BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSISSIPPI

DOCKET NO. 2019-UA-231

RE: MISSISSIPPI POWER COMPANY'S NOTICE OF IRP CYCLE PURSUANT TO COMMISSION RULE 29

COMMENTS OF THE SOUTHERN ALLIANCE FOR CLEAN ENERGY

Enshrined in the Mississippi Public Service Commission's ("Commission") Integrated Resource Planning ("IRP") rules and its corresponding final order was a clear intent to ensure transparency, meaningful stakeholder involvement, and the treatment of energy efficiency and demand response as energy resources. The rules also conveyed an expectation that utility resource plans would result in robust demand side management ("DSM") portfolios. But, the approach taken by Mississippi Power Company ("Mississippi Power" or "Company") to date has fallen far short of meeting these expectations and, unless significant changes are made soon, will result in an IRP that is subpar on multiple levels. While there are other issues of importance not touched on here, these comments focus specifically on shortcomings related to demand side resources, and provide recommendations for steps Mississippi Power could take to remedy at least some of the corresponding deficiencies prior to filing its proposed IRP with the Commission next month.

The Commission Emphasized the Important of DSM in its IRP Rule

The Commission clearly expressed the value and importance it placed on the treatment of DSM as energy resources in its Final Order approving IRP rules in 2019, stating:

"Comprehensive IRP should encompass more than traditional resource planning, which historically has focused on supply-side resources...IRP should therefore be holistic and should include a thorough evaluation of all energy delivery processes, including demand response efforts, distributed energy resources, and energy efficiency programs in addition to traditional supply-side resources.

Unlike current Rule 29, which fails to unite and integrate energy efficiency and long-term resource planning, the attached Rule folds the broader umbrella of distributed energy resources and demand-side management efforts (which include energy efficiency) into the

resource planning process and explicitly recognizes and values them as resources for planning and cost-recovery purposes."¹

Mississippi Power's Public Meeting and Technical Conference

During the IRP public meeting it held on February 28th of last year, Mississippi Power representatives presented a high-level overview of the Company's resource modeling approach. At that time, the Company did not provide any DSM input data. It also expressed uncertainty with many details for how it would integrate DSM into its IRP modeling analysis. Despite providing nothing of substance on which participants could respond, the Company invited participants to submit written recommendations (per the Commission's IRP rules) on which approaches it should use for analyzing DSM. In response, the Southern Alliance for Clean Energy ("SACE") submitted comments with recommendations focused on proven, modern methods for modeling DSM as a resource in IRP analysis. We also identified the type of supporting data that Mississippi Power would need to conduct such an analysis, and the information it should disclose to stakeholders – both for transparency, and to enable parties to conduct the kind of proper review required to provide substantive feedback.

It appears that since the first public meeting, Mississippi Power has chosen not to take *any* of the advice it received from stakeholders regarding DSM, either at the public meeting or submitted in writing afterwards. Most notably, as we would learn at the technical conference held virtually on February 25th, 2021, Mississippi Power has opted not to competitively model DSM against supply side resources, and it did not conduct a DSM potential study on which to base proposed efficiency savings levels. Nor did the company provide any information on what criteria were used to evaluate and determine what the optimal level of DSM resources would be, or indicate if any criteria were in fact used at all.

At the technical conference, all the Company provided were brief descriptions for a handful of energy efficiency program it planned to offer in 2021, with corresponding budgets and savings levels for that year. But it provided no detail, nor explanation, for how those savings levels were

¹ Final Order Amending Rule 29 to Establish Integrated Resource Planning and Annual Energy Delivery Reporting Requirements." November 2019, page 6-7

set, what underlying assumptions were used, what load curves would be attributed to the included measures for modeling purposes, nor any other information that is commonly available to intervenors for the purposes of providing input on modeling DSM in resource planning. The Company even left unanswered what savings levels would be used through the remainder of the resource planning period.

Mississippi Power's DSM Portfolio is Neither Comprehensive Nor Robust

IRP Rule Final Commission Order:

"The Rule also supports effective Commission and utility decision-making by providing accurate, comprehensive and forward-looking information about anticipated resource needs and the options available to meet those needs, while including and integrating what the Commission expects to be a robust demand-side management portfolio."²

Prior to being rolled into the Commission's IRP rulemaking process, Rule 29 clearly indicated that investor owned utilities, like Mississippi Power, were soon expected to transition from quickstart to comprehensive energy efficiency programs. The portfolio of DSM programs presented by Mississippi Power at its technical conference in February was neither comprehensive nor robust. Instead it reflected only relatively minor modifications to the energy efficiency programs offered by the Company during its quickstart phase over the past seven years.

