# FORM N-2 OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES As Required by the Provisions of the ASME Code, Section III, Division 4

Not to Exceed one Day's Production

1- 20

1. Manufactured and certified by CE Nuclear Power LLC, 55 Old Dover Road, Newington, NH 03501

2. Manufactured for CENuclear Power LLC., 2000 Day Hill Road, Windsor, CT 06095-0500.

e of installation: Consumers Excepty Company, Palisades Sinton, Michigan

S. ASME Code, Section III: 4. Type CND-E-1996 Rev. 05 (Drawing so.) accordance with Coast Spec (Div. 2 only) N/A (addenda) • SEE BACK (mail spec. no.) Revision NA Chass \*SEE BACK (tensile strength) (subsection) DHE NA (code case)

CROM Seal Housing Assemblies

I. Nees, thickeess (fe) . See Back min. design thickness (im.) See Back Dia ID (R.d. in.) . Sce Back Regist overall (fi & in.) \* See Back

9. When applicable, Certificate Holders' data reports are for each item of this report:

		T-m, 600 K		\$ ?
	do e	2922	245	(17)
	(m)	2921	244	3
	/ cm	2920	243	Ş
	(34)	2919	242	3
	(20)	2918	248	(E2)
1	(20)	2917	240	(32)
	(44)	2916	239	629
	(TD)	2915	238	3
	(26)	2914	237	3
	(25)	2913	236	3
	(945)	2912	230	3
	(23)	2911	229	3
	(33)	2910	228	3
	(t:2).	2909	227	\$
	(90)	2908	226	3
2924	(19) 247	2907	225	3
2923	(m) 246	2906	224	3
MFG SERIAL NUMBER	Part or Appurhenance Scriel Number ASSEMBLY NUMBER	MFG SERIAL MUNDER	Serial Number Serial Number ASSEMBLY NUMBER	

# FORM N-2 (back)

No. Bef cardonterment(s) state or prov and no)	New Hampthire and employed by H.S.B.L.&.I. Co.  of Harthrd, CT have inspected these nems described in this data report on MAGEN 2, 2001. and state that to the test of my knowledge and belief, the Certificate Holder has fabricated these parts or appartenance; in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.  By signing this Certificate, maided the inspector nor his employer makes may wateranty, capressed or implied, concerning the equipment described test of any kind arising from or connected with this inspection.  Due 3.269 Standa M.M  Standa M.M  Standa S. Standa M.M  Standa M.M  Standa M.M. Standa M.M  Standa M.M. Standa M.M. Standa M.M.  Standa M.M. St	CERTIFICATE OF SHOP DASPECTION  L the undersigned, holding a valid commission insued by the National Board of Ball	NPT Certificate of Authorization no. N-2041  Date 3/4/0/ Name CE Nuclear Power LLC  (NPT Certificate Holder)  CENT Certificate Holder)	CERTHECATE OF SHOP INSPECTION  We certify that the statements made in this report are correct and that this (these) CRDM Seal Housing assemblies conform to the rules of construction of the ASME Code, Section III.	Design specification certified by N/A P.E. state N/A Rag. no. N/A    N/A   P.E. state N/A Rag. no. N/A	CERTIFICATE OF DESIGN
--	--	--	--	--	--	-----------------------

•	-				
MATERIAL	TENSILE	NOMINAL THICKNESS (IN)	MIN. DESIGN THICKNESS (IN)	DIA. I.D. (FT & IN)	LENGTH OVERALL
SB-166	80,000	.120"	.H.s.	136	
NO6600			<del>.</del>	1.26	2.
Access Tube Flunge					
SP-167	2000				
NO6600	90,000		.1081	126"	39.50**
771 63					•
NO6600	00,000	28	.26	2.06	11.38
Scal Housing			٠		

### FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY As Required by the Provisions of the ASME Code, Section XI

1. OwnerCor	nsumers Ener	gy Company		Date Marc	h 5.	2002	
27780 R	lue Star Hwy	Covert, NI		Sheet1	of		
	ades Nucles			Unit1	··		
	lue Star Hwy Add				4111C	99 L Inization P.O. No., Job No.,	etc.
3. Work Performe	d by <u>Consum</u>	ers Energy		Type Code Symbol St	-	N/A	
	lue Star Hwy	. Covert, MI			·	N/A N/A	
4. Identification of	f System	Co.	mponent	Cooling (C	(25)		
5. (a) Applicable				idition, <u>nla</u>		ia, <u>nla</u>	_ Code Case
	idition of Section X		Tear				
	ection XI Code Cas	1100-		Year			
6. Identification of	Components:						
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Excl. End Bell	Kundinger Fluid Paver	1-025-7-06 -115.41.CL	None	PO# G0361381.1	01	Intalled	No
		-3					
Heat Exch. End Bell	Kundinger Fluid laws	104ФЭФСЭІSФ1	None	Po# G0361381.1	Ø1	Installed	No
:							
				·			
-							
7. Description of V	North Replace	ce heat e	xchange e	E-55A end	bell.		
•	d: Hydrostatic 🕮	Pneumatic 🗆	J	. 1/	Exempt 🗆		
	Other 🗗 🔠	Pressure	psi Test T	emp*F			
NOTE: Supp	olemental sheets in	form of lists, sketci	nes, or drawings n	nay be used, provided (1)	size is 8½	in. x 11 in., (2) info	rmation in

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at the top of this form.

This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2309.

(7/99)



E00030

24111996

#### FORM NIS-2 (Back)

Remarks NONC				
Hemory -	Applicable Ma	anufacturer's Data Reports	to be attached	
		<del></del>		
			•	
		•		
		<del></del>		
	N/4	piration Date		/A
Signed May E Shead Owner or Owner's Design	- Seriar Eng.	Date	ch a5	<u>Z60Z</u>
		OF INSERVICE INSPECT		Literantan and the Ctate on Brancia
l, the undersigned, holding a valid com of <u>Michigan</u> and employed b				Hispectors and the State of Provin
of Johnston, R.T.	11/20/99			inspected the components describ
n this Owner's Report during the period of the best of my knowledge and belief, the	he Owner has performed	to l examinations and take		
in accordance with the requirements of the By signing this certificate neither the corrective measures described in this Ow personal injury or property damage or a	he ASME Code, Section ) Inspector nor his employ mer's Report. Furthermor	XI. er makes any warranty, re, neither the Inspector	expressed or impli nor his employer	ied, concerning the examinations a
	Commissions	MT -762 ARNT		
Inspector's Signature		National Board, State, F	rovince, and Endors	ements
Date		•		

## FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY As Required by the Provisions of the ASME Code, Section XI

. OwnerCon	sumers Energ	Company		Date _ 6/13	120	<i>∞</i> 1	
	ne Ster Hor	Covert, MI		Sheet1	of		
. Plent Palis	ades Mucles	Plant		Unit1_			··
	ue Star Roy	· <del>-</del>		No. # 24	112E	500 Nestion P.O. No., Job No.,	etc.
. Work Performed	by Consume	re Rnergy		Type Code Symbol St Authorization No	-	N/A	
27780_B1	ue Star Hwy	Covert, MI		Expiration Data		N/A	
. Identification of	System SE	RVICE V	VATER	SYSTEN	1		
i. (a) Applicable	Construction Cod	B31.1	. 1986 E	dition, N/A	_ Addend	. N/A	Code Cas
	dition of Section XI		,				
	ection XI Code Case			Year			
(c) Applicable S	ection XI Code Casi	18			•	•	
. Identification of	Components:						
Name of Component	Name of Manufacturer	Manufacturer Seriel No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
VALVE	VOGT	N/A	N/A	6-0257230Q	1998	INSTALLED	NO
;							
	•	,	<u> </u>	·			
		<u>.                                    </u>					
7. Description of 1	Work REPLAC	E VALVE		TH NEW GAT	_	IM NEW VA	LVE
B. Tests Conducti	kd: Hydrostatic []	Pneumetic 🗆	Nominal Ope	erating Pressure.	Exempt 🗆		
	Other 🗗	Pressure	pel Teet T	'emp*F			
NOTE: Sup	plemental sheets in ough 6 on this repo	form of lists, sketc	thee, or drawings (	ney be used, provided (1	) size ie 8½	½ ln. x 11 in., (2) infi	ormation in

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of this form.

(7/98)

E00030

24112500

#### FORM NIS-2 (Back)

Remarks	Applicable Manufactured Day Day and the buildings
	Applicable Manufacturer's Data Reports to be attached
	•
	· · · · · · · · · · · · · · · · · · ·
	•
·	
	CERTIFICATE OF COMPLIANCE
I certify that the statements made	in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.
	N/A
ype Code Symbol Stamp	, 0/4
· · · · · · · · · · · · · · · · · · ·	N/A Expiration Data N/A
LYPHINOVIENUA SK	R. BNUHNERRING APALYST DONO 8/13/2001
Owner or Owner's E	Designee. Title
<del></del>	
	CERTIFICATE OF INSERVICE INSPECTION
to the condensational holding a valid	commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province
I, the uncertagness, moreing a vers	ed by Factory Mutual Insurance Company
s Johnston D T	have inspected the components describe
in this Owner's Report during the per	11/20/99 to 5/10/0/ and state the
n this Owner's Report curing the period to the base of my boundedge and believed to the best of the believed to the best of th	lef, the Owner has performed examinations and taken corrective measures described in this Owner's Report
a accordance with the requirements (	of the ASME Code, Section XI.
Du alaalaa thia cartificata naither t	the inenertor nor his employer makes any warranty, expressed or implied, concerning the examinations are
corrective measures described in this	. Owner's Report, Furthermore, neither the inspector nor his employer shall be liable in any manner for an
!-! monochy destant #	or s-loss of any kind arising from or connected with this inspection.
DELEGUES SUITALLY OF DIODELLY CONTINUES A	or sychological from or connected with the map and the second
personal injury or property denimber	
SBlot	Re Commissions MT =762 ARNT
inspector's Signature	Commissions MI = 762 ARRI Retional Board, State, Province, and Endorsements

#### FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY As Required by the Provisions of the ASME Code, Section XI

	lue Star Hwy	Covert, MI		Sheet1	of		* *
	ades Nucles			Unit1			
27780 B	lue Star Hwy	Covert, Mi		Wo # Z/	111Z9	7Z nization P.O. No., Job No	., etc.
	d by <u>Consum</u>			Time Code Symbol St		M/A	
27780 B1	lue Star Hwy	. Covert. M	<u> </u>	Authorization No Expiration Date		N/A N/A	
Identification of	Add System	PRIMA	RY COOL	4NT (PCS)			·
(a) Applicable	Construction Cod	ASMEI	II 1989	Edition, NO	_ Addend	ia, <u>nla</u>	Code Ca
	dition of Section X			- ~			
				Year			
(c) Applicable S	ection XI Code Cas	es Trans	<u> </u>		:		
identification of	Components:	*					
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
	Į .				· ·	ŧ	
					<u> </u>		
					·		
			CEE	ATTACHEN			
			SEE	ATTACHED _			
			SEE	ATTACHED _			
			SEE	ATTACHED _			
Description of	Work REPLA	CE REACTO		ATTACHED _	PPER	Howincs	
•	Work REPLACE Date: Hydrostatic D	CE REACTOR	e Hessel,	N.52 CRD U	PPEC Exempt 0	Howincs	

of this form.

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(7/99)

24112972

#### FORM NIS-2 (Back)

. Remarks <u>SEE DATA K</u>	CEPORTS ATTACHED
	Applicable Manufacturer's Data Reports to be attached
,	
	•
ype Code Symbol Stamp	N/A Expiration Date N/A
igned hosp & Shua. Owner or Owner's Des	N/A Expiration Date N/A  SENIOL ENG Date FEBRUARY 15 , 2002  Ignee, Title
1 the undersigned holding a valid co	CERTIFICATE OF INSERVICE INSPECTION  Immission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province
	by <u>Factory Mutual Insurance Company</u>
Tohnston R.T.	have inspected the components describe
n this Owner's Report during the period to the best of my knowledge and belief, a accordance with the requirements of By signing this certificate neither the corrective measures described in this O	to O3/19/02 , and state the Owner has performed examinations and taken corrective measures described in this Owner's Report the ASME Code, Section XI.  Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations at wher's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for a
Killah	loss of any kind arising from or connected with this inspection.  Commissions — MI =762 ABNI
Inspector's Signature	National Board, State, Province, and Endorsements
Date 746.19 200	<u>.</u>

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed or	ASME Code
Component	Maridiacturei	Serial NO.	Doard No.	identincation	Duit	Installed	Stamped
				<u> </u>			(Yes or No)
CRD Upper	Comb. Eng.	RP-1054	N/A	PO#	01	l la séalla d	· · · · · · · · · · · · · · · · · · ·
Housing	Nuclear	RP-1054	N/A	GO361396	01	Installed	Y
CRD Upper	Comb. Eng.	RP-1055	N/A	PO#	01	Installed	Y
Housing CRD Upper	Nuclear Comb. Eng.	RP-1056	N/A	GO361396 PO#	01	Installed	Υ
Housing	Nuclear	117-1050	11/7	GO361396	"	installed	T
CRD Upper	Comb. Eng.	RP-1057	N/A	PO#	01	Installed	Y
Housing CRD Upper	Nuclear Comb. Eng.	RP-1058	N/A	GO361396 PO#	01	Installed	Ÿ
Housing	Nuclear			GO361396			
CRD Upper Housing	Comb. Eng. Nuclear	RP-1059	N/A	PO # GO361396	01	Installed	Y
CRD Upper	Comb. Eng.	RP-1060	N/A	PO#	01	installed	Υ
Housing	Nuclear			GO361396			
CRD Upper Housing	Comb. Eng. Nuclear	RP-1061	N/A	PO # GO361396	01	Installed	Y
CRD Upper	Comb. Eng.	RP-1062	N/A	PO#	01	Installed	Ÿ
Housing	Nuclear	DD 4000		GO361396		1 - 4 - 0 - 1	
CRD Upper Housing	Comb. Eng. Nuclear	RP-1063	N/A	PO # GO361396	01	installed	Υ
CRD Upper	Comb. Eng.	RP-1064	N/A	PO#	01	Installed	Υ
Housing	Nuclear	RP-1065	N/A	GO361396 PO#	01	Installed	Y
CRD Upper Housing	Comb. Eng. Nuclear	RP-1065	N/A	GO361396	01	Installed	Y
CRD Upper	Comb. Eng.	RP-1066	N/A	PO#	01	Installed	Y
Housing CRD Upper	Nuclear Comb. Eng.	RP-1067	N/A	GO361396 PO#	01	Installed	Y
Housing	Nuclear	141 - 1001		GO361396		mstalled	-
CRD Upper Housing	Comb. Eng.	RP-1068	N/A	PO # GO361396	01	Installed	Y
CRD Upper	Nuclear Comb. Eng.	RP-1069	N/A	PO#	01	Installed	Ý
Housing	Nuclear			GO361396	<u> </u>		
CRD Upper Housing	Comb. Eng. Nuclear	RP-1070	N/A	PO # GO361396	01	Installed	Ý
CRD Upper	Comb. Eng.	RP-1071	N/A	PO#	01	Installed	Y
Housing CRD Upper	Nuclear	RP-1072	N/A	GO361396 PO#	01	installed	Y
Housing	Comb. Eng. Nuclear	KF-1072	IVA	GO361396	[0]	i i i staneo	,
CRD Upper	Comb. Eng.	RP-1073	N/A	PO#	01	Installed	Υ
Housing CRD Upper	Nuclear Comb. Eng.	RP-1074	N/A	GO361396 PO#	01	Installed	Υ
Housing	Nuclear			GO361396			
CRD Upper Housing	Comb. Eng. Nuclear	RP-1075	N/A	PO # GO361396	01	Installed	Υ
CRD Upper	Comb. Eng.	RP-1076	N/A	PO#	01	Installed	Υ
Housing	Nuclear	DD 40***		GO361396	101	lmake 11 = vl	- · · · · · · · · · · · · · · · · · · ·
CRD Upper Housing	Comb. Eng. Nuclear	RP-1077	N/A	PO # GO361396	01	Installed	Υ
CRD Upper	Comb. Eng.	RP-0178	N/A	PO#	01	Installed	Y
Housing CRD Upper	Nuclear Comb. Eng.	RP-1079	N/A	GO361396 PO#	01	Installed	Υ
Housing	Nuclear	·-	17/74	GO361396		istaneu	
CRD Upper	Comb. Eng.	RP-1080	N/A	PO#	01	Installed	Y
Housing CRD Upper	Nuclear Comb. Eng.	RP-1081	N/A	GO361396 PO#	01	Installed	Y
Housing	Nuclear			GO361396	ļ		_
CRD Upper	Comb. Eng. Nuclear	RP-1082	N/A	PO # GO361396	01	Installed	Υ
Housing CRD Upper	Comb. Eng.	RP-1083	N/A	PO#	01	installed	Υ
Housing	Nuclear			GO361396	1.01	In ade 18 to 1	
CRD Upper Housing	Comb. Eng. Nuclear	RP-1084	N/A	PO # GO361396	01	Installed	Υ
CRD Upper	Comb. Eng.	RP-1085	N/A	PO#	01	installed	Y
Housing	Nuclear			GO361396			

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed or Installed	ASME Code Stamped (Yes or No)
CRD Upper Housing	Comb. Eng. Nuclear	RP-1086	N/A	PO # GO361396	01	Installed	Υ
CRD Upper Housing	Comb. Eng. Nuclear	RP-1087	N/A	PO # GO361396	01	Installed	Ÿ
CRD Upper Housing	Comb. Eng. Nuclear	RP-1088	N/A	PO # GO361396	01	Installed	Υ
CRD Upper Housing	Comb. Eng. Nuclear	RP-1089	N/A	PO # GO361396	01	Installed	Y
CRD Upper Housing	Comb. Eng. Nuclear	RP1090	N/A	PO # GO361396	01	Installed	Y
CRD Upper Housing	Comb. Eng. Nuclear	RP-1091	N/A	PO # GO361396	01	Installed	Ÿ
CRD Upper Housing	Comb. Eng. Nuclear	RP-1092	N/A	PO # GO361396	01	Installed	Y
CRD Upper Housing	Comb. Eng. Nuclear	RP-1093	N/A	PO # GO361396	01	Installed	Υ
CRD Upper Housing	Comb. Eng. Nuclear	RP-1094	N/A	PO # GO361396	01	Installed	Υ
CRD Upper Housing	Comb. Eng. Nuclear	RP-1095	N/A	PO# GO361396	01	Installed	Y
CRD Upper Housing	Comb. Eng. Nuclear	RP-1096	N/A	PO# GO361396	01	Installed	Ÿ
CRD Upper Housing	Comb. Eng. Nuclear	RP-1097	N/A	PO # GO361396	01	Installed	Υ
CRD Upper Housing	Comb. Eng. Nuclear	RP-2005	N/A	PO # GO361396	01	Installed	Y
Studs	Nova Mach. Products	Ht. # 534007	N/A	PO # GO3590321-1	01	Installed	N

#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III

Not to Exceed One day's production

Pg. 1 of 2 Manufactured and certified by Ionics, Incorporated, Bridgeville Division, 3039 Washington Pike, Bridgeville, Pennsylvania, 15017 (name and address of NPT Certificate Holder) Manufactured for Westinghouse Electric Company LLC, Nuclear Services Buisiness Unit, 2000 Day Hill Road, Windsor, CT, 06095 (name and address of purchaser) Location of Installation Consumers Energy Company, Palisades Generating Plant, 27780 Blue Star Memorial Highway, Covert, MI 49043 (name and address) 75,000 SA-312 TP 316 2001 SA 182 TP 347 75,000 Type CND-E-5003G01 Rev. 6 (lest prig) (CRNI) (rigneric eliener) (matil. spec no.) ( drawing number) N/A No ASME Code, Section III, Division 1: 1989 (addenda date) (ciass) (Code case no.) (edition) Date . Revision Fabricated in accordance with Const. Spec. (Div. 2 only). Remarks Upper Housing Replacement Assembly consisting of upper flange welded to a pipe and the pipe welded to a reducer & flange. Manufactured on Ionics Contract 1149. Supplied on Westinghouse Contract 4500070105 14'-6.5" Length overall ( ft & in.) Nom. Thickness (in.) \_\_\_\_ In. design thickness (in.) \_\_\_\_ Dia. ID (ft & in.) When applicable, Certificate Holders' Data Reports are attached for each item of this report. National Part or Appurtenance National Part or Appurtanence Board No. Serial Number 117.254 Board No.1. 3, Serial Number In Numerical Order In Numerical order **RP-1054** (26)(1) (27) (2): 1 (28). . . . (3) (29)(4)7 (30) (5) · : 6 .(31) . . . ij. (6)(32)(7) (33)(8) (34)(9) (35)(10)(36)(11)(37)(12) (38)(13)(39)(14)(40)(15)(41)(16)(42)(17)(43)(18)(44)(19) (45)(20)(46)(21)(47)(22)(48)(23)(49) (24)(50)(25)

Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 % x 11, (2) information in items 2 and 3 on this Data Report is nctuded on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

osi.

Temp.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Hydro. Test pressure.

650

°F.

3200

(when applicable)

at temp. \_65\_\*F

10. Design pressure

7/98)

2485

	Certificate Holder's Serial Nos	RP-1054	through	RP-1054	
	CERTIFICATION O	F DESIGN			
esign specifications cartifled by		P.E. State	Rec	g. No	
esign report* certified by	(when applicable)	P.E. State	Re	g. No	
•	CERTIFICATE OF CO	MPLIANCE			
Ve certify that the statements made in conforms to the rules of construction of	n this report are correct and that this (these of the ASME Code, Section III, Division 1.	se) <u>Uppe</u>	r Housing Replace	ment Assembly	·
(PT Certificate of Authorization No	N-2974-1	Expires	March 26. 2	002	· 3
nate 1272-01 Name	Jonics Incomprated	Signed	D. S.	resentative)	
e de la companya de l	CERTIFICATE OF IN	SPECTION	,	•	:
f Pennsylvania and employed by f Johnston. RI set of my knowledge and belief, the I, Division 1. Each part listed has been y signing this certificate, neither the in this Data Report. Furthermore, neither	rission issued by the National Board of Boller  Factory Murhal Insurance Company have inspected these Items described in this C Certificate Holder has fabricated these para authorized for stamping on the date shown a respector nor his employer makes any warranter the inspector nor his employer shall be	Data Report on	in accordance with	goese, and state that the ASME Code, S	t to the section
r loss of any kind ansing from or co	nnected with this inspection.	commissions	MUAN	As sur	
	4,,,,,, ,, ,, ,,, ,,, ,,,,	•	•		

# FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES' As Required by the provisions of the ASME Code, Section III

As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

rufactured and certified by <u>Ionics.</u>		(name and addre	ess of NPT Certificate Holder)	
ufactured for Westinghouse Elec	tric Company I I C. Nucl	ear Consider Builiness II	-i- 2000 Day 12:11 Day	318'- 4 OT 0000
	ALO COMPANY DUC, TRUCK	(name and address of purchaser)	iiit, 2000 Day Hill Koad,	Windsor, CT 06095
		•		
ation of Installation <u>Consumers</u>	Energy Company, Palisa	des Generating Plant, 27	780 Blue Star Memorial I	Highway, Covert, MI 49043
		(name and address)		
	<u>-312 TP 316</u> 182 TP 347	75,000		
	1.104.17.347 natī. spec no.)	75,000 (lensile strength)	N/A	
, , ,		franzon an andriñ	(CRN)	(year built)
$^{ t ME}$ Code, Section III, Division 1: $\_$		No	111	N/A
	(edition)	(addenda date)	(dass)	(Code case no.)
icated in accordance with Const. S	nen (Dik 2 notu) N	I/A Revis	ulan NT/A	D. ( ) 3744
		(no.)		
arks <u>Upper Housing Replacemen</u>	Assembly consisting of u	oper flange welded to a r	pipe and the pipe welded t	o a reducer & flance.
Manuf Manuf	actured on Ionics Contrac	<u>t 1149.</u>		
Supplie	ed on Westinghouse Cont	ract 4500070105.		
t. Thickness (in.) In. design	thickness (in.)	Dia. ID (ft & in.)	Length	overall ( ft & in.) 14'-6.5"
n applicable, Certificate Holders' D	ata Reports are attached	for each item of this repo	rt:	
	<del> </del>			
Part or Appurtenance	National		Part or Appurtenance	Mattered
Serial Number	Board No.		Serial Number	National Board No.
	in Numerical order			in Numerical Order
RP-1055				
RP-1055	·	(26)	İ	
		(27)		
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Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) Information in items 2 and 3 on this Data Report is cluded on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

	Certificate Holders Senai Nos.	. <u>HP-1055</u>	Inrough RP-1035	
	CERTIFICATION	N OF DESIGN		
esign specifications certified by	Not Applicable	P.E. State	Reg. No.	
esign report* certified by	(when applicable )  Not Applicable (when applicable )	P.E. State	Reg. No	<u>-</u>
	CERTIFICATE OF	COMPLIANCE		
Ve certify that the statements made in Conforms to the rules of construction of	n this report are correct and that this to the ASME Code, Section III, Division	(these) <u>Upper</u> n 1.	Housing Replacement Assembly	· <del>-</del>
NPT Certificate of Authorization No	N-2974-1	Expires	March 26, 2002	
Date _/2-11-0\ Name _	Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized representative)	
	CERTIFICATE O	F INSPECTION		•
of Pennsylvania and employed by of Johnston, RI pest of my knowledge and belief, the II, Division 1. Each part listed has been accepted to the confidence and the con	Factory Mutual Insurance Company have inspected these items described in the Certificate Holder has fabricated these an authorized for stamping on the date should be a company to the inspector nor his employer makes any their the inspector nor his employer shappened with this inspection.	this Data Report on Page parts or appurtenances wan above. warranty, expressed or in the liable in any manner.  Commissions	sel Inspectors and the State and Province    2007  , and state that to to in accordance with the ASME Code, Section of the equipment describer for any personal injury or property damage.	he on ed ge
74-24- Signed_	(Authorized Nuclear Inspector)	[Nat'l	Bd. (incl. endorsements) and state or prov. and	no)

## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES' As Required by the provisions of the ASME Code, Section III

As Required by the provisions of the ASME Code, Section III
Not to Exceed One day's production

nactur	-	•	name and add	ress of pur	thaser)		
tion of	installation <u>Consum</u>	ers Energy Company, Palisac				orial F	lighway, Covert, MT 49043
		SA-312 TP 316	75.0	nd address; DO			
CNE	D-E-5003G01 Rev. 6	SA 182 TP 347	75.00		— N/A		2001
	ring number)	(malfL spec no.)	(lensie str	angth)	(CRN)		(year built)
E Code	e, Section III, Division 1:	1989	No		1		N/A
_ ~~	e, C400011 III, D112001 1	(edition)	(addenda	date)	(class)		(Code case no.)
atad i	n accordance with Cons	i Coop (Dir 2 osh) N	/A		Revision N/A		Date N/A
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rks_U	loper Housing Replacer	nent Assembly consisting of u	pper flange	welded	to a pipe and the pipe wel	ided to	
		nufactured on Tonics Contrac		70105	· · · · · · · · · · · · · · · · · · ·		
Thick		lign thickness (in.)				noth o	overall ( ft & In.) 14'-6.5"
BOOM	cable. Certificate Holder	s' Data Reports are attached	for each ite	on of thi	s report:		· · · · · · · · · · · · · · · · · · ·
	Part or Appurtamence	National	].	ļ	Part or Appurtenance	٠- : ا	National
	Serial Number	Board No.	ĺ		Serial Number	- 1	Board No.
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applemental information in the form of lists, skatches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in Items 2 and 3 on this Data Report is uded on each sheet; (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

	Certificate Holder's Serial Nos.	RP-1056	through	RP-1056
	CERTIFICATION (	OF DESIGN		
gn specifications certified by	Not Applicable	P.E. State	Req.	No
gn report* certified by	Not Applicable (when applicable)	P.E. State	Reg.	No
•	CERTIFICATE OF C	OMPLIANCE		
certify that the statements made in	s this report are correct and that this (the	sa) Upperi	Housino Replacen	nent Assambly
	f the ASME Code, Section III, Division 1			
Certificate of Authorization No.	N-2974-1	Expires	March 26, 200	
ation of	Ionics, Incorporated		Jon Par	5
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ا المان	CERTIFICATE OF IN	ISPECTION		
San	\$	ingreps.		
s undersigned,; holding a valid comm	alssion issued by the National Board of Boller	r and Pressure Vesso	al inspectors and	the State and Province
ennsylvania and employed by	Factory Mutual Insurance Company			
hnston, RI h	ave inspected these items described in this I	Data Report on	L. 10,200	and state that to the
Of my knowledge and bellet, the t	Certificate Holder has fabricated these pa authorized for stamping on the date shown a	ns or appurenances in	1 SCCOLOSUCE MITU	the ASME Code, Section
igning this certificate, neither the in	spector nor his employer makes any warr	anty, expressed or imp	illed, concerning	the equipment described
is Data Report Furthermore, neithers of any kind arising from or con	er the inspector nor his employer shall be	e liable in any manner	for any personal l	njury or property damage
				0
Signed_	Alston .	commissions ARA	ZIY Accel	ts) and state or now and no.
	(Authorized Nuclear Inspector)	INST P	id lindi endomemen	is) and sisia of once, and col

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES' As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

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Take	3. Incomorated, Badgeville	Division, 3039 Wash	nington Pike, Bridgeville, Pe	nnsylvania, 15017
		•	toruss of NPT Certificate Holder)	
clured for Westinghouse El	ectric Company LLC, Nucl-	car Services Buisiness	Unit. 2000 Day Hill Road, 1	Windsor, CT 06095
		(name and address of purchase	R)	
n of InstallationConsume	rs Energy Company, Palisa	des Generating Plant.	27780 Blue Star Memorial H	lighway, Covert, MI 49043
		(varne and accines)		150 may, 50 veril, (111 4704)
	SA-312 TP 316	75,000		
drawing number)	SA 182 TP 347 (mart spec no.)	75.000	N/A	2001
	•	(lensile strength)	(CRM)	(year built)
Code, Section III, Division 1:		No		N/A
	(edition)	(addenda dale)	(class)	(Code case no.)
ed in accordance with Const.	Spec. (Div. 2 only) N	ī/A Re	vision N/A	Date N/A
	•••	(m)		
Upper Housing Replacement	ani Assembly consisting of u	pper flange welded to	s pipe and the pipe welded to	a reducer & flange.
TATE U	MINERAL OF TOUCK COURSE	1149.		
Supp	olied on Westinghouse Cont	ract 4500070105,		
nickness (in.) — in. design pplicable, Centificate Holders	n unconess (in.) —	_ Dia. ID (ft & in.)	Length o	verall ( ft & in.) 14'-6.5"
	Sam Liebore era Briderian	ion agest traits of fulls 19	port	
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Part or Appurtenance Serial Number	National Board No.		Part or Appurtenance	National
04.14.10.1	in Numerical order		Serial Number	Board No. In Numerical Order
			1	in Numerical Order
RP-1057		(26)		
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plemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is 10d on each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

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	Certificate Holder's Sedal Nos.	PP-1057	through RP-1057
	CERTIFICATION O	F DESIGN	.•
Design specifications certified by	Not Applicable	P.E. State	Reg. No.
Design report* certified by	(when applicable )  Not Applicable  (when applicable )	P.E. State	Reg. No
.*	CERTIFICATE OF CO	MPLIANCE	
We certify that the statements made Conforms to the rules of construction	In this report are correct and that this (these of the ASME Code, Section III, Division 1	се) <u>Uppe</u>	r Housing Replacement Assembly
NPT Certificate of Authorization No.	N-2974-1	Expires	March 26, 2002
Date	Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized representative)
	CERTIFICATE OF IN	SPECTION	•
of Pennsylvania and employed by of Johnston, RI best of my knowledge and belief, the III, Division 1. Each part listed has been by signing this certificate, neither the In this Data Report, Furthermore, neither	mission issued by the National Board of Boiler  Pactory Mutual Insurance Company have inspected these items described in this is Certificate Holder has fabricated these pain authorized for stamping on the date shown a inspector nor his employer makes any warm their the inspector nor his employer shall be connected with this inspection.	Data Report on Aris or appurtenances above. antly, expressed or keep labele in any mann	and state that to the s in accordance with the ASME Code, Section implied, concerning the equipment described ser for any personal injury or property damage

