

BEFORE THE MISSISSIPPI PUBLIC SERVICE COMMISSION

**MISSISSIPPI POWER COMPANY
EC-120-0097-00**

DOCKET NO. 2019-UA-231

**IN RE: MISSISSIPPI POWER COMPANY’S NOTICE OF IRP CYCLE
PURSUANT TO COMMISSION RULE 29**

**SIERRA CLUB’S COMMENTS ON MISSISSIPPI POWER COMPANY’S MARCH 12,
2024 IRP TECHNICAL CONFERENCE PURSUANT TO COMMISSION RULE 29**

I. INTRODUCTION

Pursuant to Commission Rule 29, section 105.3, Sierra Club, with the assistance of Synapse Energy Economics, Inc., submits these comments on Mississippi Power Company's ("the Company" or "Mississippi Power") March 12, 2024 Technical Conference for its 2024 Integrated Resource Plan ("IRP"). Sierra Club has been engaged in this and other IRP processes across the country, and welcomes the Mississippi Public Service Commission's ("PSC" or "Commission") efforts to facilitate robust stakeholder engagement and a more transparent resource planning process, which can serve the benefit of reducing long term electric system costs and risks to Mississippi utility customers.

The IRP process is a critical part of the utility's responsibility to provide the least-cost service to ratepayers, and is designed to provide ratepayers with transparency to help protect against "wasteful, uneconomic, and inefficient uses of energy" in accordance with Miss. Code Ann. 77-3-2(1). In adopting Rule 29, the Commission explained that:

[O]ne of the primary motivations for adopting a formal IRP rule has been and continues to be the desire to provide Mississippi ratepayers with more transparency regarding their utilities' long-term planning processes. A high degree of transparency provides important protection for the Commission and ratepayers against potentially unnecessary and costly capital expenditures and long-term operational costs. As a result, adoption of an IRP Rule is "consistent with long-term management and conservation of energy resources by avoiding wasteful, uneconomic and inefficient uses of energy," and it "foster[s] the continued service of public utilities on a well-planned and coordinated basis."¹

¹ Mississippi Public Service Commission, Docket No. 2018-AD-64, Final Order Amending Rule 29 to Establish Integrated Resource Planning and Annual Energy Delivery Reporting Requirements at 5-6 (citing Miss. Code Ann. 77-3-2(1)) (Nov. 22, 2019) ["Final IRP Order"], available at <https://lpdd.org/wp-content/uploads/2020/05/Mississippi-IRP-Order-Docket-2018-AD-64.pdf>

As the Commission recognizes, the IRP process is intended “to develop a resource plan that reflects the interests of a broad range of stakeholders - not just the utility,” and it must “include meaningful participation options for these stakeholders to provide input into the resource plan's development.”² Open stakeholder involvement furthers the Commission’s goal of increasing public transparency in the utility planning process, and “fosters the development of a sound administrative record”³ to support a resource plan that ultimately reflects input from a broad range of interests. To that end, the free flow of accurate and complete information between the electric utility, the Commission, and stakeholders is critical; and the electric utility should identify and explain the IRP's core assumptions to the public as early and as clearly as possible. The technical conference is supposed to serve that purpose “for the electric utility to provide an overview of the process, planning assumptions and inputs ultimately used to develop its Integrated Resource Plan, and to answer questions related” to the IRP process.⁴

Given the information provided to date, we have serious concerns about the public’s and the Commission’s ability to meaningfully review and engage in the development of the Company’s IRP. The workshop continued Mississippi Power’s “business as usual” approach, where critical resource and planning assumptions and decisions are made behind closed doors, only to be disclosed to the public and the Commission when it is too late to change course. Indeed, Mississippi Power’s Kemper debacle, the Company's ill-advised investment in \$330 million scrubber technology at Plant Daniel, and its subsequent decision to spend another \$62.5 million to comply with EPA’s Coal Combustion Residuals Rule, all make clear that a more transparent and robust planning process is needed.

Now, MPC is proposing to continue operating several of its aging fossil plants and sell the power to Georgia Power Company under a power purchase agreement (“PPA”). Continuing to operate these units past the previously established retirement dates poses potential economic risks to the MPC ratepayer, including potentially significant capital investments to comply with impending environmental regulations, maintenance costs, and risks associated with the storage of coal ash residuals at Plant Daniel. In fact one of the Georgia Commissioners observed on the record that “I guess the benefit to it being outside is the pollution's not in Georgia right? It's in Mississippi, it's in other places.”⁵

In its initial stakeholder presentation, however, MPC provided the Commission and stakeholders with only a few cursory bullet points regarding the proposed Power Supply Agreement, and failed to even mention the potential risks and costs to customers from continued investment in,

² *Id.* at 15.

³ *Id.* at 5, 8.

⁴ Mississippi Rule 29, section 105.3.

⁵ The audio is available at the following link:

<https://www.youtube.com/watch?v=LOUPFBIO5Eg&t=17232s>.

and operation of, those aging fossil units. MPC only provides a conclusory assertion that the sale is economically beneficial to ratepayers, without providing the public or the Commission with the necessary information to understand how it reached that conclusion and how it plans to protect Mississippi ratepayers from the potential risks. Apparently this information will only be available through later discovery.

That approach is antithetical to Rule 29's goal of ensuring a transparent and collaborative resource planning process that protects customers against potentially unnecessary and costly capital expenditures and long-term operational costs⁶ Moreover, MPC's bare assertions regarding the purported benefits of its Georgia Power Company PPA is contrary to the Commission's order in Docket No. 2018-AD-145, to retire 950 MW of its aging, uneconomic fossil resources, or "show cause with detailed evidence why continued operation of the aging fossil units is in the best interest of customers."

As discussed in detail below, Sierra Club offers the following recommendations, which are intended to ensure that Mississippi Power implements an IRP that protects customers, retires fossil units in a cost-effective manner, and accurately models all renewable and demand-side resources available to MPC's electricity system:

1. MPC should provide a copy of the full unredacted PPA to all stakeholders who have signed the NDA, and explain to the Commission whether the Company plans to obtain approval from the Mississippi Commission before finalizing the agreement.
2. In accordance with Docket No. 2018-AD-145, MPC must provide the Commission and stakeholders with detailed evidence and analysis showing that the PPA is in the best interest of Mississippi customers relative to retiring its aging fossil resources. This should include calculations of:
 - a. The projected revenue from the PPA based on the PPA terms;
 - b. Projected forward-going cost to operate and maintain the plants that are being used to supply the PPA, including fuel costs, O&M costs, and sustaining capital costs incurred at Daniel, Watson, and Greene;
 - c. This analysis should reflect a reasonable range of future spending scenarios and capture the risks that fuel, capital and maintenance costs will be higher than projected; and
 - d. MPC should evaluate the costs and benefits of other options for selling the power to Georgia Power, including transferring the capacity from Mississippi Power's

⁶ Mississippi Public Service Commission, Docket No. 2018-AD-64, Final Order Amending Rule 29 to Establish Integrated Resource Planning and Annual Energy Delivery Reporting Requirements at 5-6 (citing Miss. Code Ann. 77-3-2(1)) (Nov. 22, 2019) ["Final IRP Order"], available at <https://lpsdd.org/wp-content/uploads/2020/05/Mississippi-IRP-Order-Docket-2018-AD-64.pdf>

fossil units to a deregulated arm of Southern Company and letting Southern Company supply the power.

