Intermittent Resource Subcommittee
PJM Conference and Training Center
December 10, 2018
1:00 p.m. – 3:00 p.m. EPT

**Administration**

Mr. Ken Schuyler opened the meeting and reviewed the Agenda.

Mr. Joseph Carl reviewed the Anti-Trust and Code of Conduct and performed the roll call.

The meeting minutes from the June 4, 2018 meeting were approved.

**Education**

Mr. Patricio Rocha-Garrido provided an update on Effective Load Carrying Capability (ELCC) in regards to wind and solar units. ELCC education reviewed calculations and methodology which may be a future basis for calculating capacity credits of wind and solar resources.

Mr. Joe Mulhern provided wind power curtailment statistics, both SCED and manually curtailed from 2014 through the present.

Mr. Joe Mulhern provided an update on the status of obtaining meteorological information from solar resources. PJM continues to work with solar resource owners to obtain this data.

Ms. Molly Mooney provided an update on solar resources in long-term load forecasting. The presentation highlighted the work of the Load Analysis Subcommittee to determine historical impacts of distributed solar generation on the load forecast and forecasted future values of solar capacity and the methodology to utilize these values in long-term load forecasting.

Mr. Andrew Levitt provided an update on Smart Inverter Standards. The DER Ride-Through Task Force will be analyzing requirements for DER connected at the distribution level to provide ride-through support.

Mr. Scott Baker provided an update on work regarding Distributed Energy Resources by the DER Subcommittee. Activity includes DER market participation, Wholesale DER interconnection assessments for WMPA resources and very small DER, and DER provision of Primary Frequency Response service.

Mr. Scott Baker provided information regarding recent FERC filings regarding Energy Storage Resource integration into the PJM markets. Discussed were provision of Energy, Capacity and Ancillary Services and related accounting in both charge and discharge modes.
Future Agenda Items

Mr. Schuyler stated that anyone who has any suggestions for future topics they would like to focus on should contact either himself or Mr. Carl.

Future Meeting Dates

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<thead>
<tr