Meeting Minutes  
**PJM Interconnection**  
**Intermittent Resources Task Force**  
**Teleconference**  
**October 22, 2012**  
**1:00 PM EPT**

Member Participants:

<table>
<thead>
<tr>
<th>Name</th>
<th>Company/Owner</th>
<th>Role</th>
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<tbody>
<tr>
<td>Schuyler, Ken</td>
<td>PJM Interconnection</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Feliks, Kent</td>
<td>Appalachian Power Company (AEP Generation)</td>
<td>Transmission Owner</td>
</tr>
<tr>
<td>Presutti, Kathy</td>
<td>Appalachian Power Company (AEP Generation)</td>
<td>Transmission Owner</td>
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<tr>
<td>Rainey, Matt</td>
<td>Appalachian Power Company (AEP Generation)</td>
<td>Transmission Owner</td>
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<tr>
<td>Slade Jr., Louis</td>
<td>Dominion Virginia Power</td>
<td>Transmission Owner</td>
</tr>
<tr>
<td>Goldstein, Michael</td>
<td>Grand Ridge Energy LLC</td>
<td>Generation Owner</td>
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<tr>
<td>Seymour, Melissa</td>
<td>IBERDROLA RENEWABLES, LLC</td>
<td>Generation Owner</td>
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<tr>
<td>Ferrell, Jeremy</td>
<td>NextEra Energy Power Market, LLC</td>
<td>Generation Owner</td>
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<tr>
<td>Varnell, John</td>
<td>Tenaska Power Services Co.</td>
<td>Generation Owner</td>
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<tr>
<td>Holland, Risa</td>
<td>PJM Interconnection</td>
<td>Not Applicable</td>
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Other Participants:

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<tr>
<th>Name</th>
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</thead>
<tbody>
<tr>
<td>Ruiz, Pablo</td>
<td>Charles River Associates (CRA) International</td>
<td>Other</td>
</tr>
<tr>
<td>Porter, Kevin</td>
<td>Exeter Associates</td>
<td>Other</td>
</tr>
<tr>
<td>Burcat, Bruce</td>
<td>Mid-Atlantic Renewable Energy Coalition</td>
<td>Not Applicable</td>
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<tr>
<td>Baizman, Aaron</td>
<td>PJM Interconnection</td>
<td>Not Applicable</td>
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<td>Dropkin, Robert</td>
<td>PJM Interconnection</td>
<td>Not Applicable</td>
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<td>Hoey, Ed</td>
<td>PJM Interconnection</td>
<td>Not Applicable</td>
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<tr>
<td>Schweizer, David</td>
<td>PJM Interconnection</td>
<td>Not Applicable</td>
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1. **ADMINISTRATION**

   The Task Force was asked to approve draft minutes the August 20, 2012 meeting. The minutes were approved as written.

   Mr. Schuyler reported that the IRTF charter updates were presented and approved at the October MIC meeting.

2. **CURTAILMENT FLAG FUNCTIONALITY**

   Mr. Baizman discussed PJM lessons learned and changes to the curtailment flag functionality that have been made since he reported out at the June 18, 2012 IRTF.  Mr. Baizman noted that there are still a significant number of occasions where manual dispatch is being performed, either because a wind farm is not capable of receiving and processing an electronic signal or because immediate action is needed.  Under these circumstances the curtailment flag and unit basepoints will not be set properly.  Mr. Baizman will reinforce with PJM dispatchers that they should let SCED determine corrective actions for constraints and avoid manual dispatch when possible.
Ms. Seymour discussed lessons learned following the curtailment flag implementation. She pointed out that PJM SCED looks ahead 15 minutes when calculating the desired base point, so the ramp rate submitted with the unit offer is important. If the ramp rate entered is 10 MW/minute, the wind farm might be directed to move down 150 MW’s. Ms. Seymour has also observed that there tends to be more control action needed for wind generators closer to the MISO interface.

3. WIND FARM DISPATCH

Mr. Schweizer provided information on the number of wind farms that are dispatchable:

1. PJM staff is still reviewing bid parameters for wind farms so there is no new information to report in that area.

2. With respect to being able to receive electronic signals from PJM, Mr. Schweizer reported that 76% of the PJM wind fleet (by MW) is receiving an economic base point signal and 60% of PJM wind is receiving the curtailment flag.