3. The Commission and Commission Staff should make clear that the approval of MPC's IRP does not constitute an approval of the PPA, and that the Commission will review the PPA and any associated costs as part of the next rate case.
4. MPC should disclose key assumptions underlying its modeling, and correct following flaws in its approach:
 - a. The reserve margin study is outdated, and appears to overestimate MPC's capacity needs;
 - b. The solar integration study is outdated, and it's unclear how MPC is ensuring the integration costs are not being double-counted across the integration study and the capacity expansion & production cost modeling;
 - c. MPC should provide the 2021 Reserve Margin, Renewable Integration Study, and all associated workbooks to stakeholders. When the 2024 Reserve Margin and Solar Integration Studies are finished, MPC should provide those as well as all associated workbooks;
 - d. MPC should not "hardwire" resources into the model, but should instead optimize the model to allow it to economically retire aging resources.
 - e. MPC should explicitly account for impending environmental compliance risks, including the Good Neighbor Plan, the Regional Haze Rule, and EPA's Clean Air Act Section 111 regulations.
 - f. The Company should update and explain its solar, wind, and battery storage costs and capacity assumptions to be consistent with declining industry cost forecasts.
 - g. The Company should update its renewable and battery storage costs assumptions to incorporate the full range of economic incentives available for renewable energy and battery investments under the Inflation Reduction Act.
5. MPC should also evaluate opportunities for lowering the cost of retiring uneconomic fossil resources available under the Inflation Reduction Act.
6. MPC should evaluate the benefits of joining MISO. Numerous studies demonstrate that joining an RTO can provide significant economic and reliability benefits for customers.
7. Mississippi Power is not on track to reduce its emission to near the level needed to meet Southern Company's net zero by 2050 goal, and must take more aggressive action in retiring fossil resources, including Daniel as well as existing gas generation, as soon as practicable.
8. Mississippi Power should ramp up its energy efficiency programs with a goal of achieving savings that approach the national average of 0.67 percent of retail sales, which would result in customer savings on their energy bills, create local jobs, and reduce emissions from generation

II. DESPITE THE COMMISSION’S RESERVE MARGIN PLANNING ORDER TO RETIRE UNECONOMIC AND RISKY FOSSIL GENERATION, MISSISSIPPI POWER PROPOSES TO CONTINUE SPENDING CUSTOMER MONEY TO OPERATE THOSE RESOURCES AND SELL POWER TO GEORGIA POWER.

In December of 2020, the Mississippi Commission issued an order in the Reserve Margin docket, 2018-AD-145, directing MPC retire 950 MW of fossil generation by “year-end 2027 or show cause with detailed evidence why the continued operation of some or all of MPC’s existing fossil steam generation is in the best interest of customers and MPC.”⁷

In that docket, the Mississippi Commission examined a Reserve Margin Plan for MPC and made a number of findings based on the evidence submitted, including, among others:

- “MPC’s current reserve margin is projected to be higher than targeted reserves”;
- This excess could “persist[] for over ten years” if “MPC’s generation units [were] left to operate through their remaining projected useful lives”;
- “[A]ccelerating the retirement of some combination of [MPC’s older fossil fuel units] represents the most attractive option for reducing MPC’s excess reserve margin” and “would likely be in the best long-term interest of customers”; and
- “[T]he economic evidence available to the Commission to date makes a compelling case for early retirement of some portion of MPC’s aging fossil steam generating fleet.”⁸

Based on these findings, the Mississippi Commission decided that MPC’s “upcoming IRP filing should include the schedule of early or anticipated retirement of approximately 950 megawatts of generating capacity by year-end 2027 or show cause with detailed evidence why the continued operation of some or all of MPC’s existing fossil steam generation is in the best interest of customers and MPC.”⁹

On April 15, 2021, MPC filed its IRP following the Mississippi Commission’s order and acknowledged that “[f]or the last two to three years of analysis, MPC’s fossil steam fleet has demonstrated only marginal economic value for customers” and, given the Commission’s directive to reduce “approximately 950 megawatts of generating capacity by year-end 2027”, MPC adopted planned retirements for the majority of its fossil steam fleet consistent with the following table:

⁷ Mississippi PSC Final Order, Docket, 2018-AD-145, at 5-6, https://www.psc.state.ms.us/InSiteConnect/InSiteView.aspx?model=INSITE_CONNECT&queue=CTS_ARCHIVEQ&docid=655509.

⁸ *Id.* at 3-6.

⁹ *Id.* at 5-6.

Table 1: MPC’s Planned Fossil Unit Retirements¹⁰

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	

Sierra Club and other stakeholders assumed that MPC was on track to meet these planned retirement dates. But then, in October 2023, MPC’s sister company, Georgia Power Company, filed an off-cycle IRP Update with the Georgia Public Service Commission.¹¹ As part of its 2023 Integrated Resource Plan Update, Georgia Power requested approval from the Georgia Public Service Commission to enter into a Power Purchase Agreement with MPC for 750 MW of energy from 2024 through 2028.¹² Although Georgia Power does not need the contracted capacity until the winter of 2025/2026, it stated that signing the MPC PPA so far in advance “was necessary to secure the available capacity for Georgia Power customers, and ensure that such capacity remained in the pool, dedicated to Georgia Power customers, and was not sold off the Southern Company System or otherwise retired.”¹³ On March 26, 2024, Georgia Power and the Georgia Commission’s Public Interest Advocacy Staff filed a proposed stipulation that would approve the PPA, although the stipulation proposes to deny Georgia Power collection of an additional sum for the years 2024 and 2025, since Georgia Power does not need the contracted capacity during that period.¹⁴ The Stipulation will be before the Georgia Commission for approval at its April 16, 2024 Administrative Session.

¹⁰ MPC’s 2021 IRP at 4. Available at: https://www.psc.state.ms.us/InSiteConnect/InSiteView.aspx?model=INSITE_CONNECT&queue=CTS_ARCHIVEQ&docid=658803

¹¹ Georgia Power Company (GPC) 2023 Integrated Resource Plan Update, October 2023. Available at: <https://www.georgiapower.com/content/dam/georgia-power/pdfs/company-pdfs/2023-irp-update-main-document.pdf>

¹² “On October 11, 2023, Georgia Power and Mississippi Power executed a PPA for the sale of 750 MW of capacity and energy from Mississippi Power to Georgia Power for the term of January 1, 2024, through December 31, 2028.” GPC Direct Testimony of Grubb et al. at 32:13-15, available at: <https://psc.ga.gov/search/facts-document/?documentId=216591>.

¹³ GPC Rebuttal Testimony of Grubb et al. at 36:21-26, available at: <https://psc.ga.gov/search/facts-document/?documentId=218033>.

¹⁴ See proposed stipulation between PIA Staff and Georgia Power at 1, available at: <https://psc.ga.gov/search/facts-document/?documentId=218102>.