Pg. 1 of 2

## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES' As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

ocation of installationConsumer.	Energy Company, Pa	(name and addre	ng Plant 277	80 Blue Star Memorial Hi	zhway. Coyert. MI 49043
	A-312 TP 316	(name and 75,00	MODINEE)		
	A 182 TP 347	75.00		N/A	2001
	(mart, spec no.)	(lensie stre		(CRN)	(year buil)
SME Code, Section III, Division 1:	1989	No		1	N/A (Code case no.)
	(adition)	(addende o	Salie)	(class)	••••
bricated in accordance with Const.	Spec. (Div. 2 only)	N/A	Revisi	onN/A	DateN/A
emarks Upper Housing Replaceme		(20.1	welded to a p	ipe and the pipe welded to	a reducer & flange.
Manu	rfactured on Ionics Cor	ntract 1149.	• •		
Supp	ied on Westinghouse	Contract 450007	0105.	Length ov	erali ( ft & in.) 14'-6.5"
lom. Thickness (in.)in. designing applicable, Certificate Holders'	n inkkness (in.)		n of this repor	t	
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Part or Appurtenance	National		ļ	Part or Appurtenance	National
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RP-1058	. —		(OM)	·	•
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	Certificate Holder's Serial Nos	RP-1058	through	RP-1058
	CERTIFICATION C	F DESIGN		
Design specifications certified by	Not Applicable	P.E. State	Reg.	No
Design report* certified by	(when applicable ) Not Applicable (when applicable )	P.E. State	Reg.	No
	CERTIFICATE OF CO	MPLIANCE	****	
We certify that the statements made in Conforme to the rules of construction of	this report are correct and that this (thes the ASME Code, Section III, Division 1.	e) <u>Uoca</u>	Housing Replacem	ent Assembly
NPT Certificate of Authorization No	N-2974-1	Expires	March 26, 200	2
Date 12-9-01 Name	Ionics, Incorporated (NPT Certificate Holder)	Signed	Cauthorized repres	entative)
	CERTIFICATE OF IN	SPECTION		
I, the undersigned, holding a valid commis of Pennsylvania and employed by of Johnston, RI har best of my knowledge and belief, the Colli, Division 1. Each part listed has been a By signing this certificate, neither the ins in this Data Report. Furthermore, neither or loss of any kind arising from or connicate 2-3-2 Signed	Factory Mutual Insurance Company re inspected these items described in this Destricted. Holder has fabricated these per uthorized for stamping on the date shown at pector nor his employer makes any warran the inspector nor his employer shall be ected with this inspection.	ata Report on se sor appurlenances nove.  nty, expressed or im liable in any manne	in accordance with the	and state that to the he ASME Code, Section he equipment described jury or property damage
	(Authorized Nuclear Inspector)	[Nat'l.	Bd. (incl. endorsements	s) and state or prov. and no)

# FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES' As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

Nanufactured for Westinghouse El	ectric Company LLC, Nuc	lear Services Buisiness	Unit. 2000 Day Hill Road.	Windsor, CT 06095
		frame and excusts of britishess	n	
ocation of Installation <u>Consume</u>	rs Encrey Company, Palisa	ides Generating Plant,	27780 Blue Star Memorial I	Highway, Covert, MT 49043
	SA-312 TP 316	(name and address) 75,000		
ype <u>CND-E-5003G01 Rev. 6</u>	SA 182 TP 347	75,000	N/A	
( drawing number)	(mart. spec no.)	(lensile strangth)	(CRM)	(year buil)
SME Code, Section III, Division 1:	1989	No	•	<b>.</b>
	(edition)	(addenda date)	(class)	(Code case no.)
abricated in accordance with Const.	Spec. (Div. 2 oniv)	VA Ba	vision N/A	Data Mili
		(20)		DateN/A
marks Upper Housing Replaceme	ent Assembly consisting of unfactured on Ionics Contrac	Poer flance welded to a	t bloe and the pine welded to	a reducer & flance.
Supp	lied on Westinghouse Cont	tract 4500070105		<del>-</del>
om. Thickness (in.) in. desig	n thickness (in )	Die ID /# & le \	Length o	verall ( ft & In.) 14'-6.5"
Then applicable, Certificate Holders'	Data Reports are attached	for each item of this rep	port:	(((d x2)
· · · · · · · · · · · · · · · · · · ·	<i>1</i> 11			
Part or Appurtenance Serial Number	National		Part or Appurtenance	National
Conta Notice	Board No. in Numerical order	1 1	Serial Number	Board No.
22 -050		1 1		In Numerical Order
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This form (E00040) may be obtained from the Order dept., ASME, 22 Law Orivo, Box 2300, Fairfield, NJ 07007-2300

	Certificate Holder's Serial Nos.	RP-1059	lhrough	RP-1059
	CERTIFICATION OF	DESIGN		
Design specifications certified by	Not Applicable (when applicable)	P.E. State	Reg. No	o
Design report* certified by	Not Applicable (when applicable)	P.E. State	Reg. No	)
	CERTIFICATE OF COM	PLIANCE		
We certify that the statements made in Conforms to the rules of construction of	this report are correct and that this (these) if the ASME Code, Section III, Division 1.	Upper	Housing Replacement	Assembly
NPT Certificate of Authorization No	N-2974-1	Expires	March 26, 2002	
Date 12-9-01 Name _	Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized represent	ative)
	CERTIFICATE OF INSP	ECTION		
of Johnston, RI has best of my knowledge and belief, the Could be significant of the C	ave inspected these items described in this Data Certificate Holder has fabricated these parts authorized for stamping on the date shown about spector nor his employer makes any warrants or the inspector nor his employer shall be its	a Report on Sorrappurtenances in the same of the same	accordance with the idea, concerning the for any personal injury	, and state that to the ASME Code, Section equipment described y or property damage
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# FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\*

	PARIS AND APPURIENANCES	
As Required by the	provisions of the ASME Code, Section III	
Not to	Exceed One day's production	
	_	

		•	eddress of NPT Cartificate Holder)	
Manufactured for Westinghouse	Electric Company LLC, Nucle	ear Services Buisines name and address of purchas	s Unit, 2000 Day Hill Roa en	Windsor CT 06095
ocation of installationConsum	ners Energy Company, Palisar	les Generating Plant	27780 Rhie Ster Memorie	Highway, Covert, MI 49043
<del></del>		(name and address)	27760 Blue Star Memoria	HIZHWAY, COVERT, MI 49043
O.D. P. (101001 D	SA-312 TP 316	75.000	•	
ype <u>CND-E-5003G01 Rev. 6</u> (drawing number)	SA 182 TP 347	75,000	N/A	2001
( or and the state)	(maft. spec no.)	(lensile strength)	(CRM)	(year built)
SME Code, Section III, Division 1:	1989	_ Na	1	N/A
	(edition)	(addenda date)	(ciass)	(Code case no.)
abricated in accordance with Cons	t. Spec. (Div. 2 only) N	/A 0-	evision N/A	
_		(00.)		Date
emarks Upper Housing Replacen	nent Assembly consisting of ur	per flance welded to	a pipe and the pipe welded	to a reducer & flance.
MI	numerured on Ionics Contract	: 1149.		
Sir	policed on Westinghouse Contr	act 4500070105.		<u> · ·                                  </u>
om. Thickness (in.) in. des	ign thickness (in.)	_ Dia. ID (it & in.)	Length	overall (ft & in.) 14'-6.5"
from applicable, Certificate Holder	S Data Reports are attached for	or each Item of this re	port:	Property of the second
Part or Apputtenance	National		Part or Appurtenance	National
Serial Number	Board No.		Serial Number	Board No.
	in Numerical order		•	in Numerical Order
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(7/98)

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

	Certificata Holder's Seri	al Nos. <u>RP-1060</u>	throughRP-1080
	CERTIFICA	ation of design	
Design specifications certified by	Not Applicable	P.E. State	Reg. No
Design report* certified by	(when applicable) Not Applicable (when applicable)	P.E. State	Reg. No.
	CERTIFICA	TE OF COMPLIANCE	
We certify that the statements made Conforms to the rules of construction:			ousing Replacement Assembly
t the second	Contraction Manager		Marie Sand Sand
NPT Certificate of Authorization No.	N-2974-1	Expires	March 26, 2002
Date 13-7:01 Name	Ionics Incorporated (NPT Certificate Holder)	Signed 7.	(evitorizad representative)
लागी है। चार्यकृष्टि गामा के तक स्वतिकार	Transition CERTIFICA		
of Pennsylvania and employed by of Johnston, RI best of my knowledge and belief, the III, Division 1. Each part listed has been	Factory Mutual Insurance Compave Inspected these Items describe Certificate Holder has fabricated authorized for stamping on the date.	pany ed in this Data Report on these parts or appurtenances in a shown above.	Inspectors and the State and Province and state that to the accordance with the ASME Code, Section and, concerning the equipment described
in this Data Report. Furthermore, neith or loss of any kind arising from or co	jer-the inspector nor-his employe	r, shall be liable in any manner fo	r any personal lijury of property damage
Date 12-8-2 Signed	What Same	Commissions LB &	14 An HO345
	(Authorized Nuclear Inspector)	[Nat'l. Bd	(Incl. endorsements) and state or prov. and no) (
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#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III

			Sindalan 2020 Weath	naton Pike Bridaeville I	Pennsylvania, 15017
	ufactured and certified by Ionics		(Halle are one	,	•
dan	ulactured for <u>Westinghouse Ele</u>	ctric Company LLC, Nuclea	r Services Buisiness I	Init, 2000 Day Hill Road	Windsor, CT 06095
		(12			
Loca	tion of installationConsumer	s Energy Company, Palisade	s Generating Plant. 2	7780 Blue Star Memoria	Highway, Covert, MI 49043
		A-312 TP 316	(name and address)		
Type	CND-E-5003G01 Rev. 6	A 182 TP 347	75,000	N/A	
, , pc	( quawing number)	(mail spec no.)	(lensile strength)	(CRN)	
ASM	E Codo, Section III, Division 1:	1989	No		N/A (Code case no.)
~O.IT	E Octo, octator in a	(edition)	(addenda data)	(dass)	,
Fahd	cated in accordance with Const.	Spec. (Div. 2 only)N/	A Rev	isionN/A	DateN/A
		at Assambly concletion of ur	(no.) oper flange welded to a	pipe and the pipe welder	to a reducer & flange.
Rem	Manı	afactured on lonics Contract	1149.		
	Sim	lied on Westinghouse Contr	act 4500070105.		h overall ( ft & in.) 14'-6.5"
Non	Thistones (in ) in decis	n thickness (in )	Dia, ID (ft & in.)	Lengt	h overall ( ft & in.) 14'-6.5"
Whe	n applicable, Certificale Holders'	Data Reports are attached for	or each item of this rep	ion:	
					National
	Part or Appurtenance	National		Part or Appurtenance Serial Number	Board No.
	Serial Number	Board No. in Numerical order		2018t Harman	in Numerical Order
		Itt tafttidien ciae	·		
/41	RP-1061	-	(26)		
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(12 (13 (14 (15 (16 (17 (18 (20 (21	) ) ) ) ) )		(40) (41) (42) (43) (44) (45) (46)		
(12 (13 (14 (15 (16 (17 (18 (20 (21 (21			(40) (41) (42) (43) (44) (45) (46) (47)		
(12 (13 (14 (15 (16 (17 (18 (19 (20 (21			(40) (41) (42) (43) (44) (45) (46)		

"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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(7/98)

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

10. Design pressure 2485

(when applicable)

	Certificate Holder's Serial Nos	RP-1061	through	RP-1061
	CERTIFICATION	OF DESIGN	··	•
Dealer coeffications redified by	Not Applicable	P.E. State	Reg.	No
Design specifications certified by	(when applicable)	P.F. State	_Req.	No
Dasign report* certified by	Not Applicable (when applicable )			
4	CERTIFICATE OF C	OMPLIANCE		
We certify that the statements made Conforms to the rules of construction	in this report are correct and that this (the of the ASME Code, Section III, Division	ese) <u>Uppa</u> 1.	r Housing Reciacen	ykimeaaA tneu
••	Camera Comment			•
NPT Certificate of Authorization No.				02 -
Name 12:2:2:21	Tonics Incorporated	Signed	D-S	
Dale 12 10 Name	(NPT Certificate Holder)	,	(authorized repre	sentative)
	CERTIFICATE OF	INSPECTION		
t at a control to a to a to a control comme	mission issued by the National Board of Boile	er and Pressure Ves	sel inspectors and	the State and Province
of Pennsylvania and employed by	Pactory Munial Insurance Company		<del>-                                    </del>	2 and state that to the
	Pactory Munual Insurance Company have inspected these Items described in this Certificate Holder has fabricated these p	: Data Report on	in accordance with	the ASME Code, Section
bast of my knowledge and belief, the	n authorized for stamping on the date shown	above.	maliad concerning	the equipment described
By signing this certificate, neither the	n authorized for stamping on the date snown inspector nor his employer makes any walther the inspector nor his employer shall the inspector of his employer shall the inspector of his employer shall the inspector of the inspecto	rranty, expressed or II be  Ilable in any mann	er for any personal	injury or property damage
or loss of any kind arising from or c	OUUSCIEG MIN TUR INSPACTION.			./
10 7 9	Delit Sum	Commissions No	9 8314	AN KA2245
Data /2 -/ - day Signed		falad	Rd God andorseme	nts) and state or prov. and no]

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#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\*

As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

Manufactured and certified by Ionics.		frame and area		
Manufactured for Westinghouse Elect	(**	THE STATE SECTION OF PERSONS AND		
Location of installation Consumers	Energy Company, Palisad	es Generating Plant, 277	780 Blue Star Memoria	Highway, Covert, MI 49043
	312 TP 316	75.000		
Type CND-E-5003G01 Rev. 6 SA	182 TP 347	75.000	N/A	
	sett spec no.)	(lansile strength)	(CRN)	•
ASME Code, Saction III, Division 1:	1989	No		N/A (Code case no.)
ASME CODE, SECTION III, DIVIDION II	(edition)	(addenda date)	(dass)	,
Fabricaled in accordance with Const. S	pec. (Div. 2 only) N	(nc.) Revis		DateN/A
Remarks Upper Housing Replacemen	Assembly consisting of ut	per flange welded to a r	pipe and the pipe welde	d to a reducer & flange.
Manut	actured on ionics Contract	1197.		<u> </u>
Suppli	ed on Westinghouse Contr	act 4500070105.	lenoi	th overall (ft & in.) 14'-6.5"
Nom. Thickness (in.) Jn. design When applicable, Certificate Holders' E	thickness (in.)	or each item of this repo	ert:	
When applicable, Certificate Holders L	Agra Vehous ale amportor i			1
	National		Part or Appurtenance	National
Part or Appurtenance Sprial Number	Board No.		Serial Number	Board No. In Numerical Order
Object Lauren	in Numerical order			At Hallenham Arab.
RP-1062		7263		,
(1)		(26) ——		
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(5) (6)	•	(31)		
		(32)		<del></del>
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(11)		(36)		
(12)		(38)		
(13)		(39)		
(14)		(40)		
(15)		(41)		
(16)		(42)		
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(19)		(45)	- 	
		(46)		
	•	(47)		
(21)		I I (45)		
(21) (22)				· ·
(21)		(49)		

"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in Items 2 and 3 on this Data Report included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-

(7.98)

Certificate Holder's Senal Nos.	RP-1062	_through	RF-1002
CERTIFICATION OF	DESIGN		
Design specifications certified by Not Applicable (when applicable)  Design report* certified by Not Applicable (when applicable)			
CERTIFICATE OF CON	IPLIANCE		,
We cartify that the statements made in this report are correct and that this (these Conforms to the rules of construction of the ASME Code, Section III, Division 1.	) Upper)	lousing Replacement	Assembly
NPT Certificate of Authorization No. N-2974-1	Expires	March 26, 2002	,
Date 12: 6:0   Name   Ionics Incorporated (NPT Certificate Holder)	SignedT	(authorized represent	ative)
CERTIFICATE OF INS			
I. the undersigned, holding a valid commission issued by the National Board of Boller of Pennsylvania and employed by Factory Murual Insurance Company of Inhnston. R1 have inspected these Items described in this Debest of my knowledge and belief, the Certificate Holder has fabricated these part III, Division 1. Each part listed has been authorized for stamping on the date shown all By signing this certificate, neither the inspector nor his employer makes any warral in this Data Report. Furthermore, neither the inspector nor his employer shall be or loss of any kind arising from or connected with this Inspection.  Date 12-6-201 Signed (Authorized Nuclear Inspector)	ata Report on Ses or appurtenances I ove.  nty, expressed or implicable in any manner	n accordance with the plied, concerning the for any personal inju	ASME Code, Section equipment described ry or property damage

## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES' As Required by the provisions of the ASME Code, Section III

As Required by the provisions of the ASME Code, Section III
Not to Exceed One day's production

	onics. Incorporated, Bridgeville		ddress of NPT Cardificate Holder)	
nufactured for Westinghous	e Electric Company LLC, Nucle			d. Windsor, CT 06095
	•	name and address of purchase	-,	
ation of installation <u>Cons</u>	umers Energy Company, Palisad	es Generating Plant,	27780 Blue Star Memoria	al Highway, Covert, MI 49043
	SA-312 TP 316	(name and address) 75,000		
e CND-E-5003G01 Rev. 6		75,000	N/A	2001
(drawing number)	(mat1. spec no.)	(lensile strangel)	(CRM)	(year built)
ME Code, Section III, Division	n 1: 1989	No	1	N/A
are occo, operant in, presion	(edition)	(addenda dele)	(cp:zz)	(Code case no.)
ricated in accordance with Co	onst. Spec. (Div. 2 oniv) N/	7Å De	ovision N/A	Date N/A
		(na.)		
	cement Assembly consisting of un		a pipe and the pipe welde	d to a reducer & flange.
	Manufactured on Ionics Contract		•	
	Supplied on Westinghouse Controls thickness (In.)		· · · · · · · · · · · · · · · · · · ·	th overall ( it & in.) 14'-6.5"
n. Inickness (m.) n. (	ders. Data Reports are attached for	; Disk to (it a in.)		COVERED ( IL E III.)
air abhuarair, annsuara i ia	dolo and tropolis and disserted to			
	·			No.
Part or Appurtenance Serial Number	National Board No.		Part or Appurtenance	National Board No.
Sensu Number	In Numerical order	1.1	. 1 . Oddin Junion	in Numericai Order
) RP-1063		(26)	* المحمد	•
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)		(29)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	¢. 1,-	(31)	<u> </u>	
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B)		(33)	Appendix and the second second	
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2)		(37)		
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η		(42)		
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1)		(47)		
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\*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

	Certificate Holder's Serts	II Nos RP-1063	throughF	IP-1063
	CERTIFICA	TION OF DESIGN		
				· er
ign specifications certified by	Not Apolicable (when applicable )	P.E. State	Reg. No.	
gn report certified by	Not Applicable	P.E. State	Reg. No.	
	(when applicable)			
•	CERTIFICAT	E OF COMPLIANCE		
certify that the statements made orms to the rules of construction	in this report are correct and that of the ASME Code, Section III, D	this (these) Uppe	r Housing Replacement As	sembly
	The second of th	1 + (23 12 <b>55 - 4</b> 5 - 54)		e e e e e e e e e e e e e e e e e e e
Certificate of Authorization No		Expires	March 26, 2002	
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Although # T	Car of the control of		• •	
2.131	CERTIFICAT	E OF INSPECTION	•	15.00
	•	· Marie ·		Fig. 7
		i i i	<i>.</i>	
i Lipdersigned Lholding a valid com-	mission issued by the National Board	of Bollor and Branevan Voc	rel increasion and the C	are and Browner
consvivania and employed by	Factory Mutual Insurance Comm	O COURT MIN PIESSUID TES	Sei insheciois min file 2	iale and Province
neten PI	have inspected these items describe	a District Constitution	1.83	
hi my knowledge and helief the	Certificate Holder has fabricated t	o in this Data Report on	to according to the AC	ICI STZIO BIZI ID DIO
Nision 1. Fach part listed has been	authorized for stamping on the date	nese hers of appartenances	III GOODIGENES ANTI DIS VO	ME CODE, SECTION
ioning -this -certificate -neither the -i	nspector nor his employer makes	any warranty evacaged or im	plied concerning the equ	loment described
S. Data Report Furthermore, nekt	ner the inspector nor his employer	shall be liable in any manne	r for any personal injury of	property damage
s of any kind ansing from or co	nnected with this inspection.	ISE .		
	Q/. Y	Commissions MS	es mes De	
Signed_	Sept Series	Commissions	001710 1/2	24
	(Authorized Nuclear Inspector)	(Net'L	Bd. (Incl. endorsements) and s	tate or prov. and no)
		1257		
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Page 8

#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III

		NOT TO EX	ceed One day's p		Pg. 1 of :
	ctured and certified by Ionics. I		•		
Manufac	ctured for Westinghouse Elect	ric Company LLC, Nucl	ear Services Buisiness U (name and address of purchaser)	nit. 2000 Day Hill Road.	Windsor, CT 06095
	of installationConsumers				Highway, Covert, MI 49043
Location			frights are non-	700 0100 0101 1720112	
	SA	312 TP 316	75.000	N/A	2001
Type <u>Ç</u>	ND-E-5003G01 Rev. 5 SA	182 TP 347 Lati spec no.)	75.000 (tensile strength)	(CRN)	(year built)
•	training inditions		· · · · · · · · · · · · · · · · · · ·	. 1	N/A
ASME (	Code, Section III, Division 1:	(edition)	No (addenda date)	(dass)	(Code case no.)
Eabricat	ed in accordance with Const. S	pec. (Div. 2 only)	N/A Rev		Date <u>N/A</u>
i Bulloui		Accomply consisting of	(no.) upper flange welded to a	pine and the pipe welded	t to a reducer & flange.
Remarks					
				Lengt	h overall ( # & in.) 14'-6.5"
Nom. T	hickness (in.) — in. design	thickness (in.)	Dia. ID (it & in.)	ort:	h overall ( ft & in.)14'-6.5"
When a	hickness (in.) —— in. design applicable, Certificate Holders' [	ata Reports are attached	1101 64011161110111011101		
				Part or Appurtenance	National
	Part or Appurtenance Serial Number	National Board No.	•	Serial Number	Board No. In Numerical Order
	29usi vompar	in Numerical order			in Numerical Order
(1)	RP-1064		(26)		·
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(23)			(49)		·
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(25)					
<u> </u>		psi. Temp.	650	'F. Hydro. Test press	sure 3200 at temp. (when applicable)
	n pressure2485		650		

\*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is  $8 \% \times 11$ , (2) included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-230

(7/98)

Certificate Holder's Serial Nos.	RP-1064 through RF-1004
CERTIFICATION OF	OF DESIGN
Not Applicable	P.E. StateReg. No
Design specifications certified by Not Applicable (when applicable )  Design report certified by Not Applicable )	P.E. StateReg. No
(when applicable)	
CERTIFICATE OF CO	OMPLIANCE
We certify that the statements made in this report are correct and that this (these Conforms to the rules of construction of the ASME Code, Section III, Division 1.	ese) <u>Upper Housing Replacement Assembly</u> 1.
NIPT Certificate of Authorization No	Expires March 26, 2002
Date 12.5.01 Name	Signed D. Save (authorized representative)
CERTIFICATE OF IN	INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler of Pennsylvania and employed by Factory Mutual Insurance Company of Johnston. RI have inspected these items described in this Dest of my knowledge and belief, the Certificate Holder has fabricated these palls, Division 1. Each part listed has been authorized for stamping on the date shown a By signing this certificate, neither the inspector nor his employer makes any warm in this Data Report. Furthermore, neither the inspector nor his employer shall be or loss of any kind arising from or connected with this inspection.	s Data Report on parts or appurtenances in accordance with the ASME Code, Section above.

Pg. 1 of 2

# FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section !!! Not to Exceed One day's production

	Manufactured and certified by Ion				(Haite	THE STORES OF 1	YP1 Controle Holder)	
	Manufactured for Westinghouse	Electric Company LLC.	Nuclear Sc (name a	A add	s Buis ress of pa	iness Unit. 20 uchaser)	000 Day Hill Road	Windsor CT 06095
	Location of installationConsum	ners Encrey Company, F	alisades Ge	ner:	ting Pl	ant. 27780 B	luc Star Memorial	Highway, Covert, MI 49043
	Type CND-E-5003G01 Rev. 5	SA-312 TP 316 SA 182 TP 347		75.0	00	<del></del>		
	( drawing number)	(matt. spec no.)		7 <u>5.0</u> sle str	ength)		N/A (CRN)	
	ASME Code, Section III, Division 1			No.			1	N/A
	Eshciented in accordance with Co.	(edition)		denda	dale)		(ctass)	(Code case na.)
	Fabricated in accordance with Cons		/nn 1			Revision		DateN/A
	Remarks Upper Housing Replacer Ma	nent Assembly consisting nufactured on Ionics Co	of upper fintract 1149	ange	welde	d lo a pipe ar	d the pipe welded	to a reducer & flange.
_	Sur	police on Westinghouse	Contract 45	000	70105.			
	Nom. Thickness (in.)in. das When applicable, Cortificate Holder	iign thickness (in.) <u> </u>	Dia	. ID h ite	(It & In. m of th	is report:	Length	overall ( ft & in.)14'-6.5"
ſ						is report		
	Part or Appurtenance Serial Number	National Board No. in Numerical ord					Appurtonance isi Number	National Board No. In Numerical Order
	(1) RP-1065				(26)			W Notible City
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	(3)		is Cortified Gui di ago ess		(28)			to the second
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	(6)		" F 5.45 "	1::	(31)			for supple a
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l	(8)			]	(33)			
	(9) <u>(10)</u>		<u>ាក់ដោកស្តាំ</u>		(34)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
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	(16)	<del></del>			(41)	***************************************		
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	(24)				(49)			
	(25)		-	.	(50)			
•	Dasign pressure 2485	psi. Temp.		ıl	550		rdro. Test pressure	3200 at temp. 60°

	Certificate Holder's Serial	Nos. <u>RP-1065</u>	throughRP-1065_	
	CERTIFICATI	ion of design		
Design specifications certified by	Not Applicable	P.E. State	Reg. No	
Design report* certified by	Not Applicable (when applicable )		Reg. No	
	CERTIFICATE	OF COMPLIANCE		
We certify that the statements made in Conforms to the rules of construction of	n this report are correct and that the fifthe ASME Code, Section III, Divis	is (these) <u>Upper</u> sion 1.	Housing Replacement Assembly	
	$\cdot$	e va		
NPT Certificate of Authorization No.	N-2974-1 "	Expires	March 26, 2002	
Date 12.3.01 Name	Ionics, Incorporated (NPT Certificate Holder)	Signed 5.	(authorized representative)	
	CERTIFICATE	OF INSPECTION		
I, the undersigned, holding a valid common of Pennsylvania and employed by of Johnston. RI host of my knowledge and belief, the fill, Division 1. Each part listed has been By signing this certificate, neither the in this Data Report. Furthermore, neither loss of any kind arising from or common pennsylvania.	ractory Mutual Insurance Company ave inspected these litems described in Certificate Holder has fabricated their authorized for stamping on the date shipspector nor his employer makes any ar the inspector nor his employer, shipspection.	n this Data Report on	accordance with the ASME Code. lied, concerning the equipment de for any personal injury or property	at to the Section
Date 12-3-201 Signed	Olat Brown	CommissionsNB	8314 AN Barre	· ·
-	(Authorized Nuclear Inspector)		d. (incl. endorsoments) and state or prov	/, and no]

Pg. 1 of 2

1. Manufactured and certified by Ionics, Incorporated, Bridgeville Division, 3039 Washington Pike, Bridgeville, Pennsylvania, 15017

#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

(name and address of NPT Certificate Holder)

Type <u>(</u>	CND-E-5003G01 Rev. 5	SA-312 TP 316 SA 182 TP 347	75,000 75,000	N/A (CRN)	Highway, Covert, MI 49043  2001  (year bust)
,	drawing number)	(mal'L spec no.)	(tonsilo strongth)	•	•
ASME	Coda, Section III, Division 1	(edition)	No (addenda dale)	(dass)	(Code case no.)
Fabrical	ed in accordance with Con	st. Spoc. (Div. 2 only)	N/A Rev	vision <u>N/A</u>	DateN/A
Remark	s Hoper Housing Replace	ment Assembly consisting (	of upper flange welded to a	pipe and the pipe welded	to a reducer & flange.
	M	anufactured on lonies Cont	MCL 1149.		
Nom T	hickness (in ) in, de	sion thickness (in.)	Dia. ID (ft & In.)	Length	overall ( ft & in.)14'-6.5"
When a	applicable. Conflicate Holds	ers' Data Reports are attach	ed for each item of this re	oort:	overall ( ft & in.) 14'-6.5"
	Part or Appurtenance Serial Number	National Board No. in Numerical ordo		Part or Appurtenanco Serial Numbor	National Board No. in Numerical Order
(1)	RP-1066	_	(26)		
(2)			(27)		
(3)			(28)	<u> </u>	
(4)		<u> </u>	(29)		
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(15)					
(16)					1
(17)			1   1   1		·
(18)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)	<u></u>	<u></u>
(24)			(49)		
(25)			(50)		
. Desig	n pressure 2485	psi. Temp.	650	F. Hydro. Tost pressu	re 3200 at temp
		lists, sketches, or drawings is numbered and the number	may be used provided (1) a of sheets is recorded at the	ize is 8 ½ x 11, (2) informati top of this form.	(when applicable)  Ion in Items 2 and 3 on this Data Rol  2 Law Drivo, Box 2300, Fairfield, NJ 07

	Certificate Holder's Serial Nos.	RP-1066	through	AP-1066
CERTIFICATION OF DESIGN				
Design specifications certified by	t to a soull able t			No
Design raport* certifled by	(when applicable) Not Applicable (when applicable)	P.E. State	Reg.	No
. CERTIFICATE OF COMPLIANCE				
We certify that the statements made in this report are correct and that this (these)  Upper Housing Replacement Assembly  Conforms to the rules of construction of the ASME Code, Section III, Division 1.				
NPT Certificate of Authorization No.	N-2974-1	Expires	March 26, 200	<u>)</u>
Date 12-3-01 Namo	Ionics, Incorporated (NPT Confileate Holder)	Signed	(authorized repre	
CERTIFICATE OF INSPECTION				
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State and Province of Pennsylvania and employed by Factory Mutual Insurance Company of Johnston, RI have inspected these items described in this Data Report on have inspected these items described in this Data Report on the ASME Code, Section in Division 1. Each part listed has been authorized for stamping on the date shown above. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, noither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this Inspection.  Date 23-4 Signed (Authorized Nuclear Inspector)  [Nath. Bd. (Inct. endorsements) and state or prov. and no)				

