

September 15, 2022



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

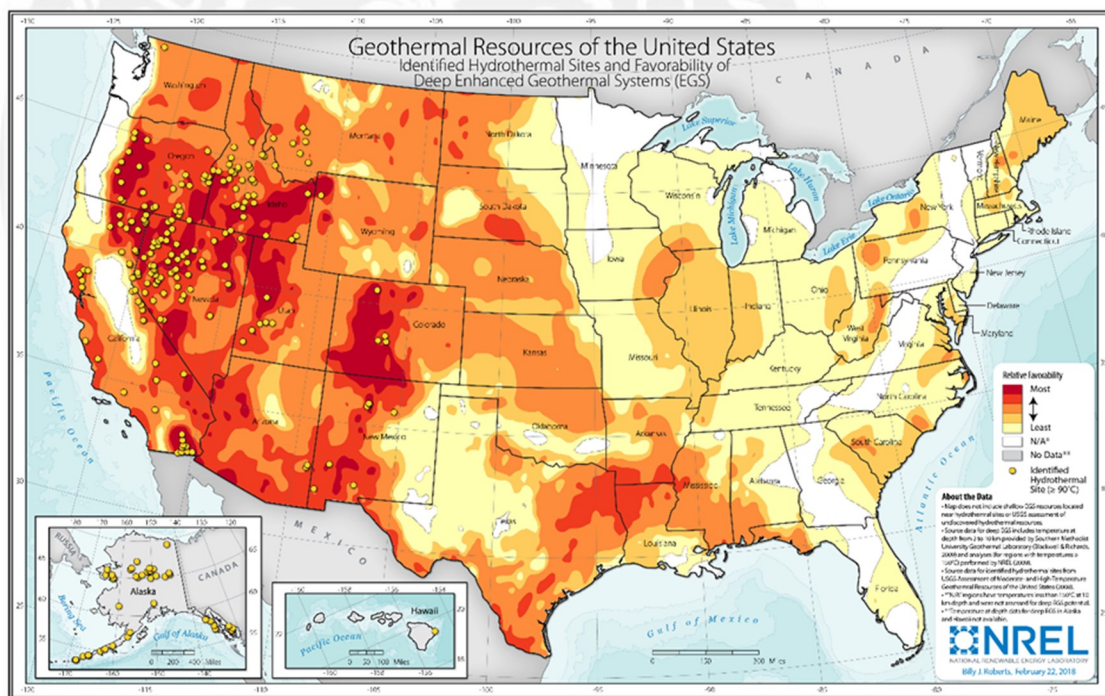
Geothermal Energy: The Heat Beneath Our Feet

Mother Earth contains vast amounts of energy. We are very familiar with the traditional energy resources that are mined from the Earth, such as oil, natural gas, coal and uranium, as well as the precious metals needed for certain battery systems. But another key energy resource is located below the Earth's surface that contains vast amounts of energy potential – geothermal energy.

Geothermal energy is a largely untapped energy resource derived from the earth's heat. That heat radiates from the Earth's core and mantle – a product of the formation of the Earth itself. This heat has been radiating from the Earth's core for about 4.5 billion years. The temperature at the center of the Earth, about 4,000 miles deep, is about the same as the surface of the sun at nearly 10,800°F!

Geothermal energy can supply clean, renewable power and/or heat around the clock, emits little or no greenhouse gases, and takes a very small environmental footprint to develop. It has the potential to be a valuable contributor to energy diversity in the U.S. whether it is through the development of large-scale geothermal power generation or through the deployment of geothermal heat pumps in millions of households across the country. Geothermal energy is “always on” and can be utilized in all 50 states.

Mississippi may lack geysers and active volcanoes that are common in the western U.S., but we have large volumes of warm salt water deep underground (at least 4,000 feet) that can be coproduced from oil and gas wells.





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Technology exists to extract useful energy from such warm fluids. Therefore, in Mississippi researchers are concentrating efforts on collection of data about bottom hole temperatures from the headers of geophysical logs.

Geothermal energy currently generates about 3,700 megawatts of electricity in the United States, but a substantial amount of geothermal energy is not accessible with current technology or current regulatory restrictions. But with technology improvements and regulatory reforms, geothermal electric power generation could increase nearly 26-fold from today.

Just last week, the Department of Energy (DOE) announced an initiative to make enhanced geothermal systems a widespread renewable energy option in the U.S. by cutting its cost by 90% to \$45 per megawatt hour by 2035. The [Enhanced Geothermal Shot](#), as the initiative is called, seeks to unlock the Earth's nearly inexhaustible heat resources to provide reliable, clean power to American communities and expand opportunities for a robust domestic geothermal industry. More than five terawatts of heat resources—enough to meet the electricity needs of the entire world—exist in the United States. Capturing even a small fraction of this could affordably power over 40 million American homes.

