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BEFORE THE PUBLIC SERVICE COMMISSION COMMISSION OF THE STATE OF MISSISSIPPI

ENTERGY MISSISSIPPI, LLC 2021-AD-52

IN RE:

ORDER ESTABLISHING DOCKET TO INVESTIGATE THE MEMBERSHIP OF ENTERGY MISSISSIPPI, LLC. IN THE MIDCONTINENT INDEPENDENT TRANSMISSION OPERATOR

#### ENTERGY MISSISSIPPI, LLC'S COMMENTS

On April 6, 2021, the Mississippi Public Service Commission ("Commission") issued its Order Establishing Docket in the above-captioned proceeding. In Paragraphs 5-9 of that Order, the Commission seeks comments on certain matters. Pursuant to Paragraph 10 of that Order, Entergy Mississippi, LLC ("EML") provides its comments as follows.

#### I. Background

Since 1998, the Entergy Operating Companies supported and pursued the establishment of an independent entity to operate the Entergy Transmission System, including efforts to establish a joint RTO with SPP and the attempt to establish the SeTrans RTO. More recently, EML's integration into the Midcontinent Independent System Operator ("MISO") regional transmission organization ("RTO") was the culmination of a massive three-year effort on behalf of the Commission, the Public Utilities Staff, the Company, and other stakeholders that included complex and detailed cost/benefit analyses and various regulatory proceedings, including at the Federal Energy Regulatory Commission ("FERC"). EML's participation in MISO has been very successful, as evidenced by:

- EML's customers having experienced over \$246 million (nominal dollars) in savings from MISO participation through 2020;
- EML's customers and stakeholders having experienced increased transparency and MISO's independence, including in the transmission planning and congestion

management processes, with MISO now making decisions (subject to applicable regulatory approvals) on transmission projects and managing congestion through market price signals; and

MISO having approved in its MISO Transmission Expansion Plan ("MTEP")
process hundreds of millions of dollars of new transmission investment across
MISO South, including in Mississippi, which has strengthened the transmission
grid and improved transmission reliability.

The on-going benefits of MISO membership include quantitative capacity and energy related benefits and qualitative benefits such as MISO's price and informational transparency, including posting of key system information regarding grid conditions, market operations, and locational marginal pricing at numerous nodes on the electrical system, which allows for increased market efficiency, better resource investment decisions, and enhanced system reliability; enhanced transmission planning coordination through MISO's region-wide view of needs and solutions; effective management of the seams around the MISO footprint; and more efficient operation of EML's generation fleet. All of these above-described activities and projects, particularly the Commission's forward-looking approval of EML's change of control (MPSC Docket No. 2011-UA-376) (the "Change of Control Order"), paved the way for EML to deliver to its customers the substantial quantitative and qualitative benefits experienced from participation in MISO.

Since approval of EML's change of control, EML expanded its organizational structure for the staff engaged in EML's Supply Planning and Operations. EML also developed new supply planning and market operations processes required for EML's participation in the MISO RTO. EML also worked with ESL to develop new support service arrangements to improve the coordination between EML and ESL groups that provide support services to EML's supply planning and market operations. As a result, EML's resources planning and market operations organization has been supported by ESL staff that have provided specialized expertise and round

the clock operational support for EML's interactions with the MISO markets and the regional market. These processes and interactions have been reviewed through the Commission's annual fuel audits, and have, to a large extent, been validated by those auditors. Additionally, EML has maintained additional subject matter expertise through the engagement of a former ESL Vice President, Dave Harlan with Veriquest Consulting to maintain knowledge of the vast number of stakeholder process initiatives and the related details underway within such a large RTO. Mr. Harlan's advisory role and the knowledge gained on behalf of EML through the MISO stakeholder process is part of an overall effort by EML to collaborate with the Commission, Staff, their consultants, and other like-minded stakeholders to fairly advocate within the MISO stakeholder process and at FERC for MISO market rules and policies, particularly with respect to transmission planning and cost allocation approaches, that we believe are in our customers' long-term best interests. To-date, we believe those efforts have been largely successful.

EML also has worked with the Commission to provide appropriate reports and data so that the Commission has access to the information necessary to evaluate and ensure benefits are realized for EML customers. The reporting by EML included filing an annual status report to the Commission and Staff providing key summary data regarding EML costs and operation under MISO membership, including for example, information on operation and planning reserves, LMP summary data for all Entergy Load Zones and for SMEPA; information on ARR/FTR acquisition, costs, revenues and revenue sufficiency; power plant output and availability; MISO administrative costs and other charges assessed to EML. The reporting by EML also required a five-year review after integration into MISO, which included a forward-looking cost/benefit analysis in order for the Public Utilities Staff to conduct a supplemental review of EML's continued MISO membership

Based upon the benefits that MISO has been producing for EML's customers, and supported by analysis that indicates similar benefits are expected to occur in the future, EML believes that the public interest will be served by EML's continued participation in MISO for the foreseeable future. Should the conduct of this proceeding cause the Commission to reconsider EML's membership in MISO, EML urges that any such decision be informed by the same thoughtful and deliberate analyses and review of the risks and benefits of alternative operating environments as were applied to EML's efforts to join MISO before any decision is made.

#### II. Introduction

It is indisputable that EML's participation in the MISO has benefitted EML's customers. EML estimates that its customers have experienced roughly \$246 million in energy and capacity-related savings through 2020, which exceeds by \$75 million the level of benefits estimated when EML joined MISO. EML expects those benefits to continue into the foreseeable future. EML appreciates that those benefits are derived largely from the diversity of loads and resources across a substantial MISO footprint. Nonetheless, with that diversity comes differences in regulatory policies and views about the evolution of the electric utility industry. One of the key attributes of MISO's governance is a robust stakeholder process wherein MISO solicits and considers input from all stakeholders on issues related to how MISO's planning and operations should evolve to keep pace with the industry. EML is an active participant in MISO's stakeholder process and routinely consults with the Commission and its representatives on how EML can most effectively represent the interests of its customers in MISO's stakeholder process. EML appreciates the opportunity to address some of the benefits and challenges of participation in the large, diverse and stakeholder-driven organization that is MISO. To date, the benefits of MISO membership far

outweigh the challenges, and EML expects that to be the case going forward if MISO's core cost allocation principles that have been in place since EML joined MISO remain intact and FERC does not enact policies that undermine those benefits.

#### III. Response to Commission's Questions

- 5. The Commission seeks comments on the following:
  - a. MISO's evolving transmission planning and cost allocation methodologies; including, but not limited, to MISO's assumptions about future generation resource portfolios and assumed increased demand tied to electrification.

#### **Transmission Planning and Cost Allocation**

Since EML joined MISO, the transmission planning and cost allocation methodologies employed by MISO have, in EML's view, been fairly consistent. Under the MISO planning process, EML and other Transmission Owners ("TOs") engage in "bottom up" local system reliability planning in order to carry out their responsibility for meeting their transmission needs, subject to the requirements of applicable state law or regulatory authority. Each TO submits its reliability projects to MISO for potential inclusion in the annual MTEP, at which point those projects are 1) subject to evaluation and discussion through a stakeholder process and 2) subject to review by MISO to ensure the proposed projects will meet the applicable transmission planning criteria. MISO's planning process applies NERC standards to all of its members except in those instances where a more stringent local planning standard is applicable.

In contrast, the identification of economic transmission upgrades is part of MISO's "top down" planning process where MISO, in collaboration with TOs and other stakeholders, identifies potential projects to address regional policy, economic and reliability issues. In general, economic

projects are intended to reduce production costs or capacity requirements. The MISO Board of Directors ultimately determines the projects that are included in the annual MTEP. Finally, FERC Order No. 1000 requires that MISO coordinate its transmission plan with neighboring regions, which is discussed further in response to Question 7.<sup>1</sup>

With regard to cost allocation for transmission projects, MISO's core principles that costs be allocated based on cost causation and in a manner roughly commensurate with the projected benefits of a project have remained unchanged since EML joined MISO. However, there has been some evolution in the classification of projects and cost allocation, and efforts to identify a broader range of benefits. For example, the voltage threshold for a Market Efficiency Project was recently reduced from 345kV to 230kV, and the range of benefits considered in evaluating the benefit-to-cost ratio was expanded to include avoided reliability projects and savings under the SPP-MISO seams settlement agreement. In addition, the "postage stamp" component of cost allocation for a Market Efficiency Project was eliminated. EML opposed any reduction in the voltage threshold but ultimately supported the 230 kV threshold at FERC as a reasonable compromise between no change and the more drastic change – lowering the threshold to 100 kV – advocated by some stakeholders. EML strongly supported the elimination of the postage stamp – and likewise supported the addition of the two new benefit metrics. MISO's current cost allocation methodologies are summarized in the following table:

Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC ¶ 61,051 (July 21, 2011) (FERC Order No. 1000); Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 139 FERC ¶ 61,132 (May 17, 2012); and Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 141 FERC ¶ 61,044 (Oct. 18, 2012).

### MISO Regional Cost Allocation

Project Type Multi-Value Project	Description  Above 100 kV and project cost of \$20 million or more, evaluated as part of a portfolio of projects and must meet one of three criteria	All ocation to Beneficiaries 2
Market Efficiency Project	230 kV and above and project cost of \$5 million or more, reduce market congestion when benefits are 1.25 in excess of costs	100% distributed to zones commensurate with expected benefit, based on the benefit metrics described in Attachment FF-7
Baseline Reliability Project	NERC Reliability Criteria	100% allocated to local Transmission Pricing Zone
Generation Interconnection Project	Interconnection Request	Primarily paid for by requestor, 345 kV and above 10% postage stamp to load.
Transmission Delivery Service Project	Transmission Service Request	Generally paid for by Transmission Customer; Transmission Owner can elect to roll-in into local Transmission Pricing Zone rates
Participant Funded	Projects that are funded by a Market Participant	The Market Participant funds the project.
Other	Project that does not qualify under other project categories.	The costs of these projects are recovered in zonal rates.