As discussed in greater detail later, the Company not only failed to model demand side resources competitively against supply resources, it also failed to utilize any discernible methodology to assess DSM potential. Nor did it indicate it had evaluated utility system benefits for DSM at successively higher levels. Even without input assumptions or any supporting analysis (which the Company has not provided), one can glean from the experience of countless other utilities that the budgets and savings levels included in the Company's DSM portfolio are clearly too low to be optimal from a least cost planning perspective.

² Final Order Amending Rule 29 to Establish Integrated Resource Planning and Annual Energy Delivery Reporting Requirements." November 2019, page 7

Mississippi Power's DSM portfolio lacks even some of the most basic offerings. For instance, it does not include demand response programs, an online marketplace, or midstream delivery channels. One of the most glaring and dubious exclusions stems from Mississippi Power's apparently unilateral decision to eliminate all program offerings for the industrial customer class, which according to the Energy Information Administration ("EIA") represents approximately *half of the Company's annual retail sales.*³ This is disappointing for two reason. First, because it means the Company is failing to pursue savings from its *largest group of customers*, and second because efficiency programs for industrial customers typically capture some the highest efficiency saving impacts at the least cost.

There are countless examples of utility efficiency programs that surpass what Mississippi Power has presented. These examples could serve as models from which the company could draw (should it choose to do so) to put together a truly comprehensive portfolio. Our first recommendation, therefore, is for the Company to:

- Substantially expand the range of programs it offers (including for industrial customers) by adding proven programs that are currently offered by other utilities,
- Add midstream and upstream delivery channels, and
- Increase overall savings levels for the programs and measures the Company has already proposed.

The reason these steps are needed is clear. The DSM portfolio presented by Mississippi Power in February represents a de minimus increase in savings levels for 2021 and leaves in question what level of savings will be included in the IRP for subsequent years. For 2019, Mississippi Power reported 21,536 MWh of efficiency savings.⁴ At the technical conference in February, Mississippi Power proposed aggregate savings for programs of 21,896 MWh in 2021⁵ – the only year for which any information was presented. This represents a mere 1.7% increase in total energy savings. Meanwhile, the Company proposes slashing both the savings and budgets in half for the only program it offers that specifically serves low income customers.⁶ During the technical conference,

³ 2019 EIA Form 861,"Sales_Ult_Cust_2019.xlsx" https://www.eia.gov/electricity/data/eia861m/

⁴ Mississippi Power, "2019 Energy Efficiency Annual Report," May 2020 page 3

⁵ Ibid and Mississippi Power Company 2021 IRP Technical Conference Presentation, Slide 29 ⁶ ibid

the Company indicated it had recently taken program administration in-house, resulting in savings of about \$1 million dollars, which it stated went back into programs. If that is the case, it does not seem these savings went towards low income programs. Nor does it appear to have resulted in significant additional savings elsewhere, since it overall savings levels for 2021 appear essentially flat from what it reported for 2019. From the information provided, it appears that total annual spending for Mississippi Power's energy efficiency portfolio actually fell by over \$800,000,⁷ or 20% (although the Company indicated the figures for 2021 may not include EM&V costs).

Mississippi Power's energy efficiency performance is among the lowest in the country for major investor owned utilities. In 2019, its efficiency savings as a percentage of prior year retail sales was 0.22%, less than half the efficiency savings of its sister company Georgia Power (0.46%) and just a third of the national average (0.67%).⁸ Compared to the major utilities in the American Council for an Energy Efficient Economy's 2020 Utility Scorecard, Mississippi Power would rank in the bottom quintile for net efficiency savings as a percentage of retail sales.⁹ Meanwhile, according to the Energy Information Administration (EIA), both average energy usage and monthly bills for Mississippi residents are among the top five highest in the country¹⁰ – both of which can be improved with additional investment in energy efficiency. Like any other resource, energy efficiency spending can impact rates (up or down), but EIA data also shows that neighboring state Arkansas has been able to maintain low rates (3rd lowest in the country)¹¹ while requiring its major utilities to deliver more than 1% annual efficiency savings (approximately five times higher than what Mississippi Power has proposed).

