

Mississippi Renewable Energy and Energy Efficiency Update

Mississippi Issues

Draft Report on Study of Actual Benefits of Distributed Generation (Net Metering) Available; MPSC Invites Comments (Docket No. 2011-AD-2)

In mid-November, Acadian Consulting Group, LLC (Acadian) submitted its draft study report examining its calculated actual benefits of distributed generation in Mississippi. The MPSC has issued an [Order Requesting Comments](#) to receive feedback regarding the study, its methodology, and its conclusions. 25x'25 and other interveners [requested an extension of time](#) for stakeholders to review the report and develop comments. The MPSC granted an additional 30 days for the comment period. **Stakeholders will now have seventy-five (75) days from Nov. 19, or no later than Feb. 4, 2019.** Currently, the MPSC net metering rule requires a 2.5 cent per kilowatt-hour (“kWh”) “add-on” above avoided cost for electrical generation put to the grid and a 2.0 cent per kWh add-on to lower-income household net metered generation. The Acadian draft report recommends an add-on of 0.35 cents/kWh for Entergy customers and 0.27 cents/kWh for customers in MS Power Co. service territory. 25x'25 and others will be formulating a response. Some of you had problems downloading the report in November Update. Please use this [link to download the report](#).

Entergy MS Files to Keep Its Net Metering Rates Steady Through 2021

As noted above, the MPSC has received a draft study to assign a value to the benefits of distributed generation. Entergy MS is [proposing](#) to keep its Non-Quantifiable Expected Benefits add-on at an assigned value of [2.5 cents per kWh through January 3, 2022](#), rather than adopt a much lower rate as recommended by the Acadian report. Keeping the rate steady for the next three years will provide certainty for those who are considering installing in a distributed generation system, such as solar. 25x'25 [filed comments in support](#) of Entergy’s proposal while encouraging the other state electric utilities to do the same. (Docket No. 2016-UN-32)

MPSC Requests Comments on Entergy MS IRP Proposed Rule (Docket No. 2018-AD-64)

In May 2018, the MS Public Service Commission issued an [Order that establishes a docket](#) to investigate and consider the development and adoption of a rule defining an Integrated Resource Planning (IRP) process for regulated electric utilities in Mississippi. An IRP establishes a framework for future generation planning and greatly increases opportunities for transparency and public participation. Stakeholders were invited to submit written comments regarding the development and adoption of a rule defining an IRP process for Mississippi. As part of its comments, Entergy MS submitted for MPSC’s consideration a proposed IRP Rule that would replace the MPSC’s existing Rule 29.

The MPSC has now issued an [Order that request stakeholders to provide written comments](#) evaluating [Entergy MS’s proposed IRP Rule](#). Please note, the proposed IRP Rule being evaluated was written by Entergy MS and submitted to the MPSC. This proposal is NOT a product of the MPSC or the Staff. **Stakeholders have 45 days from Dec. 11, or no later than Jan. 25, 2019, to submit written comments.**

According to the Order, the MPSC does not at this juncture propose to adopt EMI's proposed IRP Rule as its own, but merely seeks comments from all interested and affected parties on the form and substance of EMI's proposal. 25x'25 encourages anyone interested to file comments on this matter.

Review of MPSC Regular Meeting – December 11

On December 11, the MPSC met at 10 am in the MPSC Hearing Room. Items of interest to energy and consumer stakeholders:

Docket No. 2018-UN-193 – MS Power Co. [Notice to Establish](#) the Contract for Purchase Energy Rate (Rate CPE) Clause: This docket creates a standardized process under PURPA for electric generation facilities larger than 100 kW, selling all or part of its power to MS Power Co., and not participating in the net energy metering rate program. Previously, generation facilities larger than 100 kW negotiated rates with MS Power on a case-by-case basis. This rate creates a more streamlined process for development of certain merchant generation facilities. MPSC [approved](#) the Rate CPE.

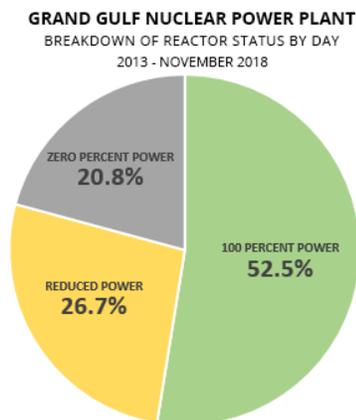
[Next Meeting](#) of the MPSC will take place on January 10, 2019, at 10 am in the Woolfolk Building.