During the Georgia proceedings, Georgia Power acknowledged the Mississippi Commission's order requiring 950 MW of retirements by the end of 2027,¹⁵ but assumed that the companies can override the Mississippi Commission's order by entering into the PPA.¹⁶ That is not accurate. Georgia Power and Mississippi Power may not need this Commission's approval before executing the PPA, but the Mississippi Public Service Commission still has authority to review the prudence of the PPA and determine that it is *not* a sufficient justification for keeping its aging fossil resources online past 2027. Indeed, there is no obvious benefit to Mississippi ratepayers, which would bear all liability for excess capacity not needed to serve its native load. If the Mississippi Commission ultimately concludes at a later date that the PPA is imprudent, Mississippi customers should not be required to bear any sustaining capital or maintenance costs for Mississippi Power's aging fossil fleet.

Moreover, pursuant to Mississippi Public Service Commission's order in Docket No. 2018-AD-145, MPC has the burden of proof to demonstrate with detailed evidence that keeping the plants online is in the best interest of Mississippi ratepayers. MPC has not presented any such analysis. Instead, MPC asserts, without any support, that continuing to operate all of its current fossil generation and selling it to Georgia Power "is economically beneficial for customers as it enables MPC to sell excess capacity at a market capacity price."¹⁷

As the Commission's Reserve Margin Order makes clear, however, MPC must either retire 950 MWs of fossil generation or "show cause with *detailed evidence* why the continued operation of some or all of MPC's existing fossil steam generation is in the best interest of customers and MPC."¹⁸ MPC's conclusory statements that the sale will be "beneficial" to customers falls woefully short of the Commission's clear directive. While it is likely true that the PPA will put the Company in a better position than if it had continued to operate the plant without selling the capacity, that option is no longer available, as the Commission ordered MPC to retire 950 MW of capacity. Given that this is no longer an option, the PPA is likely not beneficial to ratepayers, because it would leave them worse off than if the Company retired the plants as ordered. We are concerned that by entering into the PPA rather than retiring the capacity, MPC customers are maintaining liability for excess capacity that MPC does not need to serve its native load just for the benefit of Georgia Power's customers and shareholders. Mississippi Power must provide detailed evidence evaluating the costs and benefits of retirement versus the continued operation of MPC's fossil fleet.

¹⁵ "Per the order issued in Docket No. 2018-AD-145 before the Mississippi Public Service Commission, Mississippi Power must retire approximately 950 MW of capacity by the end of 2027." GPC Direct Testimony of Grubb et al. at 32:15-18.

¹⁶ "By purchasing 750 MW from Mississippi Power through this PPA, Georgia Power ensures that this capacity will remain within the Southern Company pool". *Id.* at 33:3-4.

¹⁷ MPC 2024 IRP Technical Stakeholder Conference Deck (March 12, 2024) ["MPC 2024 IRP Tech. Pres."], at 9.

¹⁸ Mississippi PSC Final Order, Docket, 2018-AD-145, at 5-6.

MPC has not provided any details on the PPA contract terms. To ensure MPC ratepayers are held harmless in the transaction, the PPA with Georgia Power Company would have to be a cost-based contract instead of a set price contract. A cost-based PPA would be set at the actual costs incurred by MPC to operate the plant rather than at a fixed, set price. Cost-based PPAs are rare, and there is no evidence that this PPA with Georgia Power is a cost-based contract. Unless the PPA price is higher per MWh than the all-in cost to operate and maintain the unit, MPC will be subsidizing Georgia Power customers. With aging fossil resources such as Plant Daniel, there is a high likelihood that things will break and maintenance and capital costs will be higher than projected. If that happens, the costs and risks are all on MPC ratepayers.

Georgia Power Company will benefit from the PPA. The Company gets power that it claims it needs to serve load, and it collects essentially a rate of return on top of the PPA cost. Specifically, Georgia Power has asked the Commission as part of the PPA, for approval to collect an additional sum of \$3/kW-year on top of the PPA price (as mentioned above, the stipulation recommends the sum be denied for 2024-2025, but approved for the remainder of the PPA period).¹⁹ That revenue will be collected from Georgia ratepayers. This means that with the rate of return that MPC is collecting from Mississippi ratepayers on the assets it is using to generate the power, and the additional sum Georgia Power will collect from Georgia ratepayers on the PPA sale of power from these assets, Southern Company affiliates are charging ratepayers twice for the same assets.

For MPC ratepayers, there is very little upside to this arrangement and substantial risk. The generation capacity MPC will use to fulfill the PPA was supposed to be retired at the order of the Commission, and it was previously found to be uneconomic. We recommend that the Commission require that MPC provide analysis to show the projected impact on Mississippi ratepayers of the PPA. This should include calculations of (1) the projected revenue from the PPA based on the PPA terms, and (2) projected forward-going cost to operate and maintain the plants that are being used to supply the PPA, including fuel costs, O&M costs, and sustaining capital costs incurred at Daniel, Watson, and Greene. This analysis should reflect a reasonable range of future spending scenarios and capture the risks that fuel, capital and maintenance costs will be higher than projected. Based on the results of this analysis, the Commission should not approve or allow the PPA with Georgia Power, or else signal to the Company that as part of the next rate case, it will disallow all costs incurred to operate Daniel, Watson, and Greene above the PPA revenue as part of the next rate case. Moreover, MPC should evaluate the costs and benefits of other options for selling the power to Georgia Power, including transferring the capacity from Mississippi Power's fossil units to a deregulated arm of Southern Company and letting Southern

¹⁹ Note that, if the proposed stipulation between Georgia's PIA Staff and Georgia Power is approved, Georgia Power will collect an "additional sum of \$3/kW-year beginning in 2026 and for the remainder of the term of the PPA". Proposed Stipulation at 1.

Company supply the power. This would allow Georgia Power to maintain the PPA but remove the risk from Mississippi ratepayers.

III. MISSISSIPPI POWER’S MODELING INPUTS AND ASSUMPTIONS ARE FLAWED IN SEVERAL WAYS.

MPC has a history of conducting sub-optimal IRP analysis. During its 2021 IRP, Sierra Club reviewed MPC’s modeling and outlined our concerns with the Company’s methodology. The following is among the recommendations we made regarding MPC’s IRP planning and modeling:

- MPC should conduct optimized capacity expansion modeling, without “hardcoding” any resources into the model to determine the least-cost, optimal retirement date for Plant Daniel.
- MPC should take action to put the Company on track to cut emissions to the level needed to meet Southern Company’s net zero by 2050 goal. This includes more aggressive action to retire existing fossil units such as Daniel.
- MPC should redesign its IRP process to focus on using a robust, transparent, and technically defensible analysis framework.
- MPC’s should design scenarios that ensure that the model is armed with all supply and demand side resources at the same time, and the IRP process as a whole takes a committed full-portfolio approach to decarbonization.
- MPC should issue an all-source RFPs, or else utilize industry recognized sources for the most up-to-date cost information on renewables and batter storage.
- MPC should not overly constrain the characteristics of, and ability for the model to select, renewables and battery storage resources.

As discussed below, in the current IRP process, it appears that MPC did little to improve its processes or to respond to our recommendations.

