%
Cumulative Unit Capability Factor: 87.4%
Cumulative Energy Unavailability Factor: 12.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	Data not provided									
1988	5345.6	860.0	73.6	73.6	73.6	73.6	70.8	70.8	6458	73.5
1989	5638.8	860.0	78.5	76.0	78.5	76.0	74.8	72.8	6873	78.5
1990	6339.0	860.0	89.2	80.4	89.2	80.4	84.1	76.6	7812	89.2
1991	5927.4	860.0	80.8	80.5	80.8	80.5	78.7	77.1	7080	80.8
1992	5427.9	860.0	74.0	79.2	74.0	79.2	71.9	76.1	6501	74.0
1993	7527.7	860.0	99.6	82.6	99.6	82.6	99.9	80.0	8721	99.6
1994	6065.1	860.0	82.2	82.5	82.2	82.5	80.5	80.1	7195	82.1
1995	5966.3	860.0	83.1	82.6	83.1	82.6	79.2	80.0	7279	83.1
1996	7067.7	860.0	95.3	84.0	94.6	83.9	93.6	81.5	8301	94.5
1997	5909.0	860.0	79.2	83.5	79.2	83.5	78.4	81.2	6934	79.2
1998	6711.6	860.0	90.1	84.1	90.1	84.1	89.1	81.9	7891	90.1
1999	7244.1	860.0	96.9	85.2	96.9	85.1	96.2	83.1	8484	96.8
2000	6878.0	860.0	92.2	85.7	92.2	85.7	91.0	83.7	8098	92.2
2001	5401.5	860.0	72.3	84.8	72.3	84.7	71.7	82.8	6335	72.3
2002	7835.0	900.0	99.0	85.8	98.7	85.7	99.4	84.0	8643	98.7
2003	7236.9	900.0	92.3	86.2	92.3	86.1	91.8	84.5	8082	92.3
2004	7008.4	900.0	87.5	86.3	87.5	86.2	88.7	84.8	7687	87.5
2005	7930.8	900.0	99.4	87.0	99.4	87.0	100.6	85.7	8710	99.4
2006	7029.3	900.0	88.5	87.1	88.5	87.1	89.2	85.9	7749	88.5
2007	7403.1	900.0	93.4	87.4	93.4	87.4	93.9	86.3	8176	93.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		1			169	
B. Refuelling without a maintenance					1	
C. Inspection, maintenance or repair combined with refuelling	581			826		
D. Inspection, maintenance or repair without refuelling				71	6	
E. Testing of plant systems or components				1		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					2	4
Subtotal	581	1	0	898	178	4
Total		582			1080	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		29
15. Reactor Cooling Systems		0
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		62
32. Feedwater and Main Steam System		48
41. Main Generator Systems		16
42. Electrical Power Supply Systems	1	2
XX. Miscellaneous Systems		5
Total	1	164

US-498 SOUTH TEXAS-1

Operator: STP (STP Nuclear Operating Co.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
 Net Reference Unit Power at the beginning of 2007: 1280.0 MW(e)
 Design Net Capacity: 1250.0 MW(e)
 Design Discharge Burnup: 43000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 11804.8 GW(e).h
 Energy Availability Factor: 100.0%
 Load Factor: 105.3%
 Operating Factor: 100.0%
 Energy Unavailability Factor: 0.0%
 Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	1018.7	920.1	1010.0	975.3	998.4	955.6	985.4	977.0	953.7	995.4	1007.6	1007.6	11804.8
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	107.0	107.0	106.2	105.8	104.8	103.7	103.5	102.6	103.5	104.5	109.2	105.8	105.3
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 22 Dec 1975 Lifetime Generation: 148142.0 GW(e).h
 Date of First Criticality: 08 Mar 1988 Cumulative Energy Availability Factor: 80.0%
 Date of Grid Connection: 30 Mar 1988 Cumulative Load Factor: 79.0%
 Date of Commercial Operation: 25 Aug 1988 Cumulative Unit Capability Factor: 80.0%
 Cumulative Energy Unavailability Factor: 20.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1988	2791.5	1250.0	77.7	77.7	77.7	77.7	72.1	72.1	2404	77.6
1989	6307.7	1250.0	63.1	66.9	63.1	66.9	57.6	61.4	5524	63.1
1990	6072.9	1251.0	59.4	63.7	59.4	63.7	55.4	58.9	5198	59.3
1991	7239.8	1251.0	69.3	65.4	69.3	65.4	66.1	61.0	6069	69.3
1992	7265.1	1251.0	68.7	66.1	68.7	66.1	66.1	62.2	6033	68.7
1993	666.0	1251.0	7.7	55.2	7.7	55.2	6.1	51.7	676	7.7
1994	8251.4	1251.0	78.2	58.8	78.2	58.8	75.3	55.4	6842	78.1
1995	9301.8	1251.0	86.5	62.6	86.5	62.6	84.9	59.4	7570	86.4
1996	10226.8	1251.0	93.5	66.3	93.5	66.3	93.1	63.5	8213	93.5
1997	9873.2	1251.0	91.6	69.0	91.6	69.0	90.1	66.3	8019	91.5
1998	10859.9	1250.0	99.8	72.0	99.8	72.0	99.1	69.5	8739	99.8
1999	9645.4	1250.0	89.7	73.5	89.7	73.5	88.1	71.1	7857	89.7
2000	8591.9	1250.0	78.6	74.0	78.6	74.0	78.3	71.7	6905	78.6
2001	10338.2	1250.0	94.1	75.5	94.1	75.5	94.4	73.4	8240	94.1
2002	10867.9	1250.0	97.9	77.0	97.9	77.0	99.0	75.2	8573	97.9
2003	6858.8	1250.0	62.3	76.1	62.3	76.1	62.6	74.4	5433	62.0
2004	11103.6	1250.0	99.2	77.5	99.2	77.5	101.1	76.0	8712	99.2
2005	9901.9	1280.0	89.6	78.2	89.6	78.2	88.3	76.7	7845	89.5
2006	10144.5	1280.0	90.7	78.9	90.7	78.9	90.5	77.5	7942	90.7
2007	11804.8	1280.0	100.0	80.0	100.0	80.0	105.3	79.0	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					796	
B. Refuelling without a maintenance					18	
C. Inspection, maintenance or repair combined with refuelling				730		
D. Inspection, maintenance or repair without refuelling				78	51	
E. Testing of plant systems or components				7		
H. Nuclear regulatory requirements					18	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0		
Subtotal	0	0	0	815	883	0
Total	0			1698		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		2
13. Reactor Auxiliary Systems		6
14. Safety Systems		466
15. Reactor Cooling Systems		12
17. Safety I&C Systems (excluding reactor I&C)		161
31. Turbine and auxiliaries		20
32. Feedwater and Main Steam System		23
35. All other I&C Systems		8
41. Main Generator Systems		82
42. Electrical Power Supply Systems		6
Total	0	786

US-499 SOUTH TEXAS-2

Operator: STP (STP Nuclear Operating Co.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1280.0 MW(e)
Design Net Capacity: 1250.0 MW(e)
Design Discharge Burnup: 43000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10373.7 GW(e).h
Energy Availability Factor: 90.7%
Load Factor: 92.5%
Operating Factor: 90.7%
Energy Unavailability Factor: 9.3%
Total Off-line Time: 817 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	959.8	849.7	621.7	45.7	998.8	957.4	988.9	968.1	957.5	999.4	1013.4	1013.4	10373.7
EAF (%)	100.0	100.0	77.4	10.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.7
UCF (%)	100.0	100.0	77.4	10.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.7
LF (%)	100.8	98.8	65.4	5.0	104.9	103.9	103.8	101.7	103.9	104.9	109.8	106.4	92.5
OF (%)	100.0	100.0	77.4	9.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.7
EUUF (%)	0.0	0.0	22.6	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3
PUF (%)	0.0	0.0	22.6	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 22 Dec 1975
Date of First Criticality: 12 Mar 1989
Date of Grid Connection: 11 Apr 1989
Date of Commercial Operation: 19 Jun 1989

Lifetime Generation: 143303.3 GW(e).h
Cumulative Energy Availability Factor: 81.3%
Cumulative Load Factor: 79.9%
Cumulative Unit Capability Factor: 81.3%
Cumulative Energy Unavailability Factor: 18.7%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	3026.7	1250.0	60.5	60.5	60.5	60.5	51.5	51.5	2845	60.5
1990	6452.2	1251.0	62.8	62.0	62.8	62.0	58.9	56.3	5494	62.7
1991	7268.0	1251.0	70.0	65.2	70.0	65.2	66.3	60.2	6134	70.0
1992	10341.0	1251.0	97.3	74.3	97.3	74.3	94.1	69.8	8548	97.3
1993	690.3	1251.0	8.0	59.7	8.0	59.7	6.3	55.8	702	8.0
1994	5991.0	1251.0	58.2	59.4	58.2	59.4	54.7	55.6	5098	58.2
1995	9923.1	1251.0	91.2	64.3	91.2	64.3	90.5	61.0	7985	91.2
1996	10457.9	1251.0	95.3	68.4	95.3	68.4	95.2	65.5	8373	95.3
1997	9972.9	1251.0	92.4	71.2	92.4	71.2	91.0	68.5	8093	92.4
1998	9983.9	1250.0	92.5	73.4	92.5	73.4	91.1	70.9	8096	92.4
1999	9799.3	1250.0	91.7	75.2	91.7	75.2	89.5	72.6	8034	91.7
2000	10557.2	1250.0	96.2	77.0	96.2	77.0	96.1	74.7	8449	96.2
2001	9537.6	1250.0	88.5	77.9	88.5	77.9	87.1	75.7	7751	88.5
2002	8219.8	1250.0	75.9	77.8	75.9	77.8	75.1	75.6	6663	76.1
2003	8920.2	1250.0	81.1	78.0	81.1	78.0	81.5	76.0	7112	81.2
2004	10304.1	1250.0	92.3	78.9	92.3	78.9	93.8	77.2	8121	92.5
2005	9937.2	1280.0	89.8	79.6	89.8	79.6	88.6	77.9	7866	89.8
2006	11226.0	1280.0	100.0	80.8	100.0	80.8	100.1	79.2	8760	100.0
2007	10373.7	1280.0	90.7	81.3	90.7	81.3	92.5	79.9	7943	90.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					561	
B. Refuelling without a maintenance					9	
C. Inspection, maintenance or repair combined with refuelling	816			884		
D. Inspection, maintenance or repair without refuelling				85		
E. Testing of plant systems or components				2		
H. Nuclear regulatory requirements					2	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					7	
Z. Others					2	
Subtotal	816	0	0	971	581	0
Total		816			1552	

7. Equipment Related Full Outages, Analysis by System

System	2007	1989 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		2
13. Reactor Auxiliary Systems		11
14. Safety Systems		212
15. Reactor Cooling Systems		10
16. Steam generation systems		17
17. Safety I&C Systems (excluding reactor I&C)		7
31. Turbine and auxiliaries		110
32. Feedwater and Main Steam System		51
33. Circulating Water System		1
35. All other I&C Systems		9
41. Main Generator Systems		46
42. Electrical Power Supply Systems		47
Total	0	523

US-335 ST. LUCIE-1

Operator: FPL (FLORIDA POWER & LIGHT CO.)
Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 839.0 MW(e)
Design Net Capacity: 830.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6235.8 GW(e).h
Energy Availability Factor: 84.7%
Load Factor: 84.8%
Operating Factor: 84.7%
Energy Unavailability Factor: 15.3%
Total Off-line Time: 1343 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	638.0	578.3	636.6	6.3	57.2	612.7	631.2	597.1	593.0	629.1	618.4	637.9	6235.8
EAF (%)	100.0	100.0	100.0	0.0	16.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.7
UCF (%)	100.0	100.0	100.0	0.0	16.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.7
LF (%)	102.2	102.6	102.1	1.0	9.2	101.4	101.1	95.7	98.2	100.8	102.2	102.2	84.8
OF (%)	100.0	100.0	100.0	2.4	14.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.7
EUF (%)	0.0	0.0	0.0	100.0	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3
PUF (%)	0.0	0.0	0.0	100.0	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 01 Jul 1970
Date of First Criticality: 22 Apr 1976
Date of Grid Connection: 07 May 1976
Date of Commercial Operation: 21 Dec 1976