Mississippi Power has not Analyzed DSM as an Energy Resource

The level of DSM Mississippi Power presented during the technical conference appears to be arbitrary. While there is much we do not know, we do know the Company did not base its level of DSM savings on the results of a DSM potential study. We also know the Company did not model DSM resources competitively against supply with its Aurora modeling software. As far as we

⁷ Ibid

⁸ SACE, Third Annual Energy Efficiency in the Southeast Third Report, page 6

⁹ American Council for an Energy Efficient Economy, 2020 Utility Energy Efficiency Scorecard, 2020 26

¹⁰ Data from forms EIA-861- schedules 4A-D, EIA-861S and EIA-861U

¹¹ Data from forms EIA-861- schedules 4A-D, EIA-861S and EIA-861U

know, it also did not analyze incrementally higher levels of DSM investment to determine which would be optimal from a utility system cost perspective.

In fact, no indication was given on what factor or factors limited the levels of DSM that the Company used. Was it a prescribed budget? Was there even any criteria applied at all to determine what level of DSM savings to include in the IRP? We don't know. Although only one year of energy savings was indicated, 2021, Mississippi Power's representative at the technical conference seemed to suggest that those savings levels would be in place for three years. But we do not know what amount of DSM was used throughout the remaining duration of the IRP planning period. Nor do we know anything about the corresponding load shapes that were used for modifying the load forecasts the Company used in the Aurora model. But we do know that the savings levels it reported for 2019. In short, there is nothing presently to indicate that Mississippi Power has done anything that would constitute analyzing DSM as an energy resource. Instead, the Company has presented a DSM portfolio that can best be described only as business as usual – as if the Commission's IRP rule and its corresponding DSM requirements simply did not exist.

It appears certain at this point that in this IRP cycle Mississippi Power will not analyze DSM competitively in a manner consistent with its treatment of supply resources. However, there are still options the Company can take to evaluate DSM in a reasonably fair way to produce an optimized final portfolio mix that properly balances supply and demand side resources.

One option is to use DSM resources to reduce load at successively higher levels of annual savings for the full planning period, including (at minimum) 0.5%, 0.75%, 1%, and 1.25%, then allow Aurora to optimize supply resources to meet any remaining generation requirements.¹² The resulting resource portfolios from these analyses can then be compared to one another on the basis of NPV for the total utility system costs. To arrive at these successively higher annual savings levels, Mississippi Power's DSM portfolios should include an expansion of the programs the

¹² These recommended levels do not and should not be considered an upper limit for efficiency savings, but rather a floor. If higher levels of savings are cost effective, they should be included and pursued. As described below, utilities like Dominion Energy South Carolina will be analyzing efficiency levels up to at least 2% annual savings.

Company presented at the technical conference, along with additional program offerings and delivery channels from peer utilities like Duke Energy, Entergy, and Georgia Power. In all cases, programs for industrial customers should be included, as well as demand response programs for each customer class with the primary purpose of reducing load for economic optimization (not just for emergency response to reliability issues).

Another option is to start with the Aurora modeling results Mississippi Power has already produced, but then have all selected supply resources subsequently compete head-to-head against DSM resources. When the DSM resources are less expensive, the size of the supply resources should be reduced, their timing delayed, and / or they should be eliminated altogether.

Regardless of which option Mississippi Power uses – or even if it chooses to ignore stakeholder input on this subject altogether - the Company should provide all of its input assumptions and the workpapers associated with its analysis of demand side resources as part of its IRP filing in April. The Company has been made aware of the need for this information through multiple direct requests by stakeholders throughout this process, and providing this information is clearly consistent with the Commission's intent for transparency in the IRP. Rather than requiring parties to submit and then have to wait for responses to formal discovery requests for this data, Mississippi Power providing the information with its IRP filing in April would be a good faith demonstration by the Company that it is being responsive to these requests. Additionally, Mississippi Power should explain in detail the process by which it arrived at the DSM savings levels in its IRP filing, while identifying and explaining any constraints placed by the Company on the included savings levels.