A. MPC’s reserve margin modeling is outdated and overestimates the need for capacity.

MPC developed its reserve margin based on a 2021 Southern Company system-wide reserve margin study. This study recommended a reserve margin of 26 percent for the whole system (and a margin of 25.15 percent for MPC’s system).²⁰ The reserve margin of 26 percent is far above the LOLE reserve margin of 20 percent, and the optimal reserve margin of 24.25 percent. The choice of the 26 percent reserve margin is based on Southern Company’s assumptions around the production cost, reliability, and capacity costs. But these assumptions are outdated and building to 26 percent is more likely to lead to an over-build system, and not necessarily a lower cost and

²⁰ MPC 2024 IRP Tech. Pres., at 17.

more robust system. MPC indicated during the technical conference that it is developing an updated 2024 reserve margin study. The Company should make available the updated study, as well as the 2021 study that it relies on currently, and all associated workpapers.

B. MPC should update and clarify its use of renewable integration costs in its resource plan.

MPC also relies on the results of its 2021 renewable integration study.²¹ Not surprisingly, the results of this study show that installing solar with firm capacity, such as BESS, decreases system costs. While it's reasonable for MPC to want to understand the impact of increased penetrations of renewables on the grid, the Company needs to ensure that the costs for increased balancing and operating reserves are not being double counted by being calculated in the RE study and in the IRP modeling runs (as was discussed during the technical conference). Additionally, the results of integration studies are dependent in large part on the system's resource mix. Some resources, such as aging steam plants, are not nimble and flexible and therefore are bad at balancing renewables. Therefore, the results of the study will vary depending on, for example, whether MPC assumes that Daniel is retiring or staying online. MPC should provide the study from 2021, as well as all associated workpapers, and the updated study when its available in the summer or fall. Additionally, the Company should provide a full explanation of how it is using the results from the study, and how it ensures it is not double-counting any integration costs for solar resources.

C. MPC should not constrain the model from evaluating the economic retirement of fossil resources.

Based on the retirement date information on Slides 10 and 45, it appears that the Company plans to once again program in or hard-wire the retirement dates for its existing legacy fossil plants between now and 2028.²² That means that rather than using the model to evaluate whether continued operations of its existing fossil fleet is in the best interest of its ratepayers, the Company plans to program in a unit retirement schedule. This is concerning and continues a trend we saw in MPC's 2021 IRP of the Company hard-coding retirements without allowing the model to make economically optimized retirement decisions. While it is reasonable for the Company to model some scenarios with hard-coded retirement schedules, the Company should also be modeling various optimized and unconstrained scenarios where the model is allowed to make retirement decisions based on economics.

In our 2021 IRP comments, we discussed our findings that MPC ratepayers have paid \$225 million²³ more in unit costs to operate and maintain Plant Daniel than it received in value for the

²¹ *Id.* at 19-22.

²² March 12, 2024 IRP Technical Conference Presentation, Slides 10 and 45.

²³ Sierra Club's Comments on Mississippi Power Company's February 25, 2021 IRP Technical Conference. Docket No. 2019-UA-231, at 7-8.

unit's services (namely energy, as the unit's capacity is not needed) in recent years (2016-2019). Looking forward, we projected that the Plant will cost ratepayers an estimated \$56 million in net revenue losses per year or a total of over one billion dollars by 2040.²⁴ These findings were confirmed by the publication of Bates White Economic Consulting's final report as part of the Reserve Margin Plan (RPM) docket. As discussed above, the report found that retirement of Daniel would provide the highest value for ratepayers than alternatives (such as retirement of Watson 5), and therefore Bates White recommended retirement of Watson Unit 4, Greene County 1 and 2, and Daniel to reduce MPC's excess capacity position by 976 MW.²⁵

Daniel's utilization has been extremely low over the past five years. Since 2019, neither unit has operated above a 40 percent capacity, and since 2021, utilization of unit 1 has fallen every year. In 2023, unit 1 was only used in August and December, and operated at a 3 percent capacity factor for the year. Unit 2 had a slightly higher utilization at around a 29 percent capacity factor in 2023.²⁶ These low utilization numbers show that the plants are not economic relative to other generation options.

D. The model fails to properly evaluate environmental compliance risk.

MPC designed and tested six planning scenarios. These scenarios reflected different combinations of assumptions around CO₂ pressures (4), technology cost and performance (3), load forecasts (4), and fuel price forecasts (3). These scenarios evaluated a fairly limited view of the world and only isolated the impact of a few different factors.

While MPC's scenarios evaluated potential greenhouse gas compliance pathways,²⁷ none of its scenarios appear to account for any additional environmental compliance risk, including Good Neighbor Plan or Regional Haze compliance. The Good Neighbor Plan would require Daniel to meet a NOx emission rate commensurate with SCR technology by 2026. That will require MPC to significantly change operations, or else make substantial capital investment to comply. The Regional Haze Rule could similarly require Daniel to install and operate SCR technology, which is estimated to cost around \$85 million dollars (\$2023) for units 1 and 2 - MPC would be

²⁴ Sierra Club's Comments on Mississippi Power Company's February 25, 2021 IRP Technical Conference. Docket No. 2019-UA-231, at 7-8.

²⁵ Sierra Club's Comments on Mississippi Power Company's 2021 IRP, June 14, 2021. Docket No. 2019-UA-231, at 5-7.

²⁶ Analysis based on public generation data from EIA form 923 and capacity data from EIA form 860.

²⁷ MPC 2024 IRP Tech. Pres., at 26-27.

responsible for half that cost.²⁸ Thus far, MPC's planning process does not account for those risks.

MPC allowed the model to build combustion turbines (CT) and combined cycle plants (CC) in all scenarios - the company tested no carbon-free scenarios. The model could select CCs with carbon capture and storage (CCS) technology and limited CTs to a 25 percent capacity factor before 2035 and a 10 percent capacity factor after. All of MPC's portfolios contained either CTs or CCs with CCS, as well as Nuclear. Only one of MPC's portfolio built new CCs capacity without CCS - and even then it was only 30 MW (which in itself is a questionable result). This shows that in a carbon-constrained world, it is not economic to build new CCs without a way to mitigate the carbon emissions. It's understandable for MPC to evaluate CCS and even model a scenario with CCS, but it's not reasonable for the Company to rely exclusively on CCS instead of evaluating a carbon-free scenario that does not rely on conventional fossil-fuel resources.

E. MPC's expansion resource assumptions are unsupported.

Looking at MPC's cost assumptions, we have several concerns. First, MPC's input cost assumptions for onshore wind are much higher than the range of prices seen across the country as reported by Lazard.²⁹ The Company does not explain the basis of its assumptions, and why the assumed costs are so much higher than other national forecasts. Second, the Company does not list long-duration storage as a resource it evaluated. There are at least half a dozen Form Energy long duration programs currently in the pilot stage (in Georgia, Virginia, Minnesota, New York, Colorado), and several utilities, including Xcel, have started to incorporate LDES into their resource plans. The Company is modeling 12-hr Medium Duration Storage, but the use case of LCES is different and we encourage MPC to also model storage with a longer duration of between 50-100 hours. While LDES is not currently commercially available at scale, MPC has chosen to model other technologies that are not commercially available. MPC models Advanced Nuclear technology, as available for the model to select starting in 2035, and in fact advanced nuclear is selected by the model as a resource in every one of MPC's scenarios. MPC should be consistent in its treatment and modeling of advanced technologies.