Lifetime Generation: 171116.0 GW(e).h
Cumulative Energy Availability Factor: 81.6%
Cumulative Load Factor: 81.5%
Cumulative Unit Capability Factor: 81.9%
Cumulative Energy Unavailability Factor: 18.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1976	99.0	814.0	100.0	100.0	100.0	100.0	16.6	16.6	264	35.5
1977	5343.7	779.0	78.4	80.1	78.4	80.1	78.3	73.3	7414	84.6
1978	5009.7	777.0	73.7	77.0	73.7	77.0	73.6	73.5	6674	76.2
1979	4889.6	777.0	71.7	75.3	71.7	75.3	71.8	72.9	6469	73.8
1980	5201.9	777.0	76.0	75.5	76.0	75.5	76.2	73.7	6797	77.4
1981	4954.7	777.0	70.5	74.5	70.5	74.5	72.8	73.6	6364	72.6
1982	6784.6	803.0	94.1	77.8	94.1	77.8	96.5	77.4	8227	93.9
1983	1099.5	820.0	15.4	68.6	15.4	68.6	15.3	68.3	1350	15.4
1984	4243.3	822.0	60.8	67.6	58.6	67.3	58.8	67.1	5154	58.7
1985	5868.6	825.0	80.4	69.1	80.4	68.8	81.1	68.7	7067	80.7
1986	7052.0	829.0	95.7	71.8	95.7	71.6	97.1	71.6	8351	95.3
1987	5719.2	839.0	77.8	72.4	77.8	72.2	77.8	72.2	6812	77.8
1988	6256.0	839.0	84.4	73.4	84.4	73.2	84.9	73.3	7407	84.3
1989	6947.3	839.0	94.3	75.1	94.3	74.9	94.5	75.0	8257	94.3
1990	4503.5	839.0	64.3	74.3	64.3	74.1	61.3	74.0	5463	62.4
1991	5793.3	839.0	80.9	74.7	80.9	74.6	78.8	74.3	7089	80.9
1992	7142.2	839.0	96.5	76.1	96.5	76.0	96.9	75.7	8479	96.5
1993	5440.5	839.0	76.6	76.2	76.2	76.0	74.0	75.6	6678	76.2
1994	6183.6	839.0	86.8	76.8	86.8	76.6	84.1	76.1	7600	86.8
1995	5519.4	839.0	76.2	76.7	76.2	76.6	75.1	76.1	6662	76.1
1996	5222.0	839.0	73.8	76.6	73.8	76.5	70.9	75.8	6472	73.7
1997	5717.7	839.0	78.1	76.7	78.1	76.5	77.8	75.9	6842	78.1
1998	7035.5	839.0	95.8	77.5	95.8	77.4	95.7	76.8	8393	95.8
1999	6532.7	839.0	89.9	78.1	88.5	77.9	88.9	77.3	7752	88.5
2000	7513.7	839.0	100.0	79.0	100.0	78.9	102.0	78.4	8784	100.0
2001	6709.8	839.0	90.4	79.5	90.4	79.3	91.3	78.9	7915	90.4
2002	6919.4	839.0	93.2	80.0	93.2	79.9	94.1	79.5	8163	93.2
2003	7504.8	839.0	100.0	80.8	100.0	80.6	102.1	80.4	8760	100.0
2004	6324.3	839.0	90.4	81.1	85.6	80.8	85.8	80.6	7518	85.6
2005	6088.1	839.0	82.4	81.2	82.4	80.9	82.8	80.6	7217	82.4
2006	7463.3	839.0	100.0	81.8	100.0	81.5	101.5	81.3	8760	100.0
2007	6235.8	839.0	84.7	81.9	84.7	81.6	84.8	81.5	7417	84.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1976 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure				0	370	
B. Refuelling without a maintenance					23	
C. Inspection, maintenance or repair combined with refuelling	1342			1079		
D. Inspection, maintenance or repair without refuelling				82	6	
E. Testing of plant systems or components				3		
H. Nuclear regulatory requirements				6		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	8	13
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						13
Subtotal	1342	0	0	1170	407	26
Total		1342			1603	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1976 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		29
12. Reactor I&C Systems		8
13. Reactor Auxiliary Systems		15
14. Safety Systems		6
15. Reactor Cooling Systems		109
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		9
32. Feedwater and Main Steam System		14
33. Circulating Water System		3
41. Main Generator Systems		14
42. Electrical Power Supply Systems		22
XX. Miscellaneous Systems		10
Total	0	240

US-389 ST. LUCIE-2

Operator: FPL (FLORIDA POWER & LIGHT CO.)
Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 839.0 MW(e)
Design Net Capacity: 830.0 MW(e)
Design Discharge Burnup: 36000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5170.5 GW(e).h
Energy Availability Factor: 71.2%
Load Factor: 70.3%
Operating Factor: 71.1%
Energy Unavailability Factor: 28.8%
Total Off-line Time: 2528 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	623.6	565.3	622.5	603.1	619.4	598.2	616.8	346.6	575.0	0.0	0.0	0.0	5170.5
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	58.6	96.7	0.0	0.1	1.9	71.2
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	58.6	96.7	0.0	0.1	1.9	71.2
LF (%)	99.9	100.3	99.9	99.8	99.2	99.0	98.8	55.5	95.2	0.0	0.0	0.0	70.3
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	58.5	98.6	0.0	0.0	0.0	71.1
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.4	3.3	100.0	99.9	98.1	28.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	100.0	99.9	98.1	25.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.4	0.0	0.0	0.0	0.0	3.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	02 May 1977	Lifetime Generation:	141481.6 GW(e).h
Date of First Criticality:	02 Jun 1983	Cumulative Energy Availability Factor:	85.7%
Date of Grid Connection:	13 Jun 1983	Cumulative Load Factor:	84.7%
Date of Commercial Operation:	08 Aug 1983	Cumulative Unit Capability Factor:	86.2%
		Cumulative Energy Unavailability Factor:	14.3%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	2397.5	808.0	89.4	89.4	89.4	89.4	87.0	87.0	3129	89.3
1984	5564.8	786.0	82.9	84.7	79.5	82.3	80.6	82.4	7067	80.5
1985	6108.6	824.0	83.9	84.4	83.9	83.0	84.6	83.4	7368	84.1
1986	6151.2	837.0	82.8	83.9	82.8	82.9	83.9	83.5	7253	82.8
1987	5950.2	839.0	82.3	83.5	82.3	82.8	81.0	82.9	7206	82.3
1988	7407.1	839.0	100.0	86.6	100.0	86.0	100.5	86.2	8784	100.0
1989	5443.4	839.0	74.6	84.7	74.6	84.2	74.1	84.3	6531	74.6
1990	5341.5	839.0	74.1	83.3	74.1	82.8	72.7	82.7	6487	74.1
1991	7428.7	839.0	100.0	85.3	100.0	84.9	101.1	84.9	8760	100.0
1992	5431.2	839.0	75.1	84.2	75.1	83.9	73.7	83.7	6598	75.1
1993	4719.9	839.0	76.4	83.4	76.4	83.1	64.2	81.8	6687	76.3
1994	5607.4	839.0	79.6	83.1	79.6	82.8	76.3	81.3	6971	79.6
1995	5295.9	839.0	75.0	82.4	75.0	82.2	72.1	80.6	6570	75.0
1996	6984.8	839.0	96.2	83.5	96.2	83.2	94.8	81.7	8444	96.1
1997	6498.9	839.0	88.6	83.8	88.6	83.6	88.4	82.1	7756	88.5
1998	6739.5	839.0	91.4	84.3	91.4	84.1	91.7	82.7	8009	91.4
1999	7213.0	839.0	98.0	85.2	98.0	85.0	98.1	83.7	8583	98.0
2000	6804.3	839.0	91.6	85.5	91.6	85.4	92.3	84.2	8041	91.5
2001	6707.5	839.0	91.1	85.8	91.1	85.7	91.3	84.6	7979	91.1
2002	7425.0	839.0	99.8	86.6	99.8	86.4	101.0	85.4	8742	99.8
2003	5891.3	839.0	81.3	86.3	81.3	86.1	80.2	85.2	7120	81.3
2004	6781.4	839.0	98.2	86.9	91.8	86.4	92.0	85.5	8059	91.7
2005	6283.1	839.0	87.9	86.9	86.8	86.4	85.5	85.5	7602	86.8
2006	6048.2	839.0	84.9	86.8	84.9	86.4	82.3	85.4	7434	84.9
2007	5170.5	839.0	71.2	86.2	71.2	85.7	70.3	84.7	6232	71.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		308			279	
B. Refuelling without a maintenance					3	
C. Inspection, maintenance or repair combined with refuelling	2218			742		
D. Inspection, maintenance or repair without refuelling				31	17	
E. Testing of plant systems or components				2	0	
H. Nuclear regulatory requirements				0		1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				0	24	9
L. Human factor related					1	
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						26
Subtotal	2218	308	0	775	324	36
Total		2526			1135	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		30
14. Safety Systems		14
15. Reactor Cooling Systems	308	118
17. Safety I&C Systems (excluding reactor I&C)		3
31. Turbine and auxiliaries		45
32. Feedwater and Main Steam System		46
33. Circulating Water System		0
41. Main Generator Systems		17
42. Electrical Power Supply Systems		2
Total	308	275

US-280 SURRY-1

Operator: VEPCO (VIRGINIA ELECTRIC POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 799.0 MW(e)
Design Net Capacity: 788.0 MW(e)
Design Discharge Burnup: 48000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6195.2 GW(e).h
Energy Availability Factor: 88.1%
Load Factor: 88.5%
Operating Factor: 88.1%
Energy Unavailability Factor: 11.9%
Total Off-line Time: 1040 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	546.3	546.3	605.1	586.0	599.9	580.9	598.5	597.2	578.8	384.0	0.0	572.2	6195.2
EAF (%)	95.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	64.5	0.1	97.4	88.1
UCF (%)	95.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	64.5	0.1	97.5	88.1
LF (%)	91.9	101.7	101.9	101.9	100.9	101.0	100.7	100.5	100.6	64.6	0.0	96.3	88.5
OF (%)	95.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	64.5	0.0	97.4	88.1
EUF (%)	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.5	99.9	2.6	11.9
PUF (%)	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.5	99.9	2.6	11.9
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Jun 1968
Date of First Criticality: 01 Jul 1972
Date of Grid Connection: 04 Jul 1972
Date of Commercial Operation: 22 Dec 1972