#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III

Not to Exceed One day's production

mulactured for Westinghouse E	Hectric Company I I C Nucl	ear Services Buisiness U	nit. 2000 Day Hill Road, W	indsor, CT 06095
		Assiste each engineer or hor manual.	•	
cation of InstallationConsum	ers Energy Company, Palisa	des Generating Plant. 27 (name and address)	780 Blue Star Memorial High	phway, Coyert, MI 49043
	SA-312 TP 316	75,000		2001
	SA 182 TP 347	75,000	N/A (CRN)	2001 (year buil)
( drawing number)	(matt. spec no.)	(lensie strangih)	•	31/4
ME Code, Section III, Division 1	1989	(addenda date)	(cises)	(Code case no.)
	(ecition)			Date N/A
oricated in accordance with Cons		Y/A Revis		
marks - Upper Housing Replacer	ment Assembly consisting of t	poper flange welded to a	pipe and the pipe walded to	a reducer & flance.
Ma	18013/Mind On 108165 (2010)	31 1 1 4 7 · · · · · · · · · · · · · · · · · ·		
om. Thickness (in.)in. des	police on Westinghouse Con	Dia 1D (ff & in.)		erail ( ft & in.) 14'-6.5"
om. Thickness (in.) In. 06s nen applicable, Certificate Holde	rs' Data Reports are attached	for each item of this repo	od: · · · · · · · · · · · · · · · · · · ·	
Mil application of continuation in the		. 9 ( 2 2		
Part or Appurtenance	National		Part or Appurtenance	National Board No.
Serial Number	Board No.		Serial Number	in Numerical Order
4	. In Numerical order			
RP-1067		1000	Section of the sectio	
1)			MEDIUM SANDERS	
2) <u>(********************</u>		v) ls *(28)	Call of the Cartes	٠,
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(4) State was the state of the	A section from the second of the second		2 10 may	
(5)		(30)	1 1 1	
(6)	1		المتعبدة البوظاجين بمنا	
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מייהרים יו שינד יהים יהיה יהיה (8)				
(9)		- (34)		
10)		(35)		
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(22)				
(23)		(49) —		

"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11. (2) information in items 2 and 3 on this Data Report is included on each shoet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order dopt., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-23:

	Certificate Holder's Serial Nos	RP-1067	throughRP-	1067
	CERTIFICATION (	OF DESIGN		
Design specifications certified by  Design report* certified by	tubes esplicable \		Reg. No	
	CERTIFICATE OF C	OMPLIANCE		
We certify that the statements made in Conforms to the rules of construction of	this report are correct and that this (the f the ASME Code, Section III, Division		r Housing Replacement Asse	mbly
NOT Applean of Authorization No.	N-2974-1	Expires	March 26, 2002	
Date 12-5-01 Name	N-2974-1  Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized representative)	1 25 16 16 16 16 16 16 16 16 16 16 16 16 16
	CERTIFICATE OF I	· ·		n grade
of <u>Pennsylvania</u> and employed by of <u>Johnston</u> . RI host of my knowledge and belief, the III, Division 1. Each part listed has been	ave inspected these items described in this Certificate Holder has fabricated these productions authorized for stamping on the date shown aspector nor his employer makes any warries the inspector nor his employer shall be needed with this inspection.	Data Report on arts or appurtenance above.  ranty, expressed or it is table in any mann	s in accordance with the ASM mplied, concerning the equiver for any personal injury or	d state that to the E Code, Section pment described properly damage
•	(Authorized Nuclear Inspector)	Nat	'i. Bd. (incl. ondersements) and si	ata or prov. and not

#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III

Not to Exceed One day's production

Manufactured and certified by Ionics, Incorporated, Bridgeville Division, 3039, Washington Pike, Bridgeville, Pennsylvania, 15017 (name and address of NPT Certificate Holder)						
Manufactured for Westinghouse I	Electric Company LLC, Nucle	ar Services Buisiness U	nit, 2000 Day Hill Road,	Windsor, CT 06095		
2. Manufactured for Westinghouse Electric Company LLC, Nuclear Services Buisiness Unit, 2000 Day Hill Road, Windsor, C1, 08095  (name and address of purchaser)						
Location of installationConsum	ners Energy Company Palisad	es Generating Plant 27	780 Blue Star Memorial F	lighway, Covert, MI 49043		
COMPANIE CONTRACTOR		(name and address)				
	SA-312 TP 316	<u>75.000</u>				
Type CND-E-5003G01 Rev. 5	SA 182 TP 347	75,000 (lensile strength)	N/A (CRN)	2001 (year built)		
( drawing number)	(mattl. spec no.)	(secent sucudar)	(cros)	Gen wany		
ASME Code, Section III, Division 1	1989	No		N/A		
	(edition)	(addenda date)	(dass)	(Code case no.)		
Fabricated in accordance with Cons	st Spec. (Div. 2 anly) N	A Revis	ion N/A	Date <u>N/A</u>		
		(no.)	ing and the pine wolded t	n a radurar & flanca		
Remarks <u>Upper Housing Replace</u>	ment Assembly consisting of un anufactured on Ionics Contract	1140	noe and the pipe welded to	o a reducer of liaritye.		
	police on Westinghouse Contr					
Nom Thickness (in ) - in de	sign thickness (in.)	Dia. ID (ft & In.)	Length of	overall ( ft & in.) 14'-6.5"		
Whon applicable, Certificate Holdo	rs' Data Reports are attached f	or each item of this repo	rt:			
Part or Appurtenance	National		Part or Appurtenance	National		
Sorial Number	Board No.		Serial Number	Board No.		
	in Numerical order			in Numerical Order		
RP-1068	_		· ·			
(1)		(26)	•			
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(3)		(29)				
(4)	-	(30)		·····		
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(7)		(32)	•			
(8)		(33)				
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(15)	J	(41)				
(16)		(42)				
(17)		(43)		-		
(18)		(44)				
(19)		(45)				
(20)		(46)	_			
(22)	· ·	(47)				
(23)		(48)				
(24)		(49)				
(25)		(50)				

"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11. (2) information in items 2 and 3 on this Data Report is included on each sheet. (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/58)

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

(when applicable)

Certificate Holder's Serial Nos.	RP-1068 through	RP-1068
CERTIFICATION OF	DESIGN	
Design specifications certified by	P.E. State	Reg. No
CERTIFICATE OF COM	PLIANCE	
We confiy that the statements made in this report are correct and that this (these) Conforms to the rules of construction of the ASME Code, Section III, Division 1.	Upper Housing Re	placement Assembly
NPT Certificate of Authorization No	Expires March	26, 2002
Date	Signed Support	od representative)
CERTIFICATE OF INSI	ECTION	
t, the undersigned, holding a valid commission issued by the National Board of Boller a of Pennsylvania and employed by Factory Mutual Insurance Company of johnston. Ri have inspected these items described in this Dalbest of my knowledge and belief, the Certificate Holder has fabricated these parts III. Division 1. Each part listed has been authorized for stamping on the date shown about this Data Roport. Furthermore, neither the inspector nor his employer makes any warrant in this Data Roport. Furthermore, neither the inspector nor his employer shall be it or loss of any kind arising from or connected with this inspection.	a Report on December of appurtenances in accordance.  y, expressed or implied, concable in any manner for any permissions  ### ### ### ### ### ### ############	erning the equipment described ersonal injury or property damage

**2**019

## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Regulard by the provisions of the ASME Code Section III

As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

				e and address of NPT Certificate Holder)	
Mani	ulactured for Westinghouse	Electric Company LLC, N	uclear Services Bu (name and address of	isiness Unit, 2000 Day Hill Road purchaser)	d. Windsor, CT 06095
Loca	tion of Installation Consur	ners Energy Company, Pa	isades Generating	Plant, 27780 Blue Star Memoria	l Highway, Covert, MI 49043
		SA-312 TP 316	(name and add 75,000	ross)	
Type	CND-E-5003G01 Rev. 5	SA 182 TP 347	75,000	N/A	2001
(F	( drawing number)	(matt. spec no.)	(tensile strength)		(Aest priy)
N2	E Coda, Section III, Division 1	1: <u>1989</u> (odition)	No (addenda dale)	l (class)	N/A (Code case no.)
abrio	cated in accordance with Con-	st. Spec. (Div. 2 only)	N/A	Revision N/A	DatoN/A
ema	arks Upper Housing Replace	ment Assembly consisting	(na.) of upper flange wel	ded to a pipe and the pipe welder	d to a reducer & flange.
	M	anufactured on Ionies Con	ract 1149.		
\[a=	Thickens (in )	pplied on Westinghouse C	Ontract 450007010	5.	h overali ( ft & in.)14'-6.5"
Nom. Nha	n applicable, Conilicate Holde	irs' Dala Reports are allact	ed for each item of	this report:	n overali ( π & in.)14-0.5 ·
	Part or Appurtenance Social Number	National Board No.		Part or Appurtenance Serial Number	National Board No.
	2014) Milliost	in Numerical orde	e	3011ab 1400   LOB	In Numerical Order
	VD 1040			•	
(.)	RP-1069		(2	.6)	
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(11)				96)	· · · · · · · · · · · · · · · · · · ·
(12)				37)	
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(20) (21)		+		15) 16)	
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(23)		<del>                                     </del>		18)	
(24)				19)	
				50)	
(25)					

"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order dopt., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

(7/9<del>t</del>)

Cartificate Holders Sorial Nos	RP-1069	through	RP-1069
CERTIFICATION OF	F DESIGN		
Dosign specifications certified by Not Applicable (when applicable)			
Design report* certified by Not Applicable (when applicable)	P.E. State	Reg.	No
CERTIFICATE OF COM	PLIANCE		
We carlify that the statements made in this report are correct and that this (these Conforms to the rules of construction of the ASME Code, Section III, Division 1.	) Uppe	r Housing Replacem	ent Assembly
NPT Certificate of Authorization NoN-2974-1	Expires		12
Date 12-4-01 Name Ionics Incorporated (NPT Certificate Holder)	Signed	(authorized repros	250
CERTIFICATE OF INS	PECTION		
I, the undersigned, holding a valid commission issued by the National Board of Boiler a of Peansylvania and employed by Factory Mutual Insurance Company of Johnston, RI have inspected these items described in this Data best of my knowledge and belief, the Certificate Holder has fabricated these parts III, Division 1. Each part listed has been authorized for stamping on the date shown about this Data Report. Furthermore, neither the inspector nor his employer makes any warrant in this Data Report. Furthermore, neither the inspector nor his employer shall be if or loss of any kind arising from or connected with this inspection.  Date 12-4-2001 Signed Confidence in Spector in Confidence in Spector in Confidence in Confidenc	or appurtenances ove.  expressed or imable in any manne	in accordance with a plied, concerning the for any personal in	e_, and state that to the the ASME Code, Section the equipment described ajury or property damage

#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

Pg. 1 of 2 Manufactured and certified by Ionics Incorporated Bridgeville Division, 3039 Washington Pike, Bridgeville, Pennsylvania, 15017 (name and address of NPT Certificato Holder) Manufactured for Westinghouse Electric Company LLC, Nuclear Services Buisiness Unit, 2000 Day Hill Road, Windsor, CT 06095 (name and address of purchaser) Locution of installation \_\_\_ Consumers Energy Company, Palisades Generating Plant, 27780 Blue Star Memorial Highway, Covert, Mt. 49043 (usus and addicts). 75,000 SA-312 TP 316 2001 SA 182 TP 347 75,000 Typ. CND-E-5003G01 Rev. S (CRN) (year built) (tensile strength) (marl. spec na.) ( drawing number) No: ASME Code, Section III, Division 1: j. (dass) (Code case no.) (addenda date) (edition) Date . N/A Revision Fabricated in accordance with Const. Spec. (Div. 2 only). Remarks Upper Housing Replacement Assembly consisting of upper flange welded to a pipe and the pipe welded to a reducer & flange (no.) Manufactured on Ionics Contract 1149. Supplied on Westinghouse Contract 4500070105 14'-6.5" Length overall (ft & in.) Norn. Thickness (in.) \_\_\_\_in. design thickness (in.) \_\_\_ Dia. ID (ft & in.) When applicable, Certificate Holders' Data Reports are attached for each item of this report: National Part or Appurtenance Social Number National Part or Appurtenance Senal Number Board No. Board No. In Numerical Order In Numerical order **RP-1070** (26)(1) (27)(2)(28)(3) (29)(4) (30) (5) (31)(15) (32)(7) (33)(8) (34) (9) (35)(10) (36)(11)(37) (12)(38)(13)(39)(14)(40)(15)(41)(16)(42)(17)(43)(18)(44)(19)(45)(20) (45)(21)(47)(22)(48)(23)(49)(24)(50) (25)at temp. 66 F 3200

"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 % x 11. (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Temp.

psi.

650

٠F.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drivo, Box 2300, Fairfield, NJ 07007-2300.

Hydro. Test pressure

(7/98)

10. Design pressure,

(when applicable)

2485

	Certificate Holder's Serial Nos	RP-1070	through	RP-1070
	CERTIFICATION (	OF DESIGN		
Dasign specifications cartified by	Not Apolicable	P.E. State	Reg.	No
Design report* certified by	(when applicable) (when applicable)	P.E. State	Reg.	No
	CERTIFICATE OF C	OMPLIANCE		
We certify that the statements made in Conforms to the rules of construction of	this report are correct and that this (the f the ASME Code, Section III, Division	ese) <u>Uppe</u> 1.	r Housing Replacen	ent Assembly
	N-2974-1			
Date 11:30:01 Name _	Ionics, Incorporated (NPT Certificate Holder)	Signed	). Scenario (authorized repre	sentative)
•	CERTIFICATE OF I	NSPECTION		
of <u>Peansylvania</u> and employed by of <u>Johnston</u> . RI hest of my knowledge and belief, the III. Division 1. Each part listed has been By signing this certificate, neither the ir in this Data Report. Furthermore, neither loss of any kind arising from or co	nission issued by the National Board of Boile Factory Mutual Insurance Company have inspected these items described in this Certificate Holder has fabricated these p hauthorized for stamping on the date shown hispector nor his employer makes any wan her the inspector nor his employer shall the	Data Report on 2 parts or appurtenance above. Tranty, expressed or lie liable in any mann	s in accordance with mplied, concerning ter for any personal	the equipment described injury or property damage
Date //-30 -2001 Signed_	(Authorized Nuclear Inspector)	Commissions <u>A</u>	Nat	INST. Bd. (incl. endorseme

# FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

anulactured and certified by Ioni		(name and )	address of NPT Certificate Holder)	
anulactured for Westinghouse D	ectric Company LLC, N	nelear Services Buisines	s Unit, 2000 Day Hill Roa	d. Windsor, CT 06095
		(name and address of purcha-	201)	
cation of installation Consum	ers Energy Company, Pal	isades Generating Plant	27780 Hluc Star Memoria	il Highway, Covert, MI 49M3
	·	(name and address)		
	SA-312 TP 316	75,000		
pe <u>CND-E-5003G01_Rcv. 5</u> (drawing number)	SA 182 TP 347 (mar), spec no.)	75,000 (tensile strength)	N/A (CRN)	
, , ,	,	(recent seoughly	(Otal)	god ocal)
SME Code, Section III. Division 1:	1989	- <u>No</u>		N/A
	(edition)	(addenda dale)	(तंत्ररः)	(Code caso no.)
bricated in accordance with Cons	it. Spec. (Div. 2 only)	N/A H	Revision N/A	Date N/A
emarks <u>Upper Housing Replacer</u>	nont Accombly consisting	(no.)	e a cies and the pige wolde	ed to a reducer & flance
marks <u>Upper Housing Replacer</u> Ma	nufactured on Ionics Con-	tract 1149	o a pipe and the pipe welde	d to a recover & mande.
	polied on Westinghouse C		•	
om Thickness (in.) In. des	slan thickness (in.) —	Dia, ID (ft & In.)	Longi	th overall ( ft & in.)14'-6.5"
hen applicable, Certificate Holder	rs' Data Reports are attach	red for each item of this	report:	
· · · · · · · · · · · · · · · · · · ·	\ <del></del>	<del></del>		
Part or Appurtenance	National	."	Part or Appurtenance	National
Sedal Number	Board No. in Numorical orde	.	Serial Number	Board No. In Numerical Order
•	in Numbrica orde	"		
RP-1071	<b>→</b> ·	(26)		
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(23) (24)	+	(49)		
	<del> </del>	(50)		
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\*Supplemental information in the form of tists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

(7/98)

		Certificate Holders Serial Nos.	AP-1071	through	RP-1071
	,	CERTIFICATION	OF DESIGN		
_	specifications certified by				g. No
Design	roport* certified by	Not Applicable (when applicable )	P.E. State	Re	g, No
	1	CERTIFICATE OF	COMPLIANCE		
We cer Conform	rify that the statements made in ns to the rules of construction of	n this report are correct and that this (the first the ASME Code, Section III, Division	nese) <u>Upp</u> 1.	er Housing Replace	ement Assembly
NPT C	ertificate of Authorization No.	· N-2974-1	Expires	March 26, 2	2002 #
Date _	11/30/0/ Name	Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized rep	resentative)
		CERTIFICATE OF	INSPECTION		
of Pen of Johns best of III, Divi By sign in this or loss	and employed by ston, RI  Iny knowledge and bellef, the sion 1. Each part listed has been ling this certificate, neither the libata Report. Furthermore, neither of any kind arising from or co		s Data Report on 2. parts or appurtenance above.  Tranty, expressed or it be liable in any mann	s in accordance will mplied, concerning er for any porsons	and state that to the the ASME Code, Section the equipment described all injury or properly damage
Date	11-30-200 Signod	(Authorized Nuclear Inspector)	Commissions (Nat	1. Bd. (incl. endorsem	ents) and state or prov. and no]

### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

inulactured and certified by Joni		· · · · · · · · · · · · · · · · · · ·			
inulactured for Westinghouse E	Iccinic Company LLC, N	luclear Services	Buisiness Unit. 2	000 Day Hill Road.	Windsor, CT 06095
		V ,			
cation of InstallationConsum	E Company P1	diendes Generalis	ng Plant, 27780	Blue Star Memorial	Highway, Covert, MI 49043
cation of InstallationConsum	iers Engley Company.				
	SA-312 TP 316	75,000		27/4	, 2001
po CND-E-5003G01 Rev. 5	SA 182 TP 347	75,000 (tensile stren		N/A (CRN)	(year built)
(drawing number)	(mail spec no.)	fictions and	And	, ,	N/A
SME Codo, Section III, Division 1	: 1989	No		(dass)	(Code case no.)
SWE CORD, Section with Extreme	(adition)	(addenda d	13(0)	,	- > > > > > > > > > > > > > > > > > > >
bricated in accordance with Con-	st Snac. (Div. 2 90)y)	N/A	Revision		
bricaled in accordance with Colling	30 Opuse (200 - 2,000)	(10)	wolded to a nice	and the cipe welded	to a reducer & flance.
marks Upper Housing Replace	ment Assembly consisting anufactured on Ionics Co	nect 1149	Welded to a bibo	0.15 (1.15 )	
M	anulacioica (m. iomas es	Contract 450007	0105.		
	~	ונו בוו	n Δε 1Ω.1	Lengli	overall ( it & in.)14'-6.5"
om. Thickness (In.) — In. de /hon applicable, Certificate Holde	ors' Data Reports are atta	ched for each ite	m of this raport:		
men applicable, Certification	,				Marianal
	National			t or Appurtanance	National Board No.
Part or Appudenance Social Number	Board No.			Sonal Number	in Numerical Order
Street (1800-00)	In Numorical or	dor			
<b></b> 1033	_	ì	(26)		
(1) RP-1072					
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(3)					
(4)			100		
(5)	<del>-                                    </del>				
(6)			(32)		
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(10)			(35)		
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(15)			(41)		
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(17) (18) (19) (20) (21)			(46) (47)		

'Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form. This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 070:

Page 7

[7.98]

10. Dosign pressure\_\_\_\_

	Certificate Holder's Serial Nos.	RP-1072	through	RP-1072
	CERTIFICATION O	F DESIGN		
Dosign specifications cartifled by	Not Applicable	P.E. State	Hog.	No
Dosign report* certified by	(when applicable) (when applicable)	P.E. State	Reg.	No
,	CERTIFICATE OF CO	MPLIANCE		
We certify that the statements made to Conforms to the rules of construction of	n this report are correct and that this (these of the ASME Code, Section III, Division 1.	e) <u>Uppe</u>	or Housing Replacem	ent Assembly
NPT Certificate of Authorization No	N-2974-1	Expires	March 26, 200	)2
Dato 12-3-0/ Name	Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized repres	sentative)
	CERTIFICATE OF INS	SPECTION		
of Pennsylvania and employed by of Johnston, RI bost of my knowledge and belief, the III, Olylsion 1. Each part listed has been By signing this certificate, neither the i	$\sim 0 / \sim 1$	ata Report on size or appurtenances ove.  nty, expressed or in liable in any manna	2, 2 in accordance with nplied, concerning 1	the ASME Code, Section the equipment described injury or property damage

Pg. 1 of 2

## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Regulred by the provisions of the ASME Code, Section III

As Required by the provisions of the ASME Code, Section III
Not to Exceed One day's production

1.	Manufactured and certified by Ionics	. Incorporated, Bridgevi	lle Division.	3039 Wa	shington P	ike, Bridgeville, I PT Certificate Holder)	Pennsylvania, 1	5017
•	Mastinghouse Fla	osmia Camaanu II C. Ni				•		
2.	Manufactured for Westinghouse Ele	eine Company I.L.C., Ni	(usws and add	tress of purch	ss Unit, 20 1501)	OU DAY HILL ROAD	, Windsor, CT	06095
١.	Location of installation Consumers Energy Company, Palisades Generating Plant, 27780 Blue Star Memorial Highway, Covert, MI 49043							еп, М1 49043
	· <u>\$</u> .	A-312 TP 316	75,0	00				
4.		A 182 TP 347	75.0	000		N/A		2001
	( drawing number)	(mat's specino)	(tensile s	(rengih)		(CRN)	•	(year built)
5.	ASME Code, Section III, Division 1:	1989	· No			11		N/A
	•	(notition)	(addend	2 (जार)		(class)		(Code case no.)
б.	Fabricated in accordance with Const.	Spoc. (Div. 2 only)	N/A (no.)	:	Revision	N/A	Date _	N/A
7.		nt Assembly consisting of	of upper flang	o woldod	o a pipo ar	oblew odia ent br	d to a roducor &	flango.
	Suppl	lied on Westinghouse Co	ontract 45000					
8. 9.	Nom. Thickness (in.) — In. design When applicable, Cortificate Holders'	n thickness (in:) Data Reports are attach	Dia. ID ed for each it	(ft & In.) em of this	героп:	Longt	h ovorall (ft & in	.)14'-6.5"
					<del> </del>		<del></del>	
	Part or Appuronance Serial Number	National Board No., In Numerical order	r .			Appurtenance rial Number	in	National Board No. Numerical Order
	RP-1073			(26)				
	(1) (2)	<del></del>		(26) -				
	(3)			(28)				
	. (4)			(29)				
	(5)			(30)				
	(6)			(31)				
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	(9)			(34)			. <del> </del>	
	(10)		<del></del>	(35)			<del></del>	
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	(4.0)			(38)			<u> </u>	
	(14)	· · · · · · · · · · · · · · · · · · ·		(39)	<del></del>			
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	(19)			(44)			<u> </u>	
	(20)	<u> </u>		(45)			<del> </del>	
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	(22)			(48)				
	(24)			(49)			<u> </u>	
	(25)			(50)				
	,,							
10	. Dosign prossure 2485	psi. Temp.		650	_1F. 1	Hydro. Tast pressi	ure3	200 at temp. 65°F
							, ,,	
*Si	upplomental information in the form of list juded on each sheet is n	a, skelchos, or drawings n umbered and the number	nay be used policy to the state of the state	provided (1 corded at 1	size is 8 in the state of the s	½ x 11, (2) informa s form.	ition in Rems 2 ar	nd son this pata Heport is

Page 7

This form (E00040) may be obtained from the Order dopt., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

(7/90)

Certificate Holder's Serial Nos	RP-1073 through RP-1073
CERTIFICATION OF	F DESIGN
Dosign specifications certified by Not Applicable (when applicable )	P.E. StateReg. No
(when applicable )  Design report* certified by	P.E. StateReg. No
CERTIFICATE OF CON	MPLIANCE
We certify that the statements made in this report are correct and that this (these Conforms to the rules of construction of the ASME Code, Section III, Division 1.	e) Upper Housing Replacement Assembly
NPT Certificate of Authorization No. N-2974-1	
Date 12-1-0\ Name Ionics, Incorporated (NPT Certificate Holder)	Signed 5. Sacrative)
CERTIFICATE OF INS	SPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Fennsylvania and employed by Factory Mutual Insurance Company of Johnston, RI have inspected these items described in this Da best of my knowledge and belief, the Certificate Holder has fabricated these pars III, Division 1. Each part listed has been authorized for stamping on the date shown about this Certificate, neither the inspector nor his employer makes any warrant in this Dala Report. Furthermore, neither the inspection or his employer shall be in or loss of any kind arising from or connected with this inspection.  Date 12-1-2 Signed (Authorized Nuclear Inspector)	ata Report on Security and state that to the its or appurtenances in accordance with the ASME Code, Section pove.  Introduce the sequipment described liable in any manner for any personal injury or property damage

Page 8

Sugar

# FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES" As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

IONICS INC

	Ionics, Incorporated, Bridgevil	(name and addre	es of NPT Certificato Holder)	IIISYIYAMA. IOUL/
Manufactured for Westinghou	ise Electric Company LLC, Nu	clear Services Buisiness U (name and address of purchaser)	nit, 2000 Day Hill Road, V	Vindsor, CT 06095
continued in the first Con-		•		
Lipication of installationCon	sumers Energy Company, Palis	sades Generating Plant, 27' (name and address)	780 Blue Star Memorial H	ighway Covert MI 49043
	SA-312 TP 316	75.000		
Type CND-E-5003G01 Rev.		75.000	N/A	2001
( drawing number)	(mafl. spec no.)	(lensile strength)	(CRN)	(year bulk)
NSME Code, Section III, Division	on 1:1989	No		
	(edition)	(addenda date)	(class)	(Code case no.)
abricated in accordance with C	const. Spec. (Div. 2 only)	N/A Revis	lon N/A	Date <u>N/A</u>
		(00.)		
emarks Upper Housing Repla	acement Assembly consisting of Manufactured on Ionics Contro	tupper flange welded to a c	ipe and the pipe welded to	a reducer & flange.
	Supplied on Westinghouse Co	ntract 4500070105		
Nom. Thickness (in.) in.	design thickness (in.)	Dia, ID (ft & In.)	— Length ov	rerail ( ft & in.) 14'-6.5"
When applicable, Certificate Ho	olders' Data Reports are attache	d for each item of this repor	rt:	( 1. d. 11.)
				·
Part or Appurtanance	National		Part or Appurtenance	National
Sorial Number	Board No.		Serial Number	Board No.
	in Numerical order			in Numerical Order
RP-1074	_ ·	1 1		
(1) RP-1074 (2)		(26)		
(3)		(27)		
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16)		(42)		
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16) 17) 18) 19) 20) 21) 22) 23)		(43) (44) (45) (46) (47) (48)		
16) 17) 18) 19) 20) 21) 22) 22)		(43) (44) (45) (46) (47) (48) (49)		
16) 16) 17) 18) 19) 20) 21) 22) 22) 23) 24)		(43) (44) (45) (46) (47) (48)		

"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 % x 11. (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Orivo, Box 2300, Fairfield, NJ 07007-2300.

Certificate Holder's Serial Nos.	RP-1074	through	RP-1074
CERTIFICATION OF	DESIGN		
Design specifications certified by Not Applicable (when applicable)  Dosign report* certified by Not Applicable (when applicable)	P.E. State	Reg. N	0
, CERTIFICATE OF COM	PLIANCE		
We certify that the statements made in this report are correct and that this (these Conforms to the rules of construction of the ASME Code, Section III, Division 1.	)Upper h	iousina Replacemen	t Assembly
NPT Certificate of Authorization No			
Date Name Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized represen	Nativo)
CERTIFICATE OF INS	PECTION		
I, the undersigned, holding a valid commission issued by the National Board of Boiler at of Pennsylvania and employed by Factory Mutual Insurance Company of Johnston. RI have inspected these items described in this Date best of my knowledge and belief, the Certificate Holder has fabricated these parts III, Division 1. Each part listed has been authorized for stamping on the date shown about By signing this certificate, neither the inspector nor his employer makes any warrant in this Data Report. Furthormore, neither the inspector nor his employer shall be or loss of any kind arising from or connected with this inspection.  Date 2-5-2001 Signed (Authorized Nuclear Inspector)	ta Report on Lack or appurtenances in the table of	accordance with the	and state that to the ASME Code, Section     equipment described any or property damage

## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES"

As Required by the provisions of the ASME Code, Section III
Not to Exceed One day's production

Manufa	actured and certified by Ioni	es. Incorporated, Bridger	cille Division 3	039 Was name and a	nington Pi ddress of NP	ike, Bridgeville, I T Cenificate Holder)	ennsylvania, 156	)17
Manufa	ectured for <u>Westinghouse</u> E	Electric Company LLC. N	luclear Services	Buisiness	: Unit_200	00 Day Hill Road	Windsor, CT 0	6095
	on of installationConsum	Energy Commonsy Do	•	•		ne Star Memorial	Highway, Cove	rt. MI 49043
Locado			(name and	900(022)		<u> </u>		
_	CND-F-5003G01 Rev. 5	SA-312 TP 316	<u>75.00</u>		-	N/A		2001
type _	[ drowing number)	(mart spoc no.)	(tensile stre	ngth)		(CRN)		(year built)
ASME	Code, Section III, Division 1	:1989	No					N/A
		(edition)	(addenda	•		(class)		(Code case no.)
Fabrica	ted in accordance with Cons	st Spec. (Div. 2 only)	N/A	R	evision	N/A	Date	N/A
Remark	s <u>Uoper Housing Replace</u> r	ment Assembly consisting	(no.) of upper flange	welded to	a pipe an	d the pipe welder	to a reducer & f	ange
	Ma	inufactured on Ionics Cor	ntract 1149.			·		
	Sun Chickness (in.) — in. des	pplied on Westinghouse (	Contract 450007	0105.		— Lengt	h overall ( ft & In.	14'-6.5"
Nom. I When a	i nicknoss (in.) <u> </u>	rs' Data Reports are attac	hed for each ite	n of this !	eport:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
		·					1	
	Part or Appunenance	National				Appurtenance		National Board No.
	Sorial Number	Board No.	lor		201	ISI MUIDOSI	A ni	iumorical Order
		,						
(1)	RP-1075			(26) (27)			<u> </u>	
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(19) (20) (21)				(48) (49)				
(19) (20) (21) (22) (23)				(48)				•

\*Supplemental Information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is included on each shoot, (3) each shoot is numbered and the number of sheets is recorded at the top of this form.