Third, MPC places unexplained restrictions on the timing and availability of replacement resources. Broadly, MPC does not allow the model to select replacement resources prior to 2027.³⁰ Solar is first available in 2027, 4-hour BESS in 2028, and CTs in 2029. This means that the model is not allowed to build new resources prior to 2027 to economically replace uneconomic energy or capacity already on the system. MPC should not be using the model only

²⁸ Calculated based on U.S. Environmental Protection Agency, Air Pollution Control Cost Estimation Spreadsheet for Selective Catalytic Reduction (SCR) and 2023 plant operations data from EIA Form 923.

²⁹ *Id.* at 41.

³⁰ *Id.* at 46.

to replace the capacity of retiring resources (and meet new incremental load growth) - the Company should also be using the model to identify when new resources can more economically provide energy and capacity than existing resources.

MPC also places annual build limits on all clean energy resources, but allows the model to build as many CTs per year as the model chooses. This skews the model in favor of conventional fossil-fuel resources.

Additionally, MPC does not appear to be incorporating into its modeling all tax credit and adders available under the Inflation Reduction Act (IRA).³¹ Mississippi Power's initial assumptions appear to cap the production tax credit (PTC) for wind and solar resources at \$27.50/MWh, but that is the base PTC under the IRA. The PTC can increase to \$33/MWh by taking advantage of the new law's tax credit adders. Mississippi Power would, for example, be entitled to a potential 10 percent tax credit adder if any renewable energy resources are sited in an energy community, which is the site where an existing fossil plant retires. The Company should evaluate whether it can place new projects in energy communities more broadly, and at the site of existing aging power plants that are planned for retirement, such as Daniel, more specifically. MPC would also be eligible for an additional 10 percent adder if the project is constructed with domestically-sourced materials. The same adders apply to the 40 percent base ITC for battery storage. Relatedly, it is unclear if MPC is considering the ITC for solar. The Company should be making the choice of the ITC vs PTC for solar based on the resource's capacity factor.

IV. MPC'S RESOURCE PLANNING PROCESS DO NOT APPEAR TO ACCOUNT FOR ECONOMIC INCENTIVES AVAILABLE UNDER THE INFLATION REDUCTION ACT.

As discussed above, one of our main concerns with MPC's IRP is the Company's decision to program in the retirement date for its fossil-legacy resources and not evaluate economic retirement dates. For the Daniel coal-fired unit, we are particularly concerned about the Company's decision not to model economic retirement, and to push back the retirement date from 2027 to 2028. We understand that there is an undepreciated plant balance at Daniel, and that is likely delaying the decision to retire the plant. But best practices in resource planning dictate that an evaluation of economics of operating a plant should be based entirely on the forward-going and unavoidable cost of operating the plant and should ignore sunk costs. The evaluation of how to address the undepreciated plant balance is important and should be entirely separate. And while addressing the plant balance may ultimately drive a retirement date that deviates from the economically optimal date, full economic analysis is still required to make that decision.

³¹ *Id.* at 47.

There are various strategies to address the undepreciated balance at legacy coal plants to remove the barrier to retirement. In some states securitization is available. Securitization allows a utility to essentially transfer the plant balance to the public through a bond, and get the cash to allow re-investment in new clean energy resources. The bond is then paid off through electricity rates. The bond rate is lower than the rate of return the utility was originally collecting, thereby providing benefits to ratepayers. In return, the utility can retire the plant without fear of getting no return, or having the entire balance disallowed.

Although Mississippi does not have a securitization statute, the Inflation Reduction Act (IRA) offers a similar mechanism available through the Energy Infrastructure Reinvestment (EIR) program.³² The EIR program could allow MPC to essentially securitize the debt on existing generation assets to promote retirement and replacement at the site. MPC should apply to the EIR program for Daniel and evaluate the impact that the program would have on enabling early retirement of the plant.

Another benefit available under the IRA, which was discussed briefly above, is the bonus tax credit available for clean energy resources placed in energy communities. One way this benefit could be pursued is by citing new clean energy resources, such as BESS and solar (paired or stand-alone) at the site of a retiring coal unit - such as Daniel. Using an existing site can also reduce costs by allowing the Company to leverage existing infrastructure and interconnection rights.

V. MPC SHOULD EVALUATE THE BENEFITS OF JOINING MISO.

Currently MPC operates within the Southern Company integrated system. Unlike the Regional Transmission Operators (RTO), the Southern Company system operates in a relatively opaque manner. These RTOs, including MISO in the Midwest, PJM in the MidAtlantic, SPP in the south central, CAISO in California, NYISO in New York, and NE-ISO in New England, are in charge of various levels of energy market operations, reliability planning, transmission coordination, and in some cases capacity market operation and design. The use of an organized market allows utilities to easily transact market energy and capacity. The use of a transmission organization allows utilities to more easily integrate transmission planning into their resource planning and operations. Overall, this results in a more efficient and lower cost system and allows electricity systems to be designed to more closely match the needs of the ratepayers.

As reflected in the table below, numerous studies conducted by many utilities across the country have found significant benefits to reliability, system cost, and generation from joining RTOs or ISOs.

³² Department of Energy, Energy Infrastructure Reinvestment Act. Available at <https://www.energy.gov/lpo/energy-infrastructure-reinvestment>.

Table 2: Prospective Production Cost Benefit Studies of Joining or Expanding or Joining RTOs or ISOs Show Typical Benefits Ranging Up to 9%

Study Name	Study Scenario	Year	Estimated Cost Savings
Western Energy Imbalance Service and SPP Western RTO ³³	SPP WEIS vs. RTO expansion in the Western United States	2020	Production cost savings of around 4% for new members joining the WEIS or SPP RTO.
WEIM vs. WEIS benefits study for Black Hills Energy, CSU, PRPA and PSCO ³⁴	WEIM vs. WEIS expansion in Colorado	2020	Production cost savings range from 0.3% to 3.6% for new members joining the WEIM or WEIS.
Mountain West Transmission Group ³⁵	RTO market formation in Colorado and Wyoming	2016	Production cost savings of 5%–9%. Did not study other benefits, such as improved long-term investment decisions, renewable integration, or reliability
Basin/WAPA/Heartlands ³⁶	Benefit from Joining SPP or MISO	2013	Production cost savings of 3%–4% Did not study other benefits, such as improved long-term investment decisions, renewable integration, or reliability

Table 2: Retrospective Production Cost Benefit Studies of Joining or Expanding or Joining RTOs or ISOs Show Typical Benefits Ranging Up to 9%

MISO ³⁷	2021 Value Proposition Study	2021	\$3.0–\$3.8 billion annually
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³³ J. Tsoukalis, et al., Western Energy Imbalance Service and SPP Western RTO Participation Benefits, The Brattle Group, December 2, 2020.