A recent development on the transmission planning and cost allocation front is a proposal by certain TOs to include consideration of Long-Range Transmission Planning ("LRTP") projects in MTEP21 with an allocation of costs based on a purported hybrid of Multi-Value Project and Market Efficiency Project cost allocation methods.<sup>2</sup> The proposal defines eligible projects as "one or more Network Upgrades that address a common set of Transmission Issues" (*e.g.*, regional reliability) with a minimum project cost of \$20 million and minimum voltage of 100 kV. EML

 $<sup>\</sup>frac{^2}{\text{https://cdn.misoenergy.org/20210428\%20RECBWG\%20Item\%2003\%20Certain\%20TO\%20Cost\%20Allocation}} \\ \frac{\text{https://cdn.misoenergy.org/20210428\%20RECBWG\%20Item\%2003\%20Certain\%20TO\%20Cost\%20Allocation}}{\text{matchessive}} \\ \frac{\text{https://cdn.misoenergy.org/20210428\%20RECBWG\%20TO\%20Cost\%20Cost\%20Allocation}}{\text{matchessive}} \\ \frac{\text{https://cdn.misoenergy.org/20210428\%20Certain\%20TO\%20Cost\%2$ 

submitted stakeholder comments suggesting that the TOs making this proposal identify a minimum benefit-to-cost ratio for such projects (at least 1.25) and provide a specific, granular cost allocation method proposal that can be vetted through the stakeholder process before any projects are added in the MTEP process. This proposal is pending consideration before the Regional Expansion Criteria and Benefits Working Group.

#### **Use of Futures in Transmission Planning**

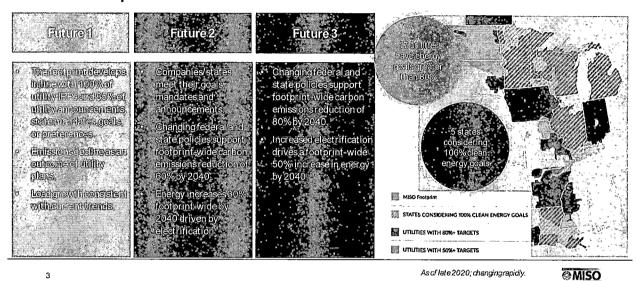
The use of reasonably likely futures in utility planning is commonplace. For example, MPSC IRP Rules 104.2 and 104.4 require the use of reasonably likely futures in the development of a utility's integrated resource plan ("IRP"). In order to produce meaningful results, such future development should represent a range of reasonably likely outcomes, as studying futures that are remote or not reasonably likely to occur would provide little value to EML or its customers — and would risk them incurring costs for projects that are unlikely to provide net benefits.

MISO develops several different futures in each Transmission Expansion Plan to "test" the capability of the planned transmission system based on assumptions regarding factors that could affect loads and resources (e.g., changes in federal policy). The futures are developed through the MTEP stakeholder process and are intended to "bookend" the various uncertainties that can affect resources (e.g., retirements) and loads (e.g., electrification).<sup>3</sup> The following futures are currently under consideration for MTEP21:<sup>4</sup>

https://www.misoenergy.org/planning/transmission-planning/futures-development/.

https://cdn.misoenergy.org//MISO%20Futures%20Report538224.pdf.

## Three Futures incorporate & bookend uncertainty with members' plans



It is EML's understanding that, for its LRTP, MISO currently plans largely to Future 1 with an eye toward mitigating against outcomes that would foreclose the capability to reasonably respond to the other Futures. However, it is possible that MISO may afford a more equal weighting of the

EML, along with the other Entergy Operating Companies and other TOs, submitted several rounds of comments on the development of the MTEP21 futures, primarily focused on vetting natural gas price assumptions and the approach taken to forecast load growth associated with electrification. At the outset of the stakeholder process, MISO had proposed to scale up loads uniformly on a MISO-wide basis to account for electrification. EML pointed out that the potential for electrification is not equal across all of the MISO footprint and recommended that electrification assumptions be developed for each individual Local Resource Zone. MISO agreed with that recommendation. As reflected in the final Futures, EML believes that the levels of

Futures in a subsequent Market Congestion Planning Study

electrification assumed in Futures 2 and 3 are potential outcomes for MISO-South in light of the emphasis federal policymakers are currently placing on taking steps to reduce carbon emissions in the United States. For example, the Biden Administration, after re-joining the Paris Agreement, set a new target of a 50-52 percent reduction in U.S. Greenhouse Gas Pollution from 2005 levels by 2030 and pointed to, among other things, opportunities to reduce carbon pollution from the transportation sector, which would include electrification of vehicles.<sup>5</sup> That said, EML communicated to MISO that the level of electrification assumed, primarily in Future 3, exceeds what EML considers to be economically viable.

On balance, in light of these policy considerations, EML believes MISO's assumptions regarding the level of electrification in MISO South in the three futures are potential bookends for possible future outcomes for purposes of transmission planning. EML believes MISO's use of futures in its transmission planning and consideration of varying degrees of electrification are reasonable. While EML and MISO do not concur entirely on the assumed level of electrification, EML notes that its recent IRP includes a base level of electrification in the reference case with increasing levels in two futures.<sup>6</sup>

b. Potential changes to generator accreditation, transition to a seasonal capacity auction, implementation of novel, untested market design changes including Available Capacity (ACAP), raising the administratively determined Value of Lost Load (VOLL) to \$10,000/MWh (particularly in light of the excessive prices of natural gas and electricity observed during the February 2021 Polar Vortex

https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/.

EML 2021 IRP at p. 31, Table 6.

[citations omitted]), MISO's application of VOLL to certain de-energized load busses during force majeure events [citations omitted] (e.g., hurricanes) resulting in unreasonably high "uplift costs" and MISO's proposal to revise the recovery of those uplift costs so that they are paid only by the subregion of MISO affected by the force majeure event, and other repercussions that may result from MISO's Resource Adequacy and Need (RAN) initiative.

#### Resource Adequacy and Need (RAN)

RAN is a project intended to evaluate issues affecting the availability of resources sufficient to serve load and provide adequate reserves. As an initial matter, EML notes that the evaluation of resource adequacy is a continually evolving process irrespective of whether a utility is part of an RTO or operating stand alone. As the loads and resources change on a utility's system, so too must the manner in which the utility assesses its capability to reliably serve its loads. Thus, EML appreciates the importance of MISO's use of the RAN project as a platform to evaluate the efficacy of its resource adequacy construct. EML has been and will continue to be an active participant in the RAN project, always with the purpose of advocating for solutions that are in the best interests of EML's customers.

The key resource adequacy change that has occurred since EML joined MISO was the creation of a separate Local Resource Zone for the State of Mississippi in 2015. Looking ahead, it is difficult to know exactly what issues may arise under the broad scope of the RAN project, although EML expects that the voluntary nature of the annual capacity auction will not be an issue raised in the foreseeable future, nor does EML believe that MISO would pursue the minimum offer

https://www.misoenergy.org/stakeholder-engagement/issue-tracking/resource-availability-and-need-ran/.

price rule and sloped demand curve concepts for which certain stakeholders have long advocated. EML believes the issues identified by the Commission are the key issues under current consideration, with one addition – the implementation of a minimum capacity requirement to address the problem of free ridership in the MISO capacity market.

#### Proposed Minimum Capacity Requirement/Free Ridership

EML has expressed to MISO a concern that some smaller Load Serving Entities ("LSEs") currently plan to rely exclusively on the annual capacity auction to satisfy their annual resource adequacy requirements in lieu of making long-term commitments to capacity. In effect, those smaller LSEs count on vertically integrated utilities to maintain sufficient long-term resources to serve their loads plus a reserve margin, thereby leaving a short-term surplus available in the annual capacity auction that the smaller LSEs can obtain at a very low auction clearing price. In this manner, the smaller LSEs shift the cost of maintaining sufficient capacity to reliably serve their loads to the customers of vertically integrated utilities who are actually paying the full cost of that capacity.

MISO has acknowledged the problem and is currently considering a proposal that each LSE demonstrate that it controls sufficient resources to satisfy at least 50 percent of its annual resource adequacy requirement.<sup>8</sup> EML has further commented that this proposal should include a locational aspect to provide assurance that the capacity relied on by an LSE can actually support reliability in the zone served by the LSE so that zonal requirements are not shifted to vertically integrated utilities.

https://cdn.misoenergy.org/20210310%20RASC%20Item%2004a%20Sub-Annual%20Construct%20(RASC010.%20011.%20012)529458.pdf.

This proposal is currently pending before MISO's Resource Adequacy Subcommittee, which is responsible for providing input and policy guidance to MISO management and the Advisory Committee on all market and operational activities and processes that facilitate adequate planning resources within MISO for the long-term planning horizon.

#### Seasonal Resource Adequacy Requirement and Capacity Auction

MISO is currently evaluating a subdivision of its annual determination of an LSE's resource adequacy requirement and administration of the capacity auction into four seasonal periods to better manage reliability risks experienced in periods other than summer peaks. The capacity auction would still occur once a year, but it would separately clear each of the four seasonal periods for the prompt year. EML has requested additional information on how MISO plans to determine an LSE's seasonal load forecast before staking out a position on the seasonal resource adequacy requirement. EML does not oppose the concept of a seasonal capacity auction.

#### Generator Accreditation/Available Capacity

There are currently several issues regarding generator accreditation pending consideration by MISO. First, MISO is evaluating seasonal accreditation to align with a seasonal capacity auction. Second, MISO is planning to recognize "hybrid resources" in the accreditation process. MISO defines a "hybrid resource" as a "generator that combines more than one type of Electric Facility for the production and/or storage for later injection of electricity."<sup>10</sup>

Third, and most significant, the method of generator accreditation is under evaluation.

