

State Regulatory Sector Response

December 2018 Hot Topic

Long-Term Regional Transmission Planning

Introduction

The OMS appreciates the opportunity to share our members' thoughts with MISO Board members and other stakeholders on this timely topic. The OMS has once again made Transmission Planning one of its annual strategic priorities for 2019. The focus will include engaging on the development of scope, key assumptions, and methodology for assessment of regional, coordinated, long-term transmission needs. Developing a strong business case with clarity regarding the models and underlying assumptions is critical to building strong and timely consensus around transmission plans.

Furthermore, while the OMS agrees that the transmission planning process should reflect any significant changes to the structure of the electric industry, the OMS cautions that MISO and stakeholders should be conscious of market and operations changes being considered through MISO's Resource Availability and Need (RAN) initiative. Transmission planning and the RAN should inform each other and future work should be coordinated and consistent.

QUESTIONS

- 1. What role does your sector believe new transmission will play to ensure continued reliability, market efficiency and resilience in the face of the evolving resource mix?*

The precise make-up of the future resource mix, where generation will be located, and the amount of load that will be served by that generation are all unknown factors. Transmission upgrades and new transmission will continue to serve as essential components of a reliable and efficient system, and the justification for new transmission projects will (and should) increasingly be based on economics, including the ability to enable a new resource fleet. The OMS believes that economic analysis should play a central role in shaping and justifying any future proposed transmission projects. Further, given the increased uncertainty in forecasted load and the rapidly changing capability and falling cost of new technologies, it will be necessary to build additional flexibility into the process.¹

The OMS maintains that current and existing reliability and resilience efforts by MISO, state and local regulators, MISO members, and the broader stakeholder community have ensured that the MISO region faces no imminent resilience concerns.² The existing transmission planning

¹ While OMS supports continuing to assess what existing or future policy drivers may exist, Mississippi, Louisiana, and the City of New Orleans do not believe any have been identified today.

² See, Comments of the Organization of MISO States, Docket No. AD18-7-000, at 3 (filed May 9, 2018) (available at: http://misostates.org/images/stories/Filings/FERC/2018/Comments_of_the_OMS_AD18_7.pdf.)

processes, along with the incremental evolution of that process throughout time, have contributed to a resilient system in our region.³ The OMS believes that transmission developed through this process will continue to contribute towards this goal in the future. Going forward, MISO should continue to focus on planning process implications of the changing resource mix. MISO has undertaken the RAN assessment and other focused studies in this area, and proper stakeholder review should be conducted to assess the potential incorporation of any findings into the MTEP process. As noted in the OMS's response to the June Hot Topic on Energy Supply Sufficiency, the OMS will continue engaging and working with MISO to examine and develop appropriate market mechanisms, if necessary, to accommodate a changing generation mix in a way that properly values and compensates resources for the attributes they contribute to grid management and operations.

2. *As we increase focus on planning for energy delivery in all hours of the year, what changes should MISO consider to its planning process?*

The OMS believes that MISO should consider incorporating some flexibility into the planning process rather than relying on fixed modeling results of system conditions that extend many years into the future. Some states in the MISO region have experienced increased reliance on intermittent resources and distributed generation, and have seen the impact of that reliance on the net load shape. Given the speed with which these resources can come online and/or impact net load shapes, the planning process should follow suit and incorporate more flexibility as well. Further complicating the matter, and supporting the need for flexibility, is the fact that many of the factors that influence the adoption of distributed resources fall outside of the traditional resource planning processes, and are also inherently hard to predict. Periodic updating of the longer-term forecasts might help mitigate the challenge of uncertainty.

To be clear, the OMS's comments regarding flexibility do not suggest adjusting the cost allocation methodology assigned to projects that have already been approved. Instead, the OMS is proposing that the planning process needs to be agile enough to account for quick shifts from either the load or the generation side. Regulators are especially focused on avoiding stranded investments. Ensuring the tools are in place to adapt transmission plans to new realities is critical to avoiding stranded assets, while recognizing that abandonment of a no longer economically justified project may be acceptable, if its abandonment is also justifiable.