³⁴ J. Chang, et al., Joint Dispatch Agreement Energy Imbalance Market Participation Benefits Study, The Brattle Group, January 14, 2020.

³⁵ J. Chang, et al., Production Cost Savings Offered by Regional Transmission and a Regional Market in the Mountain West Transmission Group Footprint, The Brattle Group, December 1, 2016.

³⁶ M. Celebi, et al., Integrated System Nodal Study: Costs and Revenues of ISO Membership, The Brattle Group, March 8, 2013.

³⁷ MISO, “2021 MISO Value Proposition,” March 9, 2022.

Western EIM ³⁸	Q4 Value Study	2022	<ul style="list-style-type: none"> · \$739 million in savings in 2021 · \$1.4 billion in savings in 2022 · \$3.4 billion cumulative cost savings since 2014
PJM ³⁹	PJM Value Proposition	2019	<ul style="list-style-type: none"> · \$3.2–\$4.0 billion annually
SPP ⁴⁰	2021 Member Value Study	2021	<ul style="list-style-type: none"> · \$2.1 billion annually
SPP, Western Energy Imbalance ⁴¹	2022 Member Value Study	2022	<ul style="list-style-type: none"> · \$31.7 million in net benefits in 2022 · \$61.2 million in cumulative net benefits since 2021
PJM (Dominion Virginia Service Territory) ⁴²	2015 PUC filing on Benefits of PJM Membership	2015	<ul style="list-style-type: none"> · \$109 million of production cost savings in 2014 · \$75 million of production cost savings in 2013 · Cumulative 2005–2015 benefits filed with NC PUC, but not made public · Did not study other benefits, such as improved long-term investment decisions, renewable integration, or reliability

Being integrated with a larger, geographically diverse footprint also provides better access to energy in other parts of the county, which can lower MPC costs and improve reliability. This can be especially important if there is a localized storm or outage affecting MPC resources. It can also improve transmission coordination and planning, which can ultimately lower system costs. Operation within a larger system also increases transparency about resource and system costs, and the costs of alternatives. But there is no evidence that MPC has evaluated whether joining

³⁸ California ISO, “[Western EIM Benefits Report: Fourth Quarter 2022](#)”, January 31, 2023.

³⁹ PJM, [PJM Value Proposition](#) accessed February 13, 2023.

⁴⁰ SPP, [2021 Member Value Study](#), April 6, 2022.

⁴¹ SPP, [Benefit of the Market Western Energy Imbalance Service \(WEIS\)](#), March 27, 2023.

⁴² [Direct Testimony of Alan Meekins on Behalf of Virginia Electric and Power Company](#), Before the State Corporation Commission of Virginia, Case No. PUE-2015-00022, February 27, 2015; and [Direct Testimony of Alan Meekins on Behalf of Virginia Electric and Power Company](#), Before the State Corporation Commission of Virginia, Case No. PUE-2014-00033, May 2, 2014.

MISO would produce system benefits or reduce MPC's need for additional generation. This is something that MPC should consider as part of the current resource planning exercise.

VI. MPC'S SCENARIOS DO NOT APPEAR TO ACCOUNT FOR SOUTHERN COMPANY'S CARBON REDUCTION GOALS.

As the Commission is aware, there is strong scientific consensus that damage from climate change is presently occurring, and if anthropogenic greenhouse gas emissions are not controlled, impacts will become increasingly severe.⁴³ Public opinion strongly supports action to control climate change.⁴⁴ Any new fossil fuel resources added to a utility portfolio will face increased regulatory risk and will likely become a stranded asset. The Commission is already familiar with this from the hundreds of millions in unnecessary costs expended on Plant Daniel over the past decade.

Recognizing those risks, MPC's parent company, Southern Company, announced an emissions reduction goal of "low-to-no" carbon emissions by 2050. Specifically, Southern Company has indicated a commitment to an intermediate goal of a 50 percent reduction in carbon emissions from 2007 levels by 2030 and a long-term goal of net zero carbon operations by 2050.⁴⁵ To meet those emission reduction goals, MPC, as a Southern Company subsidiary with some of the largest CO₂ emitting facilities in Mississippi, must also take action to reduce its CO₂ emissions.

MPC's current resource portfolio is composed almost exclusively of fossil resources.⁴⁶ Although the Company announced retirement dates for some of these resources in its last IRP, the Company's proposal to continue operating its fossil resources and selling that energy to Georgia Power appears to backtrack on those proposed retirements. Moreover, the Company's apparent

⁴³ IPCC, 2018: Summary for Policymakers. In: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.)]. World Meteorological Organization, Geneva, Switzerland. Available at https://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf. Powell, James, "Scientists Reach 100% Consensus on Anthropogenic Global Warming". *Bulletin of Science, Technology & Society*. 37 (4): 183–184.

⁴⁴ Pew Research Center, June 2020. *Two Thirds of Americans Think Government Should Do More on Climate Change*. Available at <https://www.pewresearch.org/science/2020/06/23/two-thirds-of-americans-think-government-should-do-more-on-climate/>.

⁴⁵ Southern Company: Implementation and action toward net zero. September 2020. Accessible at <https://www.southerncompany.com/content/dam/southerncompany/pdfs/clean-energy/Net-zero-report.pdf>.

⁴⁶ March 12, 2024 IRP Technical Conference Presentation, Slide 7.

baseline portfolio continues to rely heavily on fossil resources (e.g., new CTs).⁴⁷ The Company's reference scenario relies on a "lower" greenhouse gas price future, suggesting the Company is not planning to take actions to move away from carbon-intensive resources. Moreover, MPC's use of inflated costs for renewables and its failure to plan for accelerated deployment of non-emitting technologies undermine the Company's ability to address the climate crisis on any effective timeframe, will place customers at greater economic and social risk.

MPC does not appear to be on track to reduce its emissions to near the level needed to meet Southern Company's net zero by 2050 goal. To meet those emission reduction goals, the Company must take more aggressive action in retiring fossil resources—including Daniel as well as existing gas generation—and replacing them with renewable and battery options. MPC's resource plan should explicitly evaluate whether its modeled scenarios result in a carbon emissions trajectory to meet net zero carbon by 2050.

VII. MPC SHOULD INCLUDE MORE AGGRESSIVE DEMAND SIDE MANAGEMENT AND ENERGY EFFICIENCY OPTIONS IN ITS IRP.

MPC plans to approach its evaluation of EE and DSM in this IRP cycle in substantially the same problematic way as it did in the last cycle. Our June 2021 comments on MPC's 2021 IRP, which we incorporate in full here, details the many problems with MPC's approach.⁴⁸ Namely, MPC's programs are inadequate and there are many opportunities for more comprehensive, cost effective savings that MPC does not plan to consider. MPC must expand its consideration of options to comply with Rule 29's requirement that MPC include in its IRP a "wide range of potentially viable demand-side options...for further evaluation."⁴⁹ Additionally, here, as in the last IRP round, MPC did not provide sufficient information about its methodology and assumptions and should correct that issue in this IRP.

Accelerating the adoption of energy efficiency measures is critical to protecting customers, lowering bills, and reducing harmful air pollution and greenhouse gas emissions. Although Mississippi and MPC specifically has made some progress in energy efficiency programs through the Commission's Quick Start Program, there is much more that can and should be done for MPC customers, who disproportionately pay higher energy bills than the rest of the country.