3. A manual survey was initiated to determine how many wind farms are capable of processing a PJM dispatch directive. Mr. Schweizer explained that only a few wind farms have not responded to survey: approximately 40% of wind farms automatically respond to curtailment flag, 50% manually respond to curtailment flag, and 10% are unable to respond. PJM needs to follow-up with the last 10% where PJM is unsure if/how they can respond.

Mr. Schweizer confirmed that the curtailment flag is being displayed to PJM system operators.

4. REACTIVE CAPABILITY TESTING

Mr. Dropkin reviewed the updated draft of proposed Manual 14D revisions for Reactive Capability Testing. One member suggested adding Wind Generating Station as a defined term. PJM will make the edits to incorporate IRTF feedback and review the document with the Nuclear Generator Owners User Group. A new draft will be reviewed with IRTF at the December meeting before presenting the proposed manual updates to other stakeholder groups in January and February.

5. INTEGRATION OF WIND PRODUCTION FORECASTING

Ms. Lukach reviewed the work plan for addressing the issue of wind power forecasting costs and operating reserve charges (IRTF Charter item1B). The issue will go through the stakeholder process for resolution over the next several meetings, including designing a work plan, providing an education session, identifying options, and then building consensus on a solution. Ms Lukach reviewed the existing methodologies for allocating wind power forecast costs and balancing operating reserve charges in other markets. One member requested clarification regarding how balancing operating reserves was calculated in RT compared to DAM. Ms. Lukach took an action item to provide an answer.
6. **PROPOSED 2013 MEETING DATES**

The task force reviewed and approved the proposed meeting dates as listed below. Subsequent to the meeting, the February, April, and December 2013 meeting dates were moved two days to Wednesdays (as reflected at the end of these meeting minutes) to avoid conflicts with designated “no meeting” dates.

- **Monday, February 11, 2013**  PJM Conference Call  1:00-3:00
- **Monday, April 15, 2013**  PJM Conference Call  1:00-3:00
- **Monday, June 17, 2013**  PJM Conference Call  1:00-3:00
- **Wednesday, August 14, 2013**  PJM Conference Call  1:00-3:00
- **Monday, October 21, 2013**  PJM Conference Call  1:00-3:00
- **Monday, December 16, 2013**  PJM Conference Call  1:00-3:00

**INFORMATIONAL SECTION**

7. **WIND POWER STATISTICS**

The Wind Power Statistics are posted to the IRTF Website.

8. **CDS UPDATE**

Revisions to Manual 15 Cost Development Guidelines were presented for endorsement at the October 15 Cost Development Subcommittee meeting. The manual changes include language for wind unit cost offers derived from the solution package endorsed by CDS.

9. **FUTURE AGENDA ITEMS**

10. **FUTURE MEETINGS**

    **2012**
    - **Monday, December 17, 2012**  PJM Conference Call  1:00-3:00

    **2013**
    - **Wednesday, February 13, 2013**  PJM Conference Call  1:00-3:00
    - **Wednesday, April 17, 2013**  PJM Conference Call  1:00-3:00
    - **Monday, June 17, 2013**  PJM Conference Call  1:00-3:00
    - **Wednesday, August 14, 2013**  PJM Conference Call  1:00-3:00
    - **Monday, October 21, 2013**  PJM Conference Call  1:00-3:00
    - **Wednesday, December 18, 2013**  PJM Conference Call  1:00-3:00

**Anti-trust:**
You may not discuss any topics that violate, or that might appear to violate, the antitrust laws including but not limited to agreements between or among competitors regarding prices, bid and offer practices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that might unreasonably restrain competition. If any of these items are discussed the chair will redirect the conversation. If the conversation still persists, parties will be asked to leave the meeting or the meeting will be adjourned.
Code of Conduct:
As a mandatory condition of attendance at today’s meeting, attendees agree to adhere to the PJM Code of Conduct as detailed in PJM Manual M-34 section 4.5, including, but not limited to, participants' responsibilities and rules regarding the dissemination of meeting discussion and materials.

Public Meetings/Media Participation:
Unless otherwise noted, PJM stakeholder meetings are open to the public and to members of the media. Members of the media are asked to announce their attendance at all PJM stakeholder meetings at the beginning of the meeting or at the point they join a meeting already in progress. Members of the Media are reminded that speakers at PJM meetings cannot be quoted without explicit permission from the speaker. PJM Members are reminded that “detailed transcriptional meeting notes” and white board notes from “brainstorming sessions” shall not be disseminated. PJM Members are also not allowed to create audio, video or online recordings of PJM meetings.