

July 7, 2021



FROM THE DESK OF
COMMISSIONER
BRENT BAILEY
CENTRAL DISTRICT OFFICE



The Central District is pleased to bring you the latest information concerning utility rates, project developments, Public Service Commission actions and other news you can use. I hope you will find this information to be a useful resource to learn about the Public Service Commission, consumer issues and the continuous work we are doing for the citizens in the Central District and across the state of Mississippi. Thank you again for allowing me to serve you in this capacity.

Brent Bailey



Mississippi
Power

A Look at Mississippi Power Company's Energy Resources

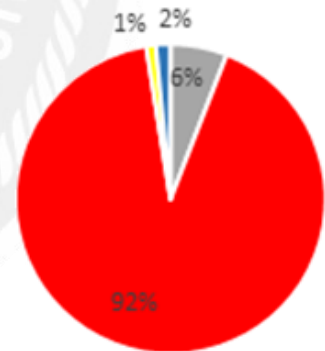
Several months ago, this newsletter began exploring and analyzing the generation mix of the various utilities that supply and/or deliver electricity to residential, commercial and industrial customers in Mississippi. This week, we take a look at the assets and performance of Mississippi Power Company.

Mississippi Power has approximately 190,000 customers across 23 counties with territorial energy sales of 12.1 terawatt-hours in 2020 of which 17% was residential, 21% was commercial, 38% was industrial, and 24% was wholesale. Peak demand in 2020 was 2,291 MW. Mississippi Power has 8,422 miles of transmission and distribution lines and 220,800 poles.

According to the Mississippi Power's [2021 Integrated Resource Plan](#) filed with Commission on April 15, 2021, Mississippi Power has a mix of supply-side and demand-side resources including natural gas, coal, cogeneration, renewable power purchase agreements (PPAs), and DSM programs. Mississippi Power owns 3,516 MW of generating capacity of which 52% is combined cycle, 41% is fossil steam, 4% is cogeneration, and 2% is combustion turbines. Renewable PPAs total 158 MW_{AC} and demand response programs total 76 MW.

Over the past 10 years, natural gas combined cycle (NGCC) units have become a larger part of Mississippi Power's energy production portfolio. This is due to low natural gas prices, lower demand growth, increased regulations on coal plant emissions, and other factors. Therefore, Mississippi Power's portion of generation from natural gas has increased from 49% to 92% while the percent of generation from coal has decreased from 51% to 6%. Solar, demand side management and market purchase make up the remainder of the energy mix.

2020 Energy Mix



■ Coal ■ Gas ■ Solar ■ Purchases



Continued...

Mississippi Power's generation fleet consists of these sites:

The Victor J. Daniel Electric Generating Plan (Plant Daniel) located in Jackson County near Escatawpa, MS is a 2,229 MW facility consisting of two coal-fired steam turbines and two natural gas combined cycle units. Mississippi Power owns 50% interest of each of the coal units. The coal units were put into service in 1977 and 1981 and had capacity factors of 20% and 31% in 2020. The gas units were put in service in 2001 and had capacity factors of 96% and 91% in 2020.

[Capacity factor is expressed as a percentage and is calculated by dividing the actual unit electricity output by the maximum possible output. This ratio indicates how fully a unit's generation capacity is used.]

The Jack Watson Electric Generating Plant (Plant Watson) is located in Gulfport in Harrison County and currently has two steam turbines (1968 and 1973) and one combustion turbine (1970) each fired by natural gas for a total capacity of 790 MW. The steam turbines had capacity factors of 30% and 38% while the combustion turbine had a capacity factor of 1% in 2020. The facility was converted from coal to natural gas in 2015.

David Ratcliffe Electric Generating Plant (Plant Ratcliffe, formerly known as the Kemper County IGCC Project) is located in Kemper County and consists of a single 745 MW natural gas-fired combined cycle unit. The unit went into service in 2014 and had a capacity factor of 88% in 2020. The facility was intended to be an integrated gasification combined cycle technology fueled by gasified lignite coal. Mississippi Power suspended coal gasification efforts in June 2017.

The Greene County Electric Generating Plant (Green County) near Demopolis, AL has two natural gas-fired steam turbines totaling 568 MW. These units were converted from coal to natural gas in 2016. Mississippi Power owns a 40% undivided interest in these units. Alabama Power Company owns the remaining 60% interest in those units and operates the facility. The units were originally put into service in 1965 and 1966.

The Lonnie P. Sweatt Electric Generating Plant (Plant Sweatt) located in Meridian, MS has a single 40 MW natural gas combustion turbine unit that was put into service in 1971. The unit had a capacity factor of 3% in 2020.