MISO has already begun to implement changes that address some of the planning process gaps that have been identified to adopt an energy planning approach. For example, changes to the demand and energy forecasting approach have recently been proposed for the economic transmission planning process. MISO hosted a series of Energy Planning & Load Shape workshops to discuss how changes to Load Serving Entity (LSE) load forecast requirements, coupled with an Independent Load Forecast and demand-side resource study, would improve the planning process.⁴ The OMS generally supports the new approach and believes that the

³ The OMS continues to maintain that resilience efforts should remain focused on "limiting disruptions of service caused by the distribution system, and to a lesser extent the transmission system.") *Id.* at 12.

⁴ MISO Energy Planning & Load Forecast Workshop. (October 12, 2018.)

additional information that will be made available to MISO will help identify potential future transmission needs.

Given the rapidly evolving industry changes, and recognizing the changes MISO has already begun to implement, the OMS believes the planning process can be further improved. The transparency and clarity of MISO's forecasting models, especially the assumptions underpinning the alternative future scenarios, is critically important for MISO's stakeholder support. The OMS strongly encourages MISO to evaluate the most effective way to share its models and assumptions with the greatest degree of clarity and timeliness in order to allow stakeholders to more fully support projects on the front end. This process will be critical for robust business case development, providing a foundation for understanding the reasonableness. If these suggestions can be incorporated into the planning process, it should result in a more timely, collaborative and less confrontational planning process, allowing resulting projects to stand up against increasing uncertainty.

In addition, MISO recently created a structure to add new benefit metrics to the economic planning process in its tariff. The structure creates a clear pathway for new metrics to be considered within the stakeholder process for possible addition to the tariff. This process can be utilized in the future to ensure that benefits from transmission that are identified as the fleet continues to evolve are eligible for inclusion in the economic planning and evaluation process.

3. MISO has the most geographically diverse footprint of any RTO. Approval of a region-wide transmission plan will require agreement among stakeholders with a wide-ranging set of interests that the plan provides value to customers.

a) What areas of potential common ground, in terms of benefits or attributes of a region-wide transmission plan, should MISO explore?

MISO's ability to maintain or lower the planning reserve margin may provide stakeholders with common ground. Given that the ability to maintain lower planning reserves constitutes the largest portion of the MISO value proposition, any transmission plan that further increases this value (by decreasing the reserve margin) may find support from stakeholders. There are many changes being discussed within the Resource Availability and Need (RAN) process that are aimed at improving operational performance, given tighter reserve margins. Ensuring that benefits derived from transmission expansion planning are consistent with and complementary to the benefits used to justify changes to markets or operations will also be key to garnering stakeholder support.

Incorporating the costs of transmission investment into a comparison of total delivered energy costs will also be important in finding common ground. If it can be shown that the economics of new transmission coupled with new generation investment compares favorably to the marginal cost of other resources, then support for transmission will become relatively easier to find.

b) Other than changes to cost allocation, what else should MISO consider as it seeks to drive consensus around transmission plans?

As discussed earlier, developing and presenting a strong and robust business case at the earliest possible instance with clarity regarding the models and their underlying assumptions, is critical to building strong and timely consensus around transmission plans. MISO could verify that previously projected benefits utilized in historical project business case development have actually materialized as a way of increasing stakeholder buy-in to future benefit projections. This type of verification exercise is already done for the MVPs, but the process could be expanded, or the results could be highlighted in a more compelling way.

Making sure off-ramps for proposed projects are considered at the outset, in case their economic justification subsequently ceases to exist, will also help to reduce initial concerns or opposition to analyzing transmission plans. It is challenging to agree to consider potential solutions when one faces the possibility of being prematurely locked into a given alternative, regardless of potentially changed circumstances in the future. In order to help minimize this type of resistance from occurring, it would be useful to amend the planning process so that sufficient transparency of sharing early versions of the emerging plans allows stakeholders to address concerns and offer suggestions – such as non-transmission alternatives – near the front end of the planning process.