Lifetime Generation: 163729.2 GW(e).h
Cumulative Energy Availability Factor: 74.0%
Cumulative Load Factor: 72.2%
Cumulative Unit Capability Factor: 74.0%
Cumulative Energy Unavailability Factor: 26.0%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1972	280.7	794.0	100.0	100.0	100.0	100.0	47.9	47.9	496	66.7
1973	3479.7	788.0	61.9	64.9	61.9	64.9	50.4	50.2	5377	61.4
1974	3318.1	788.0	54.8	60.0	54.8	60.0	48.1	49.2	4800	54.8
1975	3858.4	788.0	56.1	58.8	56.1	58.8	56.0	51.4	5343	61.2
1976	4396.8	788.0	63.6	59.9	63.6	59.9	63.5	54.4	6010	68.4
1977	5023.9	776.0	74.0	62.7	74.0	62.7	73.9	58.2	6661	76.0
1978	4704.2	775.0	69.3	63.8	69.3	63.8	69.3	60.0	6291	71.8
1979	2255.1	775.0	33.2	59.5	33.2	59.5	33.2	56.2	3045	34.8
1980	2472.6	775.0	42.2	57.4	42.2	57.4	36.3	53.8	3762	42.8
1981	2377.4	775.0	39.0	55.4	39.0	55.4	35.0	51.7	3403	38.8
1982	5483.1	775.0	89.2	58.7	89.2	58.7	80.8	54.6	7776	88.8
1983	3517.1	775.0	56.4	58.5	56.3	58.5	51.8	54.3	5010	57.2
1984	3334.1	775.0	58.1	58.5	58.1	58.4	49.0	53.9	5138	58.5
1985	5618.3	779.0	89.3	60.8	89.3	60.8	82.3	56.1	7827	89.3
1986	4488.6	781.0	68.1	61.3	68.1	61.3	65.6	56.7	6013	68.6
1987	4633.4	781.0	70.1	61.9	70.1	61.9	67.7	57.5	6113	69.8
1988	2685.0	781.0	18.7	59.2	18.7	59.2	39.1	56.3	3632	41.3
1989	3170.5	781.0	46.8	58.5	46.8	58.5	46.3	55.7	4217	48.1
1990	4772.2	781.0	74.9	59.4	74.9	59.4	69.8	56.5	6655	76.0
1991	6590.9	781.0	100.0	61.5	100.0	61.5	96.3	58.6	8760	100.0
1992	5223.8	781.0	79.6	62.4	79.6	62.4	76.1	59.5	7033	80.1
1993	6229.2	781.0	95.9	64.0	95.9	64.0	91.1	61.0	8402	95.9
1994	4881.9	781.0	74.3	64.5	74.3	64.5	71.4	61.5	6560	74.9
1995	5747.0	784.0	85.4	65.4	85.4	65.4	83.6	62.4	7505	85.7
1996	7137.8	801.0	100.0	66.9	100.0	66.9	101.4	64.1	8784	100.0
1997	5640.5	801.0	80.7	67.4	80.7	67.4	80.4	64.8	7067	80.7
1998	5752.4	801.0	81.9	68.0	81.9	68.0	82.0	65.4	7170	81.8
1999	7116.2	801.0	100.0	69.2	100.0	69.2	101.4	66.8	8760	100.0
2000	6548.4	801.0	93.2	70.1	93.2	70.1	93.1	67.7	8188	93.2
2001	5941.6	810.0	84.3	70.6	84.3	70.6	83.7	68.3	7380	84.2
2002	7149.5	810.0	100.0	71.6	100.0	71.6	100.8	69.4	8760	100.0
2003	5419.8	810.0	77.0	71.8	77.0	71.8	76.4	69.7	6741	77.0
2004	6457.1	810.0	90.5	72.4	90.5	72.4	90.8	70.3	7943	90.4
2005	6746.6	810.0	95.6	73.1	95.6	73.1	95.1	71.1	8376	95.6
2006	6311.0	799.0	90.6	73.6	90.6	73.6	90.2	71.7	7931	90.5
2007	6195.2	799.0	88.1	74.0	88.1	74.0	88.5	72.2	7720	88.1

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					582	
B. Refuelling without a maintenance					19	
C. Inspection, maintenance or repair combined with refuelling	1003			851		
D. Inspection, maintenance or repair without refuelling	35			428	1	
E. Testing of plant systems or components				1	0	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				0		
H. Nuclear regulatory requirements					59	150
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				1	126	0
Subtotal	1038	0	0	1281	787	150
Total	1038			2218		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		0
12. Reactor I&C Systems		29
13. Reactor Auxiliary Systems		7
14. Safety Systems		5
15. Reactor Cooling Systems		206
16. Steam generation systems		60
17. Safety I&C Systems (excluding reactor I&C)		2
31. Turbine and auxiliaries		21
32. Feedwater and Main Steam System		96
41. Main Generator Systems		8
42. Electrical Power Supply Systems		90
XX. Miscellaneous Systems		5
Total	0	529

US-281 SURRY-2

Operator: VEPCO (VIRGINIA ELECTRIC POWER CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 799.0 MW(e)
Design Net Capacity: 788.0 MW(e)
Design Discharge Burnup: 48000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 7086.3 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 101.2%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	606.1	547.6	606.9	587.0	588.2	581.8	599.3	596.6	579.8	601.3	586.2	605.4	7086.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	102.0	102.0	102.2	102.0	98.9	101.1	100.8	100.4	100.8	101.2	101.8	101.8	101.2
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 25 Jun 1968
Date of First Criticality: 07 Mar 1973
Date of Grid Connection: 10 Mar 1973
Date of Commercial Operation: 01 May 1973

Lifetime Generation: 163172.5 GW(e).h
Cumulative Energy Availability Factor: 74.9%
Cumulative Load Factor: 72.9%
Cumulative Unit Capability Factor: 75.0%
Cumulative Energy Unavailability Factor: 25.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	3064.7	790.0	77.9	77.9	77.9	77.9	66.1	66.1	4533	77.1
1974	2660.5	788.0	44.0	57.6	44.0	57.6	38.5	49.6	3854	44.0
1975	5053.1	788.0	73.3	63.5	73.3	63.5	73.2	58.5	6967	79.5
1976	3343.4	788.0	48.3	59.3	48.3	59.3	48.3	55.7	4585	52.2
1977	4457.3	776.0	65.6	60.7	65.6	60.7	65.6	57.8	5980	68.3
1978	5372.0	775.0	79.1	63.9	79.1	63.9	79.1	61.5	7244	82.7
1979	611.5	775.0	9.0	55.7	9.0	55.7	9.0	53.7	818	9.3
1980	2241.6	775.0	36.0	53.2	36.0	53.2	32.9	51.0	3139	35.7
1981	5150.3	775.0	82.4	56.5	79.6	56.2	75.9	53.9	6972	79.6
1982	5492.2	775.0	88.7	59.8	88.7	59.5	80.9	56.6	7729	88.2
1983	4086.1	775.0	65.0	60.3	65.0	60.0	60.2	57.0	5729	65.4
1984	5209.4	775.0	83.3	62.3	83.3	62.0	76.5	58.6	7327	83.4
1985	4072.4	775.0	65.8	62.5	65.8	62.3	60.0	58.7	5857	66.9
1986	4498.9	780.0	68.7	63.0	68.7	62.8	65.8	59.3	6072	69.3
1987	4791.0	781.0	73.6	63.7	73.6	63.5	70.0	60.0	6456	73.7
1988	3570.9	781.0	56.6	63.3	56.6	63.1	52.1	59.5	4993	56.8
1989	893.6	781.0	13.3	60.3	13.3	60.1	13.1	56.7	1355	15.5
1990	5837.8	781.0	84.8	61.6	84.8	61.5	85.3	58.3	7919	90.4
1991	3985.2	781.0	66.6	61.9	66.6	61.8	58.3	58.3	5886	67.2
1992	6426.5	781.0	96.3	63.7	96.3	63.5	93.7	60.1	8470	96.4
1993	4541.7	781.0	71.0	64.0	71.0	63.9	66.4	60.4	6283	71.7
1994	6261.0	781.0	94.1	65.4	94.1	65.3	91.5	61.9	8251	94.2
1995	5517.4	787.0	80.6	66.1	80.6	66.0	80.0	62.7	7087	80.9
1996	6081.5	801.0	85.9	66.9	85.9	66.8	86.4	63.7	7539	85.8
1997	6451.3	801.0	91.7	68.0	91.7	67.9	91.9	64.9	8034	91.7
1998	7178.9	801.0	100.0	69.3	100.0	69.1	102.3	66.4	8760	100.0
1999	5874.8	801.0	85.6	69.9	85.6	69.8	83.7	67.0	7493	85.5
2000	6539.4	801.0	91.3	70.7	91.3	70.6	92.9	68.0	8022	91.3
2001	6720.7	815.0	93.7	71.5	93.7	71.4	94.1	68.9	8203	93.6
2002	6523.7	815.0	91.0	72.2	91.0	72.1	91.4	69.7	7966	90.9
2003	5612.1	815.0	78.3	72.4	78.3	72.3	78.6	70.0	6861	78.3
2004	7051.7	815.0	98.0	73.2	98.0	73.1	98.5	70.9	8606	98.0
2005	6488.5	815.0	91.9	73.8	91.9	73.7	90.9	71.6	8046	91.8
2006	6189.4	799.0	88.0	74.2	88.0	74.2	88.4	72.1	7705	88.0
2007	7086.3	799.0	100.0	75.0	100.0	74.9	101.2	72.9	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1973 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					564	
B. Refuelling without a maintenance					19	
C. Inspection, maintenance or repair combined with refuelling				1274	0	
D. Inspection, maintenance or repair without refuelling				243		
E. Testing of plant systems or components				0		
F. Major back-fitting, refurbishment or upgrading activities with refuelling				1		
H. Nuclear regulatory requirements					19	6
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				5	0	
Subtotal	0	0	0	1523	602	6
Total	0			2131		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1973 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		26
13. Reactor Auxiliary Systems		4
14. Safety Systems		71
15. Reactor Cooling Systems		14
16. Steam generation systems		141
31. Turbine and auxiliaries		121
32. Feedwater and Main Steam System		126
35. All other I&C Systems		2
41. Main Generator Systems		5
42. Electrical Power Supply Systems		26
XX. Miscellaneous Systems		4
Total	0	540

US-387 SUSQUEHANNA-1

Operator: PP&L (PENNSYLVANIA POWER & LIGHT CO.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 1135.0 MW(e)
Design Net Capacity: 1065.0 MW(e)
Design Discharge Burnup: 36000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9456.3 GW(e).h
Energy Availability Factor: 95.3%
Load Factor: 95.1%
Operating Factor: 95.3%
Energy Unavailability Factor: 4.7%
Total Off-line Time: 411 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	863.4	772.3	854.6	814.8	846.8	805.1	832.6	831.0	810.1	336.0	828.3	861.3	9456.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	44.8	100.0	100.0	95.3
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	44.8	100.0	100.0	95.3
LF (%)	102.2	101.3	101.3	99.7	100.3	98.5	98.6	98.4	99.1	39.8	101.2	102.0	95.1
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	44.8	100.0	100.0	95.3
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.2	0.0	0.0	4.7
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.2	0.0	0.0	4.7
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 02 Nov 1973
Date of First Criticality: 10 Sep 1982
Date of Grid Connection: 16 Nov 1982
Date of Commercial Operation: 08 Jun 1983

Lifetime Generation: 173263.6 GW(e).h
Cumulative Energy Availability Factor: 83.4%
Cumulative Load Factor: 81.7%
Cumulative Unit Capability Factor: 83.5%
Cumulative Energy Unavailability Factor: 16.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1983	3536.4	1034.0	76.3	76.3	76.3	76.3	66.6	66.6	3766	73.3
1984	6088.1	1032.0	74.4	75.1	72.0	73.6	67.2	66.9	6377	72.6
1985	5286.4	1032.0	60.4	69.4	60.4	68.5	58.5	63.7	5469	62.4
1986	5839.2	1032.0	66.8	68.7	66.8	68.0	64.6	63.9	5992	68.4
1987	6132.9	1032.0	70.7	69.1	70.7	68.6	67.8	64.8	6331	72.3
1988	8410.1	1032.0	93.1	73.4	93.1	73.0	92.8	69.8	8206	93.4
1989	6483.9	1032.0	72.1	73.2	72.1	72.9	71.7	70.1	6447	73.6
1990	6446.7	1033.0	73.1	73.2	73.1	72.9	71.2	70.2	6528	74.5
1991	8821.6	1035.0	98.0	76.1	98.0	75.8	97.2	73.4	8596	98.1
1992	6400.3	1040.0	73.6	75.9	73.6	75.6	70.1	73.0	6568	74.8
1993	5232.4	1040.0	57.5	74.1	57.5	73.9	57.4	71.6	5205	59.4
1994	8414.5	1040.0	94.2	75.9	94.2	75.6	92.4	73.4	8249	94.2
1995	7432.3	1073.0	81.1	76.3	81.1	76.1	79.0	73.8	7126	81.3
1996	7752.9	1090.0	84.7	76.9	84.7	76.8	81.0	74.4	7434	84.6
1997	9085.3	1090.0	94.5	78.2	94.5	78.0	95.2	75.9	8274	94.5
1998	7652.8	1090.0	81.5	78.4	81.5	78.3	80.1	76.2	7015	80.1
1999	8814.5	1090.0	94.0	79.4	94.0	79.2	92.3	77.2	8234	94.0
2000	8180.6	1090.0	86.5	79.8	86.5	79.7	85.4	77.6	7598	86.5
2001	9413.0	1090.0	99.5	80.9	99.5	80.8	98.6	78.8	8718	99.5
2002	8026.6	1105.0	85.7	81.2	85.7	81.0	83.4	79.1	7493	85.5
2003	9359.9	1105.0	98.0	82.0	98.0	81.9	96.7	79.9	8585	98.0
2004	8027.0	1135.0	84.1	82.1	84.1	82.0	81.2	80.0	7359	83.8
2005	9442.6	1105.0	95.4	82.7	95.4	82.6	97.5	80.8	8357	95.4
2006	8602.7	1135.0	87.2	82.9	87.2	82.8	86.5	81.1	7639	87.2
2007	9456.3	1135.0	95.3	83.5	95.3	83.4	95.1	81.7	8349	95.3