Currently, MISO accredits capacity based on unforced capacity ("UCAP"), which reflects a

<sup>9 &</sup>lt;u>https://cdn.misoenergy.org/20210310%20RASC%20Item%2004a%20Sub-</u>Annual%20Construct%20(RASC010,%20011,%20012)529458.pdf.

https://cdn.misoenergy.org/20210512%20RASC%20Item%2004c%20Hybrid%20Accreditation%20Presentation548773.pdf.

planning resource's capacity after accounting for availability and forced outage rates for thermal generation (adjusted to exclude outside management control events) or historical performance for intermittent resources. MISO proposes to transition to a new method coined "available capacity." or ACAP" as part of the transition to a seasonal resource adequacy construct. 11 According to MISO, ACAP would be measured by the historical availability of a resource during tight margin hours in each season. EML submitted comments opposing the use of ACAP because it could penalize units on prudently planned outages and not able to return to service during the small subset of hours to be determined by MISO. EML suggested that MISO continue to use UCAP as determined on a seasonal basis. In the alternative, EML advocated that ACAP be based on all hours in a season and that there be a sufficient transition period to allow LSEs to adapt their planning practices to accommodate the new methodology. Through the stakeholder process, MISO's proposal has evolved to 1) cover all hours with a tiered weighting of availability as between tight-margin hours and non-tight-margin hours, and 2) to exempt certain planned outages. 12 EML is evaluating this latest evolution of MISO's proposal, but EML has already advised MISO that the proposed 24-hour lead time requirement for offline units would penalize units that require more than 24 hours for start-up time even though those units can contribute to the provision of reliable service, for example, when other units are offline for planned outages.

#### Value of Lost Load (VOLL)

MISO's current VOLL of \$3,500/MWh was set in 2009 and reflects a weighted average of

https://cdn.misoenergy.org/20210310%20RASC%20Item%2004a%20Sub-Annual%20Construct%20(RASC010,%20011,%20012)529458.pdf.

<sup>12 &</sup>lt;u>https://cdn.misoenergy.org/20210609%20RASC%20Item%2004a%20Sub-Annual%20Construct%20Presentation%20(RASC010%20011%20012)557434.pdf.</u>

residential and small commercial class estimates of the cost of an outage using studies from 1989 through 2002.<sup>13</sup> VOLL is used in several applications of MISO market settlements:

- to determine parts of the Operating Reserve Demand Curve ("ORDC"), including the administratively set maximum value;
- Locational Marginal Prices ("LMPs") and Market Clearing Prices ("MCPs") are administratively set to VOLL during a load-shed event;
- as the LMP and MCP price cap; and
- as the offer cap for Emergency Demand Response resources.

The Independent Market Monitor has advocated that the current VOLL does not appropriately price scarcity conditions, and MISO has recognized that the current VOLL may no longer reflect a consumer's valuation of uninterrupted service. Accordingly, MISO has initiated a project to review and update the calculation of VOLL, which project is pending before the Market Subcommittee. MISO has indicated that its evaluation of VOLL will include consideration of whether it is still appropriate for its current uses. In addition to evaluation of VOLL, this initiative will also consider the following related to scarcity pricing formation:

- improving the shape of the ORDC;
- improving the Up-Ramp Capability Demand Curve;
- enhancing the Short-Term Reserve Demand Curve;
- improving Regional Directional Transfer management;
- improving the regional clearing of Operating and Short-Term Reserves;
- improving the effectiveness of Short-Term Reserves;

https://cdn.misoenergy.org/20210513%20MSC%20Item%20XX%20Scarcity%20Pricing%20Evaluation%20Paper550162.pdf.

Question 5.b suggests that MISO is proposing to increase VOLL to \$10,000. However, that level is a recommendation made by the Independent Market Monitor. MISO has not yet arrived at a proposed change to VOLL.

- improving price setting by offline Fast Start Resources; and
- aligning the LMP and MCP cap with any changes to VOLL.

MISO expects to conduct this initiative over the 2021-2022 timeframe.

Separately, MISO is evaluating the use of VOLL during *force majeure* events.<sup>15</sup> Following damage to the Entergy Texas and Entergy Louisiana transmission systems by Hurricane Laura, MISO directed firm load shedding to balance supply and demand in portions of MISO South while the stability of those transmission systems was being restored. In subsequent market settlements, Real-Time prices were set to VOLL, including application of VOLL to dead busses that were electrically disconnected during those emergency conditions, causing significant "uplift costs." This resulted in approximately \$90 million in settlement charges being allocated to all MISO loads on a *pro rata* basis per the terms of the MISO tariff.

MISO has recognized that this experience raises legitimate questions regarding how its market design and price formation should take into account *force majeure* conditions. The Entergy Operating Companies, including EML, have indicated to MISO that they would not oppose a prospective change to the market settlements process to address this issue.

- c. The categories and relative magnitude of benefits and costs associated with RTO membership, including:
  - i. Wide area economic commitment and generation resource dispatch;
  - ii. Effects on the quantity and cost of required capacity reserves;
  - iii. Effects on the quantity and cost of operating reserves;
  - iv. The value of transmission planning functions performed by MISO;

https://cdn.misoenergy.org/20210415%20MSC%20Item%2005a%20Application%20of%20VOLL(MSC-2-21-3)%20(MSC-2021-4)540739.pdf.

- v. Effects on local electric system reliability;
- vi. Effects of MISO Interconnection Queue project application management.

In the May 12, 2011 report supporting EML's request to join MISO, EML identified a series of net benefits expected to be obtained from joining MISO.<sup>16</sup> In 2017, EML presented analyses confirming that such benefits had been achieved (and exceed in totality) since joining MISO and projecting additional net benefits from continued participation in MISO.<sup>17</sup> In its most recent annual, historical review, EML once again confirmed that it has continued to obtain net benefits from MISO participation as anticipated in both the May 12 and 2017 Reports.

#### Variable Production Cost Savings

In its May 12 Report, EML explained that it expected to obtain variable production cost savings from two primary sources:

- commitment and dispatch from a broad base of resources (*i.e.*, wide area economic commitment and generation resource dispatch); and
- reduced regulation and contingency reserves (*i.e.*, operating reserves).

Based on its most recent annual backward-looking analysis, EML calculates that its participation in MISO has saved its customers roughly \$168 million in variable production costs through the first category—market-wide commitment and dispatch.

The methodology utilized in EML's backward-looking analysis does not track savings associated with the second category – operating reserves, but EML is confident those savings are

See Docket No. EC123-0082-000, Joint Application of Entergy Mississippi, Inc., and the Midwest Independent Transmission System Operator, Inc., for Transfer of Functional Control of Entergy Mississippi's Transmission Facilities to MISO (Dec. 2, 2011) ("May 12 Report").

See Docket No. EC123-0082-000, Application of Entergy Mississippi, Inc. to Continue Delivering the Economic and Reliability Benefits of Participation in the Midcontinent Independent System Operator, Inc. Regional Transmission Organization (Oct. 31, 2017) ("2017 Report").

being enjoyed by customers because EML's share of operating reserves managed by MISO will necessarily be less than what EML would carry on a stand-alone basis.

#### **Fixed Production Cost Savings**

In its May 12 Report, EML further explained that it expected to obtain additional production cost savings from generation investment deferral (*i.e.*, reduced capacity reserves). Given the diversity of loads and resources across the MISO footprint, EML is able to plan to carry an amount of reserve capacity that is much lower than if EML operated on a stand-alone basis. EML currently plans to a 12.69% reserve margin, which is determined based on a loss-of-load-expectation study using EML's forecasted peak demand coincident with the MISO peak demand. <sup>18</sup> This is well below the 21% planning reserve margin forecasted for stand-alone operations.

Based on its most recent annual backward-looking analysis, EML's participation in MISO has saved its customers roughly \$78 million in fixed costs through deferral of generation investment for reserve capacity.

#### Transmission Planning Performed by MISO

Aside from the opportunity to collaborate with stakeholders and evaluate potential economic transmission projects, an important benefit of EML's participation in MISO is that doing so satisfies the obligation to engage in regional transmission planning imposed by FERC Order No. 1000. In addition, MISO's role in transmission planning provides assurance to all market participants that transmission planning is carried out in an independent and unbiased manner.

#### **Local Electric System Reliability**

Under MISO's "bottom up" approach to transmission planning, EML is responsible in the

<sup>&</sup>lt;sup>18</sup> EML 2021 IRP at p. 11.

first instance for identification and submission of transmission projects to MISO that are needed to maintain local reliability. MISO then reviews EML's submission to confirm the projects are necessary and will address the identified reliability need. In contrast, with regard to generator interconnection requests, MISO is responsible for evaluation of whether any local transmission upgrades are necessary to allow a generator to reliably interconnect and make use of EML's transmission system. Again, MISO's role in transmission planning and the interconnection process provides assurance to all market participants that transmission planning and interconnection requests are carried out in an independent and unbiased manner.

#### **MISO Interconnection Queue**

MISO's interconnection queue process has been criticized as a cumbersome and lengthy process. MISO currently takes roughly 500 days to process an interconnection request. <sup>19</sup> This obviously affects the lead time EML must take into consideration in its resource planning. One approach EML has used recently to manage this situation is to identify and evaluate projects sufficiently far enough along in the interconnection queue to evidence viable projects for potential addition to EML's resource mix. While this strategy has proven workable, it is not ideal because it necessarily limits the incremental resources EML is able to consider as part of its resource planning.

MISO launched a new online interconnection queue application tool last year that is intended to simplify and streamline the process.<sup>20</sup> EML expects it will take some period of time to determine what effect this new tool will have on the timeline to process interconnection requests.

https://www.misoenergy.org/api/documents/getbyname/GI%20Process%20Flow%20Diagram.pdf.

https://www.misoenergy.org/about/media-center/miso-launches-new-tool-for-generation-interconnection-queue/.

EML welcomes any additional improvements MISO can make to streamline the interconnection request process.

#### Other Benefits of MISO Membership

EML identified a series of other non-quantifiable benefits of MISO membership in EML's 2017 Report:

- Price Transparency;
- Seams Management;
- Balancing Authority Functions;
- OATT Administration:
- Congestion Management;
- Reduced Emissions;
- Independent Market Oversight; and
- Independent Market Monitor.
- 6. The Commission seeks comments regarding whether Entergy Mississippi and its customers would enjoy greater net benefits and be exposed to less risk in an alternative operational environment, including, but not limited to, joining the newly formed Southeast Energy Exchange Market (SEEM).