Commissioner Cecil Brown Not Seeking Re-election to MPSC

Central District Commissioner Cecil Brown, [announced](#) on Monday, Dec. 10, that he won't seek re-election in 2019. He made the announcement at an event sponsored by the Capitol press corps and Mississippi State University's Stennis Institute of Government. Comm. Brown is in his first term on the three-member utility regulatory body after 16 years in the Mississippi House.

Grand Gulf Downtime Attracts Attention from Agencies

Earlier this month, E&E News [reported](#) on the significant amount of time that Entergy's Grand Gulf nuclear plant has either been operating at reduced power or not at all since 2013. Federal daily reactor status reports from 2013 through last month found Grand Gulf operated at full power roughly 52.5% of the time. It was at zero percent power almost 21% of the days studied.



This chart shows how often Grand Gulf was listed at various power levels. It's based on data compiled by E&E News from daily NRC power reactor status reports. Reduced power numbers reflect daily listings of 1 percent through 99 percent. Claudine Hellmuth/E&E News (chart); Data compiled by E&E News from power reactor status reports from the NRC.

Grand Gulf, with a 1,443-megawatt capacity, is 90%-owned by Entergy. Cooperative Energy owns the other 10%. In 2016, the plant received a 20-year license extension from the Nuclear Regulatory Commission through most of 2044.

South MS Solar Program Continues to Gain Momentum and Partners

The Gulf Coast Community Foundation (GCCF) is administrating a grant from Mississippi Power Co., as a result of the Kemper settlement with the Sierra Club, a portion of which is to be used to support development of renewable energy projects at public educational institutions that are served by Mississippi Power Co. Educational institutions can apply for award amounts up to \$250,000 each. Solar project feasibility studies are underway at Mississippi Gulf Coast Community College – Jeff Davis Campus; USM Hattiesburg Campus; Meridian Community College; Moss Point School District; and, Ocean Springs School District. Others expressing interest is Hattiesburg and Long Beach School Districts.

Schools installing solar projects will reduce utility costs and have an opportunity to incorporate renewable energy education using the solar facilities. Is your local school served by MS Power Co. and you them to consider the program? Contact Amy Perry at aperry@mgccf.org.

Case Studies in Energy Efficiency

[Hancock County Schools Invest in Energy Efficiency HVAC](#)

The school district is working with [Coast Electric Cooperative](#) to overhaul their heating and cooling units to be more energy efficient and save money. School district officials say the new energy efficient HVAC units will save them between \$60,000 and \$65,000 a year on their utility bills. In addition, the district could earn a rebate from the utility for installing the efficient units. Coast Electric also recognizes that reducing demand for electricity produces savings for all customers.

International Paper in Richland Saves with Steam Piping Improvements

Several steam traps were identified as failed in the open position which lead to condensate accumulating in high pressure steam lines. Failed steam traps waste fuel, increase boiler firing, and reduce efficiency. International Paper replaced 4 failed steam traps for which the [Atmos Energy SmartChoice Program](#) paid for 50% of the entire project cost. This project was very inexpensive but saved an estimated 22,000 CCF of natural gas a year, which will save approximately \$11,000 a year. This project had less than one month payback. Even small projects can have big savings!

Change of Date: MS Energy Coordinators Association Conference – Feb. 7-8

The Mississippi Energy Coordinators Association (MECA) has announced a change in its date for their [Annual Conference](#). The event will now be held at the IP Casino & Resort in Biloxi on February 7-8, 2019. Go to <http://msenergycoordinators.org/> to [register](#) and for additional details.

Regional Issues

Energy Efficiency Savings, Spending Expected to Increase

Electric utility customers spent about \$5.8 billion on energy efficiency programs in 2016. The realized energy savings in turn affects the need for investment in new electricity infrastructure. A [new study](#) provides an assessment of the potential direction and impact of future spending and savings for electricity efficiency programs funded by utility customers. **Among the key findings of the study: The Southeast's share of national spending on electricity efficiency programs is expected to increase.** Efficiency programs will continue to impact load growth.