⁴⁷ *Id.*, Slides 48 and 50.

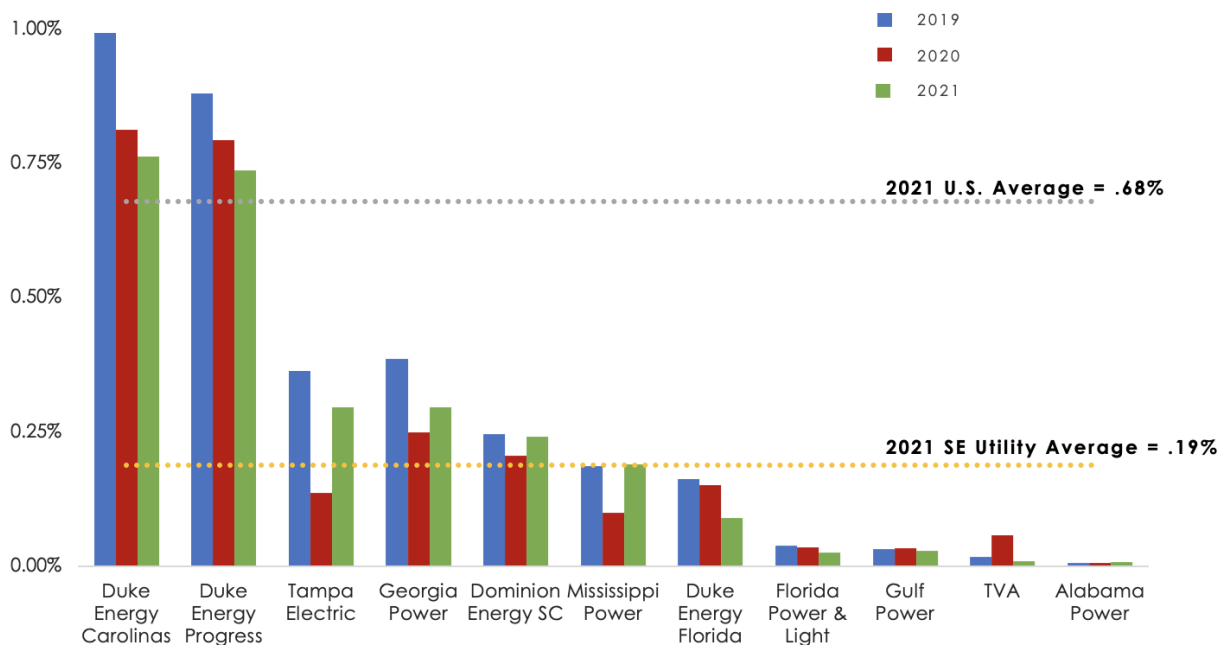
⁴⁸ Sierra Club Comments on Mississippi Power Company's 2021 IRP (June 14, 2021) ["Sierra Club June 2021 Comments"], available at: https://www.psc.state.ms.us/InSiteConnect/InSiteView.aspx?model=INSITE_CONNECT&queue=CTS_ARCHIVEQ&docid=660734

⁴⁹ Mississippi Rule 29, section 104.3.

A. MPC EE investments continue to lag significantly behind the Southeast and the entire country, harming ratepayers and low-income households.

The American Council for an Energy-Efficient Economy (“ACEEE”) most recently ranked Mississippi as number 46 overall in energy efficiency, and gave its utilities a score of 1 out of 15.⁵⁰ Historic underinvestment in energy efficiency in Mississippi means there are abundant, low-cost efficiency resources available that MPC should aggressively tap into.⁵¹ Mississippi continues to have one of the lowest savings levels in the Southeast and the country as a whole, as shown below in the graph from the Southern Alliance for Clean Energy (“SACE”) in its annual report.⁵² Duke Energy is achieving energy efficiency savings more than three times the level of MPC. MPC customers are missing out on similar savings on their energy bills and the corresponding benefits of cleaner air from reduced fossil fuel power generation. It is well past time for MPC to act in the best interests of its customers and pursue energy efficiency programs more aggressively.

EFFICIENCY PERFORMANCE OF MAJOR SOUTHEASTERN UTILITIES



⁵⁰ ACEEE, State and Local Policy Database, Mississippi, (updated 12/2022), available at: <https://database.aceee.org/state/mississippi>

⁵¹ Southern Alliance for Clean Energy, Energy Efficiency in the Southeast Fifth Annual Report (March 2023) [“SACE EE Fifth Report”], at 5 available at: <https://cleanenergy.org/wp-content/uploads/Energy-Efficiency-in-the-Southeast-Fifth-Annual-Report.pdf>

⁵² *Id.* at 7.

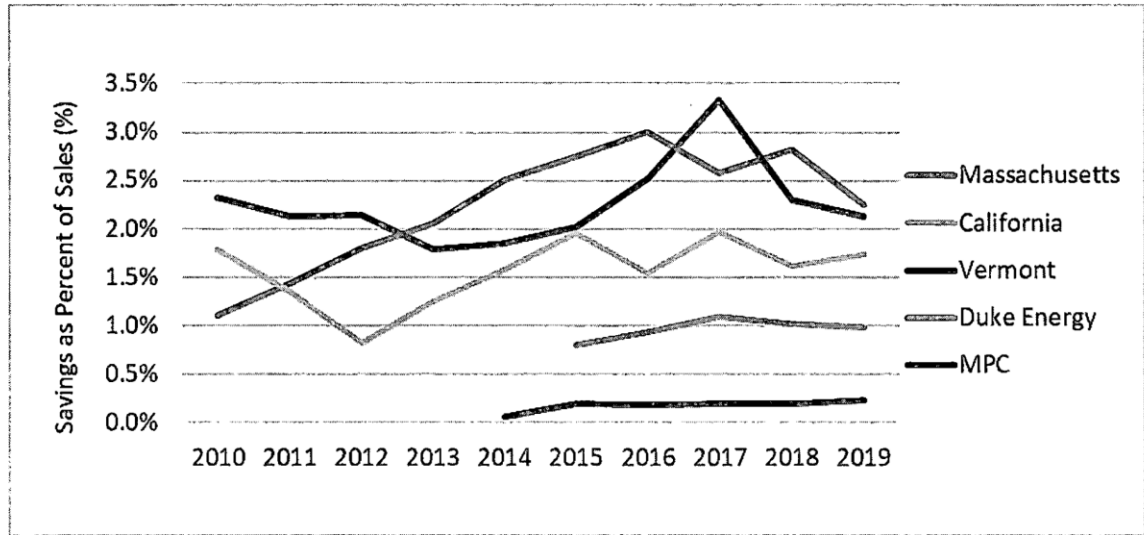
B. MPC should model scenarios with a high level of DSM and EE.