#### **Alternative Operational Environment**

The only alternative operational environment for EML that appears feasible at this time would be operation as a stand-alone entity without participation in an RTO or ISO.<sup>21</sup> Pretermitting how EML could comply with federal law, regulators or regulation to operate as a stand-alone entity

It is important to recognize that there is no RTO other than MISO in which EML could participate – the only other RTO in the region is SPP, and EML cannot join SPP due to the lack of any physical tie between EML and SPP.

and stand-alone balancing authority ("BA"),<sup>22</sup> such stand-alone operation could encompass participation in SEEM if SEEM is approved by FERC. However, even with participation in SEEM, EML has no currently viable path other than to operate as a stand-alone entity devoid of all functional benefits provided via RTO participation. As explained below, whatever benefits SEEM might entail, it is not an RTO or ISO and, as proposed, would not provide any transmission, resource or reliability function that MISO currently provides – in other words EML would lose all of the benefits of a close power pool that EML received first as a member of the Entergy System Agreement and now as a member of MISO. It is EML's understanding that SEEM does not provide this type of close power pool or the resulting benefits to an entity that is otherwise operating alone.

As a stand-alone utility, EML would have to establish its own BA. That would require EML to assume the NERC BA functions MISO currently performs (which functions were performed by the Entergy System prior to EML joining MISO in 2013). Among other things, EML would be responsible for unit commitment and all ancillary services, including the provision of operating reserves. Further, EML would lose the diversity benefit for installed capacity requirements.

Moreover, on the cost side, there is a long list of things that would have to be done for EML to become a stand-alone BA (with or without participation in SEEM). For example, as EML reported to the Commission in the 2017 Report, additional costs would be incurred to obtain necessary regulatory approvals, revise commercial and legal agreements, build or modify

<sup>&</sup>lt;sup>22</sup> E.g., FERC Order No. 1000; CLEAN Future Act, H.R. 1512, Sec. 220, 117th Congress (2020-2021) (pending before Congress).

communications infrastructure (including metering), and effectuate back-office accounting and settlements processes. At that time, EML estimated its expected costs of establishing a stand-alone BA to be \$19 million (on a present value basis in 2016 dollars).<sup>23</sup> EML further estimated that its costs relating to exit obligations under the terms of the MISO Tariff and TO Agreement, and EML's internal costs to prepare for and execute the transition to a stand-alone BA, amounted to a projected total of \$89 million (on a present value basis in 2016 dollars).<sup>24</sup>

The May 12 Report, the 2017 Report, and the annual benefits quantifications (described above) demonstrate that EML has experienced and will continue (in the foreseeable future) to experience net benefits as a member of MISO as compared to stand-alone operations. Operating in a stand-alone configuration, EML would no longer be able to achieve any of the following buckets of benefits identified in the May 12 Report:

- Commitment and Dispatch Benefits (i.e., "Trade Benefits")
  - o Reduced generation costs through the optimization of generator commitment and dispatch across the MISO region
  - Reduced purchased power costs achieved through participation in MISO's
     "Day 2" day-ahead and real-time energy markets
- Additional Benefits of Participation in "Day 2 Markets"
  - O Savings resulting from greater diversity of load and resources across the MISO footprint
  - O Ancillary services such as regulation service (i.e., the ability of the electrical system to follow the moment-to-moment change in system demand) provided by MISO that would otherwise have to be provided by EML on a stand-alone basis using its own "flexible capability" (which were typically

Application of EML to Continue Delivering the Economic and Reliability Benefits of Participation in the Midcontinent Independent System Operator, Inc. Regional Transmission Organization, Docket No. EC123-0082-00, Direct Testimony of Matthew T. Brown at 37-38 (Oct. 31, 2017).

24 Id.

#### legacy gas units in the pre-MISO construct)

#### The SEEM Proposal Would Not Replace the Functions Performed by MISO

The proposed SEEM Agreement should not be viewed as an alternative to MISO participation for a stand-alone EML.<sup>25</sup> SEEM would instead constitute a limited supplemental opportunity for EML to conduct short-term, non-firm energy transactions as a stand-alone entity. The SEEM proposal is based on voluntary bilateral trades and is simply proposed as an enhancement to the existing bilateral market. It would not provide any of the types of savings or benefits that MISO has provided Mississippi customers, especially considering EML's stand-alone posture.

Essentially, for EML, the SEEM proposal would reflect a stand-alone "plus" proposal that appears to be structured to operate at a very low cost to obtain efficiencies from bilateral, intrahour, non-firm economy energy purchases. The SEEM proposal contemplates that its members will share the cost to operate an electronic trading platform and agree to zero-cost transmission rates for economy energy transactions consummated on that platform. The SEEM proposal will not attempt to gain efficiencies through coordinated transmission planning or through coordinated operations in an organized market. In this regard, the SEEM proposal does not purport to pursue the broader range of benefits EML has experienced to date in MISO.

The projected savings from participation in SEEM are not of the same type or magnitude EML has achieved through participation in MISO. The SEEM proposal to FERC projects savings

The SEEM Agreement was submitted by Southern Company Services, Inc. to the Federal Energy Regulatory Commission ("FERC") on February 12, 2021 in Docket No. ER21-1111-000 ("SEEM Application"). It is currently pending review by FERC for acceptance under Section 205(c) of the Federal Power Act.

of \$40 million per year among all participants in 10 states.<sup>26</sup> By comparison, as explained above, EML alone has achieved savings of \$246 million through MISO participation in the years 2014-2020.

#### All SEEM Participants' Transmission Would Remain Independent

The SEEM proposal does not replicate the regional transmission coordination provided to EML by MISO. The SEEM proposal relies upon vertically integrated utilities (including affiliated groups) managing their own transmission systems. There would be no coordinated management or operation of the participants' transmission systems.<sup>27</sup> All transmission would remain independent and each participant would retain its own Open Access Transmission Tariff ("OATT"). The SEEM proposal is focused on facilitating transactions over unused transmission capacity.<sup>28</sup> "It will not change any current reliability roles or responsibilities and will rely on unused transmission given the lowest curtailment priority."<sup>29</sup>

## The SEEM Proposal Does Not Try to Replicate Other MISO Functions that Benefit EML's Customers

As noted above, the purpose of the SEEM proposal is to facilitate bilateral, short-term, intra-hour (*i.e.*, 15-minute), non-firm energy transactions. SEEM is not designed to be a replacement for the other functions MISO provides that benefit EML's customers. Unlike MISO, SEEM would not address resource adequacy or reliability. Under the SEEM proposal:

O All resource planning and maintenance of resource adequacy would continue via integrated resource plans for the individual LSEs.<sup>30</sup>

SEEM Application at 4.

See SEEM "critical core principles," SEEM Application at 8 ("Each transmission provider remains independent with its own transmission tariff (or equivalent).").

<sup>&</sup>lt;sup>28</sup> SEEM Application at 4-5, 8-9, 24 and 36.

<sup>&</sup>lt;sup>29</sup> SEEM Application at 37.

<sup>30</sup> SEEM Application at 6.

- o It "does not relieve any Participant of its resource adequacy responsibilities." 31
- O It is "not intended to provide resource adequacy, because [transactions conducted under the SEEM proposal] are the lowest priority transactions that can be displaced by higher priority transactions, and would be the first cut in a TLR situation."<sup>32</sup>
- o "[E]very load-serving entity participating in the market needs to plan to serve its own load outside and independent of the SEEM."<sup>33</sup>

SEEM would not serve as or replace the day-ahead or real-time markets operated by MISO.

And SEEM would not include any type of capacity market.<sup>34</sup>

#### Summary of EML Position Regarding Alternative Operating Environment/SEEM

In sum, the only alternative operating environment for EML that appears feasible at this time would be to establish itself as a stand-alone balancing authority if the costs of MISO membership were to be expected to exceed the long-term benefits of MISO membership. The stand-alone alternative would require significant costs and effort to implement. In conjunction with stand-alone operation, EML could participate in the SEEM Agreement. However, EML's participation in SEEM would provide additional access to a bilateral market, but it would not serve as a viable substitute to EML for the substantial functions and roles performed by MISO in terms of transmission planning, transmission coordination, resource planning, resource adequacy, and capacity and energy markets.

- 7. The Commission seeks comments regarding factors that may limit Entergy Mississippi's access to benefits from continued membership in MISO, including:
  - a. The effects of limited transmission capacity (physical and contractual) between

<sup>31</sup> SEEM Application at 37.

SEEM Application at 37-38.

<sup>33</sup> SEEM Application at 38.

<sup>34</sup> SEEM Application at 37.

#### MISO South and the rest of the MISO system;

#### Limits on the Flow of Energy between MISO-North and MISO-South

The limits on flows of energy between MISO North and South are fundamentally contractual in nature. Specifically, a SPP-MISO seams settlement agreement among MISO, SPP, and Joint Parties<sup>35</sup> creates contractual limits on the permissible transfer of energy, calculated not based on actual flows but on assumed flows after accounting for load and generation in each MISO subregion and net scheduled interchange with neighboring regions. However, MISO is currently pursuing transmission and contractual solutions to these limits to reduce costs to customers. The Entergy Operating Companies, including EML, have indicated to MISO that they are supportive of exploring solutions to improve the connection and increase power flow between MISO-North and MISO-South, provided that any solution should be composed of robust, "no regrets" projects that will result in tangible benefits to customers.

The SPP-MISO seams settlement agreement requires MISO to schedule transfers within limits (nominally 3,000 MW from North to South and 2,500 MW from South to North) within 30 minutes following a contingency.<sup>36</sup> To adhere to these limits, MISO has implemented a post-contingent constraint to hold headroom, actively manages the settlement agreement limit to avoid unmodeled overages, and commits out-of-market resources to maintain sufficient reserves. Even so, at times regional emergency events have caused MISO to exceed transfer limits in the settlement agreement. To address this contractual constraint, MISO is in negotiations with SPP and the Joint Parties regarding potential changes to the settlement agreement, as part of an

<sup>35 &</sup>lt;u>https://cdn.misoenergy.org/20200128%20MCPS%20TSTF%20Item%2002%20North-South%20Focus%20Area%20Update422465.pdf.</u>

https://www.potomaceconomics.com/wp-content/uploads/2021/05/2020-MISO-SOM Report Body Compiled Final rev-6-1-21.pdf.

extension of the term thereof, that may potentially result in increases to the limit.