100 Cities Commit to 100% Renewables

On December 5, Cincinnati, Ohio became the 100th city in the nation to establish this goal when its City Council approved a [resolution](#) committing to 100% renewable energy by 2035. In addition to the 100 cities, the states of California and Hawaii have adopted goals to be powered entirely by renewable sources of energy, like wind and solar. The full list of commitments can be [found here](#).

Dominion Energy and Smithfield Foods Embark on Methane Capture Project

Dominion Energy has announced a \$250 million joint venture with Smithfield Foods to [capture methane from hog waste](#) on Virginia farms and turn it into renewable natural gas for homes and businesses. Clusters of hog farms will cover their hog manure lagoons. The waste will undergo a bacterial process

called anaerobic digestion that produces a biogas consisting of methane and carbon dioxide. The biogas will be piped under low pressure to a central processing facility for cleaning and injection into natural gas pipelines. Farmers get paid for the gas they produce under long-term contracts.

Chattanooga, TN Airport First in U.S. to be 100% Solar Powered

the Chattanooga Metropolitan Airport is about to be [the first airfield in the U.S. run on 100% solar power](#). It marks a turn for a city once declared as “the dirtiest city in America.” The airport’s solar farm includes energy storage units to help power operations after sundown. The system has a life expectancy of 30 to 40 years. Most of the \$5 million project costs will be covered by Federal Aviation Administration grants. Chattanooga is also home of Volkswagen, with the world’s only LEED-platinum certified auto plant.

Facebook Data Center in Georgia to be 100% Powered by Renewables

Two solar developers will construct and own three new solar projects as part of Walton EMC’s agreement to [supply 100% renewable energy for Facebook’s new data center](#) in Newton County, GA. The collaboration is the largest solar development project in Georgia. Silicon Ranch will construct a 102.5 MW solar farm and Strata Solar will construct 80 MW and 20 MW solar farms that will support the new data center. The facilities, worth \$230 million, will be located in Southwest Georgia and will create 800 construction jobs. The solar panels will be sourced from Hanwha Q CELLS’s new solar manufacturing facility in Georgia.

Georgia Power Seeks 540 MW Of Renewables

GA Power has launched a [request for proposals \(RFP\) for utility-scale renewable energy projects](#) under its Renewable Energy Development Initiative (REDI). REDI authorizes GA Power to procure 1,200 MW of renewables. This is the final REDI solicitation. GA Power is soliciting eligible renewable energy (e.g. solar, wind or biomass) projects greater than 3 MW, up to 540 MW in size in this RFP. The solicitation also allows for proposals that include energy storage in conjunction with a renewable resource. The RFP is being conducted with oversight by the [Accion Group](#). Proposals are due by January 15, 2019.

Duke Energy RFP Yields Six Times Eligible Renewable Capacity

Duke Energy received [78 proposals ranging from 7 MW to 80 MW](#) in response to a 680 MW solar solicitation. In all, more than 3,900 MW of bids were submitted. The bids will be evaluated in the spring of 2019. North Carolina has the nation’s second-largest capacity of installed solar. That could grow more if the state acts on a recent executive order to reduce state GHGs.

Solar Deployment Guidebook: A Resource for State and Local Governments

To assist states and localities in accelerating solar adoption, USCA partnered with NASEO to elevate crucial strategies and tools for state and local governments to [reduce the non-hardware costs of solar development](#). The project team conducted a comprehensive review and analysis of existing solar best practices publications to state and local governments in accelerating solar adoption. The Guidebook covers permitting and inspections, zoning and siting, municipal procurement, and property taxes. [Download the Guidebook](#).

What Makes a Good Community Solar Program?

Community solar (also known as “shared solar”) has been a hot topic for years; but, there has been little public data available on the community solar market’s development. A new report provides facts and figures on a range of metrics, including which kinds of community solar programs are gaining traction

with cooperative v. public power v. investor-owned utilities. Download [Community Solar Program Design Models](#).

Largest Rooftop Solar Array in Alabama Goes Live



The largest commercial rooftop solar array in the state of Alabama was recently completed. The rooftop system includes 2,296 solar photovoltaic panels providing 746 kW of power to SteelFab's Roanoke, AL steel fabrication plant.

