

Inter-regional Planning Update



Transmission Expansion Advisory Committee May 04, 2017



Interregional Update - EIPC

- Technical Committee meetings May 18, 2017 & June 15, 2017
- Executive Committee meetings May 24, 2017 & June 28, 2017
- Production Cost Database Assembly
 - The model runs and results are under evaluation
 - Runtime and is a challenge
 - Potential to respond to EI questions
- Other Collaboration
 - March 29, 2017 meeting with NERC to explore mutual interests
 - Input to NERC frequency control project
 - Input to NERC model development
 - "state of the grid" report



Interregional Update

- 2017 cycle of data and transmission plan exchanges and plan reviews
- PJM-MISO IPSAC <u>http://www.pjm.com/committees-and-groups/stakeholder-meetings/ipsac-midwest.aspx</u>
 - IPSAC May 26, 2017
- NE Protocol IPSAC <u>http://www.pjm.com/committees-and-groups/stakeholder-meetings/ipsac-ny-ne.aspx</u>
 - IPSAC May 19, 2017
- SERTP- regional process: <u>www.southeasternrtp.com</u>
 - 2nd Quarter meeting June 19, 2017
 - Next biennial review Spring 2018



2-Year Cycle – PJM-MISO Issues Review at IPSAC

- PJM and MISO proposal "windows" closed February 28, 2017
 - 8 proposals for 3 flowgates
 - \$354 Million (\$1M \$167M)
 - 2 joint
 - 5 greenfield
 - 3 upgrade to existing facilities
 - 7 entity proposers
- Next Steps:
 - Project Verification and case updates in progress
 - Updated models will be posted
 - PJM and MISO to evaluate regional benefits
 - Determine project cost split between RTOs (share of combined regional benefits)
 - PJM and MISO evaluate regional B/C and any regional alternative and consider recommendations



- December 30, 2016 filed JOA changes for TMEP (ER17-718)
 - PJM Regional cost allocation filed April 10, 2017
 - MISO Regional cost allocation deadline May 1, 2017
 - MISO delayed regional cost allocation filing for further consideration
 - Very similar to PJM's regional allocation based on impacts of settled congestion
 - MISO proposes no allocation below 1% of project cost or \$5,000
- NIPSCO Order compliance filed April 24
 - PJM and MISO: further process clarifications (paragraphs 70 through 85 complete)
 - Paragraph 51 MISO request for filing extension to October 31, 2018 for cost allocation for below 345 kV interregional MEP
 - Some uncertainty for potential projects from the current 2-year cycle

interregional process



Interregional Update – MISO – EL13-88 further compliance

Ordering Paragraph	FERC Directive
51	Confirm that the existing Market Efficiency Project cost allocation method will apply to MISO's share of the cost of interregional economic transmission projects above 100 kV but below 345 kV that qualify as Market Efficiency Projects or to propose tariff revisions to apply a different regional cost allocation method for MISO's share of the cost of such projects. Upon review of MISO's compliance filing, including any supporting evidence, and consideration of any comments filed in response, the Commission will determine the just and reasonable MISO regional cost allocation method for MISO's share of the cost of interregional cost allocation projects. Upon review 345 kV that qualify as Market Efficiency Projects.
	Provide that the Joint RTO Planning Committee shall provide a schedule and binding deadlines for the steps in each Coordinated System Plan Study process no later than 15 days after the Interregional Planning Stakeholder Advisory Committee meeting provided for in section 9.3.6.2(b)(ii). We note that, as provided in section 9.3.6.2(a)(vii) of the JOA, regardless of the intervening deadlines, the Coordinated System Plan Study must be completed no later than the end of the second year of the two-year cycle.



Interregional Update – MISO – EL13-88 further compliance

Ordering Paragraph	FERC Directive
71	Revise section 9.3.6.2(a)(vi) of the JOA, as follows: (vi) <u>If a</u> A Coordinated System Plan study may includes targeted studies of particular areas, needs or potential expansions to ensure that the coordination of the reliability and efficiency of the Parties' transmission systems, <u>then such targeted studies</u> will be conducted during the first half of the calendar year. In years when the Coordinated System Plan study includes only targeted studies as defined herein, they may be conducted at any time during the calendar year but will be targeted for completion <u>shall be</u> <u>completed</u> within the calendar year in which they are identified.
78	Revise the JOA to include a description of how specific steps in the Coordinated System Plan Study process interact and coordinate with specific steps in the MTEP and the RTEP.
83	Change the reference to section 9.4.4.2.2 in proposed section 9.4.4.1.3.1(b) to 9.4.4.2.3 (Cost Allocation for an Interregional Market Efficiency Project).
84	Submit an updated version of Attachment FF to include all currently effective language.
84	MISO and PJM to submit JOA tariff records in which the section numbers are identical to resolve any confusion created by the different numbering of the JOA used by each RTO.





- IPSAC May 19, 2017
 - System needs and solutions update
 - IPSAC input to needs and solutions
 - Coordinated study status
- Special Ramapo phase shifter task force
 - Scope Document included with meeting materials
 - Consider potential replacements, benefits and cost allocation issues of Ramapo PARs
 - <u>http://www.pjm.com/committees-and-groups/stakeholder-meetings/pjm-nyiso.aspx</u>
 - Next meeting at PJM May 24, 2017



NYISO – Ramapo PAR

- JOA: two party agreement between PJM and NYISO
- JOA points to the Northeast Protocol for most planning
- Northeast Protocol: three party agreement including ISO-NE
- Consider creating new JOA category of transmission facility eligible for interregional and regional cost allocation
 - Option: new type of Interregional Transmission Project under Northeast Protocol
 - Option: new planning provisions under the JOA



NYISO – Ramapo – Potential Benefit Categories

- Quantifiable
 - Mitigates Reliability Violations
 - Reduces Energy Market Costs (LMP and/or production cost)
 - Reduces Capacity Market Costs (regional and local capacity cost)
- Operational Performance
 - Extreme Contingencies
 - Flow direction flexibility
 - Restoration
 - Extreme Contingency reliability
 - Interregional Transfer Capability

NYISO – Ramapo - Benefit Determination Discussion

- Reliability Violations
 - Option: solution DFAX difficult, workable or not for PJM-NYISO markets (especially this controlled tie example)?
 - Option: avoided cost (currently used, very workable)
 - Joint power flow? Not applicable to avoided cost.
- Energy Market Economics
 - Option: regional determination of market energy benefits
 - Option: avoided cost of alternative regional projects
 - Joint case use? Not workable due to regional differences



NYISO – Ramapo - Benefit Determination Discussion

- Capacity Market Economics
 - Option: quantification of regional capacity market benefits
 - Option: avoid cost of alternative regional capacity market projects.
- Operational Performance
 - Difficult to quantify a basis for cost split and regional allocations
 - Qualitative factor for RTO decision to commit to a project
 - Qualitative factor for RTO agreement on cost sharing
 - Consider during any Benefit/Cost or other thresholds determination



- Provide written comments to PJM and NYISO Facilitators by May 12, 2017
- Should planning provisions be maintained in NE Protocol?
- Should planning provisions be introduced into JOA?
- What benefits categories should be considered?
- Should a new general category of transmission facility eligible for interregional cost allocation be established?
- Should avoided cost or other method be used for a new category of interregional transmission (including Ramapo PARs)?
- What if any thresholds should apply to the new project category?



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