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					261	
B. Refuelling without a maintenance					25	
C. Inspection, maintenance or repair combined with refuelling				885		
D. Inspection, maintenance or repair without refuelling				82	18	
E. Testing of plant systems or components				63		
H. Nuclear regulatory requirements						29
J. Grid failure or grid unavailability						8
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				77	40	
S. Fuel management limitation (including high flux tilt, stretch out or coast-down operation)	410					
Subtotal	410	0	0	1107	344	37
Total		410			1488	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		14
13. Reactor Auxiliary Systems		1
14. Safety Systems		18
15. Reactor Cooling Systems		39
17. Safety I&C Systems (excluding reactor I&C)		9
31. Turbine and auxiliaries		84
32. Feedwater and Main Steam System		16
33. Circulating Water System		0
35. All other I&C Systems		4
41. Main Generator Systems		16
42. Electrical Power Supply Systems		21
XX. Miscellaneous Systems		28
Total	0	250

US-388 SUSQUEHANNA-2

Operator: PP&L (PENNSYLVANIA POWER & LIGHT CO.)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
 Net Reference Unit Power at the beginning of 2007: 1140.0 MW(e)
 Design Net Capacity: 1065.0 MW(e)
 Design Discharge Burnup: 36000 MW.d/t
 Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8781.6 GW(e).h
 Energy Availability Factor: 88.2%
 Load Factor: 87.9%
 Operating Factor: 88.2%
 Energy Unavailability Factor: 11.8%
 Total Off-line Time: 1034 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	860.9	784.7	55.3	348.3	856.8	818.5	844.0	838.4	819.4	845.5	839.6	870.2	8781.6
EAF (%)	100.0	100.0	6.3	53.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.2
UCF (%)	100.0	100.0	6.3	53.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.2
LF (%)	101.5	102.4	6.5	42.4	101.0	99.7	99.5	98.8	99.8	99.7	102.2	102.6	87.9
OF (%)	100.0	100.0	6.7	52.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.2
EUUF (%)	0.0	0.0	93.7	46.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.8
PUF (%)	0.0	0.0	93.7	46.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.8
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 02 Nov 1973 Lifetime Generation: 170816.6 GW(e).h
 Date of First Criticality: 08 May 1984 Cumulative Energy Availability Factor: 86.9%
 Date of Grid Connection: 03 Jul 1984 Cumulative Load Factor: 85.5%
 Date of Commercial Operation: 12 Feb 1985 Cumulative Unit Capability Factor: 87.0%
 Cumulative Energy Unavailability Factor: 13.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	6954.3	1032.0	90.6	90.6	90.2	90.2	84.1	84.1	6993	87.2
1986	5458.4	1032.0	63.5	76.5	63.5	76.3	60.4	71.7	5730	65.4
1987	8598.4	1032.0	96.0	83.2	96.0	83.0	95.1	79.7	8431	96.2
1988	5915.2	1034.0	66.3	78.9	66.3	78.8	65.1	76.0	5985	68.1
1989	6777.0	1038.0	76.9	78.5	76.9	78.4	74.5	75.7	6745	77.0
1990	8290.7	1038.0	94.4	81.2	94.4	81.1	91.1	78.3	8143	93.0
1991	7041.4	1041.0	78.4	80.8	78.4	80.7	77.2	78.2	6955	79.4
1992	7186.2	1044.0	80.2	80.7	80.2	80.6	78.4	78.2	7119	81.0
1993	8337.9	1044.0	92.3	82.0	92.3	81.9	91.2	79.6	8094	92.4
1994	6909.8	1073.0	74.7	81.2	74.7	81.2	73.5	79.0	6577	75.1
1995	8192.7	1094.0	87.8	81.9	87.8	81.8	85.5	79.6	7691	87.8
1996	9127.2	1094.0	95.0	83.0	95.0	83.0	95.0	81.0	8346	95.0
1997	7732.6	1094.0	82.4	83.0	82.4	82.9	80.7	80.9	7211	82.3
1998	8820.8	1094.0	93.3	83.7	93.3	83.7	92.0	81.8	8172	93.3
1999	7794.7	1094.0	83.0	83.7	83.0	83.7	81.3	81.7	7268	83.0
2000	9347.2	1094.0	97.8	84.6	97.8	84.6	97.3	82.8	8587	97.8
2001	8397.1	1111.0	87.9	84.8	87.9	84.8	86.9	83.0	7693	87.8
2002	9306.2	1111.0	96.4	85.5	96.4	85.4	95.6	83.7	8439	96.3
2003	8654.7	1140.0	88.2	85.6	88.2	85.6	87.2	83.9	7701	87.9
2004	10057.1	1140.0	100.0	86.4	100.0	86.4	100.4	84.8	8784	100.0
2005	8885.7	1140.0	90.2	86.6	90.2	86.6	89.0	85.0	7900	90.2
2006	9270.9	1140.0	93.1	86.9	93.1	86.9	92.8	85.4	8155	93.1
2007	8781.6	1140.0	88.2	87.0	88.2	86.9	87.9	85.5	7726	88.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1984 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					260	
B. Refuelling without a maintenance					6	
C. Inspection, maintenance or repair combined with refuelling	1033			735		
D. Inspection, maintenance or repair without refuelling				47	0	
E. Testing of plant systems or components				80		
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					11	
Subtotal	1033	0	0	862	277	1
Total		1033			1140	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1984 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		20
12. Reactor I&C Systems		8
13. Reactor Auxiliary Systems		7
14. Safety Systems		5
15. Reactor Cooling Systems		18
31. Turbine and auxiliaries		22
32. Feedwater and Main Steam System		29
41. Main Generator Systems		31
42. Electrical Power Supply Systems		55
XX. Miscellaneous Systems		38
Total	0	233

US-289 THREE MILE ISLAND-1

Operator: AMERGENE (AMERGEN ENERGY GENERATING CO.)

Contractor: B&W (BABCOCK & WILCOX CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 786.0 MW(e)
Design Net Capacity: 819.0 MW(e)
Design Discharge Burnup: 29100 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6645.3 GW(e).h
Energy Availability Factor: 91.7%
Load Factor: 96.5%
Operating Factor: 91.7%
Energy Unavailability Factor: 8.3%
Total Off-line Time: 726 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	633.5	571.5	628.4	604.8	616.7	592.0	610.5	608.7	591.5	387.5	173.5	626.7	6645.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	67.7	32.9	100.0	91.7
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	67.7	32.9	100.0	91.7
LF (%)	108.3	108.2	107.6	106.9	105.5	104.6	104.4	104.1	104.5	66.3	30.6	107.2	96.5
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	67.7	32.6	100.0	91.7
EUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.3	67.1	0.0	8.3
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.3	67.1	0.0	8.3
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 18 May 1968
Date of First Criticality: 05 Jun 1974
Date of Grid Connection: 19 Jun 1974
Date of Commercial Operation: 02 Sep 1974

Lifetime Generation: 152368.6 GW(e).h
Cumulative Energy Availability Factor: 71.4%
Cumulative Load Factor: 71.5%
Cumulative Unit Capability Factor: 86.2%
Cumulative Energy Unavailability Factor: 28.6%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1974	1992.4	789.0	88.2	88.2	88.2	88.2	85.9	85.9	2584	88.3
1975	5541.6	792.0	79.7	81.8	79.7	81.8	79.9	81.4	7198	82.2
1976	4344.4	792.0	62.5	73.5	62.5	73.5	62.4	73.3	5745	65.4
1977	5466.6	792.0	78.7	75.1	78.7	75.1	78.8	74.9	7087	80.9
1978	5681.9	788.0	82.0	76.7	82.0	76.7	82.3	76.6	7454	85.1
1979	888.7	776.0	12.9	64.9	12.9	64.9	13.1	64.9	1128	12.9
1980	0.0	776.0	100.0	70.4	0.0	54.8	0.0	54.8	0	0.0
1981	0.0	776.0	100.0	74.4	0.0	47.4	0.0	47.4	0	0.0
1982	0.0	776.0	100.0	77.4	0.0	41.8	0.0	41.8	0	0.0
1983	0.0	776.0	100.0	79.8	0.0	37.3	0.0	37.3	0	0.0
1984	0.0	776.0	100.0	81.8	0.0	33.8	0.0	33.7	0	0.0
1985	811.7	776.0	37.8	77.9	37.8	34.1	11.9	31.8	1853	21.2
1986	4818.3	776.0	70.8	77.3	70.8	37.1	70.9	35.0	6209	70.9
1987	5034.3	776.0	72.5	77.0	72.5	39.7	74.1	37.9	6351	72.5
1988	5465.4	784.0	76.0	76.9	76.0	42.2	79.4	40.8	6679	76.0
1989	7216.8	808.0	99.5	78.4	99.5	46.1	102.0	44.9	8714	99.5
1990	5316.2	808.0	81.8	78.6	81.8	48.3	75.1	46.8	7123	81.3
1991	5671.2	808.0	86.4	79.1	86.4	50.6	80.1	48.8	7536	86.0
1992	6936.5	789.0	99.5	80.2	99.5	53.3	100.0	51.6	8743	99.5
1993	5962.2	786.0	88.0	80.6	88.0	55.1	86.6	53.4	7702	87.9
1994	6590.9	786.0	95.3	81.3	95.3	57.1	95.7	55.5	8349	95.3
1995	6388.0	786.0	90.5	81.8	90.5	58.6	92.8	57.2	7926	90.5
1996	7100.3	786.0	100.0	82.6	100.0	60.5	102.8	59.3	8784	100.0
1997	5918.8	786.0	87.3	82.8	87.3	61.6	86.0	60.4	7633	87.1
1998	7059.2	786.0	100.0	83.5	100.0	63.2	102.5	62.2	8760	100.0
1999	6328.4	786.0	89.4	83.7	89.4	64.2	91.9	63.3	7827	89.3
2000	7144.9	786.0	100.0	84.4	100.0	65.6	103.5	64.9	8784	100.0
2001	5416.7	786.0	80.3	84.2	80.3	66.1	78.7	65.4	7034	80.3
2002	7313.5	802.0	100.0	84.8	100.0	67.4	104.6	66.8	8760	100.0
2003	6205.1	802.0	86.7	84.8	86.7	68.0	88.3	67.5	7602	86.8
2004	7273.3	802.0	100.0	85.3	100.0	69.1	103.2	68.7	8784	100.0
2005	6755.4	786.0	93.0	85.6	93.0	69.9	98.1	69.7	8145	93.0
2006	7227.0	786.0	99.1	86.0	98.7	70.8	105.0	70.7	8647	98.7
2007	6645.3	786.0	91.7	86.2	91.7	71.4	96.5	71.5	8034	91.7

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1974 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					126	
B. Refuelling without a maintenance					9	
C. Inspection, maintenance or repair combined with refuelling	724			589		
D. Inspection, maintenance or repair without refuelling				67	1	
E. Testing of plant systems or components				9	0	
H. Nuclear regulatory requirements					198	1742
J. Grid failure or grid unavailability						1
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	
Subtotal	724	0	0	665	335	1743
Total		724			2743	

7. Equipment Related Full Outages, Analysis by System

System	2007	1974 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		25
13. Reactor Auxiliary Systems		10
15. Reactor Cooling Systems		31
16. Steam generation systems		6
31. Turbine and auxiliaries		27
32. Feedwater and Main Steam System		6
35. All other I&C Systems		0
41. Main Generator Systems		7
42. Electrical Power Supply Systems		4
XX. Miscellaneous Systems		0
Total	0	116