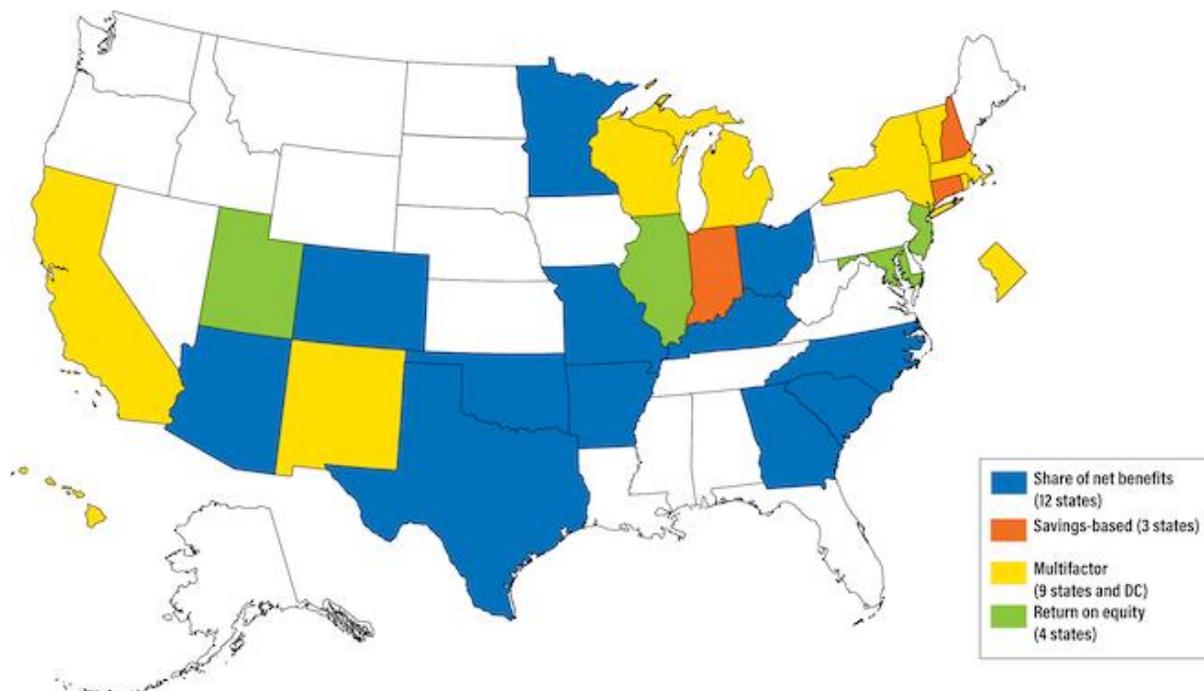
The Alabama facility is the fourth SteelFab plant to install a solar array. SteelFab facilities in Georgia, South Carolina and Virginia also have rooftop solar systems. Together, they generate 1.67 MW of solar power, cutting their combined power costs by nearly 50 percent and offsetting over 1,500 metric tons of carbon annually.

National Issues

How Much Will Incentives for Utilities Increase Energy Efficiency?

[According to ACEEE](#), the right performance incentive mechanisms (PIMs) can lead to increased utility investments in energy efficiency programs and help make energy efficiency competitive with traditional utility generation and infrastructure investments. ACEEE's new [topic brief](#) explores performance incentives for utilities in the U.S. and highlights emerging trends in incentive design.

The figure below illustrates the current landscape of utility energy efficiency incentive mechanisms.



2019 Renewable Energy Industry Outlook: Strong Fundamentals

The renewable energy sector remained resilient in 2018, gaining ground despite uncertainty about new international tax and tariff policies and regulatory rollbacks at the federal level. Some of the core fundamentals that drove growth in 2018 were declining costs of generation technology, advances in battery storage technology, and grid operators' growing expertise for integrating intermittent renewable power into the grid. Perhaps most significant was robust demand in most markets. Drivers of future growth will likely come from: Emerging policies that support renewable growth; Expanding investor interest in the sector and: Advancing technologies that boost renewable energy's value to the grid, owners, and customers. Download the [2019 Renewable Energy Outlook](#).