DSM Resources are a Valuable Alternative to Overreliance on Fossil Gas

Mississippi Power is heavily reliant on a single generation fuel source – fossil gas. It presently accounts for 84% of the Company's capacity and 92% of its energy mix.¹³ Lack of fuel diversity to this degree creates significant risk for customers. Moreover, while Mississippi Power is currently considerably over capacity, aging units in its fleet also present additional economic risks,

¹³ Mississippi Power Company 2021 IRP Technical Conference Presentation, Slide 7

which has become the focus of Commission attention in Docket No. 2018-AD-145. As older, economically challenged units are taken offline, it would be a mistake to further increase dependence on gas generation. Energy efficiency and demand response are ideal resources to help accelerate retirement of these outdated steam units, and could be pursued to reduce, delay, or eliminate the need for construction of new gas generating units in the future.

Mississippi Power has also indicated that it is now planning for peaking requirements in both the summer and winter seasons. Energy efficiency and demand response resources are particularly useful at peak times in both seasons. In fact, energy efficient heating and cooling measures deliver the most savings impact during maximum peak events, while inefficient equipment would otherwise be placing its most intense strain on the utility system during those times. Energy efficiency and demand response are also good compliments to intermittent generating resources that may not be producing power at full capacity during winter peak events. Efficiency and demand response also lessen strain on grid infrastructure during intense cold snaps, like the one that recently caused widespread unplanned outages in Texas.

However, to reap the potential of DSM resources, utility planning and investment in DSM programs must begin with sufficient lead time. If a utility fails to evaluate and optimize DSM resources in a fair manner as part of its IRP, it will undermine the Commission's ability to recognize and made decisions regarding DSM resources at the appropriate time (i.e. with sufficient lead time). This will in turn narrow future resource choices and potentially increase the likelihood that customers will have to pay for more expensive supply side resources that could have instead been served with lower cost DSM resources if investments had been made at an earlier date.

While Mississippi Power obliquely noted that some type of higher DSM levels would be evaluated as part of only one of its 10 scenarios, Company representatives at the technical conference could not describe any aspect of what that meant. Moreover, while the company had and presented modeling outputs for essentially all of the other scenarios, the Company stated that the one and only scenario that would have higher levels of DSM was unfinished, and was therefore excluded from all modeling results presented during the technical conference.

Consideration of the Company's Carbon Dioxide Reduction Plans

Southern Company has made a commitment to its customers and shareholders to reduce greenhouse gas (GHG0 emissions by 50% by 2030, and further to net zero by 2050.¹⁴ These actions are described by the Company in in terms of customer needs and benefits:

"Notably, we have committed to both our 2030 and 2050 GHG reduction goals in the absence of any state or federal mandates. Rather, we pursue these goals because they are good for the customers and communities we are privileged to serve. Our approach is driven by thoughtful scenario planning, long-term integrated resource plans (IRP) and constructive regulatory decision-making "¹⁵

In its September 2020 report, Southern Company identified the IRPs of its regulated operating companies, including Mississippi Power, as a means of reducing carbon dioxide emissions. Indeed, the IRP reporting requirements established by the Commission are well-aligned with Southern Company's stated desire to reduce greenhouse gas emissions for the good of its customer base.

But Mississippi Power's heavy reliance on fossil fuels in its IRP is in clear conflict with these corporate commitments, and the Company's resource planning work to date has failed to connect its resource portfolio outputs to GHG reductions in a meaningful way.

Given that the interim 2030 goal is well within the IRPs' 15-year planning horizon, the Company's forthcoming IRP filing should explicitly discuss the connection between its resource portfolios and reduction of greenhouse gas emissions (GHG), such as carbon dioxide and methane .

Transparency and Stakeholder Engagement

IRP Rule Final Commission Order:

"Additionally, one of the Commission's 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

¹⁴ Southern Company, Implementation and Action Towards Net Zero, September 2020 https://www.southerncompany.com/content/dam/southerncompany/pdfs/clean-energy/Net-zeroreport.pdf
¹⁵ Ibid

potentially unnecessary and costly capital Expenditures and long-term operational costs. "¹⁶

As noted above, Mississippi Power appears to have ignored all stakeholder input to date related to DSM resources, and may have in fact ignored all stakeholder input altogether. At the technical conference, the Company made no mention whatsoever of the feedback it had received over the past year or any steps it had taken to incorporate stakeholders' ideas, information, or recommendations. This represents a profound failure on the Company's part to meet the spirit of the Commission's IRP rule, which was highly focused on stakeholder involvement.