In transmission planning, MISO uses a SPP-MISO seams settlement agreement benefit/cost metric to assess the effect of reduced or increased payments resulting from the settlement agreement when analyzing Market Efficiency Projects.<sup>37</sup> In this way, potential transmission projects are annually evaluated as a means of cost-effectively increasing the level of power flows permitted between the MISO North and South subregions.

Finally, MISO conducted a North-South Interface Study in 2019 to find firm transmission capacity solutions between these two subregions.<sup>38</sup> The study evaluated whether a transmission project would offer a better value to MISO's membership than the current SPP-MISO seams settlement agreement, and if a higher transfer capability between the MISO sub-regions than what is permitted under the settlement would result in increased economic benefits. MISO received and screened 35 proposed transmission solutions. Three transmission solutions had weighted benefit-to-cost ratios in excess of 1.0 after completing the full present value analysis using the MTEP19 economic model. MISO concluded the North-South Interface Study in the spring of 2020, but anticipates conducting further analysis regarding the North-South constraint in MTEP21.<sup>39</sup>

b. The effects of existing and future planning and cost allocation procedures on potential transmission investments to expand interregional transmission capability, including accounting for economic impacts of local generation investment.

<sup>39</sup> MTEP20 at 38.

MISO, FERC Electric Tariff, Attachment FF-7 (July 29, 2020).

https://cdn.misoenergy.org//MTEP20%20Full%20Report485662.pdf.

#### **Interregional Planning Processes**

To comply with FERC Order No. 1000, an RTO's regional transmission planning processes must improve coordination and planning activities with neighboring transmission planning regions. Neighboring planning regions must jointly evaluate interregional projects they have identified and allocate the costs of these projects across the ISOs using six cost allocation principles:

- 1. costs must be allocated in a way that is roughly commensurate with benefits;
- 2. there must be no involuntary cost allocation to non-beneficiaries;
- 3. a required benefit to cost threshold ratio cannot exceed 1.25;
- 4. costs must be allocated solely within the transmission planning region (or pair of regions) unless those outside the region (or pair of regions) voluntarily assume costs;
- 5. there must be a transparent method for determining benefits and identifying beneficiaries; and
- 6. there may be different methods for different types of transmission facilities.<sup>40</sup>

MISO coordinates with its neighboring transmission planning regions—SPP, PJM, and the Southeastern Regional Transmission Planning organization ("SERTP")—to identify issues on the seams, perform studies, and jointly evaluate transmission solutions that may be more efficient or effective than a corresponding regional solution.<sup>41</sup>

<sup>&</sup>lt;sup>40</sup> FERC Order No. 1000 at PP 603, 622-693.

<sup>&</sup>lt;sup>41</sup> MTEP20 at 12.

#### MISO-SPP and MISO-PJM Interregional Planning Process

While the specific details of the interregional planning process are governed by separate Joint Operating Agreements ("JOAs") between MISO-SPP<sup>42</sup> and MISO-PJM,<sup>43</sup> the high-level interregional coordination structure is similar. Under the JOAs, a joint planning committee comprised of representatives of MISO's and SPP/PJM's respective staffs functions as the decision-making body for coordinated interregional transmission planning. Each joint planning committee is responsible for all aspects of coordinated interregional transmission planning along their RTOs' respective seams, including the annual development of a Coordinated System Plan ("CSP"). The RTOs may propose interregional solutions for evaluation during the development of the annual CSP study. The RTOs evaluate interregional projects identified in the CSP study through their respective regional processes and analyses. If both RTOs determine that a proposed project is beneficial to their respective region based on regional and JOA criteria, the planning committee can vote on the project and the associated interregional cost allocation. If the planning committee approves the project, it is presented to the RTOs' Board of Directors for approval and implementation.

#### MISO-SERTP Interregional Transmission Planning Process

FERC Order No. 1000 requires public utilities to engage in interregional transmission coordination with their neighboring transmission planning regions, regardless of whether or not they are a member of an RTO.<sup>44</sup> SERTP is a collection of three transmission planners (SERTP

FERC Order No. 1000 at P 398.

Joint Operating Agreement between the Midcontinent Independent System Operator, Inc. and Southwest Power Pool, Inc., Article IX (Dec. 11, 2008) ("MISO-SPP JOA").

Joint Operating Agreement Between the Midcontinent Independent System Operator, Inc. and PJM Interconnection, L.L.C., Article IX (Dec. 11, 2008) ("MISO-PJM JOA").

sponsors) in the SERC Reliability Corporation region, which are also neighbors to MISO.<sup>45</sup> MISO's coordinated planning agreements with SERTP transmission planners are similar to its JOAs with SPP and PJM; however, the planning occurs directly with the SERPT sponsor.

Representatives of each SERTP sponsor and MISO staff meet at least once a year to discuss interregional coordination procedures and exchange and review their regional plans at least biennially.<sup>46</sup> If they identify a potential interregional transmission project that may be more efficient or cost-effective than regional transmission projects, they must jointly evaluate the potential interregional transmission project.

#### Recent Interregional Transmission Planning Projects

In March 2020, MISO and SPP initiated a CSP study focused on economic evaluation of top congested seams flowgates identified in each RTO's respective regional planning process.<sup>47</sup> The CSP study ultimately did not recommend any new, jointly funded projects as no potential projects met the required benefit-to-cost ratios for both organizations. In late 2020, MISO and SPP began a year-long joint transmission study designed to identify transmission projects to address interconnection challenges.<sup>48</sup> The results of the study will be included in the MTEP21 Report; however, the MISO-SPP interregional transmission planning process has not led to any projects to date.

MISO and PJM conducted a long-term Interregional Market Efficiency Project study in 2018 and 2019 to address congestion along the MISO-PJM seam and evaluated ten interregional

The SERTP sponsors are: Duke Energy Carolinas LLC and Duke Energy Progress, Inc.; Kentucky Utilities Company and Louisville Gas and Electric Company; and Southern Company Services, Inc.

MISO, Attachment FF at X.A.-C.

<sup>47</sup> https://cdn.misoenergy.org/20200925%20MISO%20SPP%20IPSAC%20CSP%20Results477691.pdf.

<sup>48</sup> https://cdn.misoenergy.org/20210608%20SMWG%20Item%2005%20JTIQ%20Study%20Update557001.pdf.

proposals. 49 Based on the regional analysis and the total benefit-to-cost ratio for each proposal, both RTOs recommended the Bosserman-Trail Creek project. The Boards of both RTOs have approved the project and it is expected to move forward.<sup>50</sup> This is the only project the MISO-PJM interregional planning process has yielded so far.

#### Interregional Cost Allocation

MISO's current cost allocation methodologies with PJM, SPP, and SERTP are summarized in the following tables:

MISO-PJM Interregional Cost

Allocation			Cost Allocation Methodology	
roject Type	Description	. Project Requirements	RTO Project Share	MISO Cost Allocation
Targeted Market Efficiency Project (TMEP)	Alleviates historical M2M congestion in both RTOs	≤ \$20 million; In Service date by 3 <sup>rd</sup> Summer Peak after approval	Ratio of each RTO's expected congestion relief, adjusted by M2M settlement payments	MISO portion allocated to TPZs meeting minimum threshold using historical nodal load congestion contribution data
Interregional Market Efficiency Project (IMEP)	Reduces market congestion in both RTOs	Qualifies as MEP or MVP* in MISO and economic transmission enhancement or expansion in PJM	Ratio of each RTO's respective benefit calculations  MISO benefit calculation;  345 kV+: Uses all regional MEP benefits  <345 kV: Uses APC benefits only	345 kV+: MISO portion allocated the same as a regional MEP <345 kV: MISO portion allocated to benefiting CAZs by their respective APC benefits
Interregional Reliability Project (IRP)	Displaces reliability projects in either or both RTOs	Qualifies as BRP or MVP** in MISO and BRP in PJM	Ratio of avoided project costs in each RTO	Costs assigned based on the allocation of the applicable project category in MISO
Cross-Border Baseline Reliability Project (CBBRP)	Needed to efficiently meet reliability criteria	Qualifies as BRP in MISO or PJM	DFAX of RTO generation to respective RTO load	Wholly MISO: project is allocated like a BRP (100% to local TPZ);
Interregional Public Policy Project (IPPP)	Displaces public policy projects in both RTOs	Qualifies as MVP*** in MISO and economic or reliability project in PJM	Ratio of avoided project costs in each RTO	Costs assigned based on the allocation of the applicable project category in MISO

Note: Per the MISO-PJM JOA, projects that could qualify as an IRP and CBBRP will be cost allocated as an IRP

**⊘MISO** 

https://www.monitoringanalytics.com/reports/PJM State of the Market/2020.shtml.

Meeting Criteria 2 or 3
 Meeting Criterion 3

https://www.pjm.com/-/media/committees-groups/stakeholder-meetings/ipsac/20190920/20190920-ipsacpresentation.ashx.

