

Inter-regional Planning Update

Transmission Expansion Advisory Committee October 6, 2016

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- EISPC coordination EI-wide view WebEx's
 - Regional planning (target October)
 - Interregional planning (date TBD)
- EIPC EC approved 2-year production cost software agreement
 - flow-down of requirements in execution stage among EIPC members
 - Working group in progress
- EIPC response to FERC Order No. 1000 Technical Conference Panel 4



Interregional Update

- All regions data exchanges and issues reviews to be completed
 - With new CEII NDA exchanges with SERTP to be scheduled
- SERTP / NCTPC
 - SERTP regional process: <u>www.southeasternrtp.com</u>
 - SERTP 4th quarter meeting December
- NE Protocol
 - NY-NE IPSAC conducted May 9, 2016 regional issues/plans/interconnection coordination - http://www.pjm.com/committees-and-groups/stakeholder-groups/ipsac-ny-ne.aspx
 - End-of-year IPSAC review of regional issues and plans December 9, 2016

SERC

- LTSG transfer study, CPP study reliability work
- NTSG loop flow study complete, planning to carry forward to next year

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Interregional Update – MISO – Targeted Studies

- IPSAC dates September 30, 2016
 - http://www.pjm.com/committees-and-groups/stakeholdermeetings/stakeholder-groups/ipsac-midwest.aspx
 - Final draft JOA TMEP process and criteria language posted
- TMEP 7 potential projects identified
 - Less than \$20M total
 - More than \$100M four-year benefits total
- Evaluations of project scope, benefits and costs being finalized
- Regional cost allocation decisions are critical path task



2-Year Cycle - PJM Issues Review at IPSAC

- July 29, 2016 IPSAC was notified of September PJM issues review
- August 26, 2016 IPSAC stakeholder input to PJM issues review was due
- September 30, 2016 Reviewed identified PJM regional Issues
 - PJM issues list may be refined over next couple weeks
 - Issues list will be finalized prior to November 1 window opening
- October IPSAC PJM will share finalized issues list with IPSAC
- Draft regional market efficiency case available
 - http://www.pjm.com/planning/rtep-development/market-efficiency.aspx
- Final market efficiency case will be posted prior to November 1 window opening

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EL13-88 Directives & Informational Filings

FERC Directed Stakeholder Involvement

| Deliverable | | Due Dates (2016) | | | | Stakeholder |
|-------------------|---|------------------|--------|--------|----------|-------------|
| | | 20-Jun | 19-Aug | 18-Oct | 15-Dec | Forum |
| Directive P186 | Include Generator Retirement Coordination Procedures in JOA | | | | V | IPSAC, IPTF |
| Informational 186 | Status Reports on Gen Retirement Coordination Language | ^ | ^ | ^ | ^ | IFSAC, IFTF |
| Informational 92 | Joint Model in Regional Processes | | | X | | IPSAC, PSC |

No FERC Directed Stakeholder Involvement

| | Deliverable | Due Dates (2016) | | Stakeholder Forum | |
|-------------------|--|------------------|--------|-------------------------|--|
| | Deliverable | 20-Jun | 19-Aug | (Informational Updates) | |
| Directive P57: | Formalize Steps and Deadlines in CSP Study | X | | IPSAC, PAC | |
| Directive P131 | Lower Interregional MEP Thresholds | X | | RECB | |
| Directive P132 | Remove Interregional B/C Ratio | X | | RECB | |
| Directive P133 | Revise Benefit Calculation of Interregional MEPs | X | | RECB | |
| Directive P185 | Include BPM GI Coordination Procedures in JOA | X | | IPTF | |
| Informational P58 | Aligning Interregional, MTEP, and RTEP | | Х | IPSAC | |

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- Directs MISO and PJM to submit an informational report describing how MISO and PJM could implement a joint model with the same assumptions and criteria in their regional transmission planning processes
 - Address reliability and economic modeling
- PJM and MISO seek stakeholder input by Friday, October 7, 2016
 - Some PJM and MISO thoughts follow
 - Is the general approach reasonable
 - Explain if you believe common models are feasible or not
 - Additional Issues?



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- Joint models combine regional assumptions
 - Include respective regional assumptions
 - Compromise assumptions when necessary
 - Will always differ from regional models
- Regional models are based on regional planning process tariff requirements
 - Transmission Planning
 - Capacity Markets
- A regional solution on one interface does not address need to coordinate the same assumptions on other interfaces in a consistent fashion
- PJM and MISO drivers for regional transmission planning differ significantly
- Common assumptions are not feasible without significant changes to regional processes
- Even identical models would lead to different results when used in different regional processes



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- Examples of differing regional drivers
 - MISO Reliability analysis using multiple Transmission Planners' models
 - Years 2, 5, and 10 using both local balancing area (BA) and MISO BA dispatches
 - Can combine with or be deferred by economic upgrades
 - PJM Reliability analysis using single Transmission Planner models
 - Years 5, 7 and 8 using PJM balancing area dispatch
 - Reliability projects can not be displaced by economic projects
 - MISO production cost models
 - Scope and assumptions varies cycle to cycle
 - Studied in parallel with reliability planning
 - Multiple generation and assumption futures
 - PJM production cost models
 - Market efficiency Scope and assumptions consistent with reliability planning
 - Public Policy Planning driven by scenarios chosen by Independent State Agency Committee