

MRES appreciates the OMS and RSC working together to better understand the MISO-SPP seams issues and providing the members the opportunity to provide further information and comments on the seams whitepaper. MRES is in the unique position of being fully integrated into both MISO and SPP and has several facilities on or near the seam and thus has a vested interest in resolving seams issues and increasing efficiency. Ultimately, MRES would like to see the two RTOs merge into one, but in the meantime respectfully submit the following responses to the survey questions.

**1. What do you believe to be the single most important/impactful seams issue and what barriers are preventing resolution? If applicable, include two to four additional priority items the regulators should focus on.**

MRES believes that planning on or near the seams is primary concern, with backup service across the seam being the barrier to exploring and implementing the most efficient reliability projects. MRES has municipal utility members (“member communities”) that are close to and right on the seam between MISO and SPP. This is not only the situation on or close to existing tie-lines between MISO and SPP, but also in the form of transmission expansion opportunities to enable serving new or additional load in member communities (areas where SPP and MISO transmission are in close geographical proximity, but not necessarily electrically close). We are presently engaged in situations where MRES members are facing potential point load addition(s) that could require additional transmission facilities to comply with reliability requirements. The best transmission solutions from the perspective of construction cost and building shorter and non-duplicative transmission lines may entail interconnecting MISO and SPP. These situations go both ways: I.e., it can be an SPP load that could benefit from an interconnection with MISO, and vice versa. Building transmission to resolve load serving reliability challenges may not be material with respect to an APC savings / economic planning perspective. It can be significant from a perspective of minimizing the necessary transmission investment. This minimization could simply be having to build a five mile long transmission line, instead of a 25 mile long transmission line. Issues around Transmission Service across the Seams, pancaked rates, and the potentially lengthy RTO planning processes to move forward with a local reliability driven transmission project across the seams, adds to the cost and the timeline challenges of member communities being able to serve point load additions which the existing transmission system cannot accommodate. This can make economic development in member communities more challenging if not impossible.

MRES believes there should be an effort undertaken to eliminate planning and pancaked rate obstacles along the MISO-SPP seam. There should be timely and efficient processes to interconnect MISO and SPP to resolve load serving reliability needs that may be viewed as minor issues in a greater inter-regional context, but of great significance from a local perspective. An expedited process should be available. It should be feasible to allow for utilizing each other’s system without significant process hurdles driving one towards physically larger and costlier projects to not cross the RTO seam. This should be especially true for purposes where temporary outage conditions means that one RTO can utilize facilities of the other to increase the ability to operate in a reliable manner, even more so where systems have been designed for this during different historical settings from a tariff perspective, but also in general. Building costlier projects to stay within an RTO footprint may benefit one utility, but simultaneously unnecessarily transfer additional cost with limited or no associated benefits to other transmission customers that will pay the local pricing zone rate.

Resource capacity issues are another concern of MRES; MRES does not believe that resources with firm transmission between the RTOs should be accredited differently from resources internal to either RTO.

Lastly, MRES believes that it should be a priority of the RTOs to work on price convergence at the seams to allow the most efficient operation of both markets.

**2. How should the RTOs weigh the benefits of more efficient seams operation against focusing on maximizing intra-RTO efficiencies and operation?**

Resolving seams issues should be a priority of the RTOs, especially in terms of getting the prices at the seams to converge which will create overall more efficient markets. MRES can appreciate efforts spent and progress made

thus far through the M2M process to improve pricing across both MISO and SPP markets. However, market pricing at the MISO/SPP seams does not currently converge and MRES believes the MISO/SPP interface pricing differences should continue to be a focal point until resolved. Having interface prices that do not converge is inefficient for markets on both sides of the seam as tagged interface transactions submitted would attempt to arbitrage the seam, i.e. transfer energy across the seam buying from the lower priced market and selling into the higher priced market. Seams prices that converge would eliminate the need for tagged transactions across the seams and would allow market participants to better hedge congestion between markets. This should result in improved market liquidity in both markets as entities would be able to hedge congestion between markets without a tagged transaction to overcome the pricing gap across the seam.