## **MISO-SPP Interregional Cost** Allocation

		Cost Allocation Methodology		
Project Type	Description and Requirements .	RTO Project Share**	MISO Cost Allocation	
Reliability	Necessary to meet NERC reliability criteria; Displaces reliability projects in both RTOs	Avolded Cost	MISO portion allocated to local TPZ(s)	
Economic	Project that alleviates market congestion in both RTOs	Ratio of each RTO's respective APC benefit calculations	230 kV+: MISO portion allocated the same as a regional MEP  <230 kV: MISO portion allocated to local TPZ(s)	
Public Policy	Displaces public policy projects in both RTOs	Avoided Cost	Costs assigned based on the allocation of the applicable project category in MISO	



<sup>\*</sup>Refers to the *primary* project driver
\*\*Refers to benefits identified by the *primary* project driver; All project types may include APC and Avoided Cost benefits

# MISO-SERTP Interregional Cost Allocation

,	Cost Allocation	Methodology
Project Type	Description and Requirements RTO Project Share	
MISO-SERTP Interregional Project	Displaces a reliability, economic or public policy driven project(s) and meets the following requirements:  Interconnects to transmission facilities in both SERTP and MISO regions Combined B/C ratio ≥ 1.25*  Meets criteria for inclusion in the respective regional plans	Costs assigned based on the allocation of the avoided regional project

<sup>\*</sup>Benefits are quantified by the total avoided cost of projects displaced by the interregional project

**○MISO** 

## Consideration of the Impact of Local Generation Investment in the Interregional Planning Process

The JOAs require the RTOs to share power flow models for projected system conditions for the planning horizon that include, among other things, planned generation development. While the JOAs do not have a formal process to consider planned generation as part of the overall interregional planning process, they have used this information in previous CSP studies. In addition, the JOAs require the parties to identify generator interconnection requests that may negatively affect the other party's system when conducting system impact studies of new

interconnection requests in their respective interconnection queues.<sup>51</sup> When a potential issue is identified, the parties must conduct a coordinated study to determine the extent of the impact. If the study identifies constraints that require infrastructure additions for mitigation, the JOAs permit the affected party to perform its own analysis. The direct connect system must identify necessary upgrades in the system impact study it prepares for the interconnection customer. The direct connect system must collect from the interconnection customer the costs incurred by the affected RTO and forward the funds.

In their 2020 CSP study, MISO and SPP considered several projects that would have increased the north to south flow on the Iowa/Nebraska border.<sup>52</sup> The study identified future wind generation in the north as one of the main drivers of congestion. While several projects reduced congestion, they were ultimately rejected because they did not meet the MISO benefit-to-cost threshold.

#### Proposed Changes in the Interregional Planning Process and Cost Allocation

There are currently no proposals under consideration to change any of MISO's interregional planning processes or cost allocation methods; however, FERC has ruled on proposed changes in recent years. In July 2019, FERC approved changes to the MISO-SPP interregional planning process to eliminate the use of a joint model, enabling the two RTOs to determine their own assessment of benefits.<sup>53</sup> In March 2020, FERC rejected MISO's proposal to change its tariff to provide a cost allocation method for its share of the cost of certain interregional transmission

MISO-SPP JOA at 9.4 and MISO-PJM JOA at 9.3.3.

<sup>&</sup>lt;sup>52</sup> SPP-MISO 2020 CSP at 7.

Midcontinent Independent System Operator, Inc. Southwest Power Pool, Inc., 168 FERC ¶ 61,018 (July 16, 2019) at P 5.

projects with PJM.54

8. The Commission seeks comments regarding any factors limiting benefits to Entergy Mississippi whether and to what extent additional transmission investments would be required for Entergy Mississippi to participate in alternative regional pooling arrangements, such as SEEM.

As discussed above, the SEEM proposal is intended to utilize the existing transmission infrastructure of its participants. Thus, no additional transmission investment should be required to participate in SEEM. However, SEEM will not be a regional pooling arrangement; it will be a trading platform for short-term, bilateral transactions for non-firm energy utilizing existing unused transmission capacity.

Beyond MISO, EML does not currently have a physical tie with any entities that participate in a non-affiliated regional pooling arrangement. That said, as EML notes above, Congress is currently considering legislation that would require all public utilities to place transmission facilities under the control of an ISO/RTO.<sup>55</sup> If EML were to leave MISO only to be required by federal law to return to an RTO several years later, it would incur the costs associated with leaving MISO, and then returning to MISO or another RTO.

9. The Commission seeks comments regarding whether there any identifiable "deal breaker" events or categories of events that would make it unreasonable or cost-prohibitive for Entergy Mississippi to be an RTO member.

Midcontinent Indep. Sys. Operator, Inc., 170 FERC ¶ 61,242 (2020).

<sup>&</sup>lt;sup>55</sup> CLEAN Future Act, H.R. 1512, Sec. 220, 117th Congress (2020-2021) (pending before Congress).

EML presented an analytical framework in the May 12 Report that compared the projected cost of membership in MISO to the projected benefits of membership to assess whether benefits sufficiently exceeded costs to justify a decision to join MISO. EML employed a similar analytical framework in the 2017 Report and applied it on an historical basis annually to confirm that MISO membership has yielded net benefits and is expected to continue to do so. While EML cannot identify any specific event or series of events that would make it unreasonable or cost-prohibitive to maintain its membership in MISO, if a situation presented itself where EML quantified a net cost or other critical risk associated with MISO membership, and that circumstance was not viewed as anomalous or expected to change going forward, EML believes it would be appropriate to conduct a thorough analysis to assess whether continued MISO membership is in the best interest of its customers. The Commission has the authority under its order issued in response to the 2017 Report to direct such an analysis consistent with the terms of that order.

This the 28<sup>th</sup> day of June 2021.

ENTERGY MISSISSIPPL-LLO

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ALICIA S. HALL

SENIOR COUNSEL

ENTERGY SERVICES, LLC

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ATTORNEYS FOR ENTERGY MISSISSIPPI, LLC

#### RP 6.111 CERTIFICATE OF SERVICE

I, Alicia S. Hall, Attorney for Entergy Mississippi, LLC, hereby certify that on this day filed electronically the above and foregoing Comments with:

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and that on this day I have delivered via electronic mail a copy of the above and foregoing Comments to:

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and that, in the filing of the foregoing, I have complied with Rule 6 of the Commission's Public Utilities Rules of Practice and Procedure, in accordance with the Commission's March 12, 2020 Order Temporarily Suspending Rules and Encouraging Use of the Commission's Electronic Filing Systems.

This the 28<sup>th</sup> day of June 2021.

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## BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSISSIPPI

#### MISSISSIPPI PUBLIC SERVICE COMMISSION

**DOCKET NO. 2021-AD-52** 

IN RE:

ORDER ESTABLISHING DOCKET TO INVESTIGATE THE MEMBERSHIP OF ENTERGY MISSISSIPPI, LLC IN THE MIDCONTINENT INDEPENDENT TRANSMISSION OPERATOR

# MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.'S RESPONSES TO COMMISSION'S REQUESTS IN ORDER ESTABLISHING DOCKET

COMES NOW the Midcontinent Independent System Operator, Inc. ("MISO") and submits its comments and responses to the requests made by the Mississippi Public Service Commission ("Commission") beginning with Paragraph 5 through Paragraph 10 in its *Order Establishing Docket* filed in the above captioned proceeding on April 6, 2021, as follows:

- 1. MISO is an independent, not-for-profit regional transmission organization ("RTO") that delivers safe, cost-effective electric power across 15 U.S. States and the Canadian province of Manitoba. MISO is committed to the reliable, non-discriminatory operation of the bulk power transmission system and collaborating with all stakeholders to create cost-effective and innovative solutions for the changing industry.
- 2. On April 6, 2021, the Commission entered an Order Establishing a Docket to Investigate the Membership of Entergy Mississippi, LLC ("Entergy Mississippi") in the Midcontinent Independent Transmission Operator. In that order, the Commission invited MISO to become a party to this proceeding and to submit testimony or comments on the issues raised therein.
- 3. MISO appreciates the opportunity to submit the comments and information herein. As the Commission is aware, Entergy Mississippi's membership in MISO has resulted in significant cost savings and other related benefits. From 2014 to 2018, Entergy Mississippi and the Commission reported significant savings associated with Entergy Mississippi's membership in MISO and its participation in MISO's centralized wholesale electricity markets.<sup>1</sup>
- 4. On July 2, 2018, the Commission considered Entergy Mississippi's continued membership in MISO and determined that Entergy Mississippi's continued membership in MISO would deliver significant benefits to Mississippi rate payers.<sup>2</sup>
- 5. The following information provides an overview of MISO, its markets and services and MISO's value proposition:

<sup>&</sup>lt;sup>1</sup> Entergy Utility Customers Realize Significant Benefits After 5 Years as MISO Member, Entergy Newsroom, <a href="https://www.entergynewsroom.com/news/entergy-utility-customers-realize-significant-benefits-after-5-years-as-miso-member/">https://www.entergynewsroom.com/news/entergy-utility-customers-realize-significant-benefits-after-5-years-as-miso-member/</a> (Dec. 16, 2019).

<sup>&</sup>lt;sup>2</sup> Mississippi Public Service Commission Docket No. 2017-UA-189.

<u>Value Creation for Mississippi Members and Ratepayers:</u> Through participation in MISO, Entergy Mississippi is part of a large pool of generating facilities stretching across the large footprint of MISO. The benefits provided by MISO membership of enhanced reliability and more efficient use of the region's existing transmission and generation assets allow Entergy Mississippi to maintain reliability while passing the resulting savings along to customers. Ultimately, the delivered cost of energy and long-term benefits for customers have yielded significant savings over the years of Entergy Mississippi's membership in MISO. Prior press releases from Entergy discuss the results of Entergy Mississippi's cost/benefit analysis, which show these customer savings calculated by Entergy from their first 5 years of membership in MISO. These press releases can be found at: <a href="https://www.entergynewsroom.com/news/entergy-utility-customers-realize-significant-benefits-after-5-years-as-miso-member/">https://www.entergynewsroom.com/news/entergy-utility-customers-realize-significant-benefits-after-5-years-as-miso-member/</a>.

North America's Largest RTO / ISO: MISO is the primary RTO/ISO in the central portion of the North American continent spanning from the Gulf of Mexico in the South to Canada's Hudson Bay in the North, then, from the Great Lakes and Appalachian foothills in the East to the open prairies West of the Mississippi River. This footprint represents a diverse operating network with diversity in energy policy, structure of state and local governments, and interpretation of federal laws and implementation of regulations by individual stakeholders. MISO and its leadership engage with various stakeholders across the footprint in order to reconcile diverging styles into a unified approach to bulk electric grid operations.

World Class Energy Market: MISO's leadership is responsible for overseeing one of the world's largest energy market platforms for matching the supply and demand of energy. Providing independent, equal, and non-discriminatory access to the electric transmission system is a core function of MISO, as the largest RTO by geographic footprint. Since 2005, MISO has provided financially binding day-ahead and real-time pricing of energy. MISO Markets include a Financial Transmission Rights Market, a Day-Ahead Market and a market for operating reserves and regulation. Overall, MISO managed more than \$22 billion in transactions in 2020 on behalf of 471 Market Participants who serve approximately 42 million people.