US-250 TURKEY POINT-3

Operator: FPL (FLORIDA POWER & LIGHT CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 693.0 MW(e)
Design Net Capacity: 693.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 6078.1 GW(e).h
Energy Availability Factor: 83.6%
Load Factor: 100.1%
Operating Factor: 83.6%
Energy Unavailability Factor: 16.4%
Total Off-line Time: 1440 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	540.6	432.0	535.9	516.2	518.6	508.5	415.9	518.2	502.6	530.5	522.5	536.7	6078.1
EAF (%)	100.0	100.0	100.0	100.0	100.0	45.9	100.0	100.0	6.7	49.3	100.0	100.0	83.6
UCF (%)	100.0	100.0	100.0	100.0	100.0	45.9	100.0	100.0	6.7	49.3	100.0	100.0	83.6
LF (%)	104.8	92.8	104.1	103.4	100.6	101.9	80.7	100.5	100.7	102.9	104.6	104.1	100.1
OF (%)	100.0	100.0	100.0	100.0	100.0	45.8	100.0	100.0	6.7	49.2	100.0	100.0	83.6
EUF (%)	0.0	0.0	0.0	0.0	0.0	54.2	0.0	0.0	93.3	50.7	0.0	0.0	16.4
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.3	50.7	0.0	0.0	12.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	54.2	0.0	0.0	0.0	0.0	0.0	0.0	4.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 27 Apr 1967
Date of First Criticality: 20 Oct 1972
Date of Grid Connection: 02 Nov 1972
Date of Commercial Operation: 14 Dec 1972

Lifetime Generation: 142686.0 GW(e).h
Cumulative Energy Availability Factor: 77.1%
Cumulative Load Factor: 72.3%
Cumulative Unit Capability Factor: 77.1%
Cumulative Energy Unavailability Factor: 22.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1972	75.0	670.0	100.0	100.0	100.0	100.0	14.5	14.5	304	40.9
1973	0.0	666.0	100.0	100.0	100.0	100.0	0.0	1.2	0	0.0
1974	3478.8	666.0	100.0	100.0	100.0	100.0	59.6	29.2	6090	69.5
1975	4376.0	666.0	74.9	91.9	74.9	91.9	75.0	44.0	6948	79.3
1976	4322.0	666.0	73.9	87.5	73.9	87.5	73.9	51.3	6665	75.9
1977	4474.1	666.0	76.6	85.3	76.6	85.3	76.7	56.3	6994	79.8
1978	4502.7	666.0	77.2	84.0	77.2	84.0	77.2	59.7	7087	80.9
1979	2881.6	666.0	49.4	79.1	49.4	79.1	49.4	58.3	4509	51.5
1980	4389.0	657.0	77.9	79.0	77.9	79.0	76.1	60.5	6812	77.6
1981	933.2	646.0	13.2	71.9	13.2	71.9	16.5	55.7	1385	15.8
1982	3771.4	646.0	64.2	71.2	64.2	71.2	66.6	56.8	5612	64.1
1983	4331.0	659.0	73.3	71.4	73.3	71.4	75.0	58.4	6415	73.2
1984	4784.2	666.0	82.6	72.3	82.6	72.3	81.8	60.4	7253	82.6
1985	3421.0	666.0	61.0	71.4	59.7	71.3	58.6	60.3	5224	59.6
1986	4513.1	666.0	77.9	71.9	77.9	71.8	77.4	61.5	6816	77.8
1987	885.3	666.0	17.9	68.3	17.9	68.2	15.2	58.4	1566	17.9
1988	3468.0	666.0	60.6	67.8	60.6	67.7	59.3	58.4	5320	60.6
1989	3605.1	666.0	65.1	67.7	65.1	67.6	61.8	58.6	5696	65.0
1990	3388.4	666.0	59.4	67.2	59.4	67.1	58.1	58.6	5200	59.4
1991	1332.0	666.0	50.0	66.3	50.0	66.2	22.8	56.7	2155	24.6
1992	3428.2	666.0	67.2	66.3	67.2	66.3	58.6	56.8	5896	67.1
1993	5657.3	666.0	96.1	67.8	96.1	67.7	97.0	58.7	8421	96.1
1994	4924.9	666.0	85.8	68.6	85.8	68.5	84.4	59.9	7513	85.8
1995	5219.0	666.0	89.6	69.5	89.6	69.4	89.5	61.2	7846	89.6
1996	5750.8	673.0	96.7	70.6	96.7	70.6	97.3	62.7	8490	96.7
1997	5252.4	693.0	87.0	71.3	87.0	71.3	86.5	63.7	7570	86.4
1998	5408.3	693.0	89.8	72.1	89.0	72.0	89.1	64.7	7757	88.6
1999	6112.3	693.0	99.1	73.1	99.1	73.0	100.7	66.1	8684	99.1
2000	5684.4	693.0	92.5	73.8	92.5	73.7	93.4	67.1	8122	92.5
2001	5526.0	693.0	90.5	74.4	90.5	74.3	91.0	67.9	7923	90.4
2002	6215.4	693.0	100.0	75.3	100.0	75.2	102.4	69.1	8760	100.0
2003	5445.6	693.0	90.6	75.8	90.6	75.7	89.7	69.8	7930	90.5
2004	4734.0	693.0	79.0	75.9	79.0	75.8	77.8	70.1	6934	78.9
2005	5798.9	693.0	96.4	76.5	95.5	76.4	95.5	70.9	8362	95.5
2006	5581.9	693.0	90.3	76.9	90.3	76.9	91.9	71.5	7905	90.2
2007	6078.1	693.0	83.6	77.1	83.6	77.1	100.1	72.3	7320	83.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		389		0	453	
B. Refuelling without a maintenance					4	
C. Inspection, maintenance or repair combined with refuelling	1049			860		
D. Inspection, maintenance or repair without refuelling				324		
E. Testing of plant systems or components				9	2	
F. Major back-fitting, refurbishment or upgrading activities with refuelling				3		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				286	17	6
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						2
P. Fire					2	
Z. Others					0	
Subtotal	1049	389	0	1482	478	8
Total		1438			1968	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	389	40
13. Reactor Auxiliary Systems		57
14. Safety Systems		21
15. Reactor Cooling Systems		84
16. Steam generation systems		23
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		40
32. Feedwater and Main Steam System		31
33. Circulating Water System		2
35. All other I&C Systems		2
41. Main Generator Systems		79
42. Electrical Power Supply Systems		10
XX. Miscellaneous Systems		47
Total	389	437

US-251 TURKEY POINT-4

Operator: FPL (FLORIDA POWER & LIGHT CO.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 693.0 MW(e)
Design Net Capacity: 693.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 5148.8 GW(e).h
Energy Availability Factor: 97.6%
Load Factor: 84.8%
Operating Factor: 97.6%
Energy Unavailability Factor: 2.4%
Total Off-line Time: 208 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	535.3	485.8	524.5	495.7	530.5	223.0	518.9	518.6	23.9	230.8	522.5	539.3	5148.8
EAF (%)	100.0	89.7	100.0	100.0	100.0	100.0	81.5	100.0	100.0	100.0	100.0	100.0	97.6
UCF (%)	100.0	89.7	100.0	100.0	100.0	100.0	81.5	100.0	100.0	100.0	100.0	100.0	97.6
LF (%)	103.8	104.3	101.9	99.3	102.9	44.7	100.6	100.6	4.8	44.8	104.6	104.6	84.8
OF (%)	100.0	89.6	100.0	100.0	100.0	100.0	81.5	100.0	100.0	100.0	100.0	100.0	97.6
EUF (%)	0.0	10.3	0.0	0.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0	0.0	2.4
PUF (%)	0.0	10.3	0.0	0.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0	0.0	2.4
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 27 Apr 1967
Date of First Criticality: 11 Jun 1973
Date of Grid Connection: 21 Jun 1973
Date of Commercial Operation: 07 Sep 1973

Lifetime Generation: 140181.6 GW(e).h
Cumulative Energy Availability Factor: 76.8%
Cumulative Load Factor: 73.1%
Cumulative Unit Capability Factor: 76.8%
Cumulative Energy Unavailability Factor: 23.2%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1973	0.0	666.0	100.0	100.0	100.0	100.0	0.0	0.0	0	0.0
1974	4513.4	728.0	100.0	100.0	100.0	100.0	70.8	54.2	6759	77.2
1975	3991.9	666.0	68.3	87.0	68.3	87.0	68.4	60.1	6172	70.5
1976	3774.8	666.0	64.3	80.3	64.3	80.3	64.5	61.4	5825	66.3
1977	3671.0	666.0	62.7	76.4	62.7	76.4	62.9	61.7	5578	63.7
1978	3791.4	666.0	65.0	74.3	65.0	74.3	65.0	62.3	6693	76.4
1979	3846.6	666.0	65.9	73.0	65.9	73.0	65.9	62.9	6361	72.6
1980	3856.5	657.0	69.4	72.5	69.4	72.5	66.8	63.4	6093	69.4
1981	4507.2	646.0	77.3	73.1	77.3	73.1	79.6	65.3	6801	77.6
1982	3847.2	646.0	66.3	72.4	66.3	72.4	68.0	65.6	5806	66.3
1983	2978.9	659.0	52.4	70.5	52.4	70.5	51.6	64.2	4568	52.1
1984	3084.1	666.0	54.4	69.0	54.4	69.0	52.7	63.2	4774	54.3
1985	5177.9	666.0	89.8	70.7	89.7	70.7	88.8	65.3	7852	89.6
1986	1744.0	666.0	31.9	67.8	31.9	67.8	29.9	62.6	2790	31.8
1987	2657.5	666.0	49.3	66.5	49.3	66.5	45.6	61.4	4314	49.2
1988	3267.7	666.0	56.8	65.9	56.8	65.9	55.9	61.1	4986	56.8
1989	2107.6	666.0	42.0	64.4	42.0	64.4	36.1	59.5	3676	42.0
1990	4384.9	666.0	76.4	65.1	76.4	65.1	75.2	60.4	6692	76.4
1991	808.0	666.0	48.2	64.2	48.2	64.2	13.9	57.9	1335	15.2
1992	4642.3	666.0	81.3	65.1	81.3	65.1	79.4	59.0	7139	81.3
1993	4746.3	666.0	83.1	66.0	83.1	66.0	81.4	60.1	7277	83.1
1994	4844.4	666.0	85.0	66.9	85.0	66.9	83.0	61.2	7437	84.9
1995	5780.1	666.0	98.5	68.3	98.5	68.3	99.1	62.9	8629	98.5
1996	5165.4	673.0	88.6	69.2	88.6	69.2	87.4	63.9	7771	88.5
1997	5442.6	693.0	89.6	70.0	89.6	70.0	89.7	65.0	7809	89.1
1998	6181.5	693.0	100.0	71.3	100.0	71.2	101.8	66.5	8760	100.0
1999	5735.3	693.0	93.4	72.1	93.4	72.1	94.5	67.6	8185	93.4
2000	5591.4	693.0	91.4	72.9	91.4	72.9	91.9	68.6	8028	91.4
2001	6105.3	693.0	98.4	73.8	98.4	73.8	100.6	69.7	8623	98.4
2002	5854.1	693.0	95.6	74.6	95.6	74.5	96.4	70.7	8369	95.5
2003	5562.5	693.0	91.7	75.1	91.7	75.1	91.6	71.4	8033	91.7
2004	6079.2	693.0	98.6	75.9	98.6	75.9	99.9	72.3	8662	98.6
2005	4241.0	693.0	72.4	75.8	71.3	75.8	69.9	72.2	6243	71.3
2006	5383.7	693.0	87.6	76.2	87.6	76.1	88.7	72.7	7669	87.5
2007	5148.8	693.0	97.6	76.8	97.6	76.8	84.8	73.1	8552	97.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1975 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					401	
B. Refuelling without a maintenance					12	
C. Inspection, maintenance or repair combined with refuelling				1275		
D. Inspection, maintenance or repair without refuelling	207			126		
E. Testing of plant systems or components				7		
H. Nuclear regulatory requirements				175		
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					154	0
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						2
Subtotal	207	0	0	1583	567	2
Total		207			2152	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1975 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		8
12. Reactor I&C Systems		21
13. Reactor Auxiliary Systems		3
14. Safety Systems		5
15. Reactor Cooling Systems		105
16. Steam generation systems		108
31. Turbine and auxiliaries		64
32. Feedwater and Main Steam System		22
33. Circulating Water System		3
35. All other I&C Systems		3
41. Main Generator Systems		1
42. Electrical Power Supply Systems		51
Total	0	394

US-271 VERMONT YANKEE

Operator: ENTERGY (ENTERGY NUCLEAR)

Contractor: GE (GENERAL ELECTRIC CO.)