The Chevron Cogenerating Plant consists of five natural-gas fired combustion turbines ranging in size from 17 MW to 80 MW with a total capacity of 147 MW. Two units put into service in 1967, two units in 1971, and one unit in 1994. Capacity factors for these units ranged from 83% to nearly 100%. Mississippi Power owns and operates these five cogeneration units located at and dedicated to the Chevron Refinery in Jackson County.

Mississippi Power has contracts via 25-year power purchase agreements with four solar generators in the state. Under the terms of those agreements, Mississippi Power has the flexibility to serve its retail customers with renewable energy by retiring the associated renewable energy credits (RECs) or to sell the energy and/or the RECs, separately or bundled together, to third parties. The four solar generators include: 52 MW **MS Solar II** in Sumrall, MS (2017); 50 MW **Hattiesburg Solar Farm** (2017); 3.29 MW **CB Energy** in Gulfport, MS (2017); 53 MW **SR Meridian III** near Toomsuba, MS (2019). These solar PPAs total 157.8 MW_{AC} of nameplate capacity and generated 320,473 MWh in calendar year 2020.





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More Change Likely in Store for Mississippi Power's Generation Mix

| Generating Unit | Net Capability | Planned Retirement |
|------------------------------|----------------|--------------------|
| Watson 4 | 268 MW | Dec. 2023 |
| Greene County 1 | 103 MW | Dec. 2025 |
| Greene County 2 | 103 MW | Dec. 2026 |
| MPC Daniel Coal ³ | 502 MW | Dec. 2027 |
| Total | 976 MW | |

As a stipulation from the resolution of the Kemper County IGCC Project, Mississippi Power was ordered to conduct and file a Reserve Margin Plan. The plan was subsequently updated three times with the final submitted in January 2020. Data in the filings find that Mississippi Power has significant excess capacity and that retiring some combination of older fossil steam

units would be the best option for reducing the excess reserve margin. The Commission then ordered Mississippi Power to propose a plan for reducing generating capacity by approximately 950 megawatts by year-end 2027. The proposed retirement schedule is found in the chart above.

Despite the planned retirements for the identified fossil steam units, Mississippi Power does not anticipate a new capacity need until 2031 or later. A reliable power system has enough generation, network capacity and reserves to supply customers with the energy that they demand with a very high degree of confidence. The Commission will continue to monitor the energy delivery, reliability, resiliency and affordability of Mississippi Power service. I hope this overview of Mississippi Power's generation fleet was helpful and informative.



Other News

Madison County Board of Supervisors Seeks Broadband Consultant

On July 6, the Madison County Board of Supervisors voted to issue a Request for Statement of Qualifications for professional engineering services from qualified firms and/or individuals for broadband "last mile" infrastructure in a specified portion rural Madison County. Services include the planning, evaluation, design, and construction review and administration for broadband facilities.

A detailed Request for Qualifications can be obtained at the Office of County Administrator, or via email at: keshha.buckner@madison-co.com. Those interested in being considered shall provide a Statement of Qualification on or before 10:00 A.M. local time, on August 2nd, 2021 addressed to the following: Madison County Chancery Court Clerk's Office 125 West North Street, Canton, MS 39046.

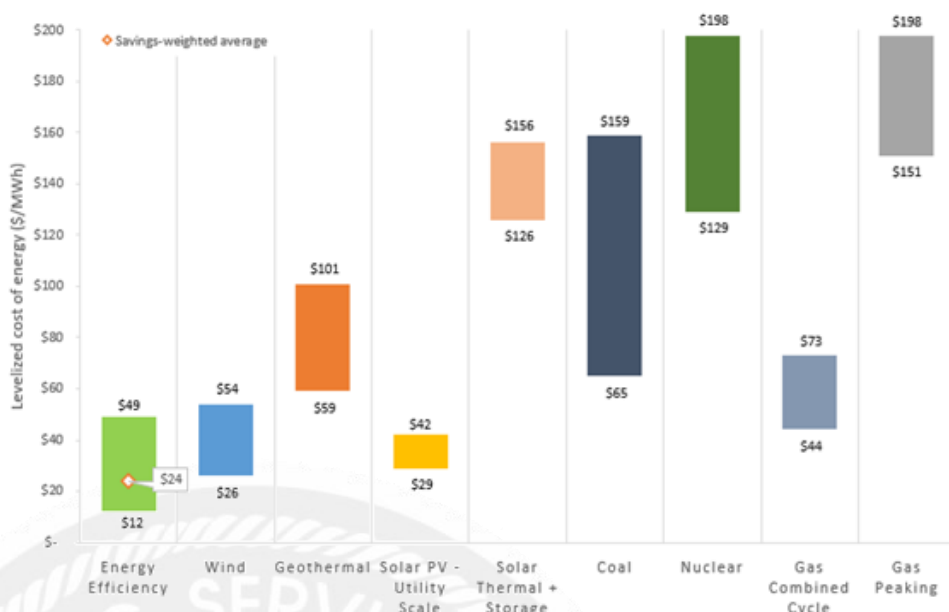
Energy Efficiency Remains a Low-Cost Energy Resource Option

