MISO-PJM Joint and Common Market

Alignment of Intra-hour Scheduling Rules
Background

- Stakeholders requested alignment of MISO and PJM intra-hour scheduling rules
- Issues and alternative options have been discussed at individual RTO stakeholder forums
  - PJM Market Implementation Committee
  - MISO Seams Management Working Group
- At the Sept 28 JCM meeting, MISO and PJM agreed to facilitate joint stakeholder discussion
# Comparison of Current Rules

<table>
<thead>
<tr>
<th>Current Rules</th>
<th>Flexibility</th>
<th>Better Control</th>
<th>Easy to Administer</th>
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</thead>
<tbody>
<tr>
<td><strong>MISO</strong></td>
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<tr>
<td>Do not allow intra-hour schedules</td>
<td>Limited – does not allow reaction to price changes within the current operating hour</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Minimum 15 minutes duration</td>
<td>Yes – shortest schedule duration that generally meets participant need</td>
<td>No</td>
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<td><strong>PJM</strong></td>
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<tr>
<td>Allow intra-hour schedules</td>
<td>Yes - allows reaction to price changes within an hour</td>
<td>No</td>
<td>Difficult to enforce given the ability to schedule transactions in the opposite direction</td>
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<tr>
<td>Minimum 45 minutes duration</td>
<td>Limited –minimum schedule duration could be longer than desired by participants</td>
<td>Yes</td>
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</table>
Path Forward – Options to Reduce Inflexibility

1. Both RTOs adopt current MISO rules
2. Both RTOs adopt current PJM rules
3. Alternative stakeholder proposal that
   • Provides more flexibility
   • Does not adversely impact system control and market efficiency
   • Is simple to administer and enforce
Next Steps

- Feedback from JCM participants regarding common intra-hour scheduling rule options
- MISO and PJM to evaluate feedback and alternative proposals from stakeholders and develop recommendation

Contacts
- Dhiman Chatterjee - dchatterjee@misoenergy.org
- Stu Bresler - Bresler@pjm.com
Appendix
Example

Illustration of potential inefficiency when no scheduling restrictions are enforced

- **Assumptions:**
  - Allow intra-hour scheduling
  - Hourly settlement on average LMPs
  - MISO’s price is $1000 HIGHER during the period 9:00-9:15
  - Minimum duration: 15 minutes

- **Potential schedule**
  - 100 MW from PJM to MISO for 9:45-10:00
  - Profitable if MISO’s average price during 9:15-10:00 is not more than $333 LOWER than PJM