1. Station Details

Type: BWR
Net Reference Unit Power at the beginning of 2007: 620.0 MW(e)
Design Net Capacity: 514.0 MW(e)
Design Discharge Burnup: 33760 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 4703.7 GW(e).h
Energy Availability Factor: 92.7%
Load Factor: 86.6%
Operating Factor: 92.6%
Energy Unavailability Factor: 7.3%
Total Off-line Time: 646 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	463.7	414.7	458.4	412.8	171.3	337.1	449.5	346.1	302.8	432.8	450.8	463.7	4703.7
EAF (%)	100.0	100.0	100.0	100.0	38.7	81.5	100.0	93.7	99.1	100.0	100.0	100.0	92.7
UCF (%)	100.0	100.0	100.0	100.0	38.7	81.5	100.0	93.7	99.1	100.0	100.0	100.0	92.7
LF (%)	100.5	99.5	99.5	92.5	37.1	75.5	97.4	75.0	67.8	93.8	100.9	100.5	86.6
OF (%)	100.0	100.0	100.0	100.0	39.2	80.8	100.0	95.6	96.8	100.0	100.0	100.0	92.6
EUF (%)	0.0	0.0	0.0	0.0	61.3	18.5	0.0	6.3	0.9	0.0	0.0	0.0	7.3
PUF (%)	0.0	0.0	0.0	0.0	61.3	18.5	0.0	0.0	0.0	0.0	0.0	0.0	6.7
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	1.0	0.0	0.0	0.0	0.6
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start:	11 Dec 1967	Lifetime Generation:	119478.3 GW(e).h
Date of First Criticality:	24 Mar 1972	Cumulative Energy Availability Factor:	83.9%
Date of Grid Connection:	20 Sep 1972	Cumulative Load Factor:	81.6%
Date of Commercial Operation:	30 Nov 1972	Cumulative Unit Capability Factor:	83.9%
		Cumulative Energy Unavailability Factor:	16.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1972	291.4	502.0	100.0	100.0	100.0	100.0	38.7	38.7	963	65.8
1973	1814.5	468.0	70.3	74.9	70.3	74.9	44.3	43.4	5354	61.1
1974	2482.7	514.0	55.4	65.5	55.4	65.5	55.1	49.1	6495	74.1
1975	3561.3	504.0	80.5	70.3	80.5	70.3	80.7	59.2	7689	87.8
1976	3260.2	504.0	73.5	71.1	73.5	71.1	73.6	62.7	6776	77.1
1977	3537.9	504.0	79.8	72.8	79.8	72.8	80.1	66.1	7456	85.1
1978	3240.7	504.0	73.4	72.9	73.4	72.9	73.4	67.3	6649	75.9
1979	3449.0	504.0	77.4	73.5	77.4	73.5	78.1	68.8	7194	82.1
1980	2978.8	504.0	73.2	73.5	72.0	73.3	67.3	68.6	6271	71.4
1981	3568.5	504.0	84.8	74.7	84.8	74.6	80.8	70.0	7407	84.6
1982	4174.3	504.0	96.7	76.9	96.7	76.8	94.5	72.4	8406	96.0
1983	2874.5	504.0	69.8	76.3	69.8	76.2	65.1	71.7	6072	69.3
1984	3335.8	504.0	79.0	76.5	79.0	76.4	75.3	72.0	6933	78.9
1985	2999.4	504.0	71.8	76.1	71.8	76.0	67.9	71.7	6287	71.8
1986	2058.4	504.0	48.9	74.2	48.9	74.1	46.6	69.9	4280	48.9
1987	3536.4	504.0	83.2	74.8	83.2	74.7	80.1	70.6	7288	83.2
1988	4113.8	504.0	94.9	76.0	94.9	76.0	92.9	72.0	8333	94.9
1989	3606.8	504.0	84.4	76.5	84.4	76.5	81.7	72.6	7372	84.2
1990	3616.3	504.0	84.7	77.0	84.7	76.9	81.9	73.1	7392	84.4
1991	4108.3	504.0	95.1	77.9	93.7	77.8	93.1	74.1	8200	93.6
1992	3734.6	504.0	87.6	78.4	87.6	78.3	84.4	74.6	7680	87.4
1993	3372.1	504.0	78.6	78.4	78.6	78.3	76.4	74.7	6860	78.3
1994	4315.6	504.0	98.2	79.3	98.2	79.2	97.7	75.8	8600	98.2
1995	3858.5	507.0	86.6	79.6	86.6	79.5	86.8	76.2	7554	86.2
1996	3798.8	510.0	84.9	79.9	84.9	79.8	84.8	76.6	7422	84.5
1997	4266.9	510.0	95.6	80.5	95.6	80.4	95.5	77.4	8358	95.4
1998	3358.7	510.0	76.6	80.3	76.6	80.2	75.2	77.3	6690	76.4
1999	4059.1	510.0	90.5	80.7	90.5	80.6	90.9	77.8	7936	90.6
2000	4548.1	510.0	99.5	81.4	99.5	81.3	101.5	78.6	8738	99.5
2001	4171.1	510.0	93.1	81.8	93.1	81.7	93.4	79.1	8145	93.0
2002	3962.6	510.0	91.0	82.1	91.0	82.0	88.7	79.5	7966	90.9
2003	4444.2	510.0	98.3	82.6	98.3	82.6	99.5	80.1	8612	98.3
2004	3858.0	510.0	86.6	82.8	86.6	82.7	86.1	80.3	7599	86.5
2005	4106.4	506.0	93.8	83.1	93.8	83.0	92.6	80.7	8212	93.7
2006	5106.6	557.0	100.0	83.6	100.0	83.6	104.5	81.4	8760	100.0
2007	4703.7	620.0	92.7	83.9	92.7	83.9	86.6	81.6	8114	92.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1972 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		55			248	
B. Refuelling without a maintenance					7	
C. Inspection, maintenance or repair combined with refuelling	589			892		
D. Inspection, maintenance or repair without refuelling				118	0	
E. Testing of plant systems or components				6	11	
H. Nuclear regulatory requirements						6
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)				22		5
Subtotal	589	55	0	1038	266	11
Total		644			1315	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1972 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		8
12. Reactor I&C Systems		6
13. Reactor Auxiliary Systems		17
14. Safety Systems		48
15. Reactor Cooling Systems		41
31. Turbine and auxiliaries	55	40
32. Feedwater and Main Steam System		19
42. Electrical Power Supply Systems		62
XX. Miscellaneous Systems		2
Total	55	243

US-395 VIRGIL C. SUMMER-1

Operator: SCEG (SOUTH CAROLINA ELECTRIC & GAS CO.)
Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 966.0 MW(e)
Design Net Capacity: 900.0 MW(e)
Design Discharge Burnup: 38900 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8479.0 GW(e).h
Energy Availability Factor: 99.5%
Load Factor: 100.2%
Operating Factor: 99.5%
Energy Unavailability Factor: 0.5%
Total Off-line Time: 41 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	731.3	596.9	729.5	700.7	725.7	694.8	723.2	720.0	698.5	725.0	704.9	728.7	8479.0
EAF (%)	100.0	93.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5
UCF (%)	100.0	93.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5
LF (%)	101.8	91.9	101.6	100.8	101.0	99.9	100.6	100.2	100.4	100.9	101.2	101.4	100.2
OF (%)	100.0	93.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5
EUf (%)	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 21 Mar 1973 **Lifetime Generation:** 148892.3 GW(e).h
Date of First Criticality: 22 Oct 1982 **Cumulative Energy Availability Factor:** 84.6%
Date of Grid Connection: 16 Nov 1982 **Cumulative Load Factor:** 81.9%
Date of Commercial Operation: 01 Jan 1984 **Cumulative Unit Capability Factor:** 84.6%
Cumulative Energy Unavailability Factor: 15.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1984	4208.6	900.0	61.3	61.3	61.3	61.3	53.2	53.2	5362	61.0
1985	5235.1	885.0	71.6	66.4	71.6	66.4	67.5	60.3	6272	71.6
1986	7160.6	885.0	95.3	76.0	95.3	76.0	92.4	70.9	8346	95.3
1987	5168.1	885.0	70.1	74.5	70.1	74.5	66.7	69.9	6135	70.0
1988	5068.2	885.0	67.8	73.2	67.8	73.2	65.2	68.9	5952	67.8
1989	5412.8	885.0	80.8	74.4	80.8	74.4	69.8	69.1	7073	80.7
1990	6117.3	885.0	82.9	75.6	82.9	75.6	78.9	70.5	7261	82.9
1991	5346.1	885.0	80.7	76.3	80.7	76.3	69.0	70.3	7065	80.7
1992	7515.2	885.0	97.1	78.6	97.1	78.6	96.7	73.2	8532	97.1
1993	6109.5	885.0	82.9	79.0	82.9	79.0	78.8	73.8	7258	82.9
1994	4456.0	885.0	68.8	78.1	68.8	78.1	57.5	72.3	6022	68.7
1995	7561.4	885.0	96.8	79.6	96.8	79.6	97.5	74.4	8478	96.8
1996	7155.1	923.0	89.6	80.4	89.6	80.4	88.2	75.5	7829	89.1
1997	7267.9	948.0	89.9	81.2	89.9	81.2	87.5	76.4	7805	89.1
1998	8188.9	953.0	98.7	82.4	98.7	82.4	98.1	77.9	8638	98.6
1999	7376.3	954.0	88.8	82.8	88.8	82.8	88.3	78.6	7779	88.8
2000	6358.8	965.0	76.2	82.4	76.2	82.4	75.0	78.4	6688	76.1
2001	6757.5	966.0	81.0	82.3	81.0	82.3	79.9	78.5	7095	81.0
2002	7379.5	966.0	87.3	82.6	87.3	82.6	87.2	79.0	7645	87.3
2003	7352.1	966.0	86.4	82.8	86.4	82.8	86.9	79.4	7564	86.3
2004	8243.3	966.0	95.8	83.5	95.8	83.5	97.1	80.3	8413	95.8
2005	7469.4	966.0	88.4	83.7	88.4	83.7	88.3	80.7	7746	88.4
2006	7521.4	966.0	88.9	83.9	88.9	83.9	88.9	81.0	7783	88.8
2007	8479.0	966.0	99.5	84.6	99.5	84.6	100.2	81.9	8719	99.5

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1983 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		40		10	149	
B. Refuelling without a maintenance					11	
C. Inspection, maintenance or repair combined with refuelling				1016		
D. Inspection, maintenance or repair without refuelling				171		
E. Testing of plant systems or components				3	0	
J. Grid failure or grid unavailability						0
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					38	1
Subtotal	0	40	0	1200	198	1
Total		40			1399	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1983 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems	40	15
14. Safety Systems		5
15. Reactor Cooling Systems		51
16. Steam generation systems		13
31. Turbine and auxiliaries		14
32. Feedwater and Main Steam System		15
35. All other I&C Systems		1
41. Main Generator Systems		18
42. Electrical Power Supply Systems		12
Total	40	144