As illustrated by the Mississippi Power article above, a utility's decisions about how to meet customers' power needs can have consequences. A new ACEEE [policy brief](#) shows that utilities needing to meet increased electric demand or replace older power plants could often save costs by investing in energy efficiency improvements in the homes and businesses they serve, rather than building new plants. Energy efficiency measures should be the first option utilities consider to provide low-cost energy solutions because the cheapest kilowatt-hour is frequently the one not used.



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Weighted based on savings, the average levelized cost per saved kilowatt-hour was 2.4 cents (\$24 per saved megawatt-hour), putting efficiency on par with the cheapest sources of clean energy available on the grid today. This value includes the cost of low-income programs, which typically come at a higher cost to program administrators. Utilities are urged to scale up energy efficiency programs to benefit customers.



U.S. Consumed Record Amount of Renewable Energy in 2020

In 2020, consumption of renewable energy in the United States grew for the fifth year in a row, reaching a record high of 11.6 quadrillion British thermal units (Btu), or 12% of total U.S. energy consumption. Renewable energy was the only source of U.S. energy consumption that increased in 2020 from 2019. Meanwhile, fossil fuel and nuclear consumption declined. Check out the [U.S. renewable energy consumption by source and sector](#) chart that shows how much renewable energy by source each user sector consumes.

U.S. Nuclear Power Plants Status Report

Every morning, each nuclear electricity generator in the United States reports its operating status to the Nuclear Regulatory Commission (NRC). The NRC compiles this information in its [Power Reactor Status Report](#) and the Energy Information Administration also presents that information in interactive visualizations on its [Status of Nuclear Outages](#) page. The page includes two maps showing the capacity and outage status of U.S. nuclear plants. The U.S. current nuclear capacity is 95,388.2 MW. Nuclear power reactors are typically refueled every 18 to 24 months, although the refueling process can be completed in as few as 10 days. As of July 6, only 4.14% of capacity was offline.



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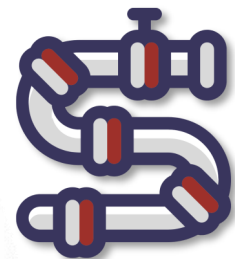


The July monthly docket meeting of the Mississippi Public Service Commission will take place on Thursday, July 8 at 10 a.m. Join us in the MS PSC hearing room on the 1st floor of the Woolfolk State Office Building. If you are not able to join us in person, the meeting will be streamed live on the MPSC YouTube channel at <https://www.psc.ms.gov/webcast>.

Save the Date
 2021 ENHANCE WORKSHOP AND AWARDS LUNCHEON
 Wednesday, August 25, 2021
 The Westin Jackson
 407 S. Congress Street, Jackson, MS 39201
 Registration information will be available soon at www.enhance.ms

Our Pipeline Safety Division completed **5** construction inspections in the Central District during the month of June 2021.

The total costs for construction notices that were received by the Commission in the Central District during the month of May is approximately **\$3.5 million**.



“Reporting of Construction Work”- The rule is found in Chapter 57.1: All Construction work involving gas facilities in which the estimated cost of proposed facilities is in excess of eight thousand dollars are related facilities that would be governed by the Federal Minimum Safety Requirements, will be reported in writing, or via telephone to the MS Public Service Commission prior to starting date of such construction. (There are exceptions for emergencies.)

The Commission encourages all intra-state natural gas operators to comply with the rule



Last week, our Consumer Complaint Specialists handled a total of **26** complaints in the Central District.

| | |
|--------------------|----|
| Electric Companies | 18 |
| Telecommunications | 5 |
| Water/Sewer | 1 |
| Natural Gas | 2 |

Last week, the Central District received a total of **303** complaints from consumers against potential telemarketers through our no call app, website and mail-ins.

We encourage consumers to file telemarketing complaints with the Federal Trade Commission at <http://www.donotcall.gov/> in addition to filing complaints with the Mississippi Public Service Commission.