While tremendously disappointing, this is only somewhat surprising, given the Company's vigorous attempts last year to prevent any non-governmental entity from intervening in this proceeding. It is doubly disappointing, however, from a company whose recent experience includes recklessly advancing a supply-side resource acquisition (the power plant formerly known as Kemper, now Ratcliffe) that resulted in billions of dollars of financial losses. It is also worth noting that the Company persisted with Kemper despite countless warning signs, including those raised by non-profit organizations like the intervenors in this proceeding who continue to promote safer, cleaner, and more affordable alternatives. Arguably, it was that very experience with Kemper that led to the creation of this integrated resource planning rule in the first place. In doing so, the Commission made abundantly clear that the rules were intended to increase transparency and bring other information and viewpoints from outside the Company into the resource planning process.

Mississippi Power has not only failed to embrace stakeholder input, it has also worked against transparency. The Company has provided almost nothing to explain its DSM input assumptions, evaluation criteria and methodologies, or any imposed constraints. As noted above, during the public meeting held last year, the company provided virtually no details on how it would evaluate DSM at all. And at the technical conference held last month, the Company's main DSM portfolio was presented as a finished product with no indication that input from stakeholders would be considered. Meanwhile, an "aggressive" energy efficiency portfolio was only mentioned in passing, and it was indicated this would be included in analysis for only one of the Company's 10

¹⁶ Final Order Amending Rule 29 to Establish Integrated Resource Planning and Annual Energy Delivery Reporting Requirements." November 2019, page 5

scenarios. No details of any sort were provided for either its forecasted savings levels or any aspect of how they would be determined.

The Company also placed a blanket claim of confidentiality over its entire slide deck and all of the discussion at the technical conference, despite there being no indication that any of the materials presented ought to be legitimately designated trade secret or sensitive for security reasons. Given that the company has made no apparent attempt to incorporate any feedback from stakeholders, it cannot even be argued that the materials and discussions should be kept confidential for the purposes of allowing frank discussion and negotiation, as may be the case in some circumstances around formal settlement agreement discussions. In short, the company has placed the cover of confidentiality seemingly for no other purpose than to avoid transparency – not due to the sensitivity of the information itself, but merely to prevent it from being available to the public. That notice was sent after business hours on Friday, March 19th, indicating that the slides would no longer be considered confidential is small conciliation, since it left no time for discussion with other parties prior to this comment filing deadline on Monday, March 22nd.

It is worth noting that even after SACE and all other intervening parties' intervention requests were accepted by the Commission (again, over the objection of Mississippi Power) the Company appears to have made no attempt to give notice nor distribute its 2021 Annual Energy Delivery Plan to the service list for this docket, which was filed last November.

Our position on these matters is clear, and we believe so are the requirements put in place by the Commission. Stakeholder input should be considered an important part of the development of Mississippi Power's IRP, and there should be evidence that the Company has incorporated meaningful aspects of the feedback it receives. The assumptions, methods and decisions made by the Company in development of its IRP should be transparent and disclosed early enough in the process (and with enough detail) to allow proper review and the development of substantive recommendations by stakeholders. The Company should not be allowed to cast such a wide and unjustified blanket of confidentiality over information in this proceeding. Instead, going forward it should limit the designation of materials as confidential only if and to the extent that those items meet accepted standards classification as competitive and security secrets.

Mississippi Power's IRP Approach Ultimately Leads to Subpar Resource Planning

Unless significant changes are made prior to its filing next month, Mississippi Power appears poised to present an IRP that is demonstrably inferior to those of its peers (including its sister company Georgia Power). Mississippi Power's approach to this IRP process has been less open to stakeholders, its plan includes substantially less energy efficiency and demand response than what is offered by other utilities in the region, and the result will almost certainly mean higher risk and higher cost for customers.

Examples of better approaches and results abound, and we refer Mississippi Power to the following as models from which it may glean additional ideas for improving its IRP.

Georgia Power

In 2019 sister company Georgia Power had more than double the amount of energy efficiency savings compared to Mississippi Power, relative to annual retail sales. That year the Georgia Public Service Commission directed the company to further increase its annual efficiency savings levels by 15% as part of its final order on Georgia Power's IRP. In Georgia, filing of an IRP is preceded by quarterly meetings with stakeholders to examine virtually every aspect of how the utility handles DSM in its IRP. Through those meetings stakeholders have the opportunity to review the detailed energy efficiency savings assumptions used by the utility and review its DSM potential study. Stakeholders also present new program recommendations that the utility develops and includes in DSM modeling runs. Ultimately, Georgia Power submits multiple DSM portfolios including its Proposed Case, an Advocates Case designed by stakeholders, and an "Aggressive" Case that is nominally intended to indicate the impact of even higher levels of DSM savings. Now, Georgia Power is evaluating new approaches to modeling DSM competitively against supply resources using Aurora modeling software – the same kind being used by Mississippi Power in its IRP. However, Mississippi Power is doing none of these things, and has indicated that it intends to set DSM savings in its IRP to essentially the same levels it was achieving during the quickstart phase.

