Inter-regional Planning Update

Transmission Expansion Advisory Committee
October 6, 2016
Interregional Update - EIPC

- 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: www.southeasternrtp.com
  – SERTP 4th quarter meeting December

• NE Protocol
  – 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
Interregional Update – MISO – Targeted Studies

• IPSAC dates - September 30, 2016
  – 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
- Final market efficiency case will be posted prior to November 1 window opening
## FERC Directed Stakeholder Involvement

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Due Dates (2016)</th>
<th>Stakeholder Forum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include Generator Retirement Coordination Procedures in JOA</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Informational 186</td>
<td>20-Jun</td>
<td>19-Aug</td>
</tr>
<tr>
<td>Status Reports on Gen Retirement Coordination Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informational 92</td>
<td>20-Jun</td>
<td>19-Aug</td>
</tr>
<tr>
<td>Joint Model in Regional Processes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## No FERC Directed Stakeholder Involvement

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Due Dates (2016)</th>
<th>Stakeholder Forum (Informational Updates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formalize Steps and Deadlines in CSP Study</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Directive P131</td>
<td>20-Jun</td>
<td>19-Aug</td>
</tr>
<tr>
<td>Lower Interregional MEP Thresholds</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Directive P132</td>
<td>20-Jun</td>
<td>19-Aug</td>
</tr>
<tr>
<td>Remove Interregional B/C Ratio</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Directive P133</td>
<td>20-Jun</td>
<td>19-Aug</td>
</tr>
<tr>
<td>Revise Benefit Calculation of Interregional MEPs</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Directive P185</td>
<td>20-Jun</td>
<td>19-Aug</td>
</tr>
<tr>
<td>Include BPM GI Coordination Procedures in JOA</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Informational P58</td>
<td>20-Jun</td>
<td>19-Aug</td>
</tr>
<tr>
<td>Aligning Interregional, MTEP, and RTEP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• 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?
• 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
• 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