<u>Outstanding Operations:</u> MISO's efficient market operations ensure and support increased grid reliability. MISO operators are responsible for the supervision of more than 65,800 miles of transmission lines and nearly 7,000 generating units with a market Generation Capacity of 184,287 MW and a reliability Generation Capacity of 198,933 MW. This requires coordination with 128 Non-Transmission Owners, 58 Transmission Owners and 38 Local Balancing Authorities.

MISO operators efficiently and reliably operate the bulk electric grid through optimized transmission utilization, allowing market transparency, eliminating pancaked transmission rates, and centralizing unit commitment and dispatch. MISO engineers plan and coordinate with peer organizations and members to ensure seamless operations across MISO's footprint as well as the rest of the North American continent. This includes the outage coordination team who ensures that the right generators and transmission lines are online at the right time.

Stakeholder Engagement and Customer Service: Thought diversity and collaboration are essential to MISO as the most reliable, value-creating RTO. To enable broad stakeholder participation, MISO hosts meetings in all three of its locations and provides dial in and WebEx access. A stakeholder can be a Member, Market Participant, government or regulatory official, or anyone who is interested in learning more about MISO.

The formal stakeholder process requires a dedicated team of professionals focused solely on engaging with a variety of stakeholders in a meaningful way. All of MISO's business units are involved in the stakeholder process and the relationships among MISO stakeholders are key to the decision-making process. MISO prioritizes consistent engagement with these groups to encourage constructive dialogue. The dialogue is with a full understanding and sensitivity to diverging views, positions, and arguments in an effort to provide an opportunity for continuous improvement for all stakeholders throughout the MISO territory and footprint. Many topics have been discussed and developed through a collective stakeholder process and many voices of stakeholders have been heard that have made meaningful and impactful changes during the process. The MISO South retail regulators have provided impactful feedback during stakeholder discussions that has helped MISO craft numerous initiatives, such as TMEP modifications to generation nodes <sup>3</sup>, the elimination of the Market Efficiency Project ("MEP") postage stamp concept in the cost allocation structure <sup>4</sup>, the cost allocation modifications and cooperation with respect to the certain transmission projects <sup>5</sup>, cooperation for withdrawal of certain transmission projects concerning benefit examination <sup>6</sup>, as well as sensitivity to projects and the seams and the benefits thereof.

These relationships go far beyond the MISO-facilitated stakeholder meetings. MISO leadership and employees participate in industry events to engage with regulators, entrepreneurs, academics, and other thought-leaders in order to enhance MISO's strategic vision. This level of engagement requires precise coordination.

<u>Value Proposition:</u> With growing energy demands throughout MISO's footprint, MISO's services help ensure reliable, least-cost delivered energy. MISO's Value Proposition documents how MISO unlocks billions in annual benefits for the region. In 2020, those efforts provided between \$3.1 billion and \$3.9 billion in regional benefits, driven by enhanced reliability, more efficient use of the region's existing transmission and generation assets, and a reduced need for new assets. MISO's Value Proposition affirms MISO's core belief that a collective, regionwide approach to grid planning and management delivers the greatest benefits. MISO's landmark

<sup>&</sup>lt;sup>3</sup> Reevaluating TMEP Regional Cost Allocation Methodology, MISO, <a href="https://cdn.misoenergy.org/20180419%20RECBWG%20Item%2003%20TMEP%20Reevaluation176834.p">https://cdn.misoenergy.org/20180419%20RECBWG%20Item%2003%20TMEP%20Reevaluation176834.p</a> df (Apr. 19, 2018).

<sup>&</sup>lt;sup>4</sup>Review of Postage Stamp Cost Allocation, MISO,

https://cdn.misoenergy.org/20170216%20RECBWG%20Item%2007%20Postage%20Stamp%20Review90253.pdf (Feb. 16, 2017).

<sup>&</sup>lt;sup>5</sup> FERC Docket No. ER18-364-000.

<sup>&</sup>lt;sup>6</sup> Waterford – Churchill 230kV Economic Project Withdrawal, MISO, https://cdn.misoenergy.org/20201009%20STSTF%20Waterford%20-

<sup>%20</sup>Churchill%20230kV%20Economic%20Project%20Withdrawal482098.pdf (Oct. 9, 2020).

<sup>&</sup>lt;sup>7</sup> MISO Value Proposition 2020: Detailed Calculation Description, MISO,

https://cdn.misoenergy.org/2020%20MISO%20Value%20Proposition%20Calculation%20Details521882.pdf.

analysis serves as a model for other grid operators and transparently communicates the benefits in MISO's operations.

MISO works every day to create value for its members. The value MISO adds became apparent shortly after the energy-only market began in 2005. To quantify this value, MISO – in collaboration with its stakeholders – created the MISO Value Proposition in 2007. The Value Proposition breaks MISO's business model into recognized categories of benefits and calculates a range of dollar values for each defined category. From 2007 through 2020, the Value Proposition studies revealed that MISO provided the region an estimated \$30 billion in cumulative net benefits.<sup>8</sup>

<u>Proven, Experienced Leadership:</u> The MISO Operating Committee consists of the organization's twelve senior leaders. They are responsible for serving stakeholders – ranging from Market Participants, to government regulators, to household energy consumers. To do so effectively, MISO's leadership team retains deep expertise in their respective business units but also remains conversant in other aspects of MISO's operations. The dedication of the executive team to continuous strategic planning ensures that MISO delivers on its cornerstones of Customer Service, Effective Communication, and Operational Excellence.

MISO's leadership represents more than 255 years of combined experience. While most of this experience is concentrated within the energy industry, the Operating Committee represents a diverse team of seasoned leaders within the RTO/ISO field and their own specific areas of focus. MISO Operating Committee members serve the energy industry in a multitude of ways while representing the needs and interests of our employees and stakeholders. This service involves countless hours of travel in order to have personal interaction with as many stakeholders as possible. Through fostering leadership within MISO, the Operating Committee ensures effective management of the organization as well as stewardship of the region's electric transmission system.

6. MISO provides the following additional comments on docket items not addressed in the above statements.

<sup>8</sup> *Id*.

#### **REQUEST NO.: 5.a.**

MISO's evolving transmission planning and cost allocation methodologies; including, but not limited, to MISO's assumptions about future generation resource portfolios and assumed increased demand tied to the electrification.

RESPONSE:	See below ⊠	See attached	
RESPONSE DATE:	June 28, 2021		

MISO's Response to the Reliability Imperative focuses on preparing the region for industry transformation as the grid evolves toward the retirement of legacy resources and the increased deployment of renewable resources. As a critical part of this effort, Long Range Transmission Planning ("LRTP") holistically considers the needs of the MISO footprint and identifies transmission that will be needed to maintain system reliability. The LRTP approach is not new to MISO. LRTP was established more than 10 years ago as a forward-looking process that considers the needs and opportunities for grid expansion and is more commonly referred to by MISO as value-based planning. LRTP employs a seven-step process that starts with the creation of the future scenarios and ends with the recommendation of a specific project for the MISO Transmission Expansion Plan ("MTEP") Appendix A, along with an associated cost allocation mechanism for the recommended project. Step 1 of the LRTP process – Futures Development – was recently completed after an 18-month collaboration between MISO and stakeholders on the broad range of projected scenarios for the industry. Going forward, MISO will iterate with stakeholders on recommended solutions to ensure the system is planned to be reliable, resilient, and efficient in the near-term as well as the distant future. Recommended solutions resulting from the LRTP process will be included in future MTEP cycles as they are identified, vetted with stakeholders, and have demonstrated the projects meet established criteria.

In further support of the above response, MISO respectfully directs the Commission to the information contained in the links below:

- 1. MISO's Long-Range Transmission Planning:
  <a href="https://www.misoenergy.org/planning/transmission-planning/long-range-transmission-planning/">https://www.misoenergy.org/planning/transmission-planning/long-range-transmission-planning/</a>
- 2. MISO's Futures Report: https://cdn.misoenergy.org//MISO%20Futures%20Report538224.pdf
- 3. MISO's Futures Development: https://www.misoenergy.org/planning/transmission-planning/futures-development/
- 4. MISO's Renewable Integration Impact Assessment Report: https://cdn.misoenergy.org/RIIA%20Summary%20Report520051.pdf
- 5. MISO's Reliability Imperative:
  <a href="https://www.misoenergy.org/about/miso-strategy-and-value-proposition/miso-reliability-imperative/">https://www.misoenergy.org/about/miso-strategy-and-value-proposition/miso-reliability-imperative/</a>

#### **REQUEST NO.: 5.b.**

Potential changes to generator accreditation, transition to a seasonable capacity auction, implementation of novel untested market design changes including Available Capacity (ACAP), raising the administratively determined Value of Lost Load (VOLL) to \$10,000/MWh (particularly in light of the excessive prices of natural gas and electricity observed during the February 2021 Polar Vortex.), MISO's application of VOLL to certain de-energized load busses during force majeur events (e.g., hurricanes) resulting in unreasonably high "uplift costs" and MISO's proposal to revise the recovery of those uplift costs so that they are paid only by the subregion of MISO affected by the force majeure event, and other repercussions that may result from MISO's Resource Adequacy and Need (RAN) initiative.

RESPONSE: See below  $\boxtimes$  See attached  $\square$  RESPONSE DATE: June 28, 2021

As MISO prepares the region for a future with a different risk profile driven by high renewable penetration and increasingly-frequent extreme weather events, alignment of Resource Adequacy Requirements with reliability risk is critical. MISO has engaged with stakeholders discussing Resource Availability and Need ("RAN") for several years. Key focus areas for 2020 and 2021 have been communicated at numerous forums, including the Markets Committee of the Board of Directors, the Resource Adequacy Sub-Committee, the Market Subcommittee, and the Organization of MISO States. Resource Adequacy changes are being driven by defining system reliability needs and capabilities, as discussed in MISO's August 2020 paper Changing Reliability Requirements for an Evolving Fleet. MISO is continuing to discuss the appropriate Resource Adequacy construct for the region taking into account increases in renewable resource penetration, extreme weather events and maximum generation emergencies in recent years. To address these issues, MISO has discussed with stakeholders a transition from an annual capacity auction to seasonal capacity auctions and related revisions to resource accreditation rules necessary to ensure resources are available when needed. While certain details of MISO's Resource Availability and Need construct are still being discussed with stakeholders, MISO expects to file changes to its Tariff to incorporate a more holistic RAN solution in the second half of 2021.