While capturing large amounts of heat for utility-scale electricity generation may not currently have application beyond the western states, there are non-electric uses of geothermal energy in the form of geothermal heat pumps with applications for residential and commercial heating and cooling. The geothermal heat pump takes advantage of the relative constant temperature of heat stored in the earth (55°F at 10 feet below the surface) or in ground water, transferring it into a building during the winter, and transferring it out of the building and back into the ground during the summer. The ground, in other words, acts as a heat source in winter and a heat sink in summer.

Is a geothermal heat pump right for you? Retrofitting a home could be expensive while installing such a system at the point of new construction is more cost effective. Also, people who live in areas with hot summers and very mild winters may not get maximum benefit of a geothermal heat pump. Regardless, geothermal heat pumps, wherever they are located, require much less energy to heat and cool than traditional HVAC systems. Before deciding on your next HVAC, think about local weather conditions and how much you are currently spending on monthly electricity costs.

Mississippi Electric Vehicle Infrastructure Deployment Plan Approved

The Federal Highway Administration (FHWA) has completed the review of the [Mississippi Electric Vehicle Infrastructure Deployment Plan](#) required under the National Electric Vehicle Infrastructure (NEVI) Formula Program. Per the review, the FHWA has determined that the *Mississippi Electric Vehicle Infrastructure Deployment Plan* is [approved for implementation](#).

With this early approval, Mississippi can now begin to access portions of the \$50 million in NEVI Formula funding for FY22 and FY23 to assess the proper locations for 20 to 30 NEVI-compliant DC fast chargers along interstate highways across the state. Approved Plans are available on the [FHWA web site](#) and funding tables for the full five years of the NEVI Formula program can be viewed [here](#).

Thirty-five states, the District of Columbia, and Puerto Rico now have the green light to build their pieces of the national charging network. After plan approval, states can be reimbursed for pre-planning costs and now have a wide range of options to use their NEVI Formula funding for projects directly related to the charging of an electric vehicle.

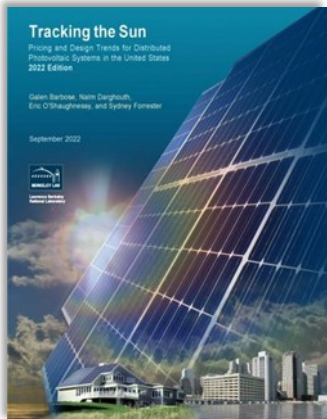




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Furthermore, FHWA has published a [Notice of Proposed Rulemaking \(NPRM\)](#) on proposed minimum standards and requirements for projects funded under the NEVI Formula Program and plans to soon finalize that rulemaking.

New Report Summarizes Typical Size and Price of Distributed Generation Solar



Lawrence Berkeley National Lab announced the release of the latest edition of its [Tracking the Sun](#) annual report, describing pricing and design trends for grid-connected, distributed solar photovoltaic (PV) systems in the United States. The report is based on data from roughly 2.5 million PV systems installed nationally through year-end 2021.

The following are a few key findings from the latest edition of the report:

Residential systems are getting larger. Residential system sizes have been rising steadily over the past two decades, driven by declining costs and rising module efficiencies. As of 2021, the median size of new residential installs was 7.0 kW, compared to just 2.4 kW in 2000.

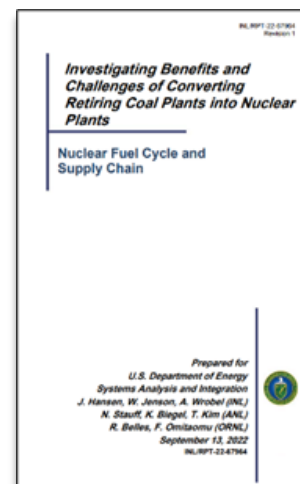
PV system prices have continued to fall, when adjusting for inflation. In real dollar terms, median installed prices for stand-alone PV systems fell by 10-20 cents per watt, from 2020-2021, across residential and non-residential customer classes. In the first half of 2022, real prices held flat for residential customers, while falling by 10-30 cents per watt for non-residential customers.

More PV systems are being paired with storage. In 2021, 10% of all new residential PV installations and 5% of all non-residential installations included battery storage. In 2021, 15% of all new paired PV+storage systems in the U.S. were the result of storage retrofits onto existing PV systems.

DOE Says Retiring Coal Plants Can Convert to Nuclear

The Department of Energy (DOE) released a report showing that hundreds of U.S. coal power plant sites could convert to nuclear power plant sites, adding new jobs, increasing economic benefit, and significantly improving environmental conditions. This coal-to-nuclear transition could add a substantial amount of clean electricity to the grid.