US-424 VOGTLE-1**Operator:** SOUTH (Southern Nuclear Operating Co.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1152.0 MW(e)
Design Net Capacity: 1122.0 MW(e)
Design Discharge Burnup: 36400 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9960.3 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 98.7%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	862.7	778.7	852.6	824.4	848.1	812.4	837.2	832.1	784.4	846.3	827.7	853.8	9960.3
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	100.7	100.6	99.6	99.4	98.9	98.0	97.7	97.1	94.6	98.7	99.7	99.6	98.7
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Aug 1976 **Lifetime Generation:** 161724.3 GW(e).h
Date of First Criticality: 09 Mar 1987 **Cumulative Energy Availability Factor:** 89.9%
Date of Grid Connection: 27 Mar 1987 **Cumulative Load Factor:** 89.5%
Date of Commercial Operation: 01 Jun 1987 **Cumulative Unit Capability Factor:** 89.9%
Cumulative Energy Unavailability Factor: 10.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1987	Data not provided									
1988	6799.7	1079.0	74.2	74.2	74.2	74.2	71.7	71.7	6569	74.8
1989	8709.4	1083.0	94.2	84.2	94.2	84.2	91.8	81.8	8275	94.5
1990	7353.1	1079.0	78.4	82.3	78.4	82.3	77.8	80.5	6980	79.7
1991	7501.7	1100.0	78.9	81.4	78.9	81.4	77.9	79.8	7016	80.1
1992	9383.5	1105.0	96.9	84.6	96.9	84.6	96.7	83.2	8523	97.0
1993	8600.7	1145.0	86.3	84.9	86.3	84.9	85.7	83.7	7577	86.5
1994	8817.2	1168.0	89.6	85.6	89.6	85.6	86.1	84.0	7847	89.6
1995	9984.0	1162.0	99.2	87.4	98.4	87.3	98.1	85.9	8621	98.4
1996	8149.8	1162.0	81.5	86.7	81.5	86.6	79.8	85.2	7162	81.5
1997	8270.1	1162.0	81.9	86.2	81.9	86.1	81.2	84.8	7167	81.8
1998	10216.9	1162.0	99.8	87.5	99.8	87.4	100.4	86.2	8738	99.7
1999	9425.9	1152.0	92.6	87.9	92.6	87.8	93.3	86.8	8108	92.6
2000	9196.6	1148.0	90.7	88.1	90.7	88.1	91.2	87.2	7963	90.7
2001	10144.4	1148.0	98.9	88.9	98.9	88.8	100.9	88.2	8665	98.9
2002	8638.8	1148.0	85.3	88.6	85.3	88.6	85.9	88.0	7469	85.3
2003	9411.5	1152.0	92.5	88.9	92.5	88.8	93.3	88.3	8097	92.4
2004	10162.3	1152.0	99.0	89.5	99.0	89.5	100.4	89.1	8694	99.0
2005	9220.1	1152.0	90.9	89.6	90.9	89.5	91.4	89.2	7964	90.9
2006	8671.1	1152.0	86.0	89.4	86.0	89.3	85.9	89.0	7536	86.0
2007	9960.3	1152.0	100.0	89.9	100.0	89.9	98.7	89.5	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1988 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					147	
B. Refuelling without a maintenance					15	
C. Inspection, maintenance or repair combined with refuelling	665					
D. Inspection, maintenance or repair without refuelling	29					
E. Testing of plant systems or components	3					
H. Nuclear regulatory requirements					9	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					1	3
Z. Others	2					
Subtotal	0	0	0	699	172	3
Total		0			874	

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1988 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		5
14. Safety Systems		28
15. Reactor Cooling Systems		37
17. Safety I&C Systems (excluding reactor I&C)		11
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		17
35. All other I&C Systems		3
41. Main Generator Systems		25
42. Electrical Power Supply Systems		13
Total	0	141

US-425 VOGTLE-2**Operator:** SOUTH (Southern Nuclear Operating Co.)**Contractor:** WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)**1. Station Details**

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1149.0 MW(e)
Design Net Capacity: 1101.0 MW(e)
Design Discharge Burnup: 36400 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 8347.3 GW(e).h
Energy Availability Factor: 83.6%
Load Factor: 82.9%
Operating Factor: 83.6%
Energy Unavailability Factor: 16.4%
Total Off-line Time: 1437 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	873.7	778.8	71.4	0.0	729.6	823.7	848.0	842.0	821.9	856.8	838.0	863.5	8347.3
EAF (%)	100.0	100.0	9.6	3.0	91.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.6
UCF (%)	100.0	100.0	9.6	3.0	91.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.6
LF (%)	102.2	100.9	8.4	0.0	85.3	99.6	99.2	98.5	99.3	100.2	101.2	101.0	82.9
OF (%)	100.0	100.0	10.0	3.9	89.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	83.6
EUUF (%)	0.0	0.0	90.4	97.0	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.4
PUF (%)	0.0	0.0	90.4	70.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5
UCLF (%)	0.0	0.0	0.0	26.7	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 01 Aug 1976 **Lifetime Generation:** 150493.4 GW(e).h
Date of First Criticality: 28 Mar 1989 **Cumulative Energy Availability Factor:** 89.9%
Date of Grid Connection: 10 Apr 1989 **Cumulative Load Factor:** 89.1%
Date of Commercial Operation: 20 May 1989 **Cumulative Unit Capability Factor:** 89.9%
Cumulative Energy Unavailability Factor: 10.1%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1989	5547.2	1110.0	93.8	93.8	93.8	93.8	94.4	94.4	5104	94.1
1990	6868.0	1110.0	81.1	85.9	81.1	85.9	70.6	79.6	7125	81.3
1991	8897.4	1097.0	95.4	89.5	95.4	89.5	92.6	84.5	8375	95.6
1992	7779.6	1109.0	80.8	87.1	80.8	87.1	79.9	83.2	7175	81.7
1993	8680.9	1140.0	88.1	87.3	88.1	87.3	86.9	84.0	7737	88.3
1994	9331.6	1168.0	92.1	88.2	92.1	88.2	91.2	85.4	8062	92.0
1995	9165.6	1162.0	90.8	88.6	90.3	88.5	90.0	86.1	7908	90.3
1996	9037.6	1162.0	89.9	88.8	89.9	88.7	88.5	86.4	7899	89.9
1997	10310.8	1162.0	100.0	90.1	100.0	90.1	101.3	88.2	8760	100.0
1998	8388.6	1162.0	83.9	89.5	83.9	89.4	82.4	87.6	7347	83.9
1999	9022.6	1156.0	89.5	89.5	89.5	89.4	89.1	87.7	7833	89.4
2000	10337.8	1149.0	100.0	90.4	100.0	90.3	102.4	89.0	8784	100.0
2001	9456.7	1149.0	92.6	90.5	92.6	90.5	94.0	89.4	8112	92.6
2002	8418.9	1149.0	83.7	90.0	83.7	90.0	83.6	89.0	7328	83.7
2003	9736.6	1149.0	95.9	90.4	95.9	90.4	96.7	89.5	8401	95.9
2004	9168.7	1149.0	90.8	90.5	90.8	90.4	90.8	89.6	7970	90.7
2005	8592.9	1149.0	85.2	90.2	85.2	90.1	85.4	89.3	7464	85.2
2006	9276.1	1149.0	91.7	90.2	91.7	90.2	92.2	89.5	8024	91.6
2007	8347.3	1149.0	83.6	89.9	83.6	89.9	82.9	89.1	7323	83.6

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1989 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure		256			126	
B. Refuelling without a maintenance					29	
C. Inspection, maintenance or repair combined with refuelling	1176			542		
D. Inspection, maintenance or repair without refuelling				64		
E. Testing of plant systems or components	2			1		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					14	2
L. Human factor related					2	
Z. Others				3		
Subtotal	1178	256	0	610	171	2
Total		1434			783	

7. Equipment Related Full Outages, Analysis by System

System	2007	1989 to 2007
	Hours Lost	Average Hours Lost Per Year
12. Reactor I&C Systems		13
13. Reactor Auxiliary Systems		13
14. Safety Systems		15
15. Reactor Cooling Systems		37
16. Steam generation systems		1
31. Turbine and auxiliaries		2
32. Feedwater and Main Steam System		27
35. All other I&C Systems		8
41. Main Generator Systems	256	0
42. Electrical Power Supply Systems		3
Total	256	119

US-382 WATERFORD-3

Operator: ENTERGY (ENTERGY NUCLEAR)
Contractor: CE (COMBUSTION ENGINEERING CO.)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1152.0 MW(e)
Design Net Capacity: 1104.0 MW(e)
Design Discharge Burnup: 33450 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 9893.0 GW(e).h
Energy Availability Factor: 96.2%
Load Factor: 98.0%
Operating Factor: 96.2%
Energy Unavailability Factor: 3.8%
Total Off-line Time: 337 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	873.8	790.5	874.5	850.1	876.3	846.6	873.2	865.5	842.5	461.9	855.6	882.5	9893.0
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	54.8	100.0	100.0	96.2
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	54.8	100.0	100.0	96.2
LF (%)	102.0	102.1	102.2	102.5	102.2	102.1	101.9	101.0	101.6	53.9	103.0	103.0	98.0
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	54.7	100.0	100.0	96.2
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.2	0.0	0.0	3.8
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.2	0.0	0.0	3.8
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation**5. Historical Summary**

Date of Construction Start: 14 Nov 1974 **Lifetime Generation:** 166405.2 GW(e).h
Date of First Criticality: 04 Mar 1985 **Cumulative Energy Availability Factor:** 86.6%
Date of Grid Connection: 18 Mar 1985 **Cumulative Load Factor:** 86.4%
Date of Commercial Operation: 24 Sep 1985 **Cumulative Unit Capability Factor:** 86.8%
Cumulative Energy Unavailability Factor: 13.4%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	1805.2	1099.0	76.1	76.1	76.1	76.1	68.8	68.8	1800	75.7
1986	7308.4	1096.0	79.5	78.7	79.5	78.7	76.1	74.5	6921	79.0
1987	7434.1	1075.0	80.9	79.7	80.9	79.7	78.9	76.4	7085	80.9
1988	6548.4	1075.0	73.7	77.9	73.7	77.9	69.3	74.3	6468	73.6
1989	7609.4	1075.0	81.5	78.7	81.5	78.7	80.8	75.8	7136	81.5
1990	8604.2	1075.0	92.2	81.3	92.2	81.3	91.4	78.7	8079	92.2
1991	7274.9	1075.0	78.9	80.9	78.5	80.8	77.3	78.5	6869	78.4
1992	7622.2	1075.0	82.1	81.1	82.1	81.0	80.7	78.8	7213	82.1
1993	9138.8	1075.0	99.2	83.3	99.2	83.2	97.0	81.0	8691	99.2
1994	7931.9	1075.0	86.3	83.6	86.3	83.5	84.2	81.3	7555	86.2
1995	7763.4	1075.0	82.7	83.5	82.7	83.4	82.4	81.5	7241	82.7
1996	8926.8	1075.0	93.8	84.4	93.8	84.4	94.5	82.6	8237	93.8
1997	6720.7	1075.0	70.4	83.3	70.4	83.2	71.4	81.7	6161	70.3
1998	8620.8	1075.0	91.0	83.8	91.0	83.8	91.5	82.4	7966	90.9
1999	7441.7	1075.0	78.9	83.5	78.9	83.5	79.0	82.2	6905	78.8
2000	8477.4	1075.0	88.2	83.8	88.2	83.8	89.8	82.7	7743	88.1
2001	9539.1	1075.0	99.5	84.8	99.5	84.7	101.3	83.8	8718	99.5
2002	8847.9	1075.0	92.8	85.2	92.8	85.2	94.0	84.4	8136	92.9
2003	8503.1	1075.0	89.7	85.5	89.7	85.4	90.3	84.7	7865	89.8
2004	9654.4	1075.0	99.9	86.2	99.9	86.2	102.2	85.7	8771	99.9
2005	7913.7	1089.0	84.0	86.1	79.7	85.9	82.9	85.5	6975	79.6
2006	9279.8	1158.0	91.3	86.4	91.3	86.1	91.5	85.8	7996	91.3
2007	9893.0	1152.0	96.2	86.8	96.2	86.6	98.0	86.4	8423	96.2

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1985 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					214	
B. Refuelling without a maintenance					14	
C. Inspection, maintenance or repair combined with refuelling				771		
D. Inspection, maintenance or repair without refuelling	336			98		
E. Testing of plant systems or components				0		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					7	1
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						16
Subtotal	336	0	0	869	235	17
Total	336			1121		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1985 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		9
13. Reactor Auxiliary Systems		4
14. Safety Systems		2
15. Reactor Cooling Systems		94
17. Safety I&C Systems (excluding reactor I&C)		34
31. Turbine and auxiliaries		8
32. Feedwater and Main Steam System		25
33. Circulating Water System		2
35. All other I&C Systems		20
41. Main Generator Systems		2
42. Electrical Power Supply Systems		2
Total	0	202