(7.95) This form (E00040) may be ob

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

	Certificate Holder's Serial Nos.	RP-1075	through	RP-1075
	CERTIFICATION C	F DESIGN		
Design specifications cortified by	Not Applicable	P.E. State	Reg. 1	۷٥
Design report* certified by	(when applicable ) Not Applicable (when applicable )	P.E. State	Reg. 1	No
	CERTIFICATE OF CO	MPLIANCE		
Ve certify that the statements mad conforms to the rules of construction	e in this report are correct and that this (then no of the ASME Code, Section III, Division 1	se) <u>Uppe</u>	r Housing Replaceme	ent Assembly
PT Certificate of Authorization No	N-2974-1	Expires	March 26, 200	2
Date 12 · 1 · O ) Name	(NPT Certificate Holder)	Signed	(authorized repress	entative)
	CERTIFICATE OF IN	SPECTION		
of Pennsylvania and employed of Johnston, RI best of my knowledge and bolief, III, Division 1. Each part listed has been signing this certificate, neither the this Data Report, Furthermore, to loss of any kind ansing from our	4 - 7	Data Report on A popular ancombove.  anty, expressed or its liable in any mann	s in accordance with the mplied, concerning the er for any personal in	, and state that to the ne ASME Code, Section ne equipment described jury or property damage
Date 12-1-2006 Signi	(Authorized Nuclear Inspector)	<u>فيم                                    </u>	I. Bd. (incl. endorsement	s) and state or prov. and no)

# FORM 14-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

						Pg. 1 of 2
anuli	actured and certified by [cni	s, Incorporated, Bridge	ville Division.	3039 W	ashington Pike, Bridgeville, Pe	nnsylvania, 15017
				(		·
มาบใจ	actured for Westinghouse E	ectric Company LLC: N	Tuc)car Scrvice (name and add	es Buisin Breas of pure	ess Unit, 2000 Day Hill Road,	Windsor, CT 06095
catio	on of installation <u>Consum</u>	rs Energy Company, Pa	lisades Genera	ating Pla	nt, 27780 Blue Star Memorial F	Highway, Covert, MI 49043
		A-312 TP 316	(name a 75.0	ind address) NGC		
	CND-E-5003G01 Rev. 5	SA 182 TP 347	75.0			2001
ηDΘ.	(drawing number)	(math. spec no.)	(lensile st		(CRN)	(hear prys)
SME	Code, Section III, Division 1:	1989	· No			N/A (Code case no.)
		(edition)	(addend	S 0516)		•
briæ	ated in accordance with Const	Spec. (Div. 2 only)	N/A (na.)		Revision N/A	Date N/A
	ke I longr Housing Reniscati	ant Assembly consisting	of upper fland	e walded	I to a pipe and the pipe welded t	o a reducer & flange.
2(1961)	NS Oppor Flodsing Nepade 311 N (a)	ufactured on Ionics Cor	tract [149.	·		
	Sup	lied on Westinghouse	Contract 45000	070105.		Samuel Committee Com
om.	Thickness (in ) - In das	on thickness (in.)	Dia. ID	) (ft & In.)	Length	overall ( ft & in.)14"-6.5"
/hen	applicable, Certificate Holden	Data Reports are aliac	hed for each it	em of thi	s report:	
•						
	•	Mattenni			Part or Appurtenance	National
	Part or Appurtenance	National Board No.		1.	Serial Number	Board No.
•	Serial Number	in Numerical ord	ler I		* * * * * * * * * * * * * * * * * * * *	in Numerical Order
			,	1	1242 1.01	<u> </u>
	RP-1076	· —		(26)	Contraction of the second of t	200 mar 200
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(7) (8)	্ৰাক্ষ্য কৰা কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ প্ৰথম কৰিছিল জ্বৰ প্ৰথম কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ	75		(31) (32) (33)	tandin il	
(7) (8) (9)		7.5		(31) (32) (33) (34)		
(7) (8) (9) (10)	্ৰাক্ষ্য কৰা কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ প্ৰথম কৰিছিল জ্বৰ প্ৰথম কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ	22		(31) (32) (33) (34) (35)	tandin il	
(7) (8) (9) (10) (11)	্ৰাক্ষ্য কৰা কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ প্ৰথম কৰিছিল জ্বৰ প্ৰথম কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ	72		(31) (32) (33) (34) (35) (36)	tandin il	
(7) (8) (9) (10) (11) (12)	্ৰাক্ষ্য কৰা কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ প্ৰথম কৰিছিল জ্বৰ প্ৰথম কৰিছিল জ্বৰ প্ৰথম কৰা কৰিছিল জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ জ্বৰ			(31) (32) (33) (34) (35) (36) (37)	tandin il	
(7) (8) (9) (10) (11) (12)	The state of the s			(31) (32) (33) (34) (35) (36) (37) (38)	tandin il	
(7) (8) (9) 10) 11) 12) 13) 14)	The state of the s			(31) (32) (33) (34) (35) (36) (37) (38) (39)	tandin il	
(7) (8) (9) 10) 11) 12) 13) 14) 15)	The state of the s			(31) (32) (33) (34) (35) (36) (37) (38) (39) (40)	tandin il	
(7) (8) (9) 10) 11) 12) 13) 14) 15)	The state of the s			(31) (32) (34) (35) (35) (36) (37) (38) (39) (40) (41)	tandin il	
(7) (8) (9) 10) 11) 12) 13) 14) 15) (16) (17)	The state of the s			(31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42)	tandin il	
(7) (8) (9) 10) 11) 12) 13) 14) 15) (16) (17) (18)	The state of the s			(31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43)	tamental in the	
(7) (8) (9) 10) 11) 12) 13) 14) (16) (17) (18)	The state of the s			(31) (32) (33) (34) (35) (35) (38) (39) (40) (41) (42) (43)		
(7) (8) (9) (10) (12) (13) (14) (15) (16) (17) (18) (19)	The state of the s			(31) (32) (33) (34) (35) (35) (38) (39) (40) (41) (42) (43) (44)		
(7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20)	The state of the s			(31) (32) (33) (34) (35) (35) (37) (38) (39) (40) (41) (42) (43) (44) (44)		
(7) (8) (10) (11) (12) (13) (14) (15) (16) (17) (18) (20) (21)				(31) (32) (33) (34) (35) (35) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47)		
(7) (8) (9) (10) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22)				(31) (32) (33) (34) (35) (35) (35) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48)		
(7) (8)				(31) (32) (33) (34) (35) (35) (37) (38) (39) (40) (41) (42) (43) (44) (44) (45) (46) (47) (48) (49)		
(7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (22) (23)				(31) (32) (33) (34) (35) (35) (35) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48)		

illomental information in the form of tis 9, sketchos, or drawings may be used provided (1) size is 8 ½ x 11. (2) information in items 2 and 3 on this Data Report is led on each sheet (3) each sheet is 1 umbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

•			. •	•
	Certificate Holder's Serial N	cs. <u>RP-1076</u>	IhroughRP-10	76
	CERTIFICATIO	ON OF DESIGN		
Design specifications centified by	. h . P - h l . h	P.E. State	Reg. No	
Design report* certified by	Not Applicable ) (when applicable )	P.E. State	Reg. No	<u></u>
	CERTIFICATE (	OF COMPLIANCE		<del>*************************************</del>
Conforms to the rules of construction of Authorization Act.	in this report are correct and that this of the ASME Code, Section III, Divis	ion 1. Expires	March 26, 2002	
Date 11 12701 Marie	Ionics Incorporated (NPT Carlificale Holder)	Signed	(authorized representative)	•
	CERTIFICATE	OF INSPECTION		
of Johnston, RI  nest of my knowledge and bel ef, the light of the lig	X7/ <del>x</del> X	n this Data Report on Assessment of appurenances nown above.  y warranty, expressed or in half be liable in any manner.	In accordance with the ASME oplied, concerning the equipment for any personal injury or pro-	ntate that to the Code, Section nent described openly damage
Date 1/-27-2001 Signed	(Authorized I luclear Inspector)	•	Bd. (incl. endorsements) and state	

## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES' A: Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

Pg. 1 of 2 Manufactured and certified by In sics, Incomparated, Bridgeville Division, 3039 Washington Pike, Bridgeville, Pennsylvania, 15017 (name and address of NPT Certificate Holder) Manufactured for Westinghot se Electric Company L.L.C. Nuclear Services Buisiness Unit, 2000 Day Hill Road, Windsor, CJ. 06095 (name and address of purchaser) Cor su nors Energy Company, Palisades Generating Plant, 27780 Blue Star Memorial Highway, Covert, Mt. 49043 Location of installation \_ (name and address) SA-312 TP 316 75,000 SA 182 TP 347 75,000 2001 Typo <u>CND-E-5003GÓ1 Rev. S</u> (CRN) (year buओ) (mail. spec no.) (tensile strength) (drawing number) 1989 No NIA ASME Code, Section III, Division 1: (adition) (addenda data) (class) (Code case no.) Fabricated in accordance with to ist. Spec. (Div. 2 only) Revision (10.) Remarks Upper Housing Replacement Assembly consisting of upper flange welded to a pipe and the pipe welded to a reducer & flange 1 anufactured on Ionics Contract 1149. 5 upplied on Westingh suse Contract 450007010S Length overall ( ft & in.) 14'-6.5" Dia. ID (ft & In.) Nom. Thickness (in.) --- in. c isign thickness (in.) \_\_\_\_ When applicable, Certificate Hok ars' Data Reports are attached for each item of this report: National Part or Appurtenance Naticinal Part or Appurtenance Board No. Board No. Serial Number Serial Number in Numerical order in Numerical Order **RP-1077** (25)(27)(2)(28)(3) (29)(4)(30) (5) (31) (6)(32)(7)(33)(8) (34)(9) (35) (10)(35) (11)(37) (12)(38)(13) (39) (14)(40) (15)(41)(15)(42)(17)(43)(18)(44)(19)(45)(20)(21) (46)(47) (22)(48) (23)(49)(24)(50)(25)\_at temp. 66 F \_ **.** F. 650 3200 Hydro. Test pressure psi. Temp. 10. Design pressure (when applicable)

"Supplemental information in the long of tists, sketches, or drawings may be used provided (1) size is 6 % x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

	Certificate Holders Sorial N	os. <u>RP-1077</u>	inrougnHP-1077	
	CERTIFICATION	on of design		
Design specifications certified by	Not Applicable  (when applicable)  (when applicable)	P.E. State	Reg. No	
-	CERTIFICATE	OF COMPLIANCE		,
Ve certify that the statements mad conforms to the rules of construction	in this report are correct and that this of the ASME Code, Section III, Division	is (these) <u>Unper</u> sion 1.	Housing Replacement Assembly	•
JPT Cardificate of Authorization No.		Expires	March 26, 2002	•
•	Ionics, Incorporated (NPT Cerificate Holder)			•
<del></del>	CERTIFICATE	OF INSPECTION .		
of Pennsylvania and employed of Johnston, RI sest of my knowledge and belief t II, Division 1. Each part listed has be	nmission issued by the National Board of Factory Mutual Insurance Comparative inspected these items described a Certificate Holder has fabricated the en authorized for stamping on the date of inspector nor his employer makes at other the inspector nor his employer sconnected with this inspection.	in this Data Report on Accesses parts or appurtenances shown above.  ny warranty, expressed or Imshall be liable in any manne.  Commissions AC	in accordance with the ASME Co	te that to the ode, Section int described enly damage

# FOI: N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES' As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

	Manufactured and certified by	anics, Incomprated, Bridges	ille Division 3039	Wash	inglan Pike Baidee	ville Pennsylvania	Pg. 1 of 2
			(ustu	and ac	dress of NPT Certificate H	જ્વાન) જ્વાન	•
	Manufactured for <u>Westingh 20</u>	e Electric Company J.C. N	uclear Services Bu (name and address of	isiness puchase	Unit, 2000 Day Hil 1)	l Road, Windsor, C	1 06095
	Location of installation <u>Con</u>		isades Generatine (name and add	l <sup>y</sup> lant, 3 ress)	27780 Blue Star Me	anorial Highway, C	overt, MI 49043
	Type <u>CND-E-5003G01 Rcv.</u> (drawing number)	SA-312 TP 316	75,000 75,000 (tensile strength	<del></del>	N/A (CAN	)	2001 (year built)
	ASME Code, Section III, Division	1989 (edition)	No (addenda dale)	•	<u>।</u> (खंद्र	· · · · · · · · · · · · · · · · · · ·	N/A (Code case ro,)
	Fabricaled in accordance with (	anst. Spec. (Div. 2 orly)	N/A (no.)	_ Áe	vision N/A	Date	N/A
1	Remarks Upper Housing Rcpl	Manufactured on Iorics Con	of upper flange we tract 1149.	-	a pipe and the pipe	welded to a reducer	& flange.
_		Supplied on Westinehouse	Contract 45000701	05.			
	Nom. Thickness (in.) in. When applicable, Certificate Hi	design thickness (in.) Iders' Data Reports are attac	Dia. ID (It &	in.) fthis re	eport:	Length overall (ft 8	in.)14-6,5"
	Part or Appurtanance Serial Number	National Bor, rd No. In Numerical ord	er		Part or Appurtense Senal Number	nce	National Board No. in Numerical Order
	(1) RP-1078			25)	·.		
	(3)			(27) (28) —			
	(4)			(29) (30)	·		•
	(6) (7)			(31) (32) _			• • • • • • • • • • • • • • • • • • • •
	(8)			(33) <u> </u>			
	(10) (11)			(35) (36)	•		
	(12)		•	(37) (38) _			
	(14)			(39) (40)			
	(16)			(41) (42)			
	(18)			(43)	•		· · · · · · · · · · · · · · · · · · ·
	(20)			(45) (46)		·	
	(22)			(47) (48)			
	(24)	<u> </u>		(49) (50)	<u> </u>		
				_			

"Supplemental information in the torn of fists, sketches or drawings may be used provided (1) size is 8 % x 11, (2) information in items 2 and 3 on this Data Report is included on each shoot, (3) each shi is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Falriald, NJ 07007-2300.

•	Certifica's Holder's Serial Nos	AP-1078	through	IP-1078
	CERTIFICATION (	of design		
resign specifications certified by	(when applicable)			
	CERTIFICATE OF C			:
Ve certify that the statements mane conforms to the rules of construction	in this report are correct and that this (the of the ASME Coile, Section III, Division	se) <u>Uppai</u> I.	Housing Replacement A	ssembly
IPT Certificate of Authorization No.	]\[1-2974-1	Explres	March 26, 2002	· · · · · · · · · · · · · · · · · · ·
	Ionics, incorporated (NPT Certificate Holder)		(authorized representati	ive)
	CERTIFICATE OF 1	NSPECTION	•	
of Pennsylvania and employed to follow the state of my knowledge and belief, he il, Division 1. Each part listed heal a by signing this certificate, neither to this Data Report. Furthermore, he is loss of any kind arising from one		Data Report on Analysis or appurenances above. ranty, expressed or true liable in any mann	in accordance with the inplied, concerning the er for any personal injury	and state that to the SME Code, Section equipment described or property damage
Tate 11-24-2004 Signic	(Authorized Nuclear Inspector)	(Nat	L Bd. (incl. endorsements) a	nd state or prov. and no]

#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES" As Required by the provisions of the ASME Code, Section III

Not to Exceed One day's production

- f - t - a fac Martinghouse l	Flectric Company I I C No.	•	nd address of NPT Carificate Holder) ness Unit. 2000 Day Hill Road	Windsor, CT 06095
inuractured for <u>Westinghouse</u>	THE PARTY LAND THE	name and address of pur	chaser)	
cation of InstallationConsum	ners Encrey Company, Palis	ades Generating Pla	nt. 27780 Blue Star Memorial	Highway Covert MI 49043
		(name and eddress 75,000	}	
c CND-E-5003G01 Rev. 6	SA-312 TP 316	75,000		2001
(drawing number)	(mart, spec no.)	(lensãe strength)	(CRN)	(year built)
			•	N/A
ME Code, Section III, Division 1	1: <u>1989</u> (edition)	No (addenda date)	(class)	(Code case no.)
	<b>,</b>	27/4	Revision N/A	Date N/A
ricated in accordance with Con		(00.)		
marks Upper Housing Replace	ment Assembly consisting of	upper flange welde	d to a pipe and the pipe welded	i to a reducer & flange.
	anufactured on Ionics Contribution on Westinghouse Co			
m. Thickness (in.) in. de	istan thickness (in.)	Dia, ID (ft & in.	)Lengt	n overall ( ft & in.)14'-6.5"
nen applicable, Certificate Holde	ers' Data Reports are attache	d for each Item of th	is report:	•
Part or Appurtenance	National		Part or Appurtenance	National
Serial Number	Board No.		Serial Number	Board No. in Numerical Order
	in Numerical order			
RP-1079	<b>—</b>	(26)		
2)	<del></del>	(27)	•	
3)		(28)		
()		(29)		
5)		(30)		
6)	+ .; <del>y</del> /			
7)		(32)		
8)	30. 05. 2 6.2 6. 01.5	(33)		
9)	13. 16. 1	(35)		
0)	•	(36)		
1) 2 <sub>)</sub>	_	(37)		
3)		(38)		<u>.</u>
4)		(39)		
5)		(40)		<del></del>
6)		(41)		
7)		(42)		
8)		(43)		
9)		(45)		
(0)		(46)		
4.		(47)		
		(48)		
(2)		(49)		
2)	•			•
21) 22) 23) 24)	•	(50)	)	· · · · · · · · · · · · · · · · · · ·

"Supplemental Information in the form of lists, sketches, or drawings may be used provided (1) size is 8 included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7.98)

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

412 257 1270

Certificate Holder's Serial Nos.	RP-1079	through RP-1079
CERTIFICATION OF	DESIGN	
Design specifications certified byNot Applicable	P.E. State	Reg. No.
(when applicable )	_ P.E. State	
CERTIFICATE OF COM	PLIANCE	
We certify that the statements made in this report are correct and that this (these) Conforms to the rules of construction of the ASME Code, Section III, Division 1.	)Uoper	Housing Replacement Assembly
NPT Certificate of Authorization No	Expires	March 26, 2002
Date 17-9-01 Name Ionics, Incorporated (NPT Certificate Holder)	Signed _D	(authoritzed representative)
CERTIFICATE OF INSI	PECTION - AMAGE	
I, the undersigned, holding a valid commission issued by the National Board of Boiler a of Pennsylvania and employed by Pactory Mutual Insurance Company of Johnston. RI have inspected these items described in this Date best of my knowledge and belief, the Certificate Holder has fabricated these parts ill, Division 1. Each part listed has been authorized for stamping on the date shown about this Data Report. Furthermore, neither the inspector nor his employer makes any warrant in this Data Report. Furthermore, neither the inspector nor his employer shall be if or loss of any kind arising from or compected with this inspection.  Date 2-9-20 Signed Commission inspector	a Report on or appurtenances we. by, expressed or implicable in any manner	in accordance with the ASME Code, Section officed, concerning the equipment described

#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTI 3.L NUCLEAR PARTS AND APPURTENANCES\* Required by the provisions of the ASME Code, Section II

		ceed One day's pro		Pg. 1 of 2
anulactured and certified by lonice	, Incorporated, Bridgeville	Division, 3039 Washingt	on Pike Bridgeville, Pen	insy vania, 15017
inulactured for Westinghouse Ele	ectric Company LLC, Nucle	ar Services Buisiness Uni	t, 2000 Day Hill Road, V	Vinc 101, CT 06095
MAISCINISO IOL WOTH BURNE CO		(name and address of purchaser)	,	
	- O Ballion	des Consenties Blook 1771	20 Blue Star Memorial H	ighyay Covert, MI 49043
cation of installationConsume	rs Energy Company, Patisat	(name and address)	o bide stat Metions in	
	A-312 TP 316	75.000		
/pe CND-E-5003G01 Rev. 5	SA 182 TP 347	75,000	N'A	
(drawing number)	(mat'l spec no.)	(lensis strength)	(CRN)	(Ass. print)
	1989	No	1	N/A
SME Code, Section III, Division 1:	(edition)	(addenda dale)	(class)	(Code case no.)
		V/A Revisi	on N/A	//Date N/A
bricated in accordance with Const.	. Spec. (Div. 2 only)	····		<del></del>
tion Linear Housian Benjaram	ent Assembly consisting of	upper flance welded to a pi	ipe and the pipe welded t	oar discar & flange.
Mar	MITACRITED ON ICINES COUNT	UN 1177.		<del>`</del>
Suo	olied on Westinghouse Con	Tract 4500070105		over:il ( ft & in.) . 14-6.5"
100	Middennes (In )	Dia ID (Rt & In.)	Length	overall ( ft & In.)14-6.5*
lom. Thickness (in.)in. desi vhen applicable, Certificate Holden	s' Dala Reports are attached	I tot each item of this repol	TG.	
•				National
Part or Appurtenance	National:		Part or Appurenance Serial Number	Board No.
: Serial Number	Board No. In Numerical order		Salet Louison	· In Numerical Order
	in Mumencas order			•
RP-1080	\$ <del></del>	(26)		
(1)	<u> </u>	(27)		
(2)				
(3)		(29)		
(4)	-	(30)		
(5)		(31)		
(6)		(32)		
(7)	<u> </u>	(33)		
(8) (9)		(34)		
(10)		(35)		
(11)		(36)		<del>                                     </del>
(12)		(37)	· · · · · · · · · · · · · · · · · · ·	<del></del>
(13)		(38)		
(14)		(39)		
(15)		——————————————————————————————————————		
(16)		(42)		
(17)		(43)		
(16)		(44)		
(19)		——————————————————————————————————————		
(20)	<del></del>	(46)		
(21)		(47)		
(22)		(48)		L
		(49)		
(23)	1	1 1 1701		
(23) (24) (25)		(50)		

"Supplemental Information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information to its mes 2 and 3 on this Data Report is included on each sheet (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Onter dept., ASME, 22 Lav. Drive, Box 2300, Fairfield, NJ 07007-2300.

(7/98)

	Certificate Holder's Serial Nos	RP-1080	lhrough	RP-1080
	CERTIFICATION (	of design		
Design specifications certified by	Not Applicable (when applicable)	P.E. Slale	F e	7. No
Design report* certified by	Not Applicable (when applicable)	P.E. State	F e	j. No
	CERTIFICATE OF CO	OMPLIANCE		•
We certify that the statements made in Conforms to the rules of construction of	this report are correct and that this (the the ASME Code, Section III, Division 1	se) lippe	r Housing Repla :28	nent Assembly
NPT Certificate of Authorization No.	N-2974-1	Expires	March 26 2	02
Date Name	Ionics Incorporated (NPT Certificate Holder)	Signed	(authorized r po	isentadve)
_	CERTIFICATE OF IN	ISPECTION		
i, the undersigned, holding a valid commissor Pennsylvania and employed by of Johnston, RI have best of my knowledge and belief, the Calli, Division 1. Each part listed has been as By signing this certificate, neither the Institute Data Report. Furthermore, neither or loss of any kind arising from or common the commission of the Calling from the Institute Data Report. Furthermore, neither or loss of any kind arising from or common that the Calling from the Call	Factory Mutual Insurance Company re Inspected these items described in this Dartificate Holder has fabricated these parthorized for stamping on the date shown a pector nor his employer makes any warm the inspector nor his employer shall be ected with this inspection.	Data Report on 2 rts or appurtenances above. anty, expressed or in a liable in any manno	in accordance vital	and state that to the the ASME Code, Section the equipment described injury or property damage
Jaco Ji Signeo	(Authorized Nuclear Inspector)			uts) and state or prov. and noi

#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\*

As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

Pa 1 of 2

		(name and a	diress of NPT Certificate Holder)	
Manufactured for Westinghouse	Electric Company LLC, N	uclear Services Buisiness (name and address of purchas	Unit, 2000 Day Hill Road,	Windsor, CT 06095
Location of installationConsu	mers Energy Company, Pal	isades Generating Plant.	27780 Blue Star Memorial I	Highway, Covert, MI 49043
	SA-312 TP 316	75.000		
Type <u>CND-E-5003G01 Rev. 5</u>		75,000	N/A	2001
( drawing number)	(mai/1. spec no.)	(tensile strength)	(CRN)	(year built)
ASME Code, Section III, Division	1: <u>1989</u> (edition)	No (addenda date)	(class)	N/A (Code case no.)
Fabricated in accordance with Co	nst. Spec. (Div. 2 only)	N/A Re	evisionN/A	Date <u>N/A</u>
Remarks Upper Housing Replac	ement Assembly consisting		a pipe and the pipe welded t	o a reducer & flance.
	fanufactured on Ionics Con			
	upplied on Westinghouse C			
Nom. Thickness (in.) in. d	esign thickness (in.)	Dia. ID (ft & in.)	Length	overall ( ft & in.)14'-6.5"
When applicable, Certificate Hold	lers' Data Reports are attach	ed for each item of this re	port:	
Part or Appurtenance Serial Number	National Board No. in Numerical orde		Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) RP-1081	_	(26)		
(2)		(27)		
4-1	•	(28)		
(4)		(29)		
(5)		(30)		
(B)		(31)		
(7)		(32)		
(8)		(33)		
(9)		(34)		
(10)		(35)		
(11)		(36)		
(12)		(37)		
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(14)		(39)		
(15)		(40)		
(16)		(41)		
(17)		(42)		
(18)		(44)		
(19)		(45)		
(20)		(46)		
(21)		(47)		
(22)		(48)		
(24)		(49)		
(25)		(50)		
(20)			<del></del>	

\*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 % x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

650

\_ F.

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Hydro. Test pressure

(when applicable)

10. Design pressure\_\_\_

2485

psi.

Temp.

	Certificate Holder's Serial	NOSRP-1081	trirougnRP+1081	
	CERTIFICAT	TION OF DESIGN		
Design specifications certified by	Not Applicable	P.E. State	Reg. No.	
Design report* certified by	Not Applicable (when applicable)	P.E. State	Reg. No.	
•	CERTIFICATE	OF COMPLIANCE		- 10. 1. 2.
We certify that the statements made conforms to the rules of construction			r Housing Replacement Assembly	
NPT Certificate of Authorization No	N-2974-1	Expires	March 26, 2002	
Date 11.21.01 Name	Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized representative)	<del></del>
	CERTIFICATE	OF INSPECTION		
best of my knowledge and belief, the III, Division 1. Each part listed has been By signing this certificate, neither the I in this Data Report. Furthermore, neith or loss of any kind arising from or co	Factory Mutual Insurance Compa have inspected these items described Certificate. Holder has fabricated the nauthorized for stamping on the date inspector nor his employer makes a her the inspector nor his employer connected with this inspection.	In this Data Report on Annesse parts or appurtenances shown above.  In warranty, expressed or imshall be liable in any mannesse.	in accordance with the ASME Code, Seplied, concerning the equipment descriptor any personal injury or property dark	to the ection
Date //-21-20/ Signed_				
	7Authorized Nuclear Inspectors	(Nath	Rd (incl. andoreaments) and state or new a	ad aal

٨.

#### FOR 1 N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III

	Toomseled Bridger	ille Division, 3039 Washington (name and address of	Pike Bridgeville Per	nsylvania. 15017
nufactured and certified by	Ionics, Incorporated, Bridge	(name and address of	NPT Cerulicale Holder)	
•	The Common STC N	uclear Services Buisiness Unit.	2000 Day Hill Road \	Windsor, CT 06095
anufactured for Westing he	ise Electric Compan Color	(name and address of purchaser)		
•		liendes Generatine Plant. 27780	Blue Star Memorial E	Hichway, Covert, M1, 49043
ocation of installation $ extstyle	Islimers Energy Continany. La	(name and address)		
	SA-312 TP 315	75.000 75.000	N/A	2001
ype CND-E-5003G01 Y.E.	SA 182 TP 347 (mall. spec no.)	(lensile strength)	(CRN)	(year built)
( drawing number)	Comment of the commen		ì	N/A ·
SME Code, Section III, Civi	i ion 1:	No (addenda date)	(class)	(Code case no.)
	•		N/A	Date
abricated in accordance vit	Const Spec (Div. 2 only)	N/A Revision		
amades Money Housing St	- Jacomont Assembly consisting	of upper flange welded to a bid	e and the pipe welded	to a reducer & flange.
emarks <u>Object Hoteland</u>	Manufactured on onics Co			
	Supplied on Westinghouse	Dia ID (R & In.)	· Length	overall (ft & in.) 14'-6.5"
Nom. Thickness (in.)	design unickness (iii-)	Dia. ID (ft & h.)ched for each item of this report		
When applicable, Certificate	; ,1000010 2000010			atalianat.
	National	P	art or Appudanance Sanal Number	National Board No.
Part or Appurtena Serial Number			Senai None	in Numerical Order
,	N Milmencaro	,oe		
RP-1082	·	(26)		
(1)				-
(3)		(28)		
(4)				
(5)				
(6)		(32)		
(f)			<u> </u>	
(8)		(34)	· · · · ·	
(10)		(36)		
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(12)		(36)		<u> </u>
(13)				
		(40)		
(14)	_	. 1 1 (41)		
(15)				
		(42)		
(15) (16) (17) (18)		(42)		
(15) (16) (17) (18) (19)		(42) (43) (44) (45)		
(15) (16) (17) (18) (19) (20)		(42) (43) (44) (45) (46)		
(15) (16) (17) (18) (19) (20) (21)		(42) (43) (44) (45) (46) (47)	·	
(15) (16) (17) (18) (19) (20)		(42) (43) (44) (45) (46)		
(15) (16) (17) (18) (19) (20) (21) (22)		(42) (43) (44) (45) (46) (47) (48)		
(15) (16) (17) (18) (19) (20) (21) (22) (23)		(42) (43) (44) (45) (46) (47) (48) (49)	F. Hydro. Test pre	ssure 3200 at lemp. La

"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is  $6.\% \times 11$ , included on each sheet, (3) e ich sheet is numbered and the number of sheets is recorded at the top of this form.