4. The queue predicts a future of diverse, more geographically dispersed intermittent generation. What does your sector see as the value in taking a broader, more coordinated regional transmission planning approach as compared to the current practice of building a number of small transmission projects to serve small groups of interconnection requests at a time? Conversely, what does your sector see as the barrier(s) to accomplishing that goal?

As MISO works to reduce the queue and more generation projects come online, congestion will increase. The OMS believes that piecemeal transmission may not be an acceptable alternative to taking a broader, more coordinated regional transmission planning approach. The OMS has identified numerous barriers to MISO taking a broader, more coordinated regional transmission planning approach, which fall into the buckets of cost allocation, regulatory complexities, and uncertainty. The ability to align the interests of those parties that benefit from the development and/or ownership of dispersed generation with those of the parties that pay for the energy produced, is challenging because there are direct beneficiaries (*e.g.*, project developers and purchasers of dispersed generation) and indirect beneficiaries (*e.g.*, those that benefit from the transmission expansion in less quantifiable ways, such as increased geographic diversity, reliability, reduced LMPs, *etc.*). Direct beneficiaries from a broader transmission build-out will not volunteer payment, and coordinating multi-party agreements for the necessary upgrades can be challenging, especially if the direct beneficiaries are not presently known (*i.e.*, generation projects to be built years later). If generators are left to pay for upgrades without indirect beneficiaries being allocated their fair share of the total costs, they will need to find another way to charge the load.

The regulatory barriers to a broader transmission plan are related to both project siting and generation policy. Siting infrastructure projects has become increasingly challenging, and siting future projects will be just as challenging. Furthermore, without a broad policy driver behind the dispersed generation, it is challenging to support the decision to build based on indirect benefits, knowing that the direct beneficiaries are likely to be a smaller subset of individual parties or utilities. There is also a need to have coordination between a variety of jurisdictions to overcome this barrier. At the present time, there is no region-wide policy direction guiding generation development, increasing the need for broader dialogue and agreement regarding of future transmission needs.

A subtler regulatory barrier originates from the presence of RTO seams. Seams issues can serve as a barrier to development of the most efficient transmission system. The OMS would also like to see continued improvement to coordinated transmission planning with SPP and PJM to seek alternatives or enhancements to intra-RTO planned transmission projects that are more efficient and cost-effective solutions.

The speed with which the resource mix is changing within the MISO footprint, and the newness of many technologies being deployed, not only impact the certainty of drivers behind future transmission, but the industry's understanding of transmission needs more broadly. The introduction of this uncertainty is relatively new to MISO, so stakeholders have limited experience in how to capture it in the MISO transmission planning process. Although attempts to capture these trends have been made, it is not yet clear if another approach is warranted.

Lastly, the perceived need to accommodate capacity within the queue should not directly serve as the primary driver for a regional transmission planning approach. The uncertainty around these numbers acts as a barrier. MISO should provide analysis and identify transmission options that would support: (a) local, state, and federal energy policy requirements, (b) growing Commercial and Industrial customer demands for renewables, and (c) state/local commission approval of electric distribution companies' commitments to emission reductions and renewables.

Despite the barriers to a broader, more coordinated regional transmission planning approach, the OMS acknowledges that, if such an approach was achievable, the majority of the value would likely derive from the following factors:

- a) The potential for reducing the interconnection queue backlog.
- b) The ability to more accurately identify and quantify the direct and the indirect merits of alternative transmission and non-transmission solutions to anticipated transmission requirements.
- c) The ability to better identify and effectively mitigate risks on a comprehensive region-wide basis.
- d) The economics of scale that might be identified that otherwise might go unrecognized and unrealized, resulting in a more efficient transmission build.