

# MISO-SPP Whitepaper Discussion

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# Purpose

- Discuss the whitepaper, specifically the issues, barriers, and solutions identified in the document
  - Current status of Joint Operating Agreement
- Discuss why seams issues aren't easy to solve, how MISO and SPP are different
- Discuss potential issues that are not in the document

# Goals of the Liaison Committee

- Identify potential improvements in the following areas and work with SPP and MISO on implementation:
  - Increase benefits to ratepayers in both markets by improving market-based transactions and operations across the seam.
  - Ensure equal consideration of beneficial regional and inter-regional projects in transmission planning, including evaluation of projects identified in the Coordinated System Plans.
  - Support the timely interconnection of new resources that includes consideration of the dynamics of the interconnection queue in both RTOs.
  - Improve inter-RTO relations through state-led cooperation.

# Whitepaper – Request of RTOs

- *In order to better understand the dynamics of issues on the SPP-MISO seam, the liaison committee asks both SPP and MISO to draft white papers identifying barriers to more efficient seams operations and transmission planning and, to the extent possible, offer solutions to those problems, including identification of current enhancements/improvements being discussed in markets and operations, transmission planning and resource integration.*

# Whitepaper - History

- The history of these issues is a strength of the whitepaper, especially discussing:
  - previous interregional planning efforts (p. 24);
  - enhancements to the Market to Market process (p. 9);
  - Contract Path capacity sharing (p. 13);
  - January 2018 and September 2018 events (p. 17);  
and
  - Flowgate allocation (p. 10)

# Joint Operating Agreement

- SPP and MISO first entered into a Joint Operating Agreement (JOA) in 2004<sup>1</sup>.
- The JOA exists in the SPP and MISO Open Access Transmission Tariffs (OATT) filed at and approved by FERC.
- The JOA has been amended many times, including implementation of Market to Market and the Order 1000 compliance filing.

<sup>1</sup> Southwest Power Pool, Inc., 109 FERC ¶ 61,008 (2004)

# Whitepaper – Markets to Market

- When an element of the transmission grid is overloaded, there is a determination of which RTO or other party is over their allowed usage of the element
- That allotment is based in part on the usage of the transmission grid in 2004
  - This needs to be updated to reflect current conditions, but parties continue to negotiate how to update the allotment
- That party over their allotment is required to find a solution to relieve this congestion.

# Whitepaper – Market to Market

- Before the beginning of SPP and MISO's Market to Market process in March 2015, Transmission Loading Relief (TLR) system was used on overloaded transmission elements near the SPP-MISO seam
  - The party over their allotment had to change their generator dispatch to alleviate the congestion on the overloaded transmission element
  - Even after the establishment of Market to Market, TLRs are still occasionally called to solve congestion issues near the MISO-SPP seam

# Whitepaper – Market to Market

- Under a Market to Market example:
  - If a MISO transmission element is overloaded, and if it is determined that SPP is over their allotment on that element, there is a calculation to see if it is cheaper for SPP to pay MISO to change MISO's generator dispatch rather than for SPP to change SPP's generator dispatch.
  - This payment from SPP to MISO is a Market to Market payment
- Benefit - This Market to Market system finds the cheapest solution for the region to solve the congestion problem.

# Whitepaper – Barriers and Issues

- Allotment of usage of transmission grid
  - Historically, RTOs and other parties are allowed to use portions of the transmission grid in part based on 2004 usage [“Freeze Date”].
  - This is spelled out in an Eastern Interconnect wide Congestion Management Process (CMP) Council, containing parties in addition to SPP and MISO.
  - Updating this allotment process could smooth operations, been discussed since early 2014

# Whitepaper – Barriers and Issues

- Market to Market issues (p. 12)
  - Congestion overlap and Interface Pricing
    - Interface pricing is the pricing at the seam, with the goal being to have SPP and MISO markets have a similar price at nearby locations.
  - Pseudo Ties
    - When generation physically located in one RTO is controlled by a neighboring RTO, often done when a generator is bid into a nearby RTO's capacity market
- A potential fix on pseudo ties and congestion overlap on the MISO/PJM seam has been filed at FERC related to the Tilton Energy complaint docket (EL16-108)
  - Phase 1 solution: ER18-136 and ER18-137 (MISO/PJM respective filings) – FERC accepted 7/31/18. Rehearing requests pending. FERC gave itself more time to consider rehearing.
  - Phase 2 solution: ER19-34 and ER18-1730 (MISO/PJM respective filings) – filed and awaiting FERC action.