•	Certificate Holder's Serial Nos.	. RP-1062_throus	gh
	CERTIFICATION	OF DESIGN	•
Design specifications cartified by	(when applicable )	P.E. State P.E. State	Reg. NoReg. No
	CERTIFICATE OF	COMPLIANCE	
We certify that the statements reconforms to the rules of constructions of	ade in this report are correct and that this to tion of the ASME Dode, Section III, Division		per Housing Replacement Assambly
NPT Certificate of Authorization No.	me	ExpiresSigned	March 26, 2002  (authorized representative)
	CERTIFICATE O	F INSPECTION	
of Pennsylvania and error of Johnston, RI best of my knowledge and held lill, Division 1. Each part listed 1 By signing this certificate, next	have inspected these items described in if, the Certificate Hulder has fabricated these is been authorized for stamping on the date short the inspector nor his employer makes any neither the inspector nor his employer short connected with this inspection.	this Data Report on 2 is parts or appurtenant own above. warranty, expressed of all be liable in any ma	ressel Inspectors and the State and Province  and state that to the ces in accordance with the ASME Code, Section or implied, concerning the equipment described inner for any personal injury or property damage  33314 hr

### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\*

As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

			•		iddress of NPT Certificate Holder)	
nufactured for Westinghouse	Electric Company LLC, Nuc	lear Servi	ces	Buisines	s Unit, 2000 Day Hill Road	d. Windsor, CT 06095
		•				
cation of installation <u>Consu</u>	ners Energy Company, Palis			ng Plant. address)	27780 Blue Star Memoria	Highway, Coycrt, MI 49043
	SA-312 TP 316	•	.000	•	_	
c CND-E-5003G01 Rev. 5			.000		N/A	2001
( drawing number)	(matil spec no.)	(tensile	stren	gth)	(CRN)	(year built)
ME Code, Section III, Division 1	1:1989	No				
	(odition)	(adder	nda d	ale)	(dass)	(Code case no.)
oricated in accordance with Con-	st. Spec. (Div. 2 only)	N/A	•	R	evisionN/A	Date <u>N/A</u>
marks Upper Housing Replace		(no.)	\na \	volded in	a nine and the nine welde	d to a reducer & flange.
manks <u>upper Housing Replace</u> M	anufactured on Ionics Contra	ct 1149.	ryu.	Velded II	A DIDS WING THE PERSON AND SERVICE	
Su	ipplied on Westinghouse Cor	itract 450	007	0105.		
m. Thickness (in.)in. de	sign thickness (in.)	Dia. I	ID (f	t & in.)	Leng	th overall (ft & in.)14'-6.5"
nen applicable, Certificate Holde	ers' Data Reports are attached	d for each	Iten	n of this r	eport:	•
		<del></del>	٦			
Part or Appurtenance	National				Part or Appurtonance	National Board No.
Serial Number	Board No.	·	- 1		Serial Number	In Numerical Order
	IU KRUBIKSI OKON					
RP-1083	-			(26)		
1)				(27)		
3)			·	(28)		
4)			- "	(29)		
(5)				(30)		
(6)			-	(31)		
(7)				(32) _		
(8)				(33) (34)		
(9)			•	(35) -		
(0)				(36)		
11)				(37)		
12) 13)				(38)		
14)			i I	(39)		
15)				(40)		
16)				(41)		
17)				(42)		
18)				(43)		
19)				(44)		
20)			-	(45)		
21)	·		ł	(46) -		
22)			1	(47)		
23)			1	(48) (49)		
24)			4	(50)		

"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11. (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/58)

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

Page 7

Certificate Holder's Serial Nos.	RP-1083	through RP-1083	
CERTIFICATION OF	DESIGN		
Design specifications certified by Not Applicable (when applicable )  Design report* certified by Not Applicable (when applicable )	P.E. State	Reg. No.	
CERTIFICATE OF COM	PLIANCE		
We certify that the statements made in this report are correct and that this (these) Conforms to the rules of construction of the ASME Code, Section III, Division 1.	Upger Ho	using Replacement Assembly	
NPT Certificate of Authorization No. N-2974-1	Expires	March 26, 2002	
Date 17:1:01 Name Ionics Incorporated (NPT Certificate Holder)	Signed	(authorized representative)	
CERTIFICATE OF INST	ECTION		
I, the undersigned, holding a valid commission issued by the National Board of Boilor a of Pennsylvania and employed by Factory Mutual Insurance Company of Johnston. RI have inspected these items described in this Data best of my knowledge and bolief, the Certificate Holder has fabricated these parts III. Division 1. Each part listed has been authorized for stamping on the date shown abo By signing this certificate, neither the inspector nor his employer makes any warrant in this Data Report. Furthermore, neither the inspector nor his employer shall be lifted to loss of any kind arising from or connected with this inspection.  Date 12 - 1 - 2 - Signed (Authorized Nuclear Inspector)	Report on Page 1 a a construction or appurtenances in a construction of the constructi	and state that to the coordance with the ASME Code, Section d, concoming the aquipment described rany personal injury or property damage	

## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES'

As Required by the provisions of the ASME Code, Section III
Not to Exceed One day's production

Pg. 1 of 2

1.	Manufactured and certified by Ion	ics, Incorporated, Bridgev	ille Division, 30	39 Washington hame and address of t	Pike, Bridgeville, P NPT Certificate Holder)	ennsylvania, 15017	
2.	Manufactured for <u>Westinghouse</u>	Electric Company LLC. N	uclear Services (name and addres	Buisiness Unit, 2 is of purchaser)	000 Day Hill Road	Windsor, CT 06095	3
3.	Location of installationConsum		(name and	address)	Blue Star Memorial	Highway, Covert, M	I 49043
		SA-312 TP 316	75.000				
4.	Type CND-E-5003G01 Rev. 5	<u>SA 182 TP 347</u>	75.000		N/A	<u> </u>	2001
	( drawing number)	(mat1. spec no.)	(lensile stren	gth)	(CRN)		(year built)
5.	ASME Code, Section III, Division 1	: 1989	No		1		N/A
•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(edition)	(addenda d	ate)	(class)	(0	Code case no.)
6.	Fabricated in accordance with Con-	st. Spec. (Div. 2 only)	N/A (no.)	Revision_	N/A	DateN/A	
<b>.7.</b>		ment Assembly consisting anufactured on Ionics Con	of upper flance	welded to a pipe a	and the pipe welded	to a reducer & flange	·
		anutactured on tonics Con policed on Westinghouse C		0105			
_	Nom. Thickness (in.)in. de	eign thickness (in )	VOUCE DELING	4 2 in \		overall (# º is \	14' 6 5"
8. 9.	When applicable, Certificate Holde	ers' Data Renorts are attacl	ned for each Her	n of this reports	Lengtr	overall ( if & In.)	14-0.3
<b>J</b> .	TYTICH applicable, Certificate Flores		100 101 0001 1101	or and report.	•		
	Part or Appurtenance Serial Number	National Board No.	÷		or Appurtenance erial Number	Board	
		in Numerical orde	er			in Numer	ical Order
	(1) RP-1084	:		(26)		•	
	(2)			(27)	<del> </del>	3	
	(3)	· · · · · · · · · · · · · · · · · · ·		(28)	· · · · · · · · · · · · · · · · · · ·		·
	(4)			(29)			
	(5)			(30)			
	(6)	<u> </u>		(31)			<u> </u>
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	(9)			(34)			· · · · · · · · · · · · · · · · · · ·
	(10)	ļ	·	(35)		ļ	
	(11)			(36)	<u> </u>		
	(12)			(37)			
	(13)			(38)			
	(14)			(39)			
	(14) (15) (16)	+		(40)		<del> </del>	<del></del>
	(16)			(41) (42)			
	(17)		<del></del>	(43)			
	(18)						
	(19)			. (44) . (45)	<del></del>	<del> </del>	
	(20)			(46)			<del></del>
	(21)	<u> </u>	· · · · ·	(47)			
	(22)	+	<del></del>	(48)	<del></del>	<del> </del>	
	(24)			(49)		<del> </del>	<u> </u>
	(25)			(50)			
	(64)						
10	. Design pressure 2485	psi. Temp.		650*F.	Hydro. Test pressu	re 3200 (when applicable)	_at temp. <u>64</u> *F
•S	upplemental information in the form of	lists, sketches, or drawings :	may be used pro	vided (1) size is 8	1 ½ x 11, (2) Informat	ion in items 2 and 3 on	this Data Report is

	Certificate Holder's Serial No	s. <u>RP-1084</u> throug	hRP-1084	
	CERTIFICATIO	ON OF DESIGN		
Design specifications certified by  Design report* certified by	Not Applicable (when applicable) Not Applicable (when applicable)			
· .	CERTIFICATE O	F COMPLIANCE		
We certify that the statements made in Conforms to the rules of construction of	this report are correct and that this the ASME Code, Section III, Divisi		r Housing Replacement Assembly	·
NPT Certificate of Authorization No.	N-2974-1	Expires	March 26, 2002	
Date Name			(authorized representative)	
	CERTIFICATE	OF INSPECTION		
i, the undersigned, holding a valid common of Pennsylvania and employed by of Johnston RI. has best of my knowledge and belief, the Cill, Division 1. Each part listed has been By signing this certificate, neither the in In this Data Report. Furthermore, neither or loss of any kind arising from or compate 11-17-200 Signed	Factory Mutual Insurance Company ave inspected these items described in Certificate Holder has fabricated the authorized for stamping on the date stappector nor his employer makes any or the inspector nor his employer stapped with this inspection.	n this Data Report on Zese parts or appurtenance nown above.  y warranty, expressed or in the liable in any mannance.  Commissions	s in accordance with the ASME Cod	that to the de, Section described ty damage

(7/95)

## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL

NUCLEAR PARTS AND APPURTENANCES\*
As Required by the provisions of the ASME Code, Section 111
Not to Exceed One day's production

		•	•	of NPT Cartificals Holder)	****
Manufactured for	Westinghouse E	<u> Jeetrie Company LLC, Nucl</u>	ear Services Auisiness Uni	c 2000 Day Hill Road.	Windsor, CT 06095
			•		
ocation of install:	ion <u>Consum</u>	ers Entray Company, Palisa	des Generating Plant 2778	10 Blue Star Memorial I	lighway, Covert, MI 49043
		SA-312 TP 316	(name and address) 75,000		
Type CND-E-50	3G01 Rev. 5	SA 182 TP 347	75,000	N/A	2001
र्वतात व व्यवस्थाते )	đ	(mail: ipec nc.)	(lensile sirengih)	(CRM)	(year built)
ASME Code, Sec	on III, Division 1:		No	1	N/A .
		(adition)	(addends date)	(class)	[Code case no.]
abricated in acco	ance with Const	it. Spec. (Div. 2 anly)]	VA Revisio	onN/A	Date N/A
Pamarks Linneri	ausino Reniaceo	ment As sembly consisting of	(no) upper flance welded to a ple	ne and the nine welded t	o a raducar & Ranne
	Ma	nufactured on Ionies Contra	ct 1149.		
	Su	oplied in Westinghouse Cor	tract 4500070105.		***
Norn. Thickness (	1.) — In. des	sign thickness (In.)	Dis. ID (ft & in.)	Length	overall ( ft & In.) 14"-6.5"
Augu abbitcable	Selflicate Loida	rs' Data. Reports are attached	ind each teath or his tabout		•
	Appurtamence .	Nallanal		art or Appurtenance	National
	al Number	Board No.		Scrial Number	National Board No.
	•	in Numarical order		•	in Numerical Order
,, I	P-1085	-	100		
(1)	<del></del>		(26) ——		>
(3)	,		(28)		
(4)			(29)		
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(18)		<del> </del>	(44)		
(19)		<del></del>	(45)		
(19)					<del>                                     </del>
(19) (20) (21)					i .
(19) (20)			(47)		
(19) (20) (21) (22)			(47)		

"Supplemental Information in the form of Ests, sketches, or drawings may be used provided (1) size is 8 % x 11. (2) information in items 2 and 1 on this Data Report is included on each size, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (500040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

NOV 16 '01 17:22 412 257 1270 PAGE.21

•	Certificata Holder's Serial Nos.	RP-1085	through	RP-1085
	CERTIFICATION O	F DESIGN		
Design specification: c rtified by		P.E. State	Rag.	No
Design report' certiles by	(when applicable) Not Applicable (when applicable)	P.E. Stale	Reg.	No.
	CERTIFICATE OF CO	OMPLIANCE		
We cartify that the st terrents made Conforms to the rules of construction	In this report are correct and that this (the of the ASME Code, Section III, Division 1		r Housing Replacem	ent Assembly
NPT Certificate of Au horization No.	N-2974-1	Exbites	March 26, 200	)2
Date Name	•	Signed	(Bulthorized repre	sentabye)
	CERTIFICATE OF II	NSPECTION		
of Pennsylvania and employed b of Johnston, RI best of my knowleds: and belief, the III, Division 1. Each artifeted has been	$\mathbf{X} / \mathbf{Z} \mathbf{Y}$	Data Report on 2 arts or appurtenance above. Tanty, expressed or its liable in any mann Commissione	s in accordance with mpiled, concerning ter for any personal	the ASME Code, Section

### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\*

As Required by the provisions of the ASME Code, Section III
Not to Exceed One day's production

fanufactured and certified by Io		(name and addre	ss of NPT Certificale Holder)	
Manufactured for Westinghouse	Electric Company LLC. Nucle	ar Services Buisiness Un name and address of purchaser)	nit, 2000 Day Hill Road.	Windsor, CT 06095
Location of installationConsu	mers Energy Company, Palisad	les Generating Plant, 27	780 Blue Star Memorial	Highway, Covert, MI 49043
	SA-312 TP 316	75,000		•
Type .CND-E-5003G01 Rev. 5		75,000	N/A .	2001
( drawing number)	(mail. spec no.)	(tensile strength)	(CRN)	(year built)
ASME Code, Section III, Division	1:	No (addenda date)	(class)	N/A (Code case no.)
Fabricated in accordance with Co		//A Revis		
Remarks <u>Upper Housing Replac</u> M	ement Assembly consisting of u fanufactured on Ionics Contrac	pper flange welded to a r	pipe and the pipe welded	lo a reducer & flange.
S	upplied on Westinghouse Cont	ract 4500070105:		•
Nom Thickness (in ) In di	esign thickness (in.)	Dia, ID (ft & ln.)	Length	overall ( ft & in.) 14'-6.5"
When applicable, Certificate Hold	lers' Data Reports are attached	for each item of this repo	rt	
	A. 41		D-11	National
Part or Appurtenance Serial Number	National Board No. In Numerical order		Part or Appurtenance Serial Number	Board No. in Numerical Order
(1) RP-1086	. —	(26)		
701		(27)	·	
(3)		(28)		
(4)		(29)		<del></del>
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(6)		(31)		
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(8)		(34)		
(9)		(35)		
(10) (11)		(36)		
(12)		(37)		
(13)		(38)	•	· · · · · · · · · · · · · · · · · · ·
(14)		(39)		·
(15)		(40)		
(16)		(41)		
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(18)		(43)		
(19)	·	(44)		
(20)		(45)		
(21)		(46)		
(22)		(47)		
		(48)		
(23)				1
(23) (24) (25)		(49)		

<sup>\*</sup>Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos	RP-1086 Illiough RP-1099
CERTIFICATION O	F DESIGN
Design specifications certified by Not Applicable (when applicable)  Design report* certified by Not Applicable (when applicable)	P.E. State Reg. No
CERTIFICATE OF CO	MPLIANCE
We certify that the statements made in this report are correct and that this (these Conforms to the rules of construction of the ASME Code, Section III, Division 1.	e) Upper Housing Replacement Assembly
NPT Certificate of Authorization No	(. ) 11
Date 11-19-01 Name Ionics Incorporated (NPT Certificate Holder)	Signed (authorized representative)
CERTIFICATE OF IN	SPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler of Pennsylvania and employed by Factory Mutual Insurance Company of Johnston. RI have inspected these items described in this D best of my knowledge and belief, the Certificate Holder has fabricated these par III, Division 1. Each part listed has been authorized for stamping on the date shown all By signing this certificate, neither the inspector nor his employer makes any warra in this Data Report. Furthermore, neither the inspector nor his employer shall be or loss of any kind arising from or connected with this inspection.  Date 11-19-22-1 Signed (Authorized Nuclear Inspector)	ata Report on 2000, 19,2001, and state that to the ts or appurtenances in accordance with the ASME Code, Section bove.

### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES'

As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

Pg. 1 of 2

nufactured for Westinghouse Elect	ric Company LLC, Nuclear S	Services Buisiness I	Init, 2000 Day Hill Ro	ad. Windsor, CT 06095
	(name	and address or purchaser)	l	
cation of installationConsumers ]	Energy Company, Palisades	Generating Plant. 2	7780 Blue Star Memor	ial Highway, Covert, MI 49043
		(name and address)		
<u></u>	312 TP 316	75.000	201	2001
	182 TP 347	75,000 tensile strength)	N/A (CRN)	(year built)
(drawing number) (m	at'l. spec no.) (	terms sociatory	(5/5/)	• ,
ME Code, Section III, Division 1:	1989	No		N/A (Code case no.)
	(edition)	(addenda date)	(class)	(Case case in.)
pricated in accordance with Const. Sp	sec. (Div. 2 only) N/A	Rev	isionN/A	DateN/A
	(6	<b>س</b> ا ۱		ied to a reducer & flance
marks Upper Housing Replacement	Assembly consisting of uppe	r flange welded to a	Dibe and the Dibe wald	ied to a reducer & flange.
<u> </u>	actured on Ionics Contract 11	4500070105		
m. Thickness (in.)in. design	ed on Westinghouse Contract	Dia ID (# 2 in )	— Len	igth overall (ft & in.) 14"-6.5"
m. Thickness (in.) — in. design nen applicable, Certificate Holders' D	iala Reports are attached for	each item of this rep	ort	
tett applicable, Certificate : loice.	ata respera de disconocione			
	h)-dah		Part or Appurtenance	National
Part or Appurtenance Serial Number	National Board No.		Serial Number	Board No.
Odia Hallon	in Numerical order			in Numerical Order
77.1057				
1)RP-1087	,	(26) —		
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"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 % x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

. سوخت نمین This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

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#### FORM N-2 (Back - Pg 2 of 2)

7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Certificate Holder's Senal N	os. <u>RP-1087</u>	_throughRP-1087	
	CERTIFICATION	on of design	•	,
Design specifications cardfied by	Not Applicab a	P.E. State	Reg. No.	
Design report* certified by	(when applicable) Not Aoplicable (when applicable)	P.E. State	Reg. No.	
	CERTIFICATE	OF COMPLIANCE		
We certify that the statements had eliconforms to the rules of construction of	n this report are correct and that thi of the ASME Code, Section III, Divis	s (these) <u>Upper l</u> sion 1.	lousing Replacement Assembly	
NPT Certificate of Authorization N )	N-2974-1	Expires	March 26, 2002	•
Date 11-14-01 Ner e _	Ionics, Incorporated (NPT Cartificate Folder)	Signed	(authorized representative)	·
3-12. 13 20. 13	• • • • • • • • • • • • • • • • • • •	OF INSPECTION		
the undersigned, holding a valid common Pennsylvania and employed by Johnston RI	Factory Mun al Insurance Compar	n this Data Report on 2	14,2001, and state t	that to the
pest of my knowledge and beliaf, the II, Division 1. Each part listed has been by signing this certificate, neither he in this Data Reports Furthermore, neither loss of any kind arising from 1 r	n authorized for s'amping on the date s inspector nor his employer makes at her the inspector nor his employer s	hown above.	lied concerning the equipment	described
Date 11-14-Jan Sign ad_	Solt Den	Commissions	34 10 /224	rov and nol
	(Authorized Nuclear Inspector)	, įNari. i	ld. (Incl. endorsements) and state or pr	ov. and not

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# FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES' As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

_							Pg. 1 of 2
1.	Manufactured and certified by Ionic	s. Incorporated, Bridgey	ille Division, 303 (na	Washington	Pike, Bridgeville, F	Pennsylvania, 15017	
2.	Manufactured for Westinghouse Ele	ectric Company LLC, N		usiness Unit.		LWindsor CT 060	95
3.	Location of InstallationConsume	rs Energy Company, Pal	•	Plant 27780	Bluc Star Memorial	Highway Coyca J	MI 49043
4.		SA-312 TP 316 SA 182 TP 347 (msl'), spec no.)	75.000 75.000 (iansila strengil		N/A (CRN)	<u> </u>	2001 (year built)
5.	ASME Code, Section III, Division 1:	1989 (edition)	No (addenda date	<del></del>	l		N/A (Code case no )
6.	Fabricated in accordance with Const.	Spec. (Div. 2 only)	N/A (ng.)	_ Revision	N/A	DateN	/A ·
7. —		ufactured on Ionics Con-	of upper flange we tract 1149.		and the pipe welded	to a reducer & flano	16
	Supp	olied on Westinghouse C	ontract 45000701	os.			
8. 9.	Nom. Thickness (in.) in. design When applicable, Certificate Holders	in thickness (in.) ' Data Reports are attact	Dia. ID (ft died for each item of	in.) f this report:	Length	n overall ( ft & in.)	14'-6.5"
	Part or Appurtenance Serial Number	Nalional Board No. in Numerical orde	ur .		l or Appurtenance Serial Number	Bos	oldonal ard No. erical Order
	(1) RP-1088	<del>-</del>		26)			
	(2)			27)	· · · · · · · · · · · · · · · · · · ·	<u> </u>	
	(3)			28)			
	(5)			29) 30)		<del> </del>	
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	(24)	···		49)			···
	(25)		\ (	50)			
	2 . 1 2 min w w				,		
10.	Design pressure 2485	psi. Temp.	65	*F.	Hydro: Test pressur	re 3200 (when applicable)	at temp. 66°F
"Su inch	pplemental information in the form of list uded on each sheet (3) each sheet is n	is, skelches, or drawings π numbered and the number	nsy be used provide of sheets is recorde	ed (1) size is it is at the top of t	8 ½ x 11, (2) Informati his form.	ion. In Items 2 and 3 or	ı this Data Report is
(7/9/	•					2 Law Drive, Box 2300,	, Faldfeld, NJ 07007-2300
					•	•	

Page 7

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# FORM N -2 (Back - Pg 2 of 2)

	FORM N -2 (Back -	Pg 2 of 2) '		
	Certificate Holder's Serial Nos.	RP-1088	through	RP-1088
	CERTIFICATION C	F DESIGN		
Design specifications certified by	Not Applicable (when applicable)	P.E. State	Req.	No
Dasign report* certified by	(when applicable )  Not Applicable (when applicable )	P.E. State	Reg.	No
,	CERTIFICATE OF CO	MPLIANCE		
Ve certify that the statements made in conforms to the rules of construction of	this report are correct and that this (thes	e) Upper	Housing Replacem	ont Assembly
Ve certify that the statements made in conforms to the rules of construction of	this report are correct and that this (these the ASME Code, Section III, Division 1.	9) Upper	Housing Replacem	ont Assembly
conforms to the rules of construction of	the ASME Code, Section III, Division 1.	Uoper Uoper Expires	Housing Replacem	
IPT Certificate of Authorization No.	the ASME Code, Section III, Division 1.	Expires		D2
IPT Certificate of Authorization No.	the ASME Code, Section III, Division 1.  N-2974-1  Ionics, Incorporated	Expires	March 26, 200	D2
PT Certificate of Authorization No.  Name  the undersigned, holding a valid commission of the rules of construction of the rules of	N-2974-1  Ionics Incorporated (NPT Certificate Holder)  CERTIFICATE OF IN:	Expires Signed SPECTION and Pressure Vess	March 26, 20(	sentative)
the undersigned, holding a valid commist Pennsylvania—and employed by Johnston, RI	N-2974-1  Ionics, Incorporated (NPT Certificate Holder)  CERTIFICATE OF IN: sion issued by the National Board of Boller Factory Mutual Insurance Company is inspected these items described in this D	Expires Signed SPECTION and Pressure Vession Report on Table	March 26, 200  (authorized representations)	the State and Province
the undersigned, holding a valid commis  f Pennsylvania — and employed by  f Johnston, RI havest of ny knowledge and belief, the Commistant of the control o	N-2974-1  Ionics, Incorporated (NPT Certificate Holder)  CERTIFICATE OF IN: sion issued by the National Board of Boller Factory Mutual Insurance Company is inspected these items described in this Distribution and the second in the partificate Holder has fabricated these par	Expires Signed SPECTION and Pressure Vession Report on Secretary or appurenances is a pressure of the secretary of the secret	March 26, 200  (authorized representations)	the State and Province
the undersigned, holding a valid commiss of Pennsylvania—and employed by If Johnston, RI—have to finy knowledge and belief, the Coll, Division 1. Each part listed has been at this Data Report. Furthermore, neither rices of any kind arising from or connections.	N-2974-1  Ionics Incorporated (NPT Certificate Holder)  CERTIFICATE OF IN:  sion issued by the National Board of Boller Pactory Mutual Insurance Company e inspected these items described in this D ortificate Holder has fabricated these par ithorized for stamping on the date shown at sector nor his employer makes any warra the inspector nor his employer shall be acted with this inspection.	Expires Signed SPECTION and Pressure Vessor ata Report on 2s or appurtenances in ove. nty, expressed or impliable in any manner	March 26, 200 (authorized representation accordance with for any personal life.)	the State and Province  Zea and state that to the the ASME Code, Section the equipment described njury or property damage
Name Conforms to the rules of construction of Conforms to the rules of construction of NPT Certificate of Authorization No.  Date 11-14-0 Name	N-2974-1  Ionics Incorporated (NPT Cartificate Holder)  CERTIFICATE OF IN: sion issued by the National Board of Boller Factory Mutual Insurance Company re inspected these items described in this D intificate Holder has fabricated these par atthorized for stamping on the date shown at bector nor his employer makes any warra the inspector nor his employer shall be	Expires Signed SPECTION and Pressure Vessor ata Report on 2s or appurtenances in ove. nty, expressed or impliable in any manner	March 26, 200 (authorized representation accordance with for any personal life.)	the State and Province  Zea and state that to the the ASME Code, Section the equipment described njury or property damage

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# FOR 1 N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES" As Required by the provisions of the ASME Code, Section ||| Not to Exceed One day's production

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Manufactured and certified I	lonics. Incorporated, Bridgey	rille Division, 3039 Washi (name and ack	ngton Pike, Bridgeville, Penn ress of NPT Cartificate Holder)	sylvania 15017
Manufactured for Westing	n se Electric Company LLC N	Inclear Services Buisiness 1	Unit, 2000 Day Hill Road, Wi	ndsor, CT 06095
Location of installation	or sumers Energy Company, Pal	lisades Generating Plant, 2		hway. Covert. MT 49043
,	SA-312 TP 316	(name and address)		
Type <u>CND-E-5003G01 Re</u>		75.000	N/A	2001
( drawing number)	(mat1. spec no.)	(lensãe strength)	(CRN)	(year built)
ASME Code, Section III, Div	in 1:	No (addenda dele)		N/A (Code case no.)
Fabricated in accordance with	( onst. Spec. (Div. 2 only)	• *** ***	isionN/A	Date N/A
	ok cement Assembly consisting	(00.)		
n• f	Manufactured on Ionics Cont	tract 1149		
Nom. Thickness (in ) k	Supplied on Westinghouse C design thickness (in.		- Longth evo	rall ( ft & In.) 14'-6.5"
When applicable, Certificate	le ders' Data Reports ere attach	ned for each Item of this rep	ort: Leight ove	raii ( it & irt.)14-0.5"
		<del></del>		
Part or Appurienan: Serial Number	Ne tional Bourd No.	1   -	Part or Appurtenance Serial Number	National
	In Numinical orde	er .	Solid Horibo	Board No. in Numerical Order
RP-1089 ·				
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•			·	
Dealgn pressure 246	5psi. Temp	650°F	. Hydro. Test pressure	3200 at temp. 66°F
. •				(when spodcable)
ofemental information in the form	( lists, sketches or drawings ma	ay be used provided (1) eine	is 8 % x 11. (2) information in	Hams 2 and 3 on this Data Record
ed on each sheet (3) each she	at is numbered and the number o	of sheets is recorded at the top	of this form.	
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plemental information in the form	c'lists, sketches, or drawings ma at is numbered and the number o	ay be used provided (1) size of aheets is recorded at the top	is 8 % x 11. (2) information in	(when spoilcable) Items 2 and 3 on this Data F

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# FORM N-2 (Back - Pg 2 of 2)

A STATE OF THE STA	- Certificate Holder's	Serial Nos.	RP-1089	through	RP-1089	_
	CERTIF	ICATION OF	DESIGN			
Design specifications certified by	Not Applicable		P.E. State	Reg. No	· <b>).</b>	
Design report* certified by	(when applicable) Not Applicable	."	P.E. State	Reg. No	1 · · · · · ·	_
	(wher applicable)	,·				
•	CERTIF	ICATE OF COMP	LIANCE		, -	
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We certify that the statements may Conforms to the rules of construct			Upper	Housing Replacement	Assembly	-
• • • • • • •					of the state of	
NPT Certificate of Authorization 1:	o. <u>N-2974-1</u>	a management to the state of th	Expires	March 26, 2002	The state of the s	_
DateNai	le <u>Ionics Incorporate</u> (NPT Conflicate Holde		Signed	(authorized represent	athre)	
The second secon	1 12					_
The state of the s		CATE OF INSP	ECTION 4		And the state of t	
		, ; 				
If the undersigned, holding a valid of Pennsylvania and empkys	t by Factory Mutual Insurance (	Comitany	· · .			
of Johnston RI best of my knowledge and belief,	have inspected these items des	cobed in this Data	Report on 226	n accordance with the	/and state that to the ASME Code, Section	
III, Division 1. Each part listed has By signing this certificate, neither	been authorized for stamping on the	e dale shown abov akes any warranty	e. . expressed or ima	blied, concerning the	equipment described	
in this Data Reports Furthermore, or loss of eny kind arising from a	neither the inspector nor his emp	loyer shall be lia	ble in any manner	focany personal injur	y or property damage 17.	
Date // 13.22001 Sign		. Υ. ε	missions 20	+31411	Pizzer	
	(Authorized Nuclear Inspector	) (48. 1	_[Na/I. I	3d. (Incl. endomements) a	nd state or prov. and no]	
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## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\*

As Required by the provisions of the ASME Code, Section III
Not to Exceed One day's production

Pa. 1 of 2

lanulactured for <u>Westinghouse</u>		name and address of purcha	ser)	
ocation of installation <u>Consu</u>	mers Energy Company, Palisa	des Generating Plant, (name and address)	27780 Blue Star Memorial	Highway, Covert, MI 49043
OVD 7 5000 CO. D 5	SA-312 TP 316	75,000	•	
ype <u>CND-E-5003G01 Rev. 5</u>	SA-479 / SA 182 TP 347		00 N/A	200
( drawing number)	(mat1. spec no.)	(tensile strength)	(CRN)	(year buill)
SME Code, Section III, Division	1: <u>1989</u> (edition)	No (addenda dale)	1(class)	N/A
abricated in accordance with Co.	,	•	. ,	(Code case no.)
abricated in accordance with Cor		(no.)	evision N/A	Date N/A
emarks Upper Housing Replace	ement Assembly consisting of a	poper flange welded to	a pipe and the pipe welded	d to a reducer & flange.
	Sanufactured on Ionics Contractured on Westinghouse Contractured on Ionics Contractu			
lom. Thickness (in.) in. de	esign thickness (in.)	Dia, ID (ft & in.)	Lengt	h overail ( ft & in.)14'-6.5"
Vhen applicable, Certificate Hold	ers' Data Reports are attached	for each item of this	eport:	14-0.5
		<del></del>		•
Part or Appurtenance	National		Part or Appurtenance	National
Serial Number	Board No.	.	Serial Number	Board No.
4.	In Numerical order			in Numerical Order
RP-1090	A Company of the Comp			
(1) <u>Re-1030</u> (2)		(26)		
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	Certificate Holder's Serial Nos	RP-1090	through	RP-1090
	CERTIFICATION O	F DESIGN		
Design specifications certified by  Design report certified by	Not Applicable (when applicable) Not Applicable (when applicable)	P.E. State	Reg.	No
	CERTIFICATE OF CO	OMPLIANCE		
We certify that the statements made in Conforms to the rules of construction of	this report are correct and that this (these the ASME Code, Section III, Division 1		r Housing Replacem	ent Assembly
NPT Certificate of Authorization No	N-2974-1	Expires	March 26, 20	02 ·
Date Name	Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized repre	rsentative)
	CERTIFICATE OF IN	NSPECTION		·
of <u>Pennsylvania</u> and employed by of <u>Johnston</u> , <u>RI</u> best of my knowledge and belief, the ill, Division 1. Each part listed has been	$\times$	Data Report on 2 arts or appurtenance above. ranty, expressed or it liable in any mann Commissions	is in accordance with implied, concerning ther for any personal	the equipment described injury or property damage

# FOI M N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Paguised by the providing of the ASME Code Section III

As Required by the provisions of the ASME Code, Section III
Not to Exceed One day's production

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Manufa	ctured for <u>Westingh</u>	use Electric	Compary LL	C. Muclean	r Stryice	s Buisine	ss Unit. 2000 Day Hi	II Road Wi	ndsor, CT 06095
Location	n of installation $\underline{\hspace{1cm}}$	nsumers Eng	ELEA COI MUUA	Lelisade			L 27780 Blue Star Me	morial Hig	hway, Coyert MI 49043
		SA-31	2 TP 316		(name s 75.0	nd address) Nn			
Type 1	CND-E-5003G01 Fe		2 TP 34	~ .	75.0	00	N/A		2001
	( drawing number)		spec no.)	•	(tensile st	rength)	(CRN	7	(year built)
ASME	Code, Section III, Divi	ion 1:	1989		No		,		N/A
	,		(editior)	-	(addend	a date)	(dass	3)	(Code case no.)
Fabricat	ted in accordance vitt	Const. Spec	. (Div. 2 only)_	N/	(no.)	:	Revision <u>N/A</u>	•	DateN/A
Remark	s Upper Housing ) le	lacement As	seiusi Alquies	ting of up	er flang	e welded	o a pipe and the pipe	welded to a	reducer & flange.
			red on Jonics on Westinghou			70105			
Nom. T	hickness (in.) jr	design thic	kness (in.)		Dia. ID	(ft & in.)	····	Length ove	erall ( ft & in.) 14'-6.5"
When a	applicable, Certifica a	Iolders' Data	Reports are a	ttached fo	r each it	em of this	report:	_ >=g=. =	
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	Part or Appurten ini	,	Nations		[	1	Part or Appurtenan	<b>ce</b>	National
	Serial Number		Epard N In Nu nerica			.·	Sedal Number		Board No. In Numericai Order
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(21) (22)	• •	<del></del>				(46) (47)	· · · · · · · · · · · · · · · · · · ·		
(23)		<del></del>			_	(48)			
(24)		_				(49)			
(25)						(50)			
Design	pressure24	15	psl. Te	:mp		650	'F. Hydro. Test	pressure _	3200 et temp. 66°1 (when applicable)
				•			Labor to #16 w44 (2)	lofomatico i	n items 2 and 3 on this Data Report