### **3. What areas of the whitepaper do you agree and disagree with? Why?**

A presentation by the seams task force based on the white-paper makes the statement that RTO membership is “voluntary”, and that RTOs compete for members. This is true to some extent, but in reality not for MRES. Our smaller “system” consists of various non-contiguous snippets of the system that are fully surrounded by other utilities that are members of an RTO. We cannot choose to take our facilities and load from SPP into MISO or vice versa, and exclusion from an RTO altogether is also not a realistic option. RTO competition to get a utility as a member is effectively the case for some, but not for all.

### **4. Are there seams issues that you believe were left out?**

Capacity accreditation, although not a seams issue directly, is an issue that results from companies having resources on both sides of the seams which result in inconsistent treatment or lack of portability of that capacity between the RTOs even though entities are paying for firm transmission via pancaked transmission rates. Specifically, external MISO resources are not given the same capacity accreditation as internal resources due to seams limitations. To explain this point, the example of WAPA hydro resources in SPP delivered to MISO load will be explained.

WAPA has hydro generation in the SPP footprint, some of which is used to serve load in the MISO footprint. Before the advent of the ISO regions, there was no regional distinction separating the WAPA load and resources. WAPA deliveries to customer load met regional resource adequacy requirements. WAPA has maintained firm network service over the years, and continues to utilize it for delivering power and energy across SPP into MISO. Within both SPP and MISO, firm network service is in place to deliver this energy to the WAPA load in MISO. MRES, representing the WAPA load for its member municipalities within MISO, uses the WAPA capacity to serve a portion of its MISO planning reserve margin; however MRES does not receive the full accreditation for the WAPA hydro resources due to seams limitations.

Instead of the full accreditation for the peak load, MISO evaluates the 12 peak monthly loads under contract and only accredits the minimum of the peak monthly loads in its planning year. Since the resource is outside the MISO balancing area, the energy must be tagged from the resource in SPP to the load in MISO as an interchange transaction. (This transaction is exclusive to the seams limitation that exists, i.e. internal MISO resources do not have these requirements.) Under the firm network transmission service, tagged amounts cannot exceed the expected load in any given hour. The transmission service and tagged delivery is used by MISO in the capacity accreditation for this resource by accrediting only the lowest peak delivery/load of the 12 months instead of the peak load amount for the year. This creates a confusing situation – is MISO receiving the capacity value from the specific generation resource in SPP, or is it receiving the capacity value from the tagged amounts which is backed up by the entire SPP system? Arguably, due to the market dispatch of SPP, all units in SPP with their combined availability are supporting the transaction into MISO and thus that transaction has a higher likelihood of actually delivering the capacity than any single unit internal to MISO, yet the transaction receives a lower capacity value than if the resource(s) supporting the transaction were in MISO.

In the case of WAPA customers in MISO, MISO does not award the full capacity credit for the load for WAPA generation, even after accounting for forced outages (which are typically less than 2% for its hydro resources). Instead, it only awards capacity credit for the entire year based on the lowest monthly peak amount which is driven by the nature of network transmission service that must be load following per the current rules. This results in a loss of over 20% in capacity accreditation, compared to an identical resource located within the MISO footprint. In effect, MISO is ignoring the higher tagged values during higher load days.

To properly accredit the WAPA external resources, MISO should accredit the WAPA generation like any other resource, or it should accredit the deliveries based on the tagged energy values only – which would be much like a non-wind intermittent generation resource capacity accreditation inside the MISO footprint. Treating the tagged WAPA amounts as a non-wind intermittent generation resource would allow them to be rated much closer to what similar resources in the footprint would receive such as a run of river hydro resource. For a non-wind intermittent generation resource, MISO accredits the capacity based on the average energy produced for the past 3 year period June – August during hours ending 15, 16, and 17.

**5. What seams issue(s) require additional analysis and study prior to solution identification? What should the goal of such an analysis/study be and what metrics or other measurable information should it include?**

MRES doesn't believe more study is needed to resolve many of the identified issues, but rather the RTOs and the participants of the RTOs need to be willing to work together to minimize the effect of the seams. MRES believes that the most efficient option for many of the issues would be to eliminate the seams completely and merge MISO and SPP into a single RTO.