The report, [Investigating Benefits and Challenges of Converting Retiring Coal Plants into Nuclear Plants](#), identified 157 retired coal plant sites and 237 operating coal plant sites as potential candidates for a coal-to-nuclear transition. Of these sites, the team found that 80% are good candidates to host advanced small modular reactors. The reuse of coal infrastructure for advanced nuclear reactors could reduce costs for developing new nuclear technology, saving from 15% to 35% in construction costs. Coal-to-nuclear transitions could also save millions of dollars by reusing the coal plant's electrical equipment (e.g., transmission lines, switchyards), cooling ponds or towers, and civil infrastructure such as roads and office buildings.





Entergy Mississippi Announces Customer Assistance Program

The MPSC joined Entergy Mississippi on September 14 to [announce](#) a \$3.2M pledge, funded by Entergy Mississippi shareholders, to provide financial assistance and other



support to help customers with high electricity bills. The four initiatives include: \$150 bill credit for moderate-income households; Up to

\$1000 in utility bill assistance for elderly and disabled customers; Free energy efficiency kits; Energy efficiency and federal assistance customer education.



Last Week at the MPSC

- ✉ The **Public Utilities Staff** prepared and filed the Monthly Purchased Gas Adjustment (PGA) Audit Reports for the period May 1, 2022 through May 31, 2022 for the following entities: [Atmos Energy](#); [CenterPoint Energy](#); [Spire Mississippi Inc.](#)
- ✉ The **Town of Edwards** filed its [Notice of Intent](#) to Increase Rates for Water Service in its Certificated Area in **Hinds County**. By action of the Board of Aldermen, the water rates for customers inside the corporate limits and within one mile of the unincorporated will increase effective October 1, 2022. The **Town of Edwards** is requesting authorization to increase the water rates of customers in the certificated area located one mile beyond the town's corporate limits in order to more equitably recover the costs of providing water service. The present rate is \$24.40 for 0-2000 gallon minimum and \$3.40 per thousand over 2000 gallons. The **Town of Edwards** is requesting to increase the monthly water service rates to \$25.13 for 0-2000 gallon minimum and \$3.50 per thousand over 2000 gallons for customers in the certificated area located one mile beyond the town's corporate limits.

SAVE THE DATES

The Mississippi Development Authority's Energy and Natural Resources Division will hold a public hearing on Sept. 20 to take comments on the federal government's [Grid Resilience Formula Grant Program](#). The hearing will take place at 2:00 p.m. in the MPSC Courtroom in the Woolfolk State Office Building. Interested parties also can access the hearing online or by phone by e-mailing energysmartms@mississippi.org to request a link or phone access.

The MPSC will hold a [Work Session](#) on Regulatory Considerations in Light of Electric Vehicle Adoption on Monday, September 26, 2022, beginning at 9:00 am in the MPSC Hearing Room.

The MPSC will hold a Special Meeting and a [Rehearing](#) on the Commission's Final Rule and Order Revising its Net Metering and Interconnection Rules on Tuesday, September 27, 2022, at 10:00 am in the MPSC Hearing Room.

The next Regular Docket Meeting of the MPSC is scheduled for October 4, 2022.



CENTRAL DISTRICT SNAPS



There was a full house and full agenda at the 2022 Annual Meeting of the Electric Cooperatives of Mississippi (ECM) this week in Biloxi.

Left picture: ECM CEO Michael Callahan, Youth Leaders Council rep Connor Gibson and ECM President and Alcorn County Electric CEO Eddie Howard



The ECM Annual Meeting provides an opportunity to visit with the CEO/GM of the various electric cooperatives that serve customers in the Central District.

Left picture: Brian Long (Central EPA), Chris Rhodes (Southern Pine Electric), and Randy Carroll (East Mississippi Electric Power Association)



Pictured above: David O'Bryan (Delta Electric Power Association), Michael Neely (Yazoo Valley Electric Power Association), and Kevin Bonds (Southwest Electric)

Our Pipeline Safety Division completed **6** construction inspections in the Central District during the month of August.

The total amount of construction notices that were received by the Commission in the Central District during the month of August is approximately **\$2,386,000**.

"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.



After more than 37 years in the natural gas industry, Atmos Energy's Mississippi Division President David Gates is entering retirement. Congratulations on a stellar career and for your community leadership in Mississippi!



Last week, our Consumer Complaint Specialists handled a total of **35** complaints in the Central District.

Electric Companies	22
Telecommunications	10
Natural Gas	2
Water/Sewer	1

Last week, the Central District received a total of **175** 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.