Georgia Power is an important point of comparison because it is owned by the same parent company as Mississippi Power, and they both rely on many of the same Southern Company personnel to conduct their IRP modeling. But several other utilities in the region have also demonstrated a willingness and ability to deliver higher efficiency savings and more robust IRPs. Following are several additional examples that Mississippi Power should look to while making final preparations for filing its IRP next month.

Duke Energy Carolinas

Duke Energy Carolinas has delivered annual efficiency savings at or near 1% of its retail sales for several years.¹⁷ It has accomplished this by offering a broader suite of energy efficiency and demand response programs, with deeper investment to drive customer participation than what Mississippi Power has presented. Even though Duke's DSM portfolio reflects a substantially more comprehensive approach than the one Mississippi Power described at its technical conference, Duke has also shown continued flexibility. This includes a willingness to explore new program concepts, delivery mechanisms, and policy changes aimed at reaching and sustaining higher levels of efficiency savings – with significant contributions and support from SACE and a robust group of Collaborative stakeholders. Notably, the most recent IRP Duke submitted in the Carolinas placed a clear emphasis on reducing carbon emissions in a manner that is consistent with, and can be measured against, the utility's corporate commitments. Southern Company has made similar commitments for carbon reductions, but how Mississippi Power's IRP matches up with meeting those commitments is unclear at best.

Entergy New Orleans and Entergy Arkansas

Entergy New Orleans and Entergy Arkansas both have annual efficiency savings targets greater than 1% of retail sales, while reporting that customer benefits from their programs are more than double the costs.¹⁸ Both utilities also allow stakeholders to develop a set of DSM and renewable energy IRP inputs that are run through the Aurora resource modeling software and presented to

¹⁷ SACE, Third Annual Energy Efficiency in the Southeast Third Report, page 6

¹⁸ Entergy New Orleans, "Energy Smart Annual Report – Program Year 9 Annual Report." July 2020, page 8 and Entergy Arkansas, "Energy Efficiency Program Portfolio Annual Report for the 2019 Program Year." May 2020, page 12

their respective regulators in their IRP filings. Entergy New Orleans' IRP process includes at least four technical conferences and stakeholders are given the opportunity to make substantive recommendations on many aspects of the utility's IRP modeling and corresponding DSM potential studies. The utility is also expected to provide detailed workpapers related to its DSM assumptions and methods. Additionally, its regulators have required Entergy New Orleans to increase its annual efficiency savings by 0.2% each year, up to 2% annual efficiency savings. Notably, the amount of total efficiency savings Mississippi Power has proposed (i.e. the upper limit in the Company's base case) is approximately the same amount by which efficiency savings in New Orleans are expected to increase *each and every year*.

Dominion South Carolina

Despite having current and planned annual efficiency savings that exceed those of Mississippi Power, last year Dominion South Carolina's IRP was rejected by the South Carolina Public Service Commission for underestimating the levels of available cost-effective energy efficiency and renewable energy. The South Carolina Commission then ordered the utility to resubmit its IRP within 60 day and required it to include at least 1% annual efficiency savings.¹⁹ The Commission's order further stated that future IRPs would have to model higher rates of efficiency savings at the 1.25%, 1.5%, 1.75%, and 2% levels. The South Carolina Commission also found that Dominion must change the way that it conducts IRP modeling, including a requirement that the utility pay for and provide the resource modeling software license for use by intervenors in subsequent IRP cycles. This is intended to increase transparency into how the utility is conducting its analysis and allow for alternative modeling by participating parties.

All of these examples may serve as models from which Mississippi Power can draw valuable insights to strengthen and improve its DSM portfolio and its proposed IRP, even before it files with the Commission next month. Notably, these are only a handful of comparable models, which were gathered only from the Southeast. Across the country there are many more examples of utilities going even further (sometimes much further) with their respective approaches to DSM and IRPs.