#### FORM N -2 (Back - Pg 2 of 2)

CERTIFICATION OF DESIGN  Design specifications certified by	
Design specifications certified by	
Design report' cartified by Nol Applicable   P.E. State Reg. No.    CERTIFICATE OF COMPLIANCE  We certify that the statements m de in this report are correct and that this (these) Upper Housing Replacement Assembly Conforms to the rules of construction of the ASME Code, Section III, Division 1.  NPT Certificate of Authorization   D. N-2974-1 Expires March 26, 2002	
We certify that the statements m de in this report are correct and that this (thesa) Upper Housing Replacement Assembly  Conforms to the rules of construction of the ASME Code, Section III, Division 1.  NPT Certificate of Authorization 1 o. N-2974-1 Expires March 26, 2002  Date 11.12.1071 Halls Incorporated Signed	
NPT Certificate of Authorization 1 o. N-2974-1 Expires March 26, 2002  Net 11/12/07 Na la Incorporated Signed	
NPT Certificate of Authorization 10	
Data 11/12/07 Have Ionics Incorporated Signed Twelf	
	<u>.</u> .
CERTIFICATE OF INSPECTION	
1, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State and Provint of Pennsylvania and employed by Factory Mulual Insurance Company	ca tho
of Pennsylvania and employ do y Factory Mulusi Insurince Company of Johnston. RI have inspected these Items described in this Data Report on the Certificate Holler has fabricated these parts or appurtenances in accordance with the ASME Code. Section 11. Division 1. Each part listed liabean authorized for all amping on the date shown above. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Reports Furthermore in the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind ansing from a connected with this Inspection.	ed
Date //-/2 -0/ Sk ned (Authorized Nuclear Inspector) Commissions NB 63 19 A W Kh 22 9 [Nat1. 8d. (Incl. endersements) and state or prov. and	<u>/)</u> no)

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NOU 12 '01 21:57

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## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

							Pg. 1 of
Manufac	tured and certified	ay Ion	ics, Incomposated, Bridgey	ille Division, 3039 V	ashington ]	Pike Bridgeville, Po	ennsylvania, 15017
1-1011010		,		(name e	nd address of I	NPT Certificate Hoider)	
			Electric Comps ny LLC. N		nece Unit 2	000 Day Hill Road.	Windsor, CT_06095
Manufac	tured for Westin	רפצונטו	Sissure Combs by Track	of teachbe are such by	chase)		,
		<b>3</b>	muse Engrand Company En	licades Generatina Pl	int 27780 E	Blue Star Memorial	Hiphway Covert MI 49043
Location	of installation	onsu	ners energy Company. Fa	enable bas omen)	<u> </u>		
•			SA-312 TP :16	75,000	<u>.                                    </u>	•	
Type C	ND-E-<003G01 I	ev. 5	SA 182 TP 147	75,000		N/A	2001
ا عورا	drawing number)		(matt. spec no.)	(lensils strength)	•	(CRN)	(year built)
•	• • •		1000	No		1	N/A
ASME C	Cods, Section III. C	VISION 7	1: <u>1989</u> (editon)	(addenda date)		(dass)	(Code case no.)
			, ,	•			Date N/A
Fabricati	ed in accordance v	ith Con	st Spec (Div. 2 only)	N/A	Revision_	N/A	DateP/A
			ment Assemble consisting	(na.)	d In a nine :	and the pipe welded	to a reducer & flance.
Remarks	s_Upper Housing	:epiace	Sample Assembly Consisting	mart 1740			
<del></del>			upplied on Westinghouse	Contract 4500070105			
N T	historia (in ) >	le de	sion thickness (in.)	Dia, ID (ft & ir	.)	Lengti	n overall (ft & in.)14'-6.5"
When a	nickness (III-)	بر ار e Holdi	ers' Data Reports are attac	hed for each item of t	nis report:		
4411611.0	ibbitopole! course						T
			National		Part	or Appurtenance	National .
Ī	Part or Appurter Serial Nu nb		Board No.	1.1		Sarial Number :	Board No.
1	Senal NU no	r	In Humerical ere	ler			In Numerical Order
						•	
(1)	RP-1092			(26	)		
(2) -			,	(27	)		
(3)			•	(28	)		
(4)				(29		<u> </u>	
(5)	<del></del>			. (30	)	·	
(e) -	<del></del>			(31			
1 66				(32	)		<del> </del>
(8)				(3:	)		<del> </del>
(9)				(34			
(10)				(3:			
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(12)				(3:	?	<u> </u>	<del></del>
(13)				(3:			
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(19)				(4			<del></del>
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(21)					e)		<u> </u>
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(23)					8)		<del></del>
(24)					9)		
(25)				(	0}		
L							
				o. 650	*F.	Hydro. Test press	sure 3200 at lemp. (
O Dasio	n pressure	_2485	psl. Tem	νου	<del></del> ··		(when applicable)
u							

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Page 7 :

	Certificate Holder's Serial Nos.	RP-1092	through	REIUSA
	CERTIFICATION O	F DESIGN		· <i>•</i>
esign specifications certified by				No
esign raport" cortified by		P.E. Slate	Reg.	No
<u> </u>	CERTIFICATE OF CO	MPLIANCE		<del></del>
e certify that the staterne to made in informs to the rules of construction of	this report are correct and that this (the the ASME Code, Section III, Division 1	se) <u>Uppe</u>	r Housing Replacen	nent Assembly
PT Certificate of Authoriza ion No	N-2374-1	Expires	March 26, 20	02
•	Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized repre	esentative)
· ·	CERTIFICATE OF I	- USPECTION		
of Pennsylvania and the property of Johnston RI  est of my knowledge and belief, the of the parties of the part		Data Report on 2 arts or appurtenance above. ranty, expressed or in a liable in any many	s in accordance will mplied, concerning ner for any persona	the equipment described injury or property damage
Deta//-/5-2wSigned	(Autho tzed Nuclear inspector)	[Na	rl. 8d. (incl. endorsem	ents) and state or prov. and no]

Page 8

# FOFN N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

	140.6	Liced One day 5	production	Pg. 1 of 2
Manufactured and certified by	unics, Incorporated, Bride	eville Division 3039 Was	hington Pike, Bridgeville, Pe	nnsylvania, 15017
Manufactured for <u>Westinghou</u>	c Electric Company LLC	Nuclear Services Buisines	s Unit. 2000 Day Hill Road.	Windsor CT 06095
		(name and address of purchas	ser)	
Location of InstallationCin	umers Energy Company.	Palisades Generating Plant. (name and address)	27780 Blue Star Memorial I	fighway. Coven. MI 49043
•	SA-312 TP 316	75,000		•
Type CND-F-5003G01 Rev	SA 182 TP 347	75.000	N/A	
(drawing number)	(maři. spec no.)	(dignerie olienal)	(CRN)	(year built)
ASME Code, Section III, Divisio	1: 1989	No	11	N/A
	(edition)	(addenda data)	(class)	(Code casa no.)
abricated in accordance with C	unst Spec /Div 2 only)	N/A R	levision N/A	Date N/A
		(no.)		•
Remarks <u>Upper Housing Re</u> ak	Manufactured on Ionics C	Contract 1149.	o a pine and the pine welded	lo a reducer & llange.
	Supplied on Westinghous	e Contract 4500070105.	<u> </u>	
Nom. Thickness (In.) Ir . When applicable, Certificate Ho	tesign thickness (in.)	Dia. ID (R & In.)	Length	overall ( ft & In.)14'-6.5"
vvnen applicable, Certificate Ho	cers Data Reports a. e au	acheo for each item of this	report	
Part or Appurtenance Serial Number	Na Jonal Board No		Part or Appurtenance Sorial Number	National Board No.
Senal Number	in Numerical		Solial Muniper	In Numorical Order
•				
(1)RP-1093	· <del>-</del>	(26)		
(2)	•	(27)		
(3)		(28).		
(4)		(29)		
(5)		(30)		
(6)	-	(31)		
(7)		(32)		
(8)		(33)		
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(12)		(37)		
(13)		(38)	•	
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(16)	,	(41)		
(17)		(42)		
(18)		(43)	<u></u>	
(19)		(44)		
(20)		(45)		
(21)		(46)		
(22)		(47)		
(23)		(48)	·, •	
(24)		(49)		<del></del>
(25)		(50) -		-
Design pressure 248	psi. Ter	np 650		
	·		-	(when applicable)
	e de la constante de la compansión de la		i cha la 0 tt u e e Mi tafa	on in Home 2 and 3 on this Data Reco
plemental information in the form ided on each sheet, (3) sech at a	H HELS, SKEICHES, OF OF WIN	gs may be used provided (1) abendi shoots is recomed at th	isize is a xx x 11. (4) incomm20 nation of this form.	on in items 2 and 3 on this Data Repo
200 AL GENT GUART (2) 2001 21 2				
• • •	. Thi	s form (E00040) may be obtained	ed from the Order dept. ASME, 2	2 Law Drive, Box 2300, Fairfield, NJ 0700
<u> </u>	•			

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#### FORM N-2 (Back - Pg 2 of 2)

;	Certifica e Holder's Serial Nos.	RP-1093	throughRP-1093	
	CERTIFICATION O	F DESIGN		
ecing specifications certified by	Not Applicable	P.E. State	Reg. No.	
asign report certified by	(when applicable) Not Applicable (when applicable)	P.E. State	Reg. No.	
to coeffe that the statements russ 8	CERTIFICATE OF CO	OMPLIANCE		
PT Certificate of Authorization No.	<u>\1-2974-1</u>	Expires	March 26, 2002	
ate	Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized representative)	
	CERTIFICATE OF 1	NSPECTION		
Pennsylvania and employed by Johnston, RI est of my knowledge and belief, he DMston 1. Each part listed has led / signing this certificate, neither I as this Data Report. Furthermore, the loss of any kind arising from c	have inspected thase Items described in this certificate Holder has fabricated these parameters and the date shown inspector nor his employer makes any war tither the inspector nor his employer shall be	Data Report on 24 arts or appurtenance above. Tranty, expressed or it is it is in any mann. Commissions	and state that to the sin accordance with the ASME Code, Section implied, concerning the equipment described er for any personal injury or property damage.  3. 8d. (incl. endorsements) and state or prov. and no.)	

Page 6

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#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III.

			W. W	
anufactured and certified by Ionics.	incorporated Bridgeville Di	vision, 3039 Washing frame and address	tion Pike. Bridgeville. Pen s of NPT Centificate Holder)	USALABUT TOOL (
anufactured for Westinghouse Elec	nic Company LLC, Nuclear	Services Buisiness Un re and address of purchaser)	nit. 2000 Day Hill Road, Y	Vindsor, CT 06095
ocation of Installation <u>Consumers</u>	·	Complete Nine 27	ren Blue Star Memorial H	johway, Covert, MI 49043
ocation of installationConsumers	Encrey Company, Palisages	(name and address)		
	-312 TP 316	75.000	_	2001
Type CND-E-5003G01 Rev. 5 SA	479 / SA 182 TP 347	75.000	N/A (CRN)	(year built)
(drawing number)	MSCL spec no.)	(lersile strength)	(00)	-
• •	1989 _	No		(Code case no.)
ASME Code, Section III, Division 1: _	(editi n)	(addenda dale)	(dass)	•
	ene (Dk 2 only) N/A	Revis		DateN/A
Fabricated in accordance with Const. S	pec. (Dis. 1. 511)	(no.)	araa aad the nine welded t	o a reducer & flance.
Fabricated in accordance with Const. S Remarks <u>Upper Housin ) Replacemen</u>	t Assembly consisting of upr	per flange welded to a	DIDE BUY HE DIDE HENEV I	
MISHU	SCHOOL STATE			
				overall ( ft & in.)14'-6.5"
Nom. Thickness (m.) In. design When applicable, Certificate Holders'	Data Reports are attached fo	r each Item of this rep	ort .	
when applicable, Certificate notices			<u> </u>	
	National		Part or Appurtanance	National Board No.
Part or Appurt Enence Serial Number	Board No.		Serial Number	in Numerical Order
Seiter unitre	in I lumerical order			
PP 1004	<u></u> '	(26)		
(1) RP-1054		——   ( <sup>20</sup> ) —	· · · · · · · · · · · · · · · · · · ·	
(2)		(28)	,	
(3)		——   (29) —		
(4)		(30)	•	
(5)				
(6)				
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(8)		(34)		
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(23)		(49)		
(24)		(50)	<u> </u>	
(25)				1
<u> </u>		650	F. Hydro. Test pressu	re <u>3200</u> at temp. 6
				(when applicable)

"Supplemental information in the form of lists, statutes, or training of sheets is recorded at the top of this form. Included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form. This form (E00040) may be obtained from the Order dept. ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Page 7

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FORM	N -2	(Back	-	Pg	2	of	2)	
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	Certificate Holder's Senal	Nos.	RP-1094	through	RP-1094
	CERTIFICA	TION OF I	DESIGN		
esign specifications certified by	Not Appli:able (when applicable)		P.E. State		Reg. No
sign report certified by	Not Applicable (when applicable)				
	CERTIFICAT	E OF COMP	LIANCE	•	
outours to the unies of co ispaceo.	e in this report are correct and that n of the ASME. Code, Section III, I	i • •			
PT Certificate of Authorization No.	N-2974-1		Expires	March	26, 2002
ateN401 Name	Ionics Incorporated (NFT Certificate Holder)	<del></del> -	Signed	(authoriza	ed representative)
	CERTIFICA	TE OF INSP	ECTION		
the undersigned holding a valid C	ommission issued by the National Boa	ard of Boiler at	nd Pressure Ve	essel inspecto	ors and the State and Province
, the undersigned, nothing a value of Pennsylvania and employed	by <u>Pactory Mutual Insurance Con</u> have inspected these items describ	peny bed in this Dat	a Report on 2	is in accordan	ce with the ASME Code, Section
best of my knowledge and bellet,	the Certificate foods has been authorized for stamping on the dispector nor his employer making the inspector nor his employer	ate shown about any warrant rer shall be if	ve. ly, expressed or able in any man	Implied, conc nerfor any pe	

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#### FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

SA-312 TP 316  SA-479 / SA 182 TP 347  (drawing number)  (mat't spec no.)  (lensile strength)  (cRN)  (CRN)  (color boilt)  (color case no.)  ASME Code, Section III, Division 1: 1989 No 1 N/A  (edition)  (addenda date)  (class)  (code case no.)			(vauve and addres	S OF NPT CERTIFICAGE FLOROET	ennsylvania, 15017
Consumers Energy Company, Palisades Generating Plant, 27780 Blue Star Memorial Highway, Covert, MI. 49043	Manufactured for Westinghouse El	ectric Company LLC, Nucle	ar Services Buisiness Un	it, 2000 Day Hill Road	Windsor, CT 06095
SA-312 TP-316		(r	name and address of purchaser)		
Type   CND_E-5003G01 Rev. 5   SA-312 TP 316   75,000	Consume	ers Energy Company, Palisad	es Generating Plant 277	80 Blue Star Memorial	Highway, Covert, MI 49043
Type   CND-E-5003G01 Rev. 5   SA-479 / SA 182 TP 347   75.000   N/A   (CRN)    ocation of installationConsume		(name and address)			
Type	<u> </u>	SA-312 TP 316			2001
ASME Code, Section III, Division 1: 1989   No   1   N/A	Type CND-E-5003G01 Rev. 5	SA-479 / SA 182 TP 347			
ASME Code, Section III, Division 1:	( drawing number)	(mat'l spec no.)	(tensile strength)	(CRN)	(Asa powi)
Code case no.   Code case no	A CHAT COME COMICE III Philipion 1:	1989	No	1	N/A
Caparina    ASME Code, Section III, Division 1.	(edition)		(class)	(Code case no.)	
Caparina	a milanta N	IA Dovie	ion N/A	Date N/A	
Remarks   Upper Housing Replacement Assembly consisting of upper flange welded to a pipe and the pipe welded to a reducer & flange.   Manufactured on Ionics Contract 1149.	Fabricated in accordance with Consi		2		
Supplied on Westinghouse Contract 1450070105.   Length overall ( ft & In.)	Remarks - Unner Housing Replaces	nent Assembly consisting of u	pper flange welded to a p	pipe and the pipe welded	to a reducer & flange.
Nom. Thickness (in.) in. design thickness (in.) Dia. ID (if & in.) Length overall (if & in.) 14-5.3*   When applicable, Certificate Holders' Data Reports are attached for each item of this report:    Part or Appurtenance	Ma	nutactured on lonics Condac	t 1149.		
Part or Appurtenance   Serial Number   Part or Appurtenance   Serial Number   Part or Appurtenance   Serial Number   Part or Appurtenance   Part or Appurtenance   Part or Appurtenance   Serial Number   Part or Appurtenance   Part or Appurtenance   Serial Number   Part or Appurtenance   Part or A	Sup	plied on Westinghouse Cont	ract 4500070105.	4 14	14 C CH
Part or Appurtenance   Serial Number   National   Board No.   In Numerical order	Nom. Thickness (in.) in. des	ign thickness (in.)	Dia. ID (ft & in.)	Lengti	n overali (π & in.) 14-6.3
Part or Appurtenance   Serial Number   Board No.   In Numerical order	When applicable, Certificate Holder	s' Data Reports are attached	for each item of this repo	· ·	
Part or Appurtenance   Serial Number   Board No.   In Numerical order			<del></del>		
Serial Number	Part or Appurtenance	National			
(1) RP-1095 (26) (27) (27) (28) (33) (44) (29) (30) (55) (30) (30) (56) (31) (32) (32) (32) (32) (32) (32) (32) (32				Serial Number	
(1)       (27)         (2)       (28)         (3)       (29)         (4)       (29)         (5)       (30)         (5)       (31)         (6)       (31)         (7)       (32)         (8)       (33)         (9)       (34)         (10)       (35)         (11)       (36)         (11)       (37)         (13)       (38)         (13)       (38)         (13)       (40)         (15)       (40)         (17)       (42)         (18)       (43)         (18)       (43)         (19)       (44)         (20)       (45)         (21)       (46)         (22)       (47)         (23)       (48)         (24)       (49)		- in Numerical order	1 1		
(1)       (27)         (2)       (28)         (3)       (29)         (4)       (29)         (5)       (30)         (5)       (31)         (6)       (31)         (7)       (32)         (8)       (33)         (9)       (34)         (10)       (35)         (11)       (36)         (11)       (37)         (13)       (38)         (13)       (38)         (13)       (40)         (15)       (40)         (17)       (42)         (18)       (43)         (18)       (43)         (19)       (44)         (20)       (45)         (21)       (46)         (22)       (47)         (23)       (48)         (24)       (49)	PP_1095				
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(9) (10) (11) (12) (13) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24)	(7)			·	
(10) (11) (12) (13) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (24) (35) (36) (37) (38) (39) (40) (40) (41) (42) (41) (42) (43) (44) (44) (44) (45) (46) (47) (48) (49)	(B)				
(11) (12) (13) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24)	(9)	:			·
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(12)       (13)       (38)       (39)         (14)       (40)       (41)       (42)       (41)       (42)       (43)       (43)       (43)       (44)       (44)       (44)       (45)       (45)       (45)       (46)       (47)       (47)       (48)       (49)       (49)       (49)       (49)       (49)       (45)       (49)       (49)       (45)       (49)       (49)       (49)       (45)       (46)       (47)       (48)       (49)       (40)	(11)			<u> </u>	
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<sup>&</sup>quot;Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

	Certificate Holder's Serial Nos.	RP-1095	through	RP-1095
	CERTIFICATION O	F DESIGN		
Design specifications certified by	Not Applicable (when applicable)	P.E. State	Reg. 1	Vo
Design report* certified by	(when applicable ) Not Applicable	P.F. State	Rea I	No
Design report certified by	Not Applicable (when applicable)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	CERTIFICATE OF CO	MPLIANCE		
We certify that the statements made it Conforms to the rules of construction	in this report are correct and that this (these of the ASME Code, Section III, Division 1.	se) Uppe	Housing Replaceme	nt Assembly
NPT Certificate of Authorization No	N-2974-1	Expires	March 26, 2002	<u>)</u>
Date ////61 Name	Ionics, Incorporated	Signed	udr	
	(NPT Certificate Holder)		(authorized represe	entalive)
	CERTIFICATE OF IN	SPECTION		
of Pennsylvania and employed by of Johnston, RI  pest of my knowledge and belief, the III, Division 1. Each part listed has been styling by signing this certificate, neither the in this Data Report. Furthermore, neither the period of the pe	have inspected these items described in this if Certificate. Holder has fabricated these pain authorized for stamping on the date shown a inspector nor his employer makes any warm ther the inspector nor his employer shall be connected with this inspection.	Data Report on Arts or appurtenances bove.  anty, expressed or in a liable in any manner.	in accordance with the spiled, concerning the for any personal in	e, and state that to the ne ASME Code, Section as equipment described jury or property damage
Date Signed_	Delt Jenn	commissions	BK3/4AN	1-10245
	(Authorized Nuclear Inspector)	[Nat'l	. Bd. (incl. endorsements	i) and state or prov. and no)

# FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES'

\*\*REVISED 11-21-01

As Required by the provisions of the ASME Code, Section III

Not to Exceed One day's production

Pg. 1 of 2

ŀ	Manufactured for Westing C	ouse Ele	ectric Compil	ny LLC. Nu	clear Service (name and add	s Buisine	ss Unit. 20 sse)	00 Day Hill Road.	Windsor, CT C	
ŧ	ocation of Installation	nsume	rs Energy Co	mpany. J'ali:	sades Genen	nting Plan	27780 B	he Star Memorial	Highway, Cove	rt, MI 49043
			A-312 TP.			000	_			
•	Type _CND-E-5003G01 R-1	ı. 5	A-479 / SA	B2 TP 347		00	<del></del>	N/A		2001 (vear boil)
	(drawing number)		(mat'l. spec no.)		(lenele si	rength)		(CRN)		
	ASME Code, Section III, Dir i	sion 1:	198	9	No					!Code case no.)
•	TOME DOGS, DECIDITION, S		(edi)	n)	(addend	a date)		(class)	•	,
	fabricated in accordance with	Const	Spec. (Div. i	only)	N/A		Revision_	N/A	Date _	N/A
•	Remarks <u>Upper Housing B</u>			leller e	(no.)	o unidad	to a nine s	beblaw soin ant hn	to a reducer &	flange.
İ	Remarks <u>Upper Housin</u> , R (	olacem	ent Assembri aufactured or	Ionics Cont	ract 1149.	Weight	0.0.0100			
						<del>^~</del> ^ + ^ E			U 4 G B 2-	1 A1 C E11
_	Nom. Thickness (in.)	deel	on thickness f	In )	Dia II	) (ft & in.)		Length	overall ( It & in	.) 14 -0.3
	When applicable, Certificate	Holden	s' Data Repoi	s are attach	ed for each i		report:			
Г								or Appurienance		National
l	Part or Appurit na	<b>29</b>		National Board No.		ĺ	S	eria) Number		Board No.
	Serial Numiner			umerical cide	r '	1	•		in	Numerical Order
	nn 100.				ŀ	Ì				
	(1)RP-1096					(26) (27)	<u> </u>			
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"Supplemental information in the orm of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in Rems 2 and 3 on this both report of included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

	Certificate Holder's Serial Nos.	RP-1096	through	RP-1096
	CERTIFICATION OF	DESIGN		
Design specifications certified by	Not Applies ble (when applicable) Not Applies ble (when applicable)	P.E. State	Reg.	No
	CERTIFICATE OF CON	IPLIANCE		
We certify that the statements of constructions to the rules of constructions.	rade in this report are correct and that this (these ction of the ASME Code, Section III, Division 1.	) <u>Üpoe</u>	r Housing Replacen	nent Assembly
NPT Certificate of Authorization	NoN-2974-1	Expires	March 26, 20	02
Date 11.21-01 N	me <u>Ionics Incorporated</u> (NPT Certificate Holder)	Signed 🖳	(authorized repre	sentativ <u>o</u> )
	CERTIFICATE OF INS	PECTION		
of <u>Pennsylvania</u> and empto of <u>Johnston</u> . RI best of my knowledge and ball III, Division 1. Each part listed h By signing this certificate, neith in this Deta Pennet Furthermore	i commission issued by the National Board of Boiler and by Factory Mutual Insurance Company have inspected these items described in this Drift. The Certificate Holder has fabricated these part is been authorized for stamping on the date shown at the inspector nor his employer makes any warrant neither the inspector nor his employer shall be or connected with this inspection.	ata Report on Zass or appurtenance: nove. nty, expressed or in liable in any mann ommissions	s in accordance with mplied, concaming ser for any personal	, and state that to the the ASME Code, Section the equipment described injury or property damage

# FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

" Revised	10-30-01

Manufactured and cer	tifled by Ionics In	corporated Bridgeville	Division	י פנחר	Vachington I	Pike Bridamalla	Denr w	i- 15017
	and the second			c enten)	nd iddress of h	NOT Certificate Holder)	rem as van	Ia. 13017
Manufectured for Wo	stinghouse Electric	c Company LLC, Nuc	car Servic	es Buisi	ness Unit 20	000 Day Hill Road	d TU naror	CT 06005
			(name and a	dèress of pu	(מונימי)	8 5 4 7 5 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M-14 (M201.	C1 (004)
Location of Installation	Consumers Er	serey Company, Palisa	des Gene	cating Pi	nt 27750 D	tive Star Memoria	ıl Wir kumır	Cause 365 40042
•			emsn)	900 900/653	)	We Star McHons	TT-111 (17.37)	Covert, MI 49(143
Type _CND-E-5003G		13 TP 316		000				
(drawing number)		l. spec ne.)		000 strength)	<del></del> -	N/A (CRN)	<del></del>	2001
ACME Ondo Ondo	m Blulston de	*****	•	• •		(0.4.)		(year built)
ASME Code, Section I	II, DIVISION 1:	(editon)	No	da dale)	<del></del>	(clase)		
• • • • • • • •		• •	•			• •	,	(Code mae no.)
abricated in accordan	ce with Const. Spec	c. (Div. 2 only)	(ng.)		Revision	N/A		ale N/A
Remarks <u>Upper Hous</u>	ing Replacement A	ssembly consisting of	oper fland	se welder	to a pice a	rid the pipe welder	d to : reduc	ar & flance
	Manutact	ruted on lonics Contract	<u>:1 149.</u>					e- a- worlder.
Non Thirtenan de N	Supplied	on Westinghouse Con	tract 4500	070105.	•	- <del></del>		
Nom. I nickness (in.)_ When applicable Cert	<u> </u>	ckness (in.) a Reports are attached	Dla. [i	D (ft & in.		Lengi	th over rail (fi	& in.) 14'-6.5"
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Part or Appu	(Parance	National			•		T	•
Serial No		Board No.				r Appurtenance rial Number		National Board No.
	ļ	in Numerical order			. ••		1	in Numerical Order
RP-10	197	_				•	1	
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"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order dept., ASME, 22 Lav. Dr. ve, Box 2300, Fairfield, NJ 07007-2300.

	Certificate Holder's Serial Nos	RP-1097	through	RP-1097
	CERTIFICATION OF	DESIGN		
Design specifications certified by	Not Applicable (when applicable)	P.E. Stats	ı	tes. No.
lesign report* certified by	Not Applicable (when applicable)	_ P.E. State	1	legs. No.
	CERTIFICATE OF CON	PLIANCE		
We certify that the statements made in conforms to the rules of construction of	this report are correct and that this (these the ASME Code, Section III, Division 1.	)Uppe	r Housing Repl	coment Assembly
PT Certificate of Authorization No	N-2974-1	Expires	March 26	2)02
ate /0/30/01 Name	Ionics, Incorporated (NPT Certificate Holder)	Signed	(authorized	spresentative)
	CERTIFICATE OF INS	PECTION	, , , , , , , , , , , , , , , , , , ,	
Pennsylvania and employed by	ssion issued by the National Board of Boiler a			
f Johnston, RI est of my knowledge and belief, the C I, Division 1. Each part listed has been a by signing this certificate, neither the ins	ve inspected these flems described in this De ertificate Holder has febricated these parts uthorized for stamping on the date shown ab- pector nor his employer makes any warran or the inspector nor his employer shall be	ove. ty, expressed or in	nplied, concern	ng the equipment described
	Oltson co	mmissions	83/4 An	- Pazze (-
	(Authorized Nuclear Inspector)			re tis) and state or prov. and no)

# FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES' As Required by the provisions of the ASME Code, Section III Not to Exceed One day's production

As Required by the provisions of the ASME Code, Section 111

Not to Exceed One day's production

Pg. 1

Day Torics Incompress Bridgeville Division 2029, Westington Pike, Bridgeville Repossition 15017

			•	address of NPT Certificate Holder)	
actured for Westinghouse E	lectric Company LLC, Nucle	ar Service	s Buisine	ss Unit. 2000 Day Hill Road	. Windsor, CT 06095
			•	•	
on of installationConsume	ers Energy Company, Palisac			. 27780 Blue Star Memorial	Highway, Covert MI 49043
!	SA-312 TP 316	(name a) 75,01	nd address) CC		
	SA 182 TP 347	75.0		N/A	2001
( drawing number)	(mat'L spec no.)	(tensãe str		(CRN)	(year built)
Code, Section III, Division 1:	1989	No		1	N/A
	(edition)	(addenda	date)	(class)	(Code case no.)
ated in accordance with Const	Sans (Div 2 aphi) N	/A	_	Revision N/A	Date N/A
ated at accordance with Collet	. apec. (DIV. 2 OTRY)IY	(no.)		Nevision 14/A	DateN/A
ks Upper Housing Replacem	ent Assembly consisting of ur	pper flange	welded t	o a pipe and the pipe welded	to a reducer & flange.
	ufactured on Ionics Contract				
	plied on Westinghouse Cont				
Thickness (in.) — In. desi applicable, Certificate Holden	gn thickness (in.)	_ Dia. ID	(.nl & fi)_	Lengt	overall (ft & in.) 14'-6.5"
applicable, Certificate Holden	Data Reports are attached	ioi eacu ire	nn oi uns	report:	والمرابع والمرابع والمنابع والمستعمل والمستعمل والمستعمل والمستعمل والمستعمل والمستعمل والمستعمل والمستعمل
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RP-2005	المرابع المراجع المستعدر المستعدر المستعدر المستعدر المستعدر المستعدر المستعدر المستعدد المست		(26)	1.77 Med 2015	Commence and the second
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upplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is luded on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

	Certificate Holders Sena	Nos. <u>RP-2005</u>	through HP-2005
	CERTIFICA	TION OF DESIGN	
Design specifications certified by	Not Applicable	P.E. State	Reg. No.
Design report® certified by	(when applicable )  Not Applicable (when applicable )	P.E. State	Reg. No.
	CERTIFICAT	E OF COMPLIANCE	
Ve certify that the statements made in conforms to the rules of construction of	n this report are correct and that of the ASME Code, Section III, C	this (these) <u>Uppe</u> Division 1.	r Housing Replacement Assembly
PT Certificate of Authorization No	N-2974-1	Expires	March 26, 2002
pate 12-/4-0/ Name	(MAL CAURICATA LIONAL)	Signed	(authorized representative)
	CERTIFICAT	re of inspection	
f Pennsylvania and employed by f Johnston, RI set of my knowledge and belief, the I, Division 1. Each part listed has been by signing this certificate, neither the linthis Data Report. Furthermore, neither loss of any kind arising from or co	Factory Mutual Insurance Com- nave inspected these items describe Certificate Holder has fabricated authorized for stamping on the dat- napector nor his employer makes her the inspector nor his employed needed with this inspection.	pany od in this Data Report on these parts or appurtenances e shown above. any warranty, expressed or in r shall be liable in any manne	isel Inspectors and the State and Province  and Inspectors and the State and Province  and Inspectors and the State and Province  and Inspectors and the State and Province  and Inspectors and Inspectors and Inspectors  and Inspectors and Inspectors  and Inspectors and Province  and Inspectors and Inspectors  and Inspecto
Date 12-14-2001 Signed	Station	Commissions <u>~</u> &	88 14 An Pa 2245

### FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY As Required by the Provisions of the ASME Code, Section XI

1. OwnerCor	naumera Ener	gy Company		Date Janua	ry 03	, 2001	
	lue Ster Hww	Covert, MI		Sheet1	_ of		
2. Plant Palis	rades Mucles	Plent		Unit1			
27780_B	lue Star Hey	Covert, MI		W.O. # Z <sup>L</sup>	11134	33 nization P.O. No., Job No.,	etc.
3. Work Performe	d by <u>Consum</u>	ers Rnergy		Type Code Symbol S		N/A	
_27780 B	lue Star Hwy	Covert MI		Authorization No Expiration Date		N/A	
4. Identification of		Enginez	red Sofe	quards (ES	5)		
5. (a) Applicable	Construction Cod	ANSE BUIL	L. <u>1955</u>	dition, NO.	Addend	nla	_ Code Case
		l Utilized for Repair	Year				
(b) Applicable c	Oltion of Section A	n la	/Replacement Acti	Year			
(c) Applicable S	iection XI Code Cas	les	<del></del>				
6. Identification of	Components:			•	٠		
Name of Component	Name of Manufacturer	Manufacturer Seriel No.	National Board No.	Other Identification	Yeer Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Shaft	Crane Nuclear	DØ508	nla	Po# 366553/1	01	Installed	No
Gland	Crane	20511	nla	366 553/6	01	Installed	No
Cartridge	Cane Nuclear	04505	nla	366553/1	01	Installed	No
Stuffing	Cone Nuclear	D0507	nla	366553 / 3	01	Installed	No
				·			
7. Description of V	Nork Modi	ify packi	ng gland	per EAR. 2	DØ1· Ø	Ø21.	
8. Tests Conducte	d: Hydrostatic 🕮	Pneumatic 🗆	Nominal Ope	erating Pressure.	Exempt []		

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is  $8\frac{1}{2}$  in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at the top of this form.