US-390 WATTS BAR-1

Operator: TVA (TENNESSEE VALLEY AUTHORITY)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1121.0 MW(e)
Design Net Capacity: 1218.0 MW(e)
Design Discharge Burnup: 36000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10049.7 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 102.3%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	847.1	794.8	842.5	842.2	860.5	818.0	842.2	822.6	813.7	852.5	841.5	872.2	10049.7
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	101.6	105.5	101.2	104.3	103.2	101.3	101.0	98.6	100.8	102.2	104.1	104.6	102.3
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 23 Jan 1973 **Lifetime Generation:** 87808.3 GW(e).h
Date of First Criticality: 01 Jan 1996 **Cumulative Energy Availability Factor:** 90.1%
Date of Grid Connection: 06 Feb 1996 **Cumulative Load Factor:** 90.0%
Date of Commercial Operation: 05 May 1996 **Cumulative Unit Capability Factor:** 90.1%
Cumulative Energy Unavailability Factor: 9.9%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1996	5141.4	1109.0	87.7	87.7	87.7	87.7	89.0	89.0	4803	91.4
1997	7600.1	1117.0	82.3	84.3	82.3	84.3	77.7	81.9	7269	83.0
1998	9681.0	1117.0	99.0	90.0	99.0	90.0	98.9	88.5	8672	99.0
1999	8267.4	1118.0	86.8	89.1	86.8	89.1	84.4	87.3	7606	86.8
2000	9076.4	1118.0	92.5	89.8	92.5	89.8	92.4	88.4	8124	92.5
2001	9626.6	1125.0	96.1	91.0	96.1	91.0	97.5	90.1	8419	96.1
2002	9079.4	1125.0	91.3	91.0	91.3	91.0	92.1	90.4	7998	91.3
2003	8549.6	1121.0	86.2	90.4	86.2	90.4	86.9	89.9	7551	86.2
2004	9856.9	1121.0	98.8	91.4	98.8	91.4	100.1	91.1	8680	98.8
2005	8816.4	1121.0	89.5	91.2	89.5	91.2	89.8	91.0	7841	89.5
2006	6697.1	1121.0	69.7	89.1	69.7	89.1	68.2	88.8	6099	69.6
2007	10049.7	1121.0	100.0	90.1	100.0	90.1	102.3	90.0	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1996 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					222	
B. Refuelling without a maintenance					8	
C. Inspection, maintenance or repair combined with refuelling				597		
E. Testing of plant systems or components				58	3	
H. Nuclear regulatory requirements				95		
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					16	
Subtotal	0	0	0	750	249	0
Total	0			999		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1996 to 2007 Average Hours Lost Per Year
12. Reactor I&C Systems		5
14. Safety Systems		16
15. Reactor Cooling Systems		18
31. Turbine and auxiliaries		71
32. Feedwater and Main Steam System		60
33. Circulating Water System		22
35. All other I&C Systems		3
41. Main Generator Systems		8
42. Electrical Power Supply Systems		17
Total	0	220

US-482 WOLF CREEK

Operator: KGEKO (Kansas Gas and Electric Co.)

Contractor: WH (WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS)

1. Station Details

Type: PWR
Net Reference Unit Power at the beginning of 2007: 1166.0 MW(e)
Design Net Capacity: 1170.0 MW(e)
Design Discharge Burnup: 33000 MW.d/t
Status at end of year: Operational

2. Production Summary 2007

Net Energy Production: 10369.1 GW(e).h
Energy Availability Factor: 100.0%
Load Factor: 101.5%
Operating Factor: 100.0%
Energy Unavailability Factor: 0.0%
Total Off-line Time: 0 hours

3. 2007 Monthly Performance Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
GW(e).h	888.0	801.5	881.7	858.4	879.1	847.2	870.0	866.7	848.2	882.9	859.1	886.3	10369.1
EAF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UCF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LF (%)	102.4	102.3	101.8	102.2	101.3	100.9	100.3	99.9	101.0	101.8	102.2	102.2	101.5
OF (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUf (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UCLF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XUF (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UCLF replaces previously used UUF.

4. 2007 Summary of Operation

5. Historical Summary

Date of Construction Start: 31 May 1977
Date of First Criticality: 22 May 1985
Date of Grid Connection: 12 Jun 1985
Date of Commercial Operation: 03 Sep 1985

Lifetime Generation: 176786.5 GW(e).h
Cumulative Energy Availability Factor: 86.5%
Cumulative Load Factor: 86.0%
Cumulative Unit Capability Factor: 86.6%
Cumulative Energy Unavailability Factor: 13.5%

Year	Energy GW(e).h	Capacity MW(e)	Performance for Full Years of Commercial Operation							
			Unit Capability Factor (in %)		Energy Availability Factor (in %)		Load Factor (in %)		Annual Time Online	
			Annual	Cumul.	Annual	Cumul.	Annual	Cumul.	Hours	of (%)
1985	2942.1	1144.0	100.0	100.0	100.0	100.0	90.6	90.6	2770	96.2
1986	6966.1	1128.0	73.0	79.7	73.0	79.7	70.5	75.5	6416	73.2
1987	6504.1	1128.0	68.6	74.9	68.6	74.9	65.8	71.3	6009	68.6
1988	6676.4	1128.0	66.8	72.5	66.8	72.5	67.4	70.1	5963	67.9
1989	9709.3	1135.0	98.4	78.5	98.4	78.5	97.7	76.5	8618	98.4
1990	7889.1	1135.0	79.8	78.7	79.8	78.7	79.3	77.1	7036	80.3
1991	5891.4	1135.0	71.0	77.5	71.0	77.5	59.3	74.2	6288	71.8
1992	8490.7	1131.0	85.4	78.6	85.4	78.6	85.5	75.8	7538	85.8
1993	7908.6	1132.0	79.3	78.7	79.3	78.7	79.7	76.2	7000	79.9
1994	8546.0	1149.0	85.4	79.4	85.4	79.4	84.9	77.2	7500	85.6
1995	10062.2	1163.0	98.5	81.3	98.5	81.3	98.7	79.3	8625	98.5
1996	8233.7	1165.0	81.8	81.3	80.6	81.2	80.4	79.4	7078	80.6
1997	8447.5	1163.0	82.8	81.5	82.8	81.4	82.9	79.7	7255	82.8
1998	10400.7	1163.0	100.0	82.9	100.0	82.8	102.1	81.4	8760	100.0
1999	9156.6	1163.0	89.6	83.3	89.6	83.3	89.9	82.0	7847	89.6
2000	9071.4	1169.0	88.8	83.7	88.8	83.6	88.3	82.4	7795	88.7
2001	10346.7	1170.0	99.7	84.7	99.7	84.6	101.0	83.6	8731	99.7
2002	9041.7	1165.0	87.8	84.9	87.8	84.8	88.4	83.9	7695	87.8
2003	8902.5	1167.0	86.7	85.0	86.7	84.9	87.1	84.1	7594	86.7
2004	10132.7	1166.0	98.8	85.7	98.5	85.6	98.9	84.8	8650	98.5
2005	8820.9	1165.0	86.0	85.7	86.0	85.6	86.4	84.9	7528	85.9
2006	9350.3	1166.0	90.6	86.0	90.6	85.9	91.5	85.2	7935	90.6
2007	10369.1	1166.0	100.0	86.6	100.0	86.5	101.5	86.0	8760	100.0

6. Full Outages, Analysis by Cause

Outage Cause	2007 Hours Lost			1986 to 2007 Average Hours Lost Per Year		
	Planned	Unplanned	External	Planned	Unplanned	External
A. Plant equipment problem/failure					143	
B. Refuelling without a maintenance					125	
C. Inspection, maintenance or repair combined with refuelling				877		
D. Inspection, maintenance or repair without refuelling				10	15	
E. Testing of plant systems or components				0	1	
K. Load-following (frequency control, reserve shutdown due to reduced energy demand)					9	5
N. Environmental conditions (lack of cooling water due to dry weather, cooling water temperature limits, flood, storm, lightning, etc.)						1
Subtotal	0	0	0	887	293	6
Total	0			1186		

7. Equipment Related Full Outages, Analysis by System

System	2007 Hours Lost	1986 to 2007 Average Hours Lost Per Year
11. Reactor and Accessories		28
12. Reactor I&C Systems		13
15. Reactor Cooling Systems		1
16. Steam generation systems		7
17. Safety I&C Systems (excluding reactor I&C)		1
31. Turbine and auxiliaries		5
32. Feedwater and Main Steam System		20
35. All other I&C Systems		6
41. Main Generator Systems		11
42. Electrical Power Supply Systems		4
Total	0	96

6. NON-ELECTRICAL APPLICATIONS OF NUCLEAR ENERGY IN MEMBER STATES

Table 6.1: District heating and process heating in 2007

Country	Reactor	District heating [Gcal]	Process heating [Gcal]	Total heating [Gcal]	
Bulgaria	Kozloduy-5	66736	NA	66736	
	Kozloduy-6	137191	NA	137191	
Czech Republic	Temelin-1	3906	NA	3906	
	Temelin-2	40702	NA	40702	
Hungary	PAKS-2	182	NA	182	
	PAKS-3	105827	NA	105827	
	PAKS-4	106307	NA	106307	
India	Rajasthan-1	NA	0	0	
	Rajasthan-2	NA	40420	40420	
	Rajasthan-3	NA	95010	95010	
	Rajasthan-4	NA	23160	23160	
Romania	Cernavoda-1	28815	NA	28815	
Russia	Balakovo-1	33615	0	33615	
	Balakovo-2	0	0	0	
	Balakovo-3	0	0	0	
	Balakovo-4	6897	0	6897	
	Beloyarsky-3	262812	0	262812	
	Bilibino-1	36837	NA	36837	
	Bilibino-2	46246	NA	46246	
	Bilibino-3	44487	NA	44487	
	Bilibino-4	44533	NA	44533	
	Kalinin-1	241985	4308	246293	
	Kalinin-2	261428	5819	267247	
	Kalinin-3	NA	41823	41823	
	Kola-1	7120	2269	9389	
	Kola-2	8889	2235	11124	
	Kola-3	7522	1899	9421	
	Kola-4	5300	2152	7452	
	Kursk-1	95385	107444	202829	
	Kursk-2	93288	113939	207227	
	Kursk-3	68798	56580	125378	
	Kursk-4	220203	219875	440078	
	Leningrad-1	342818	0	342818	
	Leningrad-2	190015	0	190015	
	Leningrad-3	211454	0	211454	
	Leningrad-4	173205	0	173205	
	Novovoronezh-3	53974	14	53988	
	Novovoronezh-4	71492	257	71749	
	Novovoronezh-5	4810	2987	7797	
	Smolensk-1	180345	14681	195026	
	Smolensk-2	110121	4881	115002	
	Smolensk-3	362649	38182	400831	
	Slovakia	Bohunice-3	211741	19063	230804
		Bohunice-4	202820	5194	208014
Switzerland	Beznau-1	126	NA	126	
	Beznau-2	5	NA	5	
	Goesgen	NA	65734	65734	
Ukraine	Khemnitski-1	154341	NA	154341	
	Khemnitski-2	149784	NA	149784	
	Rovno-1	56280	NA	56280	
	Rovno-2	36101	NA	36101	
	Rovno-3	51554	NA	51554	
	Rovno-4	243972	NA	243972	
	South Ukraine-1	97876	NA	97876	
	South Ukraine-2	193608	NA	193608	
	South Ukraine-3	67135	NA	67135	
	Zaporozhe-1	76813	NA	76813	
	Zaporozhe-2	92299	NA	92299	
	Zaporozhe-3	85759	NA	85759	
	Zaporozhe-4	45552	NA	45552	
	Zaporozhe-5	94614	NA	94614	
Zaporozhe-6	82233	NA	82233		

Table 6.2: Water desalination in 2007

Country	Reactor	Thermal energy [Gcal]	Electrical energy for reverse osmosis [MWh]	Water produced [m3]
India	Madras-1	0	0	0
	Madras-2	0	0	0
Japan	Genkai-3	21530	NA	298086
	Genkai-4	8520	NA	113356
	Ikata 1&2		NA	476393
	Ikata-3		NA	259350
	Ohi 1&2		NA	1137245
	Takahama 3&4		NA	622171
Pakistan	KANUPP	0	0	0

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