¹⁹ South Carolina Public Service Commission, Docket No. 2019-226-E – Order No. 2020-832, "Order Rejecting Dominion's Integrated Resource Plan and Requiring Dominion to Make Modifications to Its 2020 Integrated Resource Plan, Future Updates and Future Integrated Resource Plans." December 2020

All of these examples may also serve as a benchmark against which Mississippi Power should be judged as it completes its first IRP under the Commission's rules. Should the Company ultimately file a DSM portfolio and / or an IRP that is substantially inferior to these examples, the Commission should take steps to remedy the deficiencies during this IRP cycle, and put in place guidelines that will prevent similar shortcoming in the future. We continue to hold out some hope that Mississippi Power will of its own volition take meaningful steps to strengthen its IRP, and specifically its approach to DSM, though that hope is already substantially diminished in light of Mississippi Power's approach so far to stakeholder input in this IRP cycle.

We therefore summarize and offer the following recommendations ahead of Mississippi Power's filing of its proposed IRP:

- 1. In the Company's base case, expand annual DSM savings and budgets for the next three years to be at least 0.5% of retail sales. If utility cost test (UCT) analysis shows that higher annual savings levels are cost effective, these savings levels should ramp up further.
- Include demand response programs in the DSM portfolio. Such programs should be designed to operate when power costs are high, and not be limited only to events called for reliability purposes.
- Industrial energy efficiency and demand response programs (consistent with the demand response approach described above) should be included in the DSM portfolio for all years in the IRP planning period.
- 4. Energy efficiency and demand response program savings levels should be optimized using a clearly stated industry standard methodology, based on cost effectiveness at the utility system level (eg. UCT). Unless considerable evidence and a detailed explanation is presented, no year in the IRP planning time horizon should have annual efficiency savings as a percentage of sales less than 0.5%.
- 5. Analyze at least four DSM portfolio load impact sensitivities at the 0.5%, 0.75%, 1%, and 1.25% annual savings levels, then optimize each resulting load forecast for any remaining supply-side addition needs. Present and compare the NPV of utility system

costs for the resulting resource portfolio mix in each scenario while holding other factors steady.

- 6. After supply resource optimization modeling outputs have been generated, have any supply-side resource additions compete head-to-head against DSM resources. When the DSM resources are less expensive, the size of the supply resources should be reduced, their timing delayed, or they should be eliminated altogether. The purpose of this analysis is to assist MPC in arriving at a least cost resource portfolio mix, wherein supply resource additions have actually been analyzed against DSM alternatives.
- Eliminate the confidential designation for all information except those which are legitimately protected for commercial competition reasons and those pertaining to sensitive security matters.
- 8. Concurrent with the filing of the Company's IRP, Mississippi Power should provide detailed information in workable file formats (e.g. Excel, Word, etc.) supporting its DSM resource analysis. This should include all input assumptions, calculation workbooks, and detailed explanations of the analytic evaluation criteria and limiting factors that were used for determining levels of DSM resources in the Company's IRP filing. Following are examples of the kind of information that ought to be provided with the Company's IRP filing in April, though any other pertinent information not listed should also be provided.

Data Requests:

- In each scenario and for each year of the IRP planning period, please indicate how much energy and capacity savings are attributed to the Company's energy efficiency programs, as well as the corresponding projected annual budgets.
- 2. For each DSM portfolio please indicate the corresponding levelized cost of energy saved in \$ / kWh and the associated utility cost test (UCT) and total resource cost (TRC) scores.
- 3. In each scenario and for each year of the IRP planning period, please indicate how much energy and capacity savings are attributed to the Company's demand response programs.
- 4. Please describe in detail criteria were used to evaluate the optimal level of DSM in each scenario analyzed in the Company's IRP.

- 5. What constraints were placed on DSM resource selection in each scenario? Please explain the reasoning behind the Company's choices and indicate the magnitude of effect the Company believes can be attributed to these constraints.
- 6. Please describe and indicate how the Company established the load profile for its DSM portfolios prior to adjusting its load forecast in Aurora.
- 7. Please provide any studies or analysis used to determine the optimal level of DSM resources in the Company's IRP.
- For purposes of comparing to past performance, please identify any costs excluded from the DSM programs and portfolios in the Company's IRP filing that would typically be included in its Annual DSM Reports.