Test Temp. \_\_\_\_\_\*F

This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Other 2

(7/99)



24113483

#### FORM NIS-2 (Back)

	Applicable Manufacturer	r's Data Reports to be attached	
	•		
· · · · · · · · · · · · · · · · · · ·		•	
rtificate of Authorization No.	N/A Expiration [	January 63	/A 2 4 4 7
gned / HDF L. Mus Owner or Owner's Design	gnee, Title	, Vanuary 03	
	·		
	CERTIFICATE OF INSER		
I, the undersigned, holding a valid cor	mmission issued by the National Bo	oard of Boiler and Pressure Vesse	I Inspectors and the State or Prov
Michigan and employed to	mmission issued by the National Boby Factory Mutual Insu	oard of Boiler and Pressure Vesse 1787Ce COMDANY have	
Michigan and employed to Johnston, R. I. this Owner's Report during the period	mmission issued by the National Boby Factory Mutual Insu	oard of Boiler and Pressure Vesse 17 ance Company have to 01/03/02	inspected the components descr
Michigan and employed to Johnston, R. I. this Owner's Report during the period the best of my knowledge and belief, to	mmission issued by the National Boby Factory Mitual Insu  11/20/99 the Owner has performed examina	oard of Boiler and Pressure Vesse 17 ance Company have to 01/03/02	inspected the components descr
Michigan and employed to Johnston, R. T.  this Owner's Report during the period the best of my knowledge and belief, to accordance with the requirements of the Rv signing this certificate neither the	mmission issued by the National Boby Factory Mutual Insu  11/20/99 the Owner has performed examinathe ASME Code, Section XI.	oard of Boiler and Pressure Vesse  ITARCE COMPARY  have  to 0/03/02  Itions and taken corrective measure  any warranty, expressed or impli	inspected the components described, and state area described in this Owner's Re
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### FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY As Required by the Provisions of the ASME Code, Section XI

1. Owner <u>Cor</u>	nsumers Ener	gy Company		Date JAULAR	4 03	2002	
27780_R	lue Star Hwy	Covert, MI		Sheet1	_ of	1	<u> </u>
2. Plant Pall	lades Nuclea	r Plant		Unit1			
27780 B	lue Star Rwy	Covert, MI		Wo # Z4 )	1348	F) enization P.O. No., Job No.,	. etc.
3. Work Performe	d by <u>Consum</u>	ers Energy		Type Code Symbol St		W/A N/A	
27780 B	lue Star Hwy	. Covert. MI		Authorization No. —— Expiration Data ———		N/A	
4. Identification of	f System	Engine	ered Saf	reguards (E	<u>(22)</u>		
5. (a) Applicable	Construction Cod	AUST B31	1, 1955	edition, <u>Na</u>	_ Adden	de, nla	Code Case
		l Utilized for Repair.	1000		•		
(n) Applicable t	diddin or Section A	none	rreplacement Acti	Year			
(c) Applicable S	ection XI Code Cas	es		•			
3. Identification of	f Components:	s. ?			•		
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
SHAFT	Crane	00509	nla	G034553/2	01	Installed	ん。
Gland	Crane	00510	nla	G034655314	<i>Φ1</i>	Installed	No
Carbrida	Ruclear	00504	nla	G036655311	<b>Φ</b> 1	Installed	20
Stuffing Box	Come	00506	na	Po# G03455313	ΦΙ	Installed	20
				·			
							· · · · · · · · · · · · · · · · · · ·
7. Description of	Work Modi	fy packin	g gland	per EAR.Z	DO1.	DØ21.	
B. Tests Conducte	ed: Hydrostatic Cl	Pneumatic 🗆	Nominal Ope	erating Pressure	Exempt 🗆		
	• 1 · 1						

NOTE: Supplemental sheets in form of lists, electhes, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at the top of this form.

Test Temp. \_\_\_\_\_\*F

This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

(7/99)



24113484

#### FORM NIS-2 (Back)

Remarks VIOAC
Applicable Manufacturer's Data Reports to be attached
Script Code Symbol Stamp N/A Expiration Date N/A  Signed Apple: No. N/A Expiration Date N/A  Signed Apple: No. Script Engineer Date January 03, 200 2002  Owner or Owner's Designee, Title
CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province.
f Michigan and employed by Factory Mutual Insurance Company
f
this Owner's Report during the period $\frac{11/20/99}{}$ to $\frac{0/03/o2}{}$ and state the
) the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Repo I accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations an orrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an
personal injury or property damage or a loss of any kind arising from or connected with this inspection.
1 HKlake commencer was the same
Commissions MI = 762 ARNI Inspector's Signature National Board, State, Province, and Endorsements
Date January 03 , 2002

### FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY As Required by the Provisions of the ASME Code, Section XI

l. Owner <u>Co</u> r	ngumers Ener	у Сомрану		Date FEBIZU	ARY	18, 2002	
27780_R	lue Star Hwy	Covert, MI		Sheet1	of		
2. Plant Pali	sades Nuclear	Plant	· · · · · · · · · · · · · · · · · · ·	Unit1	<del></del>		
27780_B	lue Star Huy Add	Covert, MI		W.O. # ZC	)	593 nization P.O. No., Job No.,	etc.
3. Work Performe	od byConsum_	ers Rnergy	,	Type Code Symbol Signature Authorization No	=	N/A N/A	
27780_В	lue Star Hwy Add	Covert, MI		Expiration Date		N/A	
4. Identification o		SR	ENT FUE	EL (SFP)			·
5. (a) Apolicable	Construction Cod	AUSI B31.	1 55	Edition, NONE	_ Addend	NONE	Code Case
				tivity 89			
(D) Applicable (	Edition of Section Al	Utilized for Repair	/ Replacement Ac				
(c) Applicable S	Section XI Code Case	- 10070 <u>2</u>			2.00 m		
6. Identification o	f Components:					••	
Name of Component	Name of	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
NuT				PO# G0369321-1	W 2.18.0	2 .	
NUT	NOVA MACH. PRODUCTS	HT# 723581 HT#	NIA	PO# G0369321.Z	01	INSTALLED	No
BOLT	NOVA MACH. PRODUCTS	4T# 35564	NIA	PO# G0369321. 1	01	INSTALLED	No
					<u> </u>		
7. Description of	Work KEPLAGE	hanger HGI	21HC4-R87	1.1 holt with	longer	piecz.	
B. Tests Conducti	ed: Hydrostetic 🖸	Pneumetic 🗆	Nominal Op	perating Pressure.	Exempt 🗵		
		Pressure	pei Test	Temp**F		. *	
	Outer Co		per 165t	rompo			

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at the top of this form.

This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

(7/99)



24114093

#### FORM NIS-2 (Back)

to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Repoin accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an	Remarks / lonc				
Type Code Symbol Stamp N/A  Certificate of Authorization No. N/A Expiration Date N/A  Signed Symbol Stamp Several Evic. Date Federally 18 2002  Owner or Owner's Designes, Title  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by Factory Mutual Insurance Company  of Johnston, R. I. have inspected the components describe in this Owner's Report during the period 11/20/99 to 02/19/02 have inspected the components describe in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an experience of the ASME Code. Section XI.		Appli	icable Manufacturer's Data Reports to	be attached	<del></del>
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Certificate of Authorization No. N/A Expiration Date N/A  Signed JULY ROLL SCHOOL ENG. Date FEBRUARY 18 ZOOZ  Owner or Owner's Designes, Title  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by Factory Mutual Insurance Company  of Johnston, R. I. have inspected the components describe in this Owner's Report during the period 11/20/99  to 2/19/02 , and state the to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an accordance with the requirements of the ASME Code, Section XI.					
Certificate of Authorization No. N/A Expiration Date N/A  Signed Server Eng. Date February 18 ZOOZ  Owner or Owner's Designee, Title  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by Factory Mutual Insurance Company  of Johnston, R.T. have inspected the components described in this Owner's Report during the period 11/20/99 to 02/19/02 have inspected the components described in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an accordance with the requirements of the ASME Code, Section XI.	I certify that the statements ma	ide in the report are corr	rect and that this conforms to the	requirements of the ASME Code	e, Section XI.
Certificate of Authorization No. N/A Expiration Date N/A  Signed Lough Server Eng. Date FERRIARY 18 ZOOZ  Owner or Owner's Designee, Title  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province Michigan and employed by Factory Mutual Insurance Company  of Johnston, R. I. have inspected the components described in this Owner's Report during the period 11/20/99 to 02/19/02 have inspected the components described in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an accordance with the requirements of the ASME Code, Section XI.	Type Code Symbol Stamp	N/A			
CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province Michigan and employed by Factory Mutual Insurance Company  of Johnston, R. I. have inspected the components described in this Owner's Report during the period 11/20/99 to 02/19/02 have inspected the components described in this Owner's Report during the period state the to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report during the examinations are corrective measures described in this Owner's Report during the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an corrective measures described in this Owner's Report.		37 / A		N / A	
CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by Factory Mutual Insurance Company  of Johnston, R.T. have inspected the components described in this Owner's Report during the period 11/20/99 to 0/2/19/02 have inspected in this Owner's Report of the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an expression of the Asmala.	Certificate of Authorization No.	A			<del></del>
CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by Factory Mutual Insurance Company  of Johnston, R.T. have inspected the components described in this Owner's Report during the period 11/20/99 to 0/2/19/02 have inspected in this Owner's Report of the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an expression of the Asmala.	Signed house house	SENOR EN	14. Data FEBRUARY	18 2002	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by Factory Mutual Insurance Company  of Johnston, R.T. have inspected the components described in this Owner's Report during the period 11/20/99 to 0/19/02 have inspected the components described in this Owner's Report to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an examination of the ASME Code, Section XI.	Owner or Owner	's Designes, Title			
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by Factory Mutual Insurance Company  of Johnston, R.T. have inspected the components described in this Owner's Report during the period 11/20/99 to 0/19/02 have inspected the components described in this Owner's Report to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an examination of the ASME Code, Section XI.					
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of <u>Nichigan</u> and employed by <u>Factory Mutual Insurance Company</u> of <u>Johnston</u> , R. I. have inspected the components described in this Owner's Report during the period 11/20/99 to <u>Col/19/Col</u> , and state the tothe best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an expression of the ASME Code, Section XI.	•				
of <u>Johnston</u> , R.T. have inspected the components describe in this Owner's Report during the period 11/20/99 to <u>C2/19/C2</u> , and state the tothe best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an	I, the undersigned, holding a ve	lid commission issued by	y the National Board of Boiler and	I Pressure Vessel Inspectors and t	he State or Province
in this Owner's Report during the period 11/20/99 to 02/19/02, and state the to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an	of Tohnston, R. I.		THAT THATTAILE VOR		mponents described
to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Repo in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for ar	in this Owner's Report during the p	reriod <u>11/20/99</u>		119/02	, and state that
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations are corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an	to the best of my knowledge and b	elief, the Owner has perf	formed examinations and taken o	corrective measures described in	this Owner's Report
	By signing this certificate neith	er the Inspector nor his e	imployer makes any warranty, ex	pressed or implied, concerning th	e examinations and
personal injury or property damage or a loss of any kind arising from or connected with this inspection.					any manner for any
SPROD.	I GB	00			
Inspector's Signature National Board, State, Province, and Endorsements	Insperior's Signature	Commission		vince and Endorsements	· · · · · · · · · · · · · · · · · · ·
Date	Fr. 0 12	2002		राराज्यम् साराची क्रिरिक्षण्य क्षमाराष्ट्रास्य	

### FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY As Required by the Provisions of the ASME Code, Section XI

				Date March O1, 2002					
	sumers Ener	me							
27780 R	lue Star Hwy	Covert, MI		Unit					
Plant Palis	ades Nuclean	r Plant							
27780_B	Lue Star Hwy	Covert, Mi							
	d by <u>Consum</u>								
	ue Star Hwy								
	Add	Doin	1041 (0	alout (QC)	3)		<u></u>		
Identification of	System	(2) = 7	T 1300	oran e Cres					
(a) Applicable	Construction Cod	LISME II	<u> 1486</u>	olaut (PCS	Adden	te, 1101C	Code Ca		
	dition of Section X								
(b) Applicable 2	ection XI Code Cas	N.411.	. 1	Year					
(c) Applicable S	ection XI Code Cas	es							
Identification of	Components:								
Name of	Components:	Manufacturer Serial No.	National Board No.	Other Identification	Yeer Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)		
	Name of	Manufacturer Serial No.	Board	Other Identification		Removed, or	Code		
Name of	Name of		Board	Other Identification		Removed, or	Code Stamped		
Name of	Name of		Board No.			Removed, or	Code Stamped		
Name of	Name of		Board	Other Identification  Attached		Removed, or	Code Stamped		
Name of	Name of		Board No.			Removed, or	Code Stamped		
Name of	Name of		Board No.			Removed, or	Code Stamped		
Name of	Name of		Board No.			Removed, or	Code Stamped		
Name of	Name of		Board No.			Removed, or	Code Stamped		
Name of	Name of Manufacturer	Serial No.	Sec.	attached	Built	Removed, or Installed	Code Stamped (Yes or No)		
Name of Component	Name of Manufacturer	Serial No.	Sec.		Built	Removed, or Installed	Code Stamped (Yes or No)		
Name of Component  Description of V	Name of Manufacturer	Serial No.	Sec. Scal Ha	attached	Built	Removed, or Installed	Code Stamped (Yes or No)		

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is  $8\frac{1}{2}$  in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at the top of this form.

This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

(7/99)

E00030

24114160

) Domarks	Sec M	anufacture	r data r	ports at	tached.	
. Remarks		Applic	able Manufacturer's Dat	a Reports to be attached	i	
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<del> </del>	<u> </u>	<del></del>				
····						
		**************************************				
			•			
<del></del>						
<u> </u>			<u></u>			
			ERTIFICATE OF CON			
I certify t	that the statements mad	de in the report are corr	ect and that this con	forms to the requirem	ents of the ASME Code,	Section XI.
Time Cade Si	ymbol Stamp	N/A				
Type Code 3	yinbor Stemp					
Certificate of	Authorization No.	N/A	Expiration Date .	. 60	N/A	
	hand & II	I - Scario	Ena.	March #3	301, 7007	
Signed	Owner or Owner's	Designee, Title	Date	Wilh 40	<u> </u>	
			1477 OF 110701 808	micoscotion		
l the unc	dersigned holding a val		CATE OF INSERVICE the National Board		Vessel inspectors and the	s State or Province
of Michi	221 and emplo	wed by Factory M	utual Insurar	се Сомрапу		<del></del>
of Johns	ston R.T.			-(-0/	have inspected the comp	·
in this Owne	r's Report during the p	eriod 11/20/99	lamad avaminations	to	measures described in th	, and state that
in accordance	e with the requirement	s of the ASME Code, Se	ection XI.			
Ry signir	no this certificate neithe	r the Inspector nor his e	mployer makes any v	varranty, expressed o	r implied, concerning the	examinations and
corrective m	easures described in th	e or a loss of any kind a	nermore, neither the rising from or connec	inspector nor his emp ited with this inspecti	ployer shall be liable in a on.	ily manner tor any
parsonal my	VERO D	<b></b>		·		
	Tolkeke	Commissio	ns <u>MI -762</u>	ABNT	Fadamaman	
	Inspector's Signature	_	Wational Boa	rd, State, Province, and i	Endorsements	
Date	<u>Feb.28, o</u>	2002		•		

FORM NIS-2 (Back)

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed or Installed	ASME Code Stamped (Yes or No)
CRD Seal Housing	Comb. Eng. Nuclear	201	2880	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	202	2881	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	203	2882	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	204	2883	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	205	2884	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	206	2885	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	207	2886	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	210	2889	PO # GO321653	01	Installed	Υ
CRD Seal Housing	Comb. Eng. Nuclear	212	2891	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	214	2893	PO # GO321653	01	Installed	Υ
CRD Seal Housing	Comb. Eng. Nuclear	215	2894	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	221	2895	PO # GO321653	01	Installed	Ý
CRD Seal Housing	Comb. Eng. Nuclear	218	2900	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	220	2902	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	231	2903	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	235	2905	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	225	2907	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	226	2908	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	227	2909	PO # GO321653	01	Installed	Υ
CRD Seal Housing	Comb. Eng. Nuclear	228	2910	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	229	2911	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	230	2912	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	236	2913	PO # GO321653	01	Installed	Ÿ
CRD Seal Housing	Comb. Eng. Nuclear	237	2914	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	238	2915	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	239	2916	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	240	2917	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	241	2918	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	242	2919	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	245	2922	PO # GO321653	01	Installed	Υ
CRD Seal Housing	Comb. Eng. Nuclear	246	2923	PO # GO321653	01	Installed	Y
CRD Seal Housing	Comb. Eng. Nuclear	247	2924	PO # GO321653	01	Installed	Y

### FORM N-2 OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL **NUCLEAR PARTS AND APPURTENANCES**

### As Required by the Provisions of the ASME Code, Section III, Division 1 Not to Exceed one Day's Production

pg  $\underline{1}$  of  $\underline{1}$ 

1. Manufactured and certified !	y CE Nuclear Power LLC, 55 Old Dover Road, Newington, NH 03	201
---------------------------------	---	-----

- 2. Manufactured for CE Nuclear Power LLC., 2000 Day Hill Road, Windsor, CT 06095-0500.
- 3. Location of installation Consumers Energy Company, Palisades Station, Michigan

4. Type CND-E-4996 Rev. 05 (Drawing no.)

• SEE BACK (mat'l spec. no.) • SEE BACK (tensile strength) 'N/A (cm)

2001 (year built)

5. ASME Code, Section III:

1986 (edition)

1988 (addenda)

NB (class) (subsection)

(code case)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision NA Date N/A

7. Remarks:

CRDM Seal Housing Assemblies

8. Nom. thickness (in) \* See Back min. design thickness (in.) \* See Back Din. ID (ft & in.) \* See Back length everall (ft & in.) \* See Back

9. When applicable, Certificate Holders' data reports are for each item of this report:

	Part or Appurtenance Serial Number ASSEMBLY NUMBER	mfg serial number	Part or Appurtenence Serial Number ASSEMBLY NUMBER	MFG SERIAL NUMBER
(1)	201	2880	(18) 223	2897
(2)	202	2881	(19)	
(3)	203	2882	(30)	
(4)	204	2883	(21)	
(5)	205	2884	(22)	
(6)	206	2885	(23)	
(7)	207	2886	(24)	
(8)	208	2887	(25)	
(9)	209	2888	(24)	
(10)	210	2889	an /	
(11)	211	2890	(28)	
(12)	212	2891	(29)	
(13)	213	2892	(30)	
(14)	214	2893	(31)	
(15)	215	2894	(32)	
(16)	221	2895	(33)	
(17)	222	2896	an	

<sup>10.</sup> Design pressure 2500 psi

Part Serial No.	201	thru	215	& <b>?</b> ?1	than 22

<u> </u>		1 art 361 at 140. 201 thru 215 & 221 thr
	CER'	TIFICATE OF DESIGN
Design specification certified b  Design report certified by	(when applicable) N/A (when applicable)	P.E. state N/A Reg. no. N/A  P.E. state N/A Reg. no. N/A
	CERTIFI	CATE OF SHOP INSPECTION
We certify that the statements a conform to the rules of construc	nade in this report are correct and that titlon of the ASME Code, Section III.	this (these) <u>CRDM Seal Housing assemblies</u>
NPT Certificate of Authorization		Expires <u>February 20, 2002</u>
Date <u>2//0/p1</u> Name	CE Nuclear Power LLC (NPT Cartificate Holder)	Signed Diffe Sternastive)
	CERTIFIC	CATE OF SHOP INSPECTION
best of my knowledge III. Each part listed he By signing this Certifi in this data report, Fur	have inspected these items described is and belief, the Certificate Holder has a been authorized for stamping on the icata, neither the inspector nor his empirithermore, neither the inspector nor his g from or connected with this inspection	in this data report on, and state that to the fabricated these parts or appurameness in accordance with the ASME Code, Section date shown above.  loyer makes any warranty, expressed or implied, concerning the equipment described employer shall be liable in any manner for any personal injury or property damage or on.
727.550	get !!	Commission NH202 "N" Nt Bd endorsement(s) state or prov and no)

MATERIAL	TENSILE	NOMINAL THICKNESS (IN)	MIN. DESIGN THICKNESS (IN)	DIA. I.D. (FT & IN)	LENGTH OVERALL (FT & IN)
SB-166 NO6600 Access Tube Flange	80,000	.120*	.115"	1.26"	2"
SB-167 NO6600 Access Tube	80,000	.120**	.108"	1.26"	39.50"
SB-166 NO6600 Seal Housing	80,000	.28	.26	2.06	11.38

# 1

# PORM N-2 OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IBENTICAL NUCLEAR PARTS AND APPURTENANCES As Required by the Provisions of the ASME Code, Section III, Division I Not to Exceed one Day's Production

D8 | of 1

- 2. Manufactered for CE Nuclear Power LLC., 2000 Day 15H Road, Windsor, CT 06095-4500.
- 3. Location of installation Contemuts Energy Company, Filliples Station, Michigan

4. Type CADE.	49% Ker. 05 ng no.)	(marl spec. no.)		*SEE BACK (tensile strength)	<b>V</b> (E)	Z001 Oren built)
S. ASHE CHE;	Action 134: 1986 (cdition)	1965 (adventa)		NB (subsection)	None (code case)	
6. Fabricated in 1	iccordinace with Coast, Spec	Court Spec (Div. 2 only) NA	Acvision	Acrision MA Das NA	zi	
7. Remarke	CRDM Seil Housing A	osemblics				

Kingth overall (ft & in.) . See Back Die Wichelmy . See Back 9. When applicable, Certificate Holders' data reports are for each item of this straegt. E. Norm. ablebacte (in) \* Sec Back

ASSESSED TO A STATE OF THE STAT				
216 2898 (144 ASSAURE VANIMER 217 2898 (144 CP) 218 2900 (144 CP) 219 290T (141 CP) 231 2902 (141 CP) 232 2904 (144 CP) 235 2904 (144 CP)	Part or Apparenance Serial Number	······································	Per se Asparatores Serial Number	
216     2898       217     2898       218     2900       219     2901       220     2902       231     2903       232     2904       235     2905       235     2905		MFG SERGAL NUMBER	•	MPC SERIAL MUMBER
215 2899 218 2900 219 2901 220 2902 231 2903 232 2904 235 2905		2898	tar)	-
216 2900 219 2901 220 2902 231 2903 232 2904 235 2908		2899	(A)	
229 2901 221 2902 232 2903 232 2904 235 2905		2900	(3)	
231 2902 231 2903 232 2904 235 2905		290f	(di)	
231 2903 232 2904 235 2908		2902	(23)	
235 2904		2903	8	
235 2905		2904		
	÷	2905	·· #8	
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	<b>₹</b> (1)		(39)	
	(0)		000	
	(14)		Oto /	
	(51)		(m)	
	(149)		Ko	
	\$		(F)	

10. Design pressure 2500 psi

The 600 "F

Hydro, test pressure 3125 gris at temp 70 . f

<sup>1.</sup> Manufactured and cortified by CS Nuclear Power L.L.C., 55 Old Dover Royd, Newington, NH 03501.

### FORM N-2 (back)

Design specification certified by NA P.E. state: NA Reg. no. N/A  Design report certified by NA P.E. state: N/A Reg. no. N/A  CERTIFICATE OF SHOP INSPECTION  We certify that the statements made in this report are correct and that this (these) CRDM Seat Housing assemblies conform to the railes of construction of the ASME Code. Section III.  NPT Certificate of Authorization ws. N-2041 Expires February 20, 2002  Date 2/16/01 Name CE Nuclear Power LLC. (NPT Certificate Holder)  CERTIFICATE OF SHOP INSPECTION  L, the undersigned, holding a valid commission issued by the National Seate of Boiles and Pressure Vessel Inspectors and the state or province of Hartfard, CT have improved they have been described in this data report on 2/16/02 and state that the best seated for Stamping on the date shown there.  By signing this Certificate, either the improvement the statement of the stown that the inspector or impliced. Conforming the conjument described in this data report in this data report intend has been substituted for Stamping on the date shown there.  By signing this Certificate, either the improvement of the comployer shall be liable in any manuace for any personnil injury or property damage on loss of any limit arising from or counced with the inspector.			Part Serial No. 216 thru 220 & 231, 232, 235				
Design report certified by WA P.E. State N/A Reg. no. N/A  CERTIFICATE OF SHOP INSPECTION  We certify that the statements made in this report are correct and that this (these) CRDM Sent Housing assemblies  conform to the rules of construction of the ASME Code. Section III.  NET Certificate of Authorization are:  N-2041: Expires February 28, 2002  Date: 2/16 of 1 Name  CENtricate Power LLC  (NPT Certificate Holder)  CERTIFICATE OF SHOP INSPECTION  L, the undersigned, holding a wall communication insued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of New Plannighter: and employed by H.S. E.L. & I. Co.  of Harder CT  have inspected does items described in this data report on 2/16 for and same that to the best of the state of the state of the best of the state of the state of the state of the best of the state of the best of the state of the state of the best of the state of the state of the best of the state report. Furthermore, neither the inspector rare his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.							
Design report cartified by    NA	Design specification certified b		P.E. SIME. N/A Reg. no. N/A				
We certify that the statements made in this report are correct and that this (these) CRDM Seat Housing assemblies  onesform to the rules of construction of the ASME Code, Section III.  NPT Certificate of Authorization are:  N-2641:  Expires February 20, 2002  Signed Signed (sufforization for the ASME Code, Section III.  Like undersigned, holding a valid commission issued by the Manisons Board of Boiler and Pressure Vessel Inspectors and the state or province of New Humanhire: and employed by H.S. E.L. Q.L. Co.  of Harriard CT:  have inspected these items described in this data expert on Section III. Each part listed has been authorized the stamping on the date shows theve.  By signing this Contificate, incither the inspector rule his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with the inspection.	Design report certified by	N/A	P.E. state N/A Reg. no. N/A				
NPT Conficate of Authorization ms.  N-2641:  New CE Nuclear Power LLC (NPT Certificate Holder)  CERTIFICATE OF SHOP INSPECTION  L, the undersigned, holding a valid commission istued by die National Board of Boiler and Pressure Vessel Inspectors and the state or province of New Humpshire and employed by H.S. R. I. A. I. Co.  of Harding CT have inspected these items described in this data report on Life Log and state has been substrated the state fibricated these parts or appartenances in accordance with the ASINE Code; Section III. Each part listed has been authorized for stamping on the date shown above.  By signing this Cartificate, actifier the imposture and his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.		CERT	FICATE OF SHOP INSPECTION				
CENtricate Of SHOP INSPECTION  L, the undersigned, holding a valid commission issued by the Maximust Board of Boiler and Pressure Vessel Inspectors and the state or province of New Hampahire and employed by H.S. R. I. A. I. Co.  of Hampahire and employed by H.S. R. I. A. I. Co.  of Hampahire and employed these items described in this data report on	We certify that the statements a conform to the rules of construc	nade in this report are correct and the zion of the ASME Code, Section III.	H this (these) CR DM Sent Hausing assemblies				
CENTIFICATE OF SHOP INSPECTION  L, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of New Hampahire and employed by H. S. B. I. Q. I. Co.  I have inspected these items described in this data report on Z. I. E. I. D	NPT Certificate of Authorizatio	N-2041	Expires February 20, 2002				
I, the undersigned, holding a valid commission issued by the Marianat Board of Boiler and Pressure Vessel Inspectors and the state or province of New Homeshire and employed by H. S. R. I. Q. I. Co.  of Hartford CT have inspected these items described in this data report on	Dett. 2/16/01 Name	CE Nuclear Power LLC (NPT Certificate Holder)	Δ .				
of _Hardong_CT _ have inspected these items described in this data report on		CERTIE	PCATE OF SHOP INSPECTION				
III. Each part listed has been authorized the stamping on the date shows above.  By signing this Curtificate, neither the imposeur tate his employer makes any manner; expressed or implied, concerning the equipment described in this date report. Furthermore, neither the imposter tate his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.							
loss of any kind arising from or connected with this inspection.	III. Each part listed he By signing this Conid	r and benet; the Cartificate Holder hi he been authorized for stamping ow d icate, heither the increases not his ow	is fibricated these parts or appurtenances in accordance with the ASME Code; Section to date shows above.				
Date 2/16/04 Signed U.S. Commission NHOED THE	loss of any kind arisin	g from or connected with this inspec					
No But and anticoncentral(s) state or prov and not	Date 2/14/04	Signed Speling	Commission NHZ02 "N"				

MATERIAL	TENSILE	NOMINAL THICKNESS (IN)	MIN. DESIGN THICKNESS (IN)	DIA. I.D. (FT & IN)	LENGTH OVERALL (FT & IN)
SB-166 NO6600 Access Tube Flange	80,000	.120"	.115*	1-26"	2**
SB-167 NO6600 Access Tube	80,000	.120*	.108*	1.26"	39.50"
SB-166 NO6600 Seal Housing	80,000	.28	.26	2.06	11.38

# FORM N-2 OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES

# As Required by the Provisions of the ASME Code, Section III, Division 4 Not to Exceed one Day's Production

Pg 1 of 1

2001

(year built)

1. Manufactured and certified by CE Nuclear Power LLC, 55 Old Dov	er Road, 1	Newington, NH	03801
---	------------	---------------	-------

- 2. Manufactured for CE Nuclear Power LLC., 2000 Day Hill Road, Windsor, CT 06095-0500
- 3. Location of installation Consumers Energy Company, Palisades Sintion, Michigan

4. Type CND-E-1996 Rev. 05 
SEE BACK SEE BACK (Consider Strength)

(Drawing no.) (mat'l spec. no.) (tensile strength) (cm)

S. ASME Code, Section Lti: 1986 1988 1 NB None (code case)

6. Fabricated in accordance with Coast. Spec. (Div. 2 only) N/A Revision N/A Date N/A

7. Remarks: CRDM Scal Housing Assemblies

8. Nom. thickness (in) \* See Back min. design thickness (in.) \* See Back Dia, ID (R & in.) \* See Back length overall (ft & in.) \* See Back

9. When applicable, Certificate Holders' data reports are for each item of this report:

Serial	purtenance Number Y NUMBER	MFG SERIAL NUMBER	Part or Appurtenance Serial Number ASSEMBLY NUMBER	MFC SERIAL NUMBER
(1) 22	4	2906	(it) 246	2923
ca 22	5	2907	(19) . 247	2924
(r) 22	6	2908	(20)	/
(4) 22'	7	2909	( <del>21</del> )	
( <del>3)</del> 22	8	2910	(33)	
(e) 22 <u>9</u>		2911	(23)	
(n) 23(	}	2912	(24)	
(a) 236	5	2913	- (25)	
m 237		2914	(24)	
(10) 238		2915	an /	
(in) 239	}	2916	(20)	
(12) 240		2917	(29).	
(13) 241		2918	(30)	
(14) 242	746	2919	(34)	
(IS) 243		2920	(12)	
(16) 244		2921	(11)	
(17) 245		2922	69	