EPA Issues Final Renewable Fuel Standards for 2019, 2020



On November 30, 2018, EPA released the [finalized volume requirements](#) under the Renewable Fuel Standard (RFS) program for 2019 for cellulosic biofuel, biomass-based diesel, advanced biofuel, and total renewable fuel, and for biomass-based diesel for 2020. The final volume requirements are listed in the table below. See the [Rule Summary](#) for more info.

RFS Volume Comparison (in billions of gallons)

	Statutory 2017 RVOs	Final 2017 RVOs	Statutory 2018 RVOs	Final 2018 RVOs	Statutory 2019 RVOs	Proposed 2019 RVOs	Final 2019 RVOs
Cellulosic biofuel	5.5	.311	7.0	.288	8.5	.381	.418
Biomass- based diesel	No less than 1.0	2.0	No less than 1.0	2.1	No less than 1.0	2.1*	2.43 [#]
Advanced biofuel	9.0	4.28	11.0	4.29	13.0	4.88	4.92
Conventional ethanol	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Total Renewable Fuel	24.0	19.28	26.0	19.29	28.0	19.88	19.92

* The 2019 biomass-based diesel volume requirement was established in the 2018 final rule and cannot be changed (82 FR 58486 published December 12, 2017).

The 2019 Final Rule also establishes the 2020 biomass-based diesel volume.

While the EPA did slightly increase the final 2019 required blending volumes (40 million gallons) over the proposed volumes and increased the 2019 volumes by 630 million gallons over the 2018 renewable volume obligations, biofuels supporters are [disappointed](#) that the EPA did not reallocate the 2+ billion gallons of biofuel lost to refinery exemptions over the past two years or the exemptions the EPA is expected to issue in 2019. Advocates are also [disappointed](#) that the EPA failed to activate the biogas or bioenergy to renewable electricity (eRIN) pathway. Activating the eRIN pathway will stimulate additional growth in the bioenergy sector.

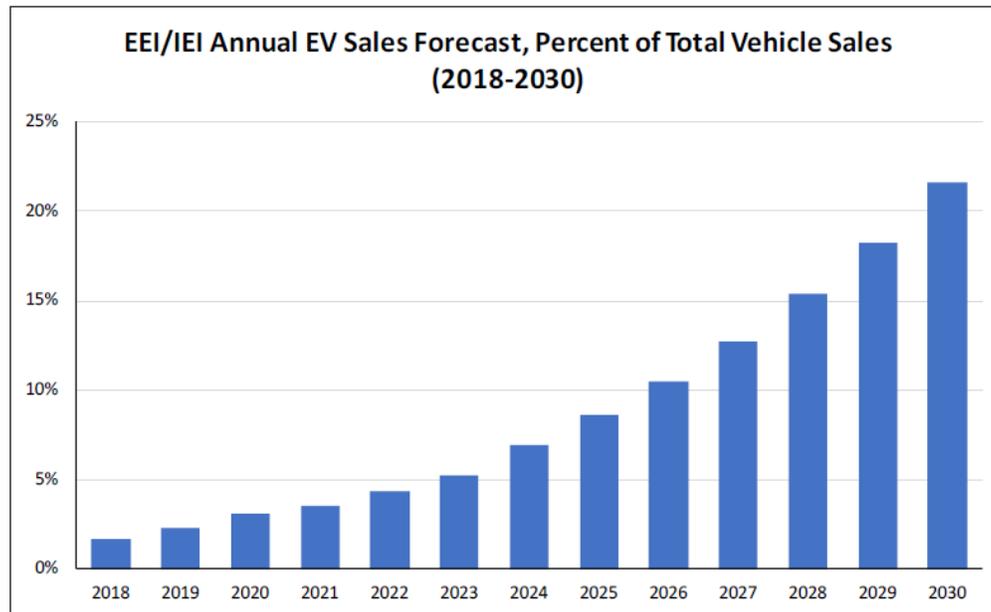
Study Finds that Biodiesel Adds Billions to US Economy While Reducing GHGs

A new study, [The Biodiesel Industry: Impacts on the Economy, Environment and Energy Security](#), analyzed the financial and socioeconomic impact of the U.S. biodiesel industry. In 2017, the U.S. biodiesel sector had an economic impact of \$21.6 billion, provided employment for approximately

61,900 workers, paid wages and benefits totaling \$3.8 billion, and contributed nearly \$2 billion in federal, state and local taxes. Biodiesel, an essentially interchangeable fuel with conventional diesel, reduced GHG emissions by 14.8 million tons, which is equivalent to taking 3.2 million cars off U.S. roads.