# Whitepaper – Barriers and Issues

- Contract Path Capacity Sharing
  - Interpretation of Section 5.2 of Joint Operating Agreement (JOA), MISO North-South flows
    - Section 5.2 of JOA describes how MISO and SPP can use each other's system to serve
      - SPP interpretation – third parties
      - MISO interpretation – third parties or their own system
    - Settlement Agreement - MISO utilizes SPP and other Joint Parties' systems, with different annual payments from MISO to the Joint Parties based on usage.
    - MISO and SPP still disagree on interpretation of Section 5.2, and this causes issues in other areas, including Unreserved Usage (see p. 26, Split Rock - Lawrence potential interregional project)

# Whitepaper - Interregional Planning

- 3 of the issues MISO and SPP have identified as “Process Short Falls” (p. 30) are planned to be addressed in a Q1 2019 tariff filing
  - Removal of Joint Model, “Triple Hurdle”
  - Removal of \$5M interregional project cost floor
  - Standardization of how to allocate costs of interregional projects between MISO and SPP
- “Short Fall” of “Unreserved Usage Penalties” (p. 32) is not planned to be addressed in the filing

# Whitepaper - Interregional Planning

- MISO and SPP are considering using historical Market to Market payments as a means to justify smaller interregional transmission projects (p. 36)
  - MISO and PJM currently use this process, called Targeted Market Efficiency Projects
  - Multiple TMEPs have been approved to address issues on the MISO-PJM seam, including in northern Indiana

# Whitepaper – Transmission Planning

- SPP and MISO are working on “Affected Systems Studies” (p. 40), working to improve communication and coordination
  - SPP and MISO are required to notify each other if an approved transmission project affects the neighboring system
  - EDF FERC Complaint (EL18-26) (p. 42) is related to the issues of cost responsibility involving generator interconnection requests near a seam

# Whitepaper – Resource Integration

- MISO and SPP have different procedures on how to study generation additions that count for capacity credit, called “Network Resources” (p. 41)
- This issue impacts allotments of how much of each other’s transmission grid can be used, issues related to the “Freeze Date”

# Seams issues – not easy

- Issues in RTO creation and framework cause RTOs to be ‘self interested’
- MISO and SPP have different positions about fundamental ideas as well as tariff / contract interpretation

# “Self Interested” RTOs

- RTOs were formed at different times in separate orders after Order 2000. Order 2000 was issued by FERC on December 20, 1999.
- RTOs are formed for the benefit of their members, not the benefit of the entire transmission grid or country
  - This isn’t inherently a bad thing, wanting to create value for their members
    - RTOs publish how much benefit they create for their members (regional transmission planning benefits, for example)
  - When working on seams issues, this self interest can create tricky situations
- RTO membership is voluntary
  - Entities have switched RTOs
  - RTOs compete for members

# Differences

- In past discussions related to the 2018 MARC Conference, differences of perspectives arose between SPP and MISO on transmission system usage
  - MISO perspective: should utilize the existing, already purchased grid as best as possible to determine the best outcomes for the region without additional charges [sunk cost]
  - SPP perspective: if a portion of the transmission grid is used above an allowed amount, the user should be charged [usage charges]

# Differences

- This difference in perspective materializes in multiple portions of the whitepaper:
  - Interpretation of Section 5.2 of the JOA, Contract Path Capacity Sharing (p. 13)
  - “Unreserved Usage” penalties (p. 32)

# Additional Issues

- MISO and SPP discuss two extreme events that happened over both systems in 2018
  - January 18 event (p. 15) involving cold weather and expected generator outages
  - September 15 event (p. 18) involving MISO underforecasting of load, rapidly increasing temperatures
  - SPP and MISO used lessons from January event to improve the outcome of the September event

# Issues not in the whitepaper

- Rate pancaking issues
  - Utilities with generation in one RTO and load in the other RTO may have to pay both RTOs to get that generation to load.
  - Sometimes referred to as a “Regional Through and Out Rate” (RTOR).
  - MISO and PJM have worked to eliminate such charges
- Conditional Generator Interconnection Agreements
  - Conditioned on addressing issues in the neighboring region

# Issues not in the whitepaper

- How the Settlement Agreement on MISO North – MISO South flows affect seams issues
- Others??

# Questions?