Another key focus area in MISO's Response to the Reliability Imperative has been to improve emergency and scarcity pricing, ensuring market prices better reflect underlying system conditions. MISO recently received approval from FERC on its 2020 emergency pricing filing (ER21-700-001) and completed its evaluation of scarcity pricing. MISO set its current Value of Lost Load ("VOLL") to \$3,500/MW over 10 years ago and completed a review of alternative methodologies for updating the value. The Independent Market Monitor has recommended updating VOLL to a higher value, including reconfiguring the Operating Reserve Demand Curve for several years. The Scarcity Pricing initiative has been a MISO, IMM, and stakeholder priority and has adjusted scope in response to Hurricane Laura, the February Arctic event and associated concerns voiced by stakeholders regarding the events' market outcomes. As a result, MISO has prioritized issues related to the use of VOLL pricing during capacity and transmission emergencies, the application of VOLL to de-energized nodes, also known as dead busses, and the allocation of uplift associated with de-rated transmission capacity, including de-rates and

emergencies caused by force majeure events. Discussions of these issues, solutions and timelines continue at MISO's stakeholder forums.

MISO's continued work on price formation and resource adequacy align with MISO's Market Vision Guiding Principle of supporting Market Participants in making efficient operational and investment decisions. Through continued enhancements to pricing and resource adequacy requirements, MISO seeks to better incentivize Market Participants, including vertically integrated utilities, to make efficient operational and investment decisions in both the short- and long-run. Short-run market efficiency generally involves resources operating according to their marginal cost. In the case of vertically integrated utilities, prices that accurately reflect system conditions provide a signal on when to utilize their own resources and when to make market purchases when more economic. In the long-run, market price signals and resource adequacy requirements incentivize optimal investments in upgrading, maintaining and building new capacity. As a result, vertically integrated utilities benefit from efficient market pricing through providing a mechanism to optimally utilize their resources.

#### **REQUEST NO.: 5.c.**

The categories and relative magnitude of benefits and costs associated with RTO membership, including:

- i. Wide area economic commitment and generation resource dispatch;
- ii. Effects on the quality and cost of required capacity reserves;
- iii. Effects on the quantity and cost of operating reserves;
- iv. The value of transmission planning functions performed by MISO;
- v. Effects on local electric system reliability;
- vi. Effects of MISO Interconnection Queue project application management.

RESPONSE: See below ⊠ See attached □ RESPONSE DATE: June 28, 2021

For information regarding the benefits and costs associated with RTO membership, including the value drivers of improved reliability, more efficient use of existing assets, and reduced need for additional assets, please refer to the Value Proposition page of the MISO website which can be found at the following link: <a href="https://www.misoenergy.org/about/miso-strategy-and-value-proposition/miso-value-proposition/">https://www.misoenergy.org/about/miso-strategy-and-value-proposition/</a>

MISO manages the Generator Interconnection Queue process for all of the MISO footprint by administering Attachment X – Generator Interconnection Procedure – of the MISO Tariff. These Tariff provisions outline the non-discriminatory manner in which MISO studies requests to connect to the MISO transmission system; including the MISO transmission system in Mississippi owned by Entergy Mississippi and Cooperative Energy. There have been fifty-one projects submitted for connection to the MISO transmission system in Mississippi over the last five years representing 8,496MW. Fourteen of those projects are still under study and represent 2,091 MW in the queue. Eleven projects have been studied and are now under a Generator Interconnection Agreement representing approximately 956MW. This information is publicly available on the MISO website at the following link: <a href="https://www.misoenergy.org/planning/generator-interconnection/GI\_Queue/gi-interactive-queue/">https://www.misoenergy.org/planning/generator-interconnection/GI\_Queue/gi-interactive-queue/</a>.

Along with managing the Tariff requirements associated with queue administration, MISO also manages the NERC compliance associated with FAC-002-2 Facility Interconnection Studies.

#### **REQUEST NO.: 6**

The Commission seeks comments regarding whether Entergy Mississippi and its customers would enjoy greater net benefits and be exposed to less risk in an alternative operational environment, including, but not limited to, joining the newly formed Southeast Energy Exchange Market SEEM).

RESPONSE: See below ☑ See attached □ RESPONSE DATE: June 28, 2021

Please see the following MISO comments to FERC regarding the Southeast Energy Exchange Market which can be found at the following link: <u>FINAL MISO SEEM Filing Comments531875.pdf (misoenergy.org)</u>

#### **REQUEST NO.: 7.**

The Commission seeks comments regarding factors that may limit Entergy Mississippi's access to benefits from continued membership in MISO, including:

- a. The effects of limited transmission capacity (physical and contractual) between MISO South and the rest of the MISO system;
- b. The effects of existing and future planning and cost allocation procedures on potential transmission investments to expand interregional transmission capability, including accounting for economic impacts of local generation investment.

RESPONSE: See below ⊠ See attached □
RESPONSE DATE: June 28, 2021

7a.)

MISO continues to evaluate opportunities to cost-effectively increase the transfer capability in the MISO system. As part of the Market Congestion Planning Study completed in 2020, MISO included a focus area evaluating transmission projects to increase the transfer capability between MISO Midwest and South. While several transmission projects were evaluated the study concluded without recommending a transmission project for approval by the MISO Board of Directors. A summary of the study is available at the following link: <a href="https://cdn.misoenergy.org/20200527%20MCPS%20TSTF%20Item%2003%20North-South%20Interface448455.pdf">https://cdn.misoenergy.org/20200527%20MCPS%20TSTF%20Item%2003%20North-South%20Interface448455.pdf</a>

As part of the Long-Range Transmission Planning process MISO will continue to evaluate cost-effectively increasing the transfer capability between the MISO Midwest and South.

7b.)

In 2020, MISO completed the most recent iteration of the MISO-SPP Coordinated System Plan Study. This study did not result in approved MISO-SPP interregional transmission projects. The final 2020 study report is available at the following link: <a href="https://cdn.misoenergy.org/20210326%20MISO%20SPP%20IPSAC%202020%20SPP-MISO%20CSP%20Report530782.pdf">https://cdn.misoenergy.org/20210326%20MISO%20SPP%20IPSAC%202020%20SPP-MISO%20CSP%20Report530782.pdf</a>

MISO and SPP plan to begin discussions in late 2021 on a potential interregional process to identify interregional transmission projects focused on addressing chronic areas of congestion resulting in market-to-market settlements. Additional information responsive to this request can be found at the following link:

https://www.misostates.org/images/stories/meetings/Seams\_Liaison\_Committee/2021/RSC\_Final\_Recommendations\_for\_SLC.pdf

The limitation on the transmission capacity between MISO South and the rest of the MISO system is largely contractual but yet subjective as to physical transfer limitation. With MISO membership, Entergy Mississippi has access to benefits provided by the sharing of all transmission capacity, including the physical and contractual capacity, within MISO South and between MISO South and the rest of the MISO System. These include, but are not limited to: (1) Access to

purchase lower cost economic energy imports of up to 3,000 MW from MISO North and Central, as well as from other resources in MISO South, without procuring additional Transmission Service; (2) Access to sell economic energy exports of up to 2,500 MW to MISO North and Central, as well as to execute market or bilateral sales in MISO South, without procuring additional Transmission Service; (3) Access to procure capacity from bilaterally from Resources in MISO South or MISO North and Central, or making purchases of Zonal Resource Credits in the Planning Resource Auction without procuring additional transmission service; and (4) Significantly reduced cost of Operating and Contingency Reserves which are shared across the MISO footprint, and associated compliance costs.

#### **REQUEST NO.: 8.**

The Commission seeks comments regarding any factors limiting benefits to Entergy Mississippi whether and to what extent additional transmission investments would be required for Entergy Mississippi to participate in alternative regional pooling arrangements, such as SEEM.

RESPONSE: See below ⊠ See attached □ RESPONSE DATE: June 28, 2021

MISO's Tariff and the Transmission Owner Agreement ("TOA") provide a process for exiting membership in MISO which includes a calculation regarding the cost of exiting the system. The MISO Transmission Owners Agreement can be found at the following link: <a href="https://docs.misoenergy.org/legalcontent/Rate\_Schedule\_01\_">https://docs.misoenergy.org/legalcontent/Rate\_Schedule\_01\_</a>Transmission Owners Agreement.pdf

### **REQUEST NO.: 9.**

MISO's evolving transmission planning and cost allocation methodologies; including, but not limited, to MISO's assumptions about future generation resource portfolios and assumed increased demand tied to the electrification.

RESPONSE: See below oximes See attached oximes

RESPONSE DATE: June 28, 2021

MISO does not have any comments regarding this item at this time.

### **REQUEST NO.: 10.**

The Commission seeks comments from Entergy Mississippi, MISO, other MISO members, other RTOs (e.g., Southwest Power Pool), the utilities involved in developing SEEM, and any other interested stakeholder.

RESPONSE: See below ⊠ See attached □
RESPONSE DATE: June 28, 2021

For MISO comments regarding the Southeast Energy Exchange Market ("SEEM"), please see the comments on docket item #6.

Respectfully submitted, this 28th day of June 2021.

Midcontinent Independent System Operator, Inc.

By: Butler Snow LLP

MEADE W. MITCHELL

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## **CERTIFICATE OF SERVICE**

- I, Meade W. Mitchell, counsel for Midcontinent Independent System Operator, Inc. do hereby certify that in compliance with Rule 6.121(2) of the Commission's Public Utilities Rules of Practice and Procedure:
- (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
  - (2) An electronic copy of the filing has been served via e-mail to the following:

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(3) A copy of the filing has been served via U. S. Mail, to the following:

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This the 28th day of June 2021.

Meade W. Mitchell