State Regulatory Sector Response
March 2019 AC Hot Topic

Seams

1. When considering historical and currently active seams initiatives, are there solutions that haven’t met your expectations in the areas of 1) planning and/or 2) markets/operations, such as getting transmission built in order to achieve price convergence?

Expectations in planning and/or markets and operations can depend on multiple factors, such as experience with MISO seams processes and whether the party is located near a MISO seam. Expectations of different states\(^1\) within the State Regulatory Sector may vary because of these and other factors.

**Interregional Planning**

a. Interregional Planning issues across multiple MISO seams

States have discussed concerns related to the modeling used in MISO’s interregional planning efforts. Some states recommended looking at the correlation between MISO-SPP interregional planning efforts in 2014 and 2016 and the actual congestion experienced along the MISO-SPP seam in 2016/2017. Other states believe that improving the accuracy of this modeling may be more important than improving the transmission planning efforts themselves.

The OMS remains concerned about the misalignment of each RTO’s transmission planning cycles. The OMS continues to believe it is beneficial to reduce the incompatibilities among the various regional and interregional processes and facilitate concurrent regional and interregional planning of projects, both within MISO and among RTOs, would help the interregional planning and project approval processes better meet expectations.

Some states believe that there is benefit in exploring solutions in the interregional planning processes other than solutions to individual flowgates, similar to how MISO considers and evaluates solutions within its regional processes. To achieve such implementation, MISO may have to fold in existing holistic regional planning processes into the interregional process, be willing to consider a combination of interregional needs in the interregional planning process, or better coordinate addressing of interregional concerns during any holistic regional planning process.

Some states believe the interregional planning approval process has not met expectations. For example, the “triple hurdle” of needing to have an interregional transmission project approved through an interregional planning process and two separate regional planning processes has been previously cited by the OMS as an impediment to efficient interregional transmission planning.\(^2\) This third hurdle of a separate interregional process requirement may be removed on the MISO-SPP seam in an expected March 2019 tariff filing.

Some states would prefer to wait through at least one planning cycle to assess the results of the expected removal of the triple hurdle and other recent changes to MISO’s coordinated system study process with

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\(^1\) Throughout this document the term “states” should be understood to include the member states of the Organization of MISO States (“OMS”), the City of New Orleans, and the province of Manitoba in Canada.

SPP (e.g., the elimination of the joint model and the $5 million project threshold) before implementing additional incremental changes to the interregional planning processes.

b. Interregional planning across specific seams:
   i. MISO-PJM Seam

Some states view the MISO-PJM interregional planning process, including the Targeted Market Efficiency Projects (TMEPs) and the “Quick Hits” process used to identify needs along the MISO-PJM seam, as a successful process that they would like to replicate or adapt for other seams.

   ii. MISO-SPP Seam

To date, interregional planning efforts related to the MISO-SPP seam have resulted in the identification of issues along the seam, and have focused solely on economic needs and have not focused on reliability concerns. Some OMS members view these efforts as having done a poor job of identifying and implementing transmission solutions, even when benefits were shown to both RTOs, and see the potential use of the TMEP process that was developed for the MISO-PJM seam as an opportunity to have the MISO-SPP interregional planning efforts better meet expectations.

Other states do not view the lack of transmission development to date as evidence of a flawed interregional planning process along the MISO-SPP seam.

   iii. MISO and non-RTO seams

To date, MISO has focused the majority of its seams initiatives on RTO seams with PJM and SPP. Some states believe that MISO should increase attention to issues with its non-RTO seams neighbors. These states suggest that MISO could realize significant gains by focusing on the MISO-TVA seam and the MISO seams near Canada. In addition, recent emergency events in MISO have shown the importance of ensuring effective seams coordination with all neighbors, including non-RTO regions.

MISO has not shown the same amount of progress in its defined interregional planning process or Order No. 1000 process with its non-RTO neighbors as it has on the MISO-PJM seam. Many of MISO’s non-RTO neighbors are part of the Southeastern Regional Transmission Planning (SERTP) region, created specifically for compliance with FERC Order 1000 requirements. The interregional project requirements, cost allocation, approval process, and lack of review of issues also highlight the broken planning process that is difficult, has nearly insurmountable predefined cost allocations that must be met, and is often referred to as a “Triple Hurdle”. See Appendix for further references to this issue and its implications in relation to Order 1000.

Operations:

MISO should seek to resolve issues on non-RTO seams. For example, the use of Transmission Loading Relief procedure (TLR), or other congestion management processes, to manage flows between MISO and non-RTO seams neighbors is an issue that may introduce some reliability risk.