What is the Future for Electric Vehicle (EVs) Sales?

A new report from EEI and IEI estimates the [U.S. market will grow](#) from more than 1 million EVs on the road by the end of 2018 to having 18.7 million in 2030. EVs are increasingly cost-competitive with traditional internal combustion engine vehicles. However, as driver's tastes trend to trucks and SUVs during a time of stable fuels prices, the challenge for automakers will be to appease consumers' interest in larger vehicles.



Furthermore, the projected growth in EV sales is predicted to lead to only about a 2% increase of energy sales on the grid system. That is due to predicted evolution of rate structures that will flatten the load curve and encourage charging in off-peak hours.

Excel Energy Pledges 100% Carbon-Free Electricity

Xcel Energy, one of the biggest utilities in the US, has committed to going completely carbon-free by 2050 (and 80 percent carbon-free by 2030). Xcel serves 3.6 million customers from North Dakota to Texas. Earlier this year, Excel [announced plans](#) to reduce carbon emissions 60% by 2030 and increase the level of renewable energy in its fleet to 55%. [The new goals build on that](#). Xcel stands to profit handsomely, and benefit politically, by giving its customers the clean energy they want.

2018 Farm Bill Passes Congress

The [Agricultural Improvement Act of 2018](#) (a.k.a Farm Bill) conference report was released on Dec. 10. The Senate immediately passed the \$867 billion bill (on an 87 to 13 vote) the next day with the House accepting the legislation shortly after (369 yeas to 47 nays). The President is expected to sign the bill soon. Among highlights include: expanded payments eligibility; increase in CRP acres; maintained SNAP benefits; legalized hemp; more dairy risk management tools; and, more funding for animal disease prevention and response. Also, the Energy Title was retained in the bill with authorized funding for most bioenergy programs. Of particular interest is the reauthorization of \$50 million per year

mandatory funding for the Rural Energy for America Program (REAP) that enables the spread of renewable energy and energy efficiency improvements throughout America's heartland. The Farm Bill also reauthorizes the Rural Energy Savings Program (RESP), which provides zero-percent loans to rural electric cooperatives and other rural electric utilities for the purpose of relending the funds to utility members/customers for energy improvements.

The chart below was developed by the Environmental and Energy Study Institute's Sustainable Biomass Program. The chart below compares program funding changes from 2014 to 2018 as well as annual funding levels for each program through 2023.

Title IX of the Agricultural Improvement Act of 2018 (H.R. 2)					Mandatory Funding			
(Dollars in thousands)					Discretionary Funding			
	Section	Total: 2014 Farm Bill	Total: 2018 Farm Bill	2019	2020	2021	2022	2023
9002	Biobased Markets Program	15,000	15,000	3,000	3,000	3,000	3,000	3,000
		10,000	15,000	3,000	3,000	3,000	3,000	3,000
9003	Biorefinery Assistance	200,000	75,000	50,000	25,000			
		375,000	375,000	75,000	75,000	75,000	75,000	75,000
9004	Repowering Assistance Program	12,000	Repealed					
		50,000	Repealed					
9005	Bioenergy Program for Advanced Biofuels	75,000	35,000	7,000	7,000	7,000	7,000	7,000
		100,000	100,000	20,000	20,000	20,000	20,000	20,000
9006	Biodiesel Fuel Education Program	5,000						
			10,000	2,000	2,000	2,000	2,000	2,000
9007	Rural Energy for America Program	250,000	250,000	50,000	50,000	50,000	50,000	50,000
		100,000	250,000	50,000	50,000	50,000	50,000	50,000
9008	Biomass Research and Development Initiative	12,000						
		100,000	100,000	20,000	20,000	20,000	20,000	20,000
9010	Biomass Crop Assistance Program	125,000						
			125,000	25,000	25,000	25,000	25,000	25,000
9011	Carbon Utilization and Biogas Education							
			10,000	2,000	2,000	2,000	2,000	2,000