10: Design pressure 2500 psi

Temp 600 4

Hydro, test pressure 3125 psi ut temp 70 \* f

Design report cartified by NIA (when applicable)  Design report cartified by (when applicable)  CERTHFCATE OF SHOP INSPECTION  We certify that the statements made in this report are connect and that this (three) CRDM Scall Equating assemblies conform to the rules of construction of the ASME Code, Section III.  NET Certificate of Authorization no. N.2041  Expires February 20, 2022  Singued Mile (NET Certificate Folder)  CERTIFICATE OF SHOP INSPECTION  CERTIFICATE OF SHOP INSPECTION  L the undessigned, holding a valid commission issued by the Nindonal Beased of Boiler and Pressure Vessel Inspectors and the state of the Inspector and this targetion and the state of the Inspector and this targetion are this cample of the Shop and the state of the Inspector and the state of the Inspector and the state of the Inspector and the state of the Inspector and the state of the Inspector and the state of the Inspector and the state of the Inspector and the state of the Inspector and the state of the Inspector and the state of the Inspector and the state of the Inspector and Inspector and Inspector and Inspector and Inspector and Inspector
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MATERIAL	TENSILE	NOMINAL THICKNESS (IN)	MIN. DESIGN THICKNESS (IN)	DIA. I.D. (FT & IN)	LENGTH OVERALL (FT & IN)
SB-166 NO6600 Access Tube Flange	80,000	.120**	.H.	1.26"	2"
SB-167 NO6600 Access Tube	\$0,000	.120**	.108"	1.26"	39.50"
SB-166 NO6600 Seal Housing	80,000	2#	.26	2.06	

## FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY As Required by the Provisions of the ASME Code, Section XI

وي المستون المستوادي			<del></del>				
1. Owner <u>Co</u>	nsumers Ener	ey Company	<del></del>	Date Janua	M 15	, 2002	
27780_R	live Star Hey	Covert, MI		Sheet1	_ of		
	sades Nuclea			Unit1			<u></u>
	Slue Star Buy			W 0 # Z4	1144 decement Orga	るゆ nization P.O. No., Job No.	, etc.
3. Work Perform	ed by <u>Consum</u>	ers Energy		Type Code Symbol S Authorization No		N/A	
27780_E	Blue Star Hwy	Covert, MI		Expiration Date	······································	<del></del>	
4. Identification o	of System	S <sub>i</sub>	ervice W	later (SUS)			
5. (a) Applicable	Construction Co	B31.1	_, <u>\$5</u>	Edition, <u>nla</u>	Addend	ie, <u>nla</u>	Code Cas
(b) Applicable	Edition of Section X	(I Utilized for Repair	/Replacement Act	ivity 89	.1	g <sup>*</sup> e · · · · · · · · · · · · · · · · · ·	•
(c) Applicable	Section XI Code Cas	Non	<u>د                                      </u>	Substitution of the Section of the S	•	···	
6. Identification		e jaron et e					
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
STUD	Mach Prod.	67741	NIA	70# 284505/1	97	Installed	- No
NUT	Nova Mad frod.	HE# B87035	NIA	PO# 367311/1	01	Installed	No
	7-44, 17-65,	007000					
	+						
							·
<u> </u>							
						<u>L</u>	
7. Description of	Work Repla	a studs	and ru	ts on Refrig	. God	ensing Unit	4C.14
8. Tests Conduc	ted: Hydrostatic 🖸	Pneumatic 🗆	Nominal Op	perating Pressure.	Exempt 🗆	•	
	Other 🖽	Pressure	pei Test	Temp*F			
	•				l else is els	. in v 11 in /91 i=4	ormation in
NOTE: Suj	rough 6 on this repo	n torm or HSCE, SKACC ort is included on eac	nes, or <del>crawings</del> th sheet, and (3) e	may be used, provided (1 such sheet is numbered as	nd number	of sheets is recorde	d at the top

This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

E00030

(7/99)

24114430

### FORM NIS-2 (Back)

Remarks // O	ne	
. Hemarks	Applicable Manufacturer's Data Reports to be attached	
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<del></del>	· · · · · · · · · · · · · · · · · · ·	
	CERTIFICATE OF COMPLIANCE	
certify that th	e statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section X	1.
Time Code Sambal	Stamp N/A	
Type Code Symbol	Stamp	
Certificate of Author	prization No. N/A Expiration Date N/A	
Signed May	Owner or Owner's Designee. Title	
•	Owner or Owner's Designee, 1 tols	•
		·
	CERTIFICATE OF INSERVICE INSPECTION	
l, the undersign	ned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or F	Province
	and employed by Factory Mutual Insurance Company	
ofIohnston	11/00/00	
	port during the period 11/20/99 to 0/65/04 , and st nowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's	tate that
	the requirements of the ASME Code, Section XI.	s rieport
By signing this	certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinati	
	is described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner	for any
personal injury or	property damage or a loss of any kind arising from or connected with this inspection.	
•	Lake Commissions MT =762 ARNT	•
Inspe	ctor's Signature National Board, State, Province, and Endorsements	
Date	n. 29 2002	
Date	The state of the s	

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY As Required by the Provisions of the ASME Code, Section XI

1. Owner Co	ngumera Ener	ey Company		Date Janua	iry 1	5, ZOOZ		
_27780 B	lue Star Hury	Covert, MI	<del></del>	Sheet1	of			
2. Plant Pali	sades Mucles	Plant me		Unit1_				
27780 B	lue Star Rwy	Covert, Mi		W.O. # Z Z	1144 Iscoment Orga	3   nization P.O. No., Job No.	, etc.	
	Work Performed by Consumers Rnergy Type Code Symbol Stamp N/A  Name Authorization No. N/A  27780 Blue Star Hwy, Covert, MI Symination Date N/A							
2//80 B	27780 Blue Star Rwy. Covert. MI Expiration Date N/A  Address  Scrfice Water (SWS)							
5. (a) Applicable	(a) Applicable Construction Code B31. 1 PSS Edition, Na Addenda, Na Code Case							
(b) Applicable	(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 89 Year  (c) Applicable Section XI Code Cases Nonc							
6. Identification of	of Components:					e e.		
Name of Component	Name of Manufacturer	Manufacturer Seriel No.	National Board	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)	
Stud	Mach. Prod.	HE# 67741	nia .	GOZB4505/1	97	Installed	No	
Nut	Mach. frod.	B84032	nla.	PO# GO367311/1	<b>Ø</b> 1	Installed	No	
7. Description of	Work Replace	studs a	end nuts	on Retrig.Co	ndensi	ng Unit 40	C-11	
8. Tests Conduct	other 2	Pressure		erating Pressure.	Exempt 🗆			

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is  $8\frac{1}{2}$  in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at the top of this form.

This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

(7/99)

E00030

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### FORM NIS-2 (Back)

Remarks 1000	Applicable I	Manufacturer's Data Reports to b	attached	
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### **ENCLOSURE 2**

### NUCLEAR MANAGEMENT COMPANY PALISADES NUCLEAR PLANT DOCKET 50-255

March 21, 2002

CONTAINMENT STRUCTURAL INTEGRITY SURVEILLANCE PROGRAM



# NUCLEAR MANAGEMENT COMPANY, LLC PALISADES NUCLEAR PLANT

# CONTAINMENT STRUCTURAL INTEGRITY SURVEILLANCE PROGRAM

ISI SUMMARY

Interval - 1

Period - 1

PLANT OWNER: Consumers Energy Company

PLANT: Palisades Nuclear Plant

**AUTHOR:** 

GESchrader, PE, Program Sponsor

Date

**TECHNICAL REVIEWER** 

HNewton, System Engineer

)ate

MANAGER APPROVAL

M Carlson, Engineering, Programs

Date

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3.4 3.5	Examination Category E-P, All Pressure Retaining Components  Examination Category L-A, Concrete Surfaces	<i>)</i> 7…
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4.3	Outage Containment Post Tensioning System Summary, Preservice To 25-Year Surveillance	
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# 2001 CONTAINMENT STRUCTURAL INTEGRITY SURVEILLANCE, ISI SUMMARY – INTERVAL 1, PERIOD 1

Submitted in accordance with ASME Boiler and Pressure Vessel Code, Section XI, Article IWA-6000, 1992 Edition, 92 Addenda

1. Date:

March through May 2001

2. Plant Owner:

Consumers Energy Company 212 West Michigan Avenue Jackson, Michigan 49201

3. Plant:

Palisades Nuclear Plant

27780 Blue Star Memorial Highway

Covert, Michigan 49043

4. Unit No:

1

5. Commercial Service Date:

December 31, 1971

6. Major Component Inspected:

	Component	Manufact	<u>urer</u>	Equipment Number
	Liner Plate Reinforced Concrete Escape Airlock Personnel Airlock Equipment Hatch	Bechtel Bechtel WJWoole WJWoole	y, Comp	N-54B N-54A MZ-50 MZ-19 MZ-51
7.	Completion Date of Exam	nination:	April 30,	2001
8.	Code Inspector:		Kenneth	L. Blake
9.	Authorized Inspection Ag	ency:	Factory N	lutual Insurance Company
			Johnston	, R.I.
10.	Abstract:		See attac	ched report

### 1.0 PURPOSE

In accordance with Code of Federal Regulation 10 CFR 50.55a, Nuclear Management Company, LLC (NMC) is required to implement ASME Section XI, 1992 Edition, 1992 Addenda, Subsection IWE and IWL by September 9, 2001. This requirement is met by implementation of inspection program B as described in IWE-2412 and the inspections required by IWL.

This report provides a summary of examinations, inspections and corrective actions through the 2001 refueling outage for containment liner plate inservice examinations. All current activities are performed in accordance with the rules and requirements specified in ASME Section XI, Subsection IWE and IWL.

In accordance with ASME Section XI, 1992 Edition, IWA-6240(b), "The inservice inspection summary report shall be submitted within 90 calendar days of the completion of each refueling outage." The Responsible Engineer shall complete a Containment Structural Integrity Surveillance Program report. The 2001 refueling outage (end of fuel cycle 15) ended May 10, 2001.

### 2.0 EXAMINATION AND INSPECTION SCOPE FOR INTERVAL 1, PERIOD 1

The examination and inspection scope for interval 1, period 1, as conducted during the 2001 refueling outage, is summarized in the following table:

Item			
Number	Reference I.D.	Examination	Disposition
E1.11	Containment Liner El. 590'- El. 607' N 54 B	General VT	Accepted
E1.11	Containment Liner El. 607'- El. 625' N 54 B	General VT	Accepted
E1.11	Containment Liner El. 625'- El. 649' N 54 B	General VT	Accepted
E1.11	Containment Liner El. 649'- El. 739' N 54 B	General VT	Accepted
E1.11	Containment Liner El. 739'- El. 779' N 54 B	General VT	Accepted
E1.11	HGR/EB1-H1	General VT	Accepted
E1.11	HGR/EB1-206WR-1 (R1.1)	General VT	Accepted
E1.11	HGR/EB1-206WR-2	General VT	Accepted
E1.11	HGR/EB1-206WR-3	General VT	Accepted
E1.11	HGR/EB1-H14	General VT	Accepted
E1.11	HGR/EB1-206WR-1 (R14.1)	General VT	Accepted
E1.11	HGR/EB1-206WR-2	General VT	Accepted
E1.11	HGR/EB1-206WR-3	General VT	Accepted
E1.11	Polar Crane Support Brackets #1 through 20	General VT	Accepted
E1.11	Containment Liner Support Truss #1 through 18	General VT	Accepted
E5.30	Moisture Barrier, Elevation 590, 0 to 120 degrees.	VT-3	Accepted
E8.10	Escape Airlock	VT-1	Accepted
E8.10	ILRT Fill Line MZ-27	VT-1	Accepted
L1.11	Containment Wall 25 deg85 deg.	VT-3 C	Accepted
L1.11	Containment Wall 85 deg145 deg.	VT-3 C	Accepted
L1.11	Containment Wall 145 deg205 deg.	VT-3 C	Accepted
L1.11	Containment Wall 205 deg265 deg.	VT-3 C	Accepted
L1.11	Containment Wall 265 deg325 deg.	VT-3 C	Accepted
L1.11	Containment Wall 325 deg25 deg.	VT-3 C	Accepted
L1.11	Containment Dome 360 deg.	VT-3 C	Accepted
L1.11	Containment Tendon Access Tunnel	VT-3 C	Accepted
	E1.11  E1.11	Number	Number         Reference I.D.         Examination           E1.11         Containment Liner El. 590'- El. 607' N 54 B         General VT           E1.11         Containment Liner El. 607'- El. 625' N 54 B         General VT           E1.11         Containment Liner El. 625'- El. 649' N 54 B         General VT           E1.11         Containment Liner El. 649'- El. 739' N 54 B         General VT           E1.11         Containment Liner El. 739'- El. 779' N 54 B         General VT           E1.11         HGR/EB1-H1         General VT           E1.11         HGR/EB1-H1         General VT           E1.11         HGR/EB1-206WR-1 (R1.1)         General VT           E1.11         HGR/EB1-206WR-2         General VT           E1.11         HGR/EB1-206WR-3         General VT           E1.11         HGR/EB1-206WR-3         General VT           E1.11         HGR/EB1-206WR-2         General VT           E1.11         HGR/EB1-206WR-2         General VT           E1.11         HGR/EB1-206WR-3         General VT           E1.11         Polar Crane Support Brackets #1 through 20         General VT           E1.11         Containment Liner Support Truss #1 through 18         General VT           E5.30         Moisture Barrier, Elevation 590, 0 to 120 degrees.

### 3.0 EXAMINATION AND INSPECTION RESULTS AND CORRECTIVE ACTIONS

### 3.1 Examination Category E-A, Containment Surfaces

### **Examination Results:**

During refueling outage 15, general visual examination of the containment liner plate discovered miscellaneous structural integrity test (SIT) instrument and wire chase attachments and other minor indications.

### Corrective Actions:

Conditions were accepted by examination in accordance with Subsection IWE-3122.1. Palisades condition report CPAL0101101 documents the basis for acceptance. Acceptance is based on the liner plate meeting acceptance criteria for structural integrity and pressure boundary thickness.

### 3.2 Examination Category E-D, Seals, Gaskets and Moisture Barriers

### **Examination Results:**

During refueling outage 14, visual examination VT-3 of the containment, 590-foot elevation, moisture barrier was performed from the 0 to 120 degree locations. This represents 33% of the entire circumference. This area failed acceptance criteria, and the examination scope was expanded to include 100% of the exam category E-D, item number 5.30, moisture barrier.

During refueling outage 15, visual examination VT-3 of the containment, 590-foot elevation, moisture barrier indicated four areas that should be removed and replaced. Total length of barrier affected was approximately ten feet.

### Corrective Actions:

During refueling outage 14 and due to failure to meet acceptance criteria in the 0 to 120 degree area, condition report CPAL9902035 was initiated and the entire circumference at the 590-foot elevation of containment was inspected.

Work order 24903053 was written to control assessment activities for the liner plate at the 590-foot elevation of containment. Assessment results indicate all areas meet the nominal 0.250-inch plate thickness described in the Palisades Final Safety Analysis Report (FSAR), Section 5.8. Minimum thicknesses were nominally 0.280 inches. Based on these results, the liner plate was accepted by examination as allowed by IWE-3122.1. The moisture barrier was accepted by replacement as allowed by IWE-3122.3.

During refueling outage 15, areas of the moisture barrier not meeting the requirements of IWE-3513 were accepted by repair in accordance with IWE-3122.2. Portions of loose moisture barrier were repaired under work order 24010051. This was considered a normal maintenance activity.

### 3.3 Examination Category E-G, Pressure Retaining Bolting

### **Examination Results:**

During refueling outage 15, visual examination VT-1, as required by item E8.10, was performed on the integrated leak rate test (ILRT) fill line MZ-27. Results are documented in work order 24411366 and components meet acceptance criteria.

During refueling outage 14, visual examination VT-1, as required by item E8.10, was performed on the escape airlock MZ-50. All components meet acceptance criteria.

### 3.4 Examination Category E-P, All Pressure Retaining Components

### **Examination Results:**

During the 2001 refueling outage, NMC fulfilled examination category E-P requirements for item numbers E9.10, E9.30 and E9.40. Palisades does not have any components within the scope of item number E9.20. Results for the ILRT are contained in a report entitled "Palisades Plant, Integrated Leak Rate Test Report." Results for airlocks and seals and gaskets are contained in completed Local Leak Rate Test (LLRT) Program surveillance procedures.

### 3.5 Examination Category L-A, Concrete Surfaces

### **Examination Results:**

An ISI summary report entitled "Containment Inservice Inspection, Testing and Aging Management, ISI Summary – Refout 15" was submitted to the Nuclear Regulatory Commission (NRC) on August 10, 2000. This report documents the results for the initial visual examination of containment concrete surfaces in accordance with ASME Subsection IWL.

### 4.0 HISTORICAL EXAMINATION AND INSPECTION SUMMARIES

### 4.1 Containment Liner Examinations, Preservice to 2001 Refueling Outage

- 4.1.1 Preservice examinations for containment are documented in Palisades FSAR, Section 5.8.8, "Containment Structure Testing" and Section 5.8.8.4, "Structural Integrity Test."
- 4.1.2 An initial Containment Liner Plate and Penetration Surveillance Program is documented in Palisades FSAR, Section 5.8.8.5. The liner plate and penetration surveillance program was established to satisfy the requirements of the original Palisades Technical Specifications. Surveillances were conducted in 1) a preservice condition before the pressurization phase of the structural integrity test (PPSIT) in March of 1970; 2) after the PPSIT (one year after initial start-up) and; 3) one-and-one-half years after initial start-up. It was concluded that the

liner plate system and penetration assemblies were performing as predicted. Therefore, the surveillance program was terminated.

### 4.2 Containment Reinforcing Concrete Examinations, Preservice to Present

- 4.2.1 Preservice examinations for containment are documented in Palisades FSAR, Section 5.8.8, "Containment Structure Testing."
- 4.2.2 The End Anchorage Concrete Surveillance Program, documented in Palisades FSAR, Section 5.8.8.6, was established to satisfy the requirements of the original Palisades Technical Specifications. Observations were made before, during and after the PPSIT. Subsequent observations were made February 12, 1971 and June 7, 1971. It was concluded that the end anchorage concrete was sound and free of significant cracking. Therefore, the surveillance program was terminated.

### 4.3 Containment Post Tensioning System, Preservice to 25-Year Surveillance

- 4.3.1 Preservice examination for containment post tensioning system is documented in Palisades FSAR, Section 5.8.8.3, "Prestressing System Surveillance."
- 4.3.2 A historical summary for containment post tensioning system surveillances (years 1, 3, 5, and 10-20) are documented in Palisades FSAR, Section 5.8.8.3.5, "Historical Summary."
- 4.3.3 Consumers Energy Company submitted the Palisades 25-Year tendon surveillance report on December 18, 1997, with a supplemental submittal on February 23, 1998. A response was also provided to the NRC Staff's July 27, 1998, request for additional information on September 25, 1998.

### 5.0 ASSESSMENT OF POTENTIAL DEGRADATION MECHANISMS

### 5.1 Containment Metal Liner

### 5.1.1 Pitting Thinning

This degradation has not been found at Palisades to date.

- 5.1.2 Corrosion Thinning (atmospheric, embedment, crevice, differential aeration, galvanic, microbiologically induced, chemical)
  Atmospheric corrosion was discovered during the 1999 refueling outage. Minor corrosion was noted at the 590-foot elevation moisture barrier and at various locations where SIT strain gauges remained attached to the liner plate.
  Corrosion occurred at unprotected carbon steel surfaces. Areas of occurrence were characterized by visual evidence of reddish brown discoloration. Corrosion was minor and liner plate nominal wall thickness was not significantly affected.
- 5.1.3 Mechanical Damage, Wear Erosion or Abrasion
  This degradation has not been found at Palisades to date.
- 5.1.4 Galvanic Corrosion Thinning

This degradation has not been found at Palisades to date.

5.1.5 Cracking (Stress Corrosion, Cyclic Fatigue)
This degradation has not been found at Palisades to date.

### 5.2 Containment Reinforcing Concrete

### 5.2.1 Chemical Attack of Concrete

This degradation has not been found at Palisades to date.

### 5.2.2 Freeze-Thaw

This degradation has not been found at Palisades to date.

### 5.2.3 Differential Settlement

This degradation has not been found at Palisades to date.

### 5.2.4 Aggregate Reactions

This degradation has not been found at Palisades to date.

### 5.2.5 Leaching of Calcium Hydroxide

This degradation has not been found at Palisades to date.

### 5.2.6 Mechanical Damage, Wear Erosion or Abrasion

This degradation has not been found at Palisades to date.

### 5.3 Containment Post Tensioning System

### 5.3.1 Tendon Wire Corrosion

This degradation has not been found at Palisades to date.

### 5.3.2 Tendon Relaxation

The lift-off forces for tested tendons are reviewed at each surveillance. With some exceptions, lift-off forces are above the lower bound values (i.e., the prescribed lower limits) established for each group. Some tendons have tested below their respective prescribed lower limit, but above 95% of this limit. The force and elongation for each affected tendon was analyzed. The analysis indicates that there is some non-linearity in the force/elongation relation. This is caused by a binding of the tendon and would not have any effect on the performance of the tendon.

### 5.3.3 Tendon Grease Loss

From the data on grease removed and grease replaced there appeared to be some voids in the grease. Most of the grease voids are less than 5%. Large voids in sheathing may indicate that the tendon wires are not fully protected against corrosion. Large voids may also indicate that there may be leakage of grease into concrete, thus potentially reducing concrete strength. From the sheathing filler streaks that exist on the outside of the containment wall at various locations, it appears that there has been some leakage from the sheathing. Replacements have been performed on a number of grease can gaskets. Leakage appears to have resulted from an ambient temperature change after greasing operations. Grease leakage was also found scattered along construction joints. This situation is not unique to Palisades. Grease voids have not had any impact on the integrity of the tendon and concrete as evidenced by visual examination of the concrete and the lift-off readings of the tendons. During the steam generator replacement in 1990 and 1991, 52 tendons were removed from the containment opening, were examined and found to have adequate grease coverage with no evidence of corrosion. The effects of grease voids on the containment integrity appear to be insignificant.

### 5.3.4 Strain Aging

This degradation has not been found at Palisades to date.

### 5.3.5 Water Infiltration

As documented in a Consumers Power Company submittal to the NRC dated June 16, 1992, entitled "20 Year Containment Tendon Surveillance Report," water infiltration has been documented at Palisades. The grease in tendons D2-23 and V-20 had an absorbed water content of 15.5% and 10.2%, respectively. In addition, small quantities of free water were found in three additional grease cans. The concern is that water in contact with the anchorage may cause stress corrosion of the anchor head or tendon wire, or hydrogen embrittlement of the anchorage. However, examinations of the anchorages in the surveillance scope did not show any visible corrosion or cracking of any of the anchorage components. On the basis of this information, it is concluded that the presence of water in the grease is limited to a few tendons, and its effect appears to be insignificant to cause corrosion or cracking of the anchorage components.

### 6.0 SUMMARY

The Containment Inservice Inspection, Testing and Aging Management Program demonstrates that the Palisades containment continues to be operable and capable of fulfilling all designed operating and accident functions.

### 7.0 APPENDIX

### 7.1 Definitions and Acronyms

<u>Condition Report (CR)</u> - Condition Reports (CRs) identify undesirable conditions or conditions adverse to quality at Palisades.

<u>Inspection</u> - As used in this report, an inspection is an observation, other than Code examinations, performed by engineers, operators or maintenance persons.

Operating Experience (OE) - Operating experience is industry information received from the Institute of Nuclear Power Operators (INPO), the NRC, utilities, NSSS suppliers, and international participants in the form of various reports that are disseminated to nuclear power plants via the Nuclear Network system.

<u>Pressurization Phase of the Structural Integrity Test (PPSIT)</u> - The pressurization phase of the structural integrity test (PPSIT) was conducted between March 23 and March 31, 1970.

<u>Ultrasonic Test (UT)</u> - In accordance with ASME Section XI, 1992 Edition, IWA-2230, UT examinations are conducted to detect the presence of discontinuities throughout the volume of material and may be conducted from either the inside or outside surface of a component.

General Visual Examination - In accordance with ASME Section XI, 1992 Edition, IWE-3510.1, General Visual examinations are conducted to detect

evidence of degradation that may affect either the containment structural integrity or leak tightness.

<u>Visual Examination VT-1</u> - In accordance with ASME Section XI, 1992 Edition, IWA-2211, VT-1 examinations are conducted to detect discontinuities and imperfections on the surfaces of components, including such conditions as cracks, wear, corrosion or erosion.

<u>Visual Examination VT-2</u> - In accordance with ASME Section XI, 1992 Edition, IWA-2212, VT-2 examinations are conducted to detect evidence of leakage from pressure retaining components, with or without leakage collection systems, as required during the conduct of system pressure test. VT-2 examinations are conducted in accordance with IWA-5000. For direct examination, the Table IWA-2210-1 maximum examination distance shall apply to the distance from the eye to the surfaces being examined.

<u>Visual Examination VT-3</u> - In accordance with ASME Section XI, 1992 Edition, IWA-2213, VT-3 examinations are conducted to determine the general mechanical and structural condition of components and their supports by verifying parameters such as clearances, settings, and physical displacements; such as loss of integrity at bolted or welded connections, loose or missing parts, debris, corrosion, wear, or erosion. VT-3 includes examination for conditions that could affect operability or functional adequacy of snubbers and constant load and spring type supports.

### 8.0 ATTACHMENTS

Attachment 1, NIS-1 Form, "Owner's Report for Inservice Inspections"

Attachment 2, NIS-2 Form, "Owner's Report for Repair/Replacement Activity"

Attachment 1, F	Form NIS-1, "Ow	/ner's Report	for Inservice In	spections"
		•		

Containment Structural Integrity, Surveillance Program

Palisades Nuclear Plant

# FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS As required by the Provisions of the ASME Code Rules

1.	Owner Consumers Energy Company, 212 W. Michigan Avenue Jackson, Mi. 49201 (Name and Address of Owner)
2.	Plant Palisades Nuclear Plant, 27780 Blue Star Memorial Highway, Covert, MI. 49043 (Name and Address of Plant)
3.	Plant Unit4. Owner Certificate of Authorization (if required)n/a
5.	Commercial Service Date 12/31/71 6. National Board Number for Unitn/a
7.	Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Containment Liner Plate	Bechtel Group, Inc.	n/a	n/a	n/a
Containment Concrete	Bechtel Group, Inc.	n/a	n/a	n/a
Equipment Hatch	WJWooley, Comp.	6860-12	n/a	n/a
Escape Airlock	WJWooley, Comp.	6860-11	n/a	n/a
Personnel Airlock	WJWooley, Comp.	6860-10	n/a	n/a

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Attachment 2, Form I	NIS-2, "Owner	r Repair/Repla	acement Activi	ity"

Containment Structural Integrity, Surveillance Program

Palisades Nuclear Plant

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY As Required by the Provisions of the ASME Code, Section XI

=		A	s Required by tr	ne Provisions o	T THE ASIVIE Code, S	ection A				
1.	OwnerCon	sumers Energ	zy Company		Date APRI					
	27780 Blue Star Hwy Covert, MI				1					
2.	2. Plant Palisades Nuclear Plant									
	27780 Blue Star Hwy. Covert, MI				Repair/Replacement Organization P.O. No., Job No., etc.					
3.	3. Work Performed by <u>Consumers Energy</u>				Type Code Symbol Stamp N/A					
	27780 Blue Star Hwy. Covert. MI				Expiration Date N/A					
4.	Identification of	System	ONTAINME	UT ISOL	ATION (CI	(2.				
5.	(a) Applicable	Construction Cod	asmE III	. 1965 E	dition, <u>nla</u>	_ Addeno	a, <u>nla</u>	Code Case		
	(b) Applicable E	dition of Section X	Utilized for Repair	/Replacement Activ	vity <u>92</u>					
		ection XI Code Cas	(11/1		1 dar					
6.	Identification of	Components:								
	Name of	Name of	Manufacturer	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)		
	Component	Name of Manufacturer	Serial No. HT# 69731	Board No.	Other Identification Po ##-	Year Built	Removed, or installed	Code		
	BOLT T	Manufacturer	Serial No. HT# 69731 / 83916 HT#	Board No.	Po# Cop 286382/3	Built	Removed, or Installed  TNSTALLED	Code Stamped (Yes or No)		
	Component  BOLT  NUT	Manufacturer  IREUTEC  IREUTEC	Serial No. HT# 69731/ 83916	Board No.	Po# G\$ 286382   3 Po# G\$ 286382   1	Built 99	Removed, or Installed  TNSTALLED  INSTALLED	Code Stamped (Yes or No)		
	BOLT T	Manufacturer TROUTEC	Serial No. HT# 69731 / 83916 HT#	Board No.	Po# G\$ 286382   3 Po# G\$ 286382   1	Built 99	Removed, or Installed  TNSTALLED	Code Stamped (Yes or No)  NO		
	Component  BOLT  NUT	Manufacturer  IREUTEC  IREUTEC	Serial No. HT# 69731 / 83916 HT#	Board No.	Po# G\$ 286382   3 Po# G\$ 286382   1	Built 99	Removed, or Installed  TNSTALLED  INSTALLED	Code Stamped (Yes or No)  NO		
	Component  BOLT  NUT	Manufacturer  IREUTEC  IREUTEC	Serial No. HT# 69731 / 83916 HT#	Board No.	Po# G\$ 286382   3 Po# G\$ 286382   1	Built 99	Removed, or Installed  TNSTALLED  INSTALLED	Code Stamped (Yes or No)  NO		
	Component  BOLT  NUT	Manufacturer  IREUTEC  IREUTEC	Serial No. HT# 69731 / 83916 HT#	Board No.	Po# G\$ 286382   3 Po# G\$ 286382   1	Built 99	Removed, or Installed  TNSTALLED  INSTALLED	Code Stamped (Yes or No)  NO		
	Component  BOLT  NUT	Manufacturer  TREVIEC  TREVIEC	Serial No. HI# 69731/ B3916 HT# 68395	Board No. NIA NIA	Po# GΦ 286382 / 3 PO# GΦ 286382 / 1 PO# GΦ 287455 / 1	Buik 99 99 99	Removed, or Installed  INSTALLED  INSTALLED  ENSTALLED	Code Stamped (Yes or No)  NO		
7.	Component  BOLT  NUT	Manufacturer  TREVIEC  TREVIEC	Serial No. HI# 69731/ B3916 HT# 68395	Board No. NIA NIA	PO# G\$ 286382   3 PO# G\$ 286382   1 PO# G\$ 287455   1	Buik 99 99	Removed, or Installed  INSTALLED  INSTALLED  ENSTALLED  ENSTALLED	Code Stamped (Yes or No)  NO		
	Component  BOLT  NUT  UASPIGE  Description of	Manufacturer  TREVIEC  TREVIEC	Serial No. HI# 69731/ B3916 HT# 68395	Board No.	PO# G\$ 286382   3 PO# G\$ 286382   1 PO# G\$ 287455   1	Buik 99 99 99	Removed, or Installed  INSTALLED  INSTALLED  ENSTALLED  2.51.	Code Stamped (Yes or No)  NO		

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This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

(7/99)



E00030

### **Additional References**

- -Palisades Condition Report, CPAL9801018, "Containment Liner Plate Corrosion Observed During Containment Coatings Walkdown"
- -Palisades Condition Report, CPAL9902035, "Containment Liner Plate to Floor Caulked Joint Missing or Degraded (N-54B)"
- -Palisades Technical Specification Surveillance Procedure RT-131, "Containment Inservice Inspection Metal Liner,"
- -ASME Section XI, 1992 Edition, Subsection IWE, "Requirements for Class MC and Metallic Liners of Class CC Components of Light-Water Cooled Plants"
- -Palisades Engineering Manual Procedure EM-09-12, "Containment Structural Integrity Surveillance Program"
- -Palisades Engineering Analysis EA-EAR-98-0443, "Basis for ISI Acceptance Criteria for Containment Liner Plate Reduced Thickness"