States have indicated that MISO’s emergency coordination efforts with its seams neighbors have not met expectations. There are questions as to whether MISO is using the Regional Directional Transfer between MISO North and MISO South appropriately during those emergencies. MISO should continue coordination and review efforts with its RTO and non-RTO seams neighbors to ensure reliability during emergency events or review more efficient coordination on this nexus to help avoid emergency events.
Interface pricing has been an issue that may have met expectations on the PJM seam, but perhaps not on the SPP seam. MISO’s interface pricing and emergency coordination efforts may not properly incentivize neighbors, be they RTOs, non-RTOs, or owners of generation within RTOs or non-RTOs, to sell energy to MISO during emergency situations. This issue has been raised in the ongoing OMS-SPP RSC seams initiative.

2. Where is it most important to have consistency in seams processes across RTO and non-RTO seams? What adverse impacts are created by the lack of consistency?

Uniformity in planning criteria, procedures, and cost allocation rules across the seams is not necessary to achieve efficiency and equity, and should not be MISO’s objective. The OMS believes that MISO does not need to apply standard processes across the seams with MISO’s various neighboring regions.

Achieving uniformity across multiple seams is impracticable, if not impossible. The MISO region is: (i) large and diverse; (ii) has multiple seams partners with very different planning processes; and (iii) sits in the middle of the Eastern Interconnection. Attempting to apply uniformity across MISO’s various seams would present unnecessary challenges and forcing a “one-size fits all” process across multiple seams could disrupt otherwise well-functioning regional processes.

Moreover, FERC has repeatedly recognized that regional differences are legitimate and has not required uniformity in RTO/ISO processes.3

That being said, the OMS has identified three potential areas for consistency in background approaches that may be applicable to all of MISO’s seams, provided customers on either side of the seam are not harmed by this consistency.

a. Affected System studies

As seen throughout various comments in the recent FERC Technical Conference related to this issue, coordination of affected system studies may be an opportunity for consistency that has wide stakeholder support. Inconsistency in this area can create problems with interconnection queues. While it is still important to respect regional components, such as modeling and interconnection processes, there may be an opportunity to create a general framework that would be applicable to each of MISO’s seams. Affected system studies could be better coordinated through the existing JOA agreements and further customized for each seam, if necessary.

b. Concurrent Planning

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3 See, e.g., Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, FERC Stats. & Regs., Regulations Preambles January 1991-June 1996 ¶ 31,036 (1996), order on reh’g, Order No. 888-A, FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 ¶ 31,048, order on reh’g, Order No. 888-B, 81 FERC ¶ 61,248 (1997), order on reh’g, Order No. 888-C, 82 FERC ¶ 61,046 (1998), aff’d in relevant part sub nom, Transmission Access Policy Study Group, et al. v. FERC, 225 F.3d 667 (D.C. Cir. 2000), aff’d sub nom. New York v. FERC, 535 U.S. 1 (2002). Order No. 888 laid the foundation for a competitive wholesale energy industry while also permitting variations for regional differences. Subsequent FERC orders, such as Order 1000 and Order 890, built on Order 888 and required the development of a regional transmission plan, but did not require MISO to have the same interregional processes and methods with each of its neighbors.
Consistency and standardization in interregional transmission planning is desirable but is certainly not necessary to achieve efficiency and equity. Standardization is probably more achievable for reliability project planning than planning for market efficiency or public policy needs. NERC sets out the minimum standards to meet reliability, and those govern the planning process. Consequently, transmission system modeling and assumptions for reliability projects should be nearly the same across MISO’s seams. MISO and its seams partners should strive to agree on a single model for the interregional planning of reliability projects. However, OMS recognizes that inherent regional differences may not make a single model practical but encourages MISO to pursue this ideal with its seams partners.

The OMS supports concurrent planning for regional and interregional projects, where practicable and cost effective.

Transmission planning needs to be neutral with respect to whether the solution is regional or interregional. There should not be any bias created one way or the other due to the planning process.

c. Emergency operating procedures

Emergency operating procedures are an area where it may be beneficial to have consistent standards, language, and procedures. Clarity and communication are key in any system emergency and they are particularly important when relying on energy from seams partners. While some seams partners have similar language and processes in their emergency procedures, there are still differences that may cause confusion in an emergency.