MPC should treat EE like any other resource and pursue programs that are beneficial to ratepayers. In this IRP cycle MPC should compare EE with other resource alternatives in resource optimization modeling like other utilities do. Some studies have shown that energy efficiency is not only competitive with supply side resources, but that even half to one-third the cost of the next best alternative.⁵³

C. MPC should model a scenario that achieves annual incremental savings of 1.5 percent per year.

MPC should include a 1.5 percent savings level per year as a high EE and DER scenario. Our comments from June 2021 on the last IRP cycle included a chart showing historical EE program savings achievements by MPC and leading jurisdictions in the region and nation-wide.⁵⁴ The chart shows that 1.5 percent savings per year is a reasonable target for MPC. MPC’s Technical Conference Presentation Slides show that MPC is now aiming for savings in 2024 that are even lower than what it achieved in 2023.⁵⁵ MPC should aim much higher or else explain in detail why it cannot implement savings that are on par with other Southern states like North Carolina.

Figure 9: Comparison of Historical EE Savings Achievements by MPC and Regional and National Leading Jurisdictions



Source: EIA 861; Synapse Energy Economics. 2021. *Clean, Affordable, and Reliable – A Plan for Duke Energy’s Future in the Carolinas*, Figure 8.

⁵³ Molina, M., "The best Value for America's Energy Dollar: A National Review of the Cost of Utility Energy Efficiency Programs." (2014).

⁵⁴ Sierra Club June 2021 Comments at 32-34.

⁵⁵ MPC 2024 IRP Tech. Pres.. at 37 (2024 EE targets - 6,078 kW) and at 35 (2023 results - 6,660 kW).

D. MPC should use a market potential study for its service area.

Energy efficiency potential studies are an important starting point for evaluating efficiency measures compared to supply side resources and formulating program designs.⁵⁶ MPC states in its Technical Conference Slides that it is considering the business case for updating or creating a new market potential study.⁵⁷ In the last IRP, MPC based its EE factors on a potential study for Georgia Power but indicated that it would be procuring a market potential study.⁵⁸ It is not clear whether the technical conference slides are referring to a MPC-specific study or the Georgia Power study. MPC should base its EE factors on an updated account of MPC’s service area, which could have critical differences in appliance saturation, customer characteristics, buildings and other factors.

E. MPC should provide more public information and details around its energy efficiency program design and assumptions.

MPC has not provided sufficient information to facilitate meaningful stakeholder involvement in its energy efficiency program design. The Commission should require MPC to make details of its IRP public prior to its publication.

F. MPC should incorporate federal funding in its EE projections.

MPC states in its Technical Conference Presentation that it is working with the other utilities and the Mississippi Development Authority to distribute and utilize the IRA funds for energy efficiency measures for Mississippians. The IRA funds are an unprecedented investment in energy efficiency and electrification that MPC should take full advantage of to benefit its customers. Mississippi will receive \$132,858,000 million in federal dollars for energy efficiency.⁵⁹ This is roughly equivalent to annual spending on utility efficiency programs.⁶⁰

Combining the new federal funds with more reasonable investments by MPC provides “a unique chance for the Southeast to make up for lost time by capturing untapped efficiency resources.”⁶¹ MPC must not reduce its efficiency investments in light of the federal funding, and in fact the IRA includes language specifically cautioning against just that. MPC should appropriately reflect the impacts of the federal funding in the IRP.

⁵⁶ U.S. EPA, Guide for Conducting Energy Efficiency Potential Studies - A Resource of the National Action Plan for Energy Efficiency (2007), at ES-1, available at: https://www.epa.gov/sites/production/files/2015-08/documents/potential_guide_0.pdf

⁵⁷ MPC 2024 IRP Tech. Pres. at 36.

⁵⁸ Sierra Club June 2021 Comments at 33.

⁵⁹ SACE EE Fifth Report at 8.

⁶⁰ *Id.* at 9.

⁶¹ *Id.*

G. MPC should increase spending on efficiency programs that target low-income households.

MPC should increase its spending on low-income energy efficiency programs that target low-income customers and focus on reducing their energy burdens. This will help alleviate energy poverty and create local jobs.

EIA estimates that low-income customers in Mississippi have the highest energy burden across all the states in the nation. Low-income customers in the state are using about 10 to 12 percent of their income on energy bills, and electricity is critical to remaining safe during summer heat.⁶² On the positive side, EIA also found that Mississippi and other southern states have a very high electricity savings potential in low-income households ranging from 25 to 29 percent.⁶³

MPC has some of the highest electricity bills in the U.S., but its electricity rates are very close to the national average. The combination indicates that Mississippi electricity customers use more energy than the average electricity customers in the U.S. This relative inefficiency of energy use among MPC's customers can be at least partly attributed to MPC's lack of investments in energy efficiency.

MPC should increase its spending on efficiency programs that target low-income customers. Leading jurisdictions are spending as much as two to three percent of residential revenues on low-income efficiency programs.⁶⁴

Specifically, MPC should expand the SELECT program budget in line with suggestions in our June 2021 comments.⁶⁵ SELECT should receive a larger budget and have a higher spending limit per participant to allow the program to provide more comprehensive and long-lasting measures including HVAC, appliances and air sealing. SELECT should also include health and safety screening to prevent installation of measures that could potentially create or exacerbate health and safety problems.

⁶² U.S. Department of Energy, *Low-Income Household Energy Burden Varies Among States - Efficiency Can Help In All of Them* (2018), available at: [https://www.energy.gov/sites/prod/files/2019/01/f58/WIP-Energy-Burden final.pdf](https://www.energy.gov/sites/prod/files/2019/01/f58/WIP-Energy-Burden%20final.pdf)

⁶³ *Id.*

⁶⁴ Kallay et al., "Opportunities to Ramp Up Low-Income Energy Efficiency to Meet State and National Climate Policy Goals," *Proceeding of the 2016 ACEEE Summer Study of Energy Efficiency in Buildings* (2016), Table 1, available at: <https://www.synapse-energy.com/sites/default/files/Opportunities-Low-Income-EE-66-015.pdf>

⁶⁵ Sierra Club June 2021 Comments at 37-39.

VIII. CONCLUSION

Before the Commission in this IRP cycle is a proposal by Mississippi Power Company to continue to operate uneconomic fossil fuel units past the previously established retirement dates established by the Commission, posing potential economic risks to the MPC ratepayer, including maintenance costs and risks associated with the storage of coal ash residuals at Plant Daniel. To correct course, the Commission should direct Mississippi Power to provide the necessary information to evaluate the proposed transaction alongside analysis to show the projected impact on Mississippi ratepayers of the PPA with Georgia Power.

Moreover, we urge Mississippi Power to incorporate the substantive recommendations discussed above, which will ensure more robust stakeholder involvement, transparent and reliable assumptions and methodologies, and ultimately, a resource plan that is rigorously vetted by the Commission and stakeholders. Sierra Club looks forward to a continued engagement with Mississippi Power's planning process.

Respectfully submitted this 8th day of April, 2024.

Mississippi Chapter Sierra Club



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CERTIFICATE OF SERVICE

I, Robert B. Wiygul, counsel for Sierra Club do hereby certify that in compliance with RP6.122(2) of the Commission’s Public Utilities Rules of Practice and Procedure (the “Rules”).

(1) An electronic copy of the filing has been filed with the Commission via e-mail to the following address: efile.psc@psc.state.ms.us

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