For example, MISO’s Emergency Event Step 1 dispatches all generation and economic DR throughout the constrained area.4 In contrast, PJM calls its procedures “actions” and dispatches the same resources across multiple steps in its emergency procedures.5

Without a common language and procedure, it is difficult to understand the severity of each RTO’s situation from the titles of these events or steps. At a minimum, operators in each control area should have a complete understanding of each RTO’s emergency procedures so they can adjust to changing situations quickly and easily. While the OMS is confident control room operators are the experts in their field, common terminology, language and procedures could reduce confusion in an emergency situation. This opportunity for consistency would also help other stakeholders quickly understand the ramifications of actions that each control area takes and respond accordingly.

3. How should MISO measure the benefits of seams improvements?

While seams projects may attempt to address various interregional issues, each project should seek to meet consumers’ needs reliably, economically, and efficiently. Following this line of thinking, a goal of seams projects should be that consumers on each side of the seam, whether served by an RTO or not, receive any benefit of reasonable costs associated with an interregional transmission project. "Consumers should receive consistent treatment of RTO membership, regardless of their location in relation to the seam.

One metric that is linked to this idea is more efficient dispatch. As conditions along the seams improve, MISO may gain access to additional, least-cost energy from its seams partners. This would reduce the

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overall cost of delivered energy, improve efficiency, and, particularly in shortage situations, improve reliability. This metric is highly relevant, and all of MISO could benefit from the ability to access additional, low-cost energy found in other regions. The goal of this metric should be to identify which projects, whether intra-RTO or an interregional seams project, will deliver energy to its destination at the least overall cost. At the same time, planners would need to take into account any applicable usage charges for each project type as well as clear cost allocation principles.

Cost allocation and creating an accurate benefit methodology is always a tricky issue, but a few general principles should apply. Cost allocation of interregional projects should be commensurate with benefits that accrue to either side. These benefits should be identified and found to be adequate by each regional process before moving forward with an interregional project. Any benefit measurement methodology should include a thorough and quantitative cost-benefit analysis so that it is clear to all parties involved. Purported costs and benefits must be supported by a strong business case, which remains strong across a number of different scenarios, and must not be speculative. Clarity and consistency, when possible, within the cost-benefit analysis will help head off future disagreements and help mutually beneficial interregional projects be built.

4. Given the significant impact of political and regional differences and each region’s focus on its own interests what approaches or actions may help drive greater collaboration and good faith efforts by all counterparties on seams matters?

The priority of any RTO should be given to regional members first, but there should always be an acknowledgement of the impacts and benefits that could come from neighboring systems. RTOs should be willing to explore benefits where they exist and work to improve issues in seams operations and planning as part of their own regular improvement processes.

Since political and regional differences are – for the most part – outside of an RTO’s control, actions from outside of the RTO will often be required to drive greater levels of collaboration on seams matters. Examples of this include the recent OMS/SPP RSC Seams Initiative; and FERC’s involvement, at the request of state commissions, to improve the MISO-PJM seam, for example the “Joint and Common Market” (JCM) process. These external drivers provide broader perspectives on the benefits to ratepayers that a membership-minded RTO may not have. State regulator interests are often broader than a single RTO. All but one state within the MISO footprint have jurisdictional utilities in multiple regions (either RTO or non-RTO) and are acutely aware of seams-related issues, the benefits of geographic diversity, and the differing needs and issues of each utility within its borders.
Appendix:

Background Information and implications of the Order 1000 process on Interregional Planning Issues with non-RTO neighbors:

The following is offered by some states as a way to possibly better meet expectations in the area of interregional planning.

In the recent past, there has been willingness of at least one of MISO’s non-RTO seams neighbors to go beyond the Order 1000 Southeastern Transmission Regional Planning (SERTP) interregional planning processes. One of MISO’s non-RTO seams neighbors and a member of SERTP, AECI, has a separate Joint Operating Agreement (JOA) with Southwest Power Pool (SPP). The SPP-AECI JOA has discrete interregional planning requirements, requiring SPP and AECI to perform interregional planning functions at least every other year. SPP and AECI utilized the results of their interregional planning to identify needs, develop solutions, and ultimately approve interregional projects in the southwest Missouri region in October 2018.

MISO should be encouraged to consider whether the Order 1000 interregional planning process with SERTP is ‘good enough’, or if MISO is willing to go beyond those requirements to provide the benefits of organized interregional planning with its non-RTO neighbors. SPP has demonstrated the ability to provide its members along the SPP-AECI seam the benefits of interregional planning through separate JOAs with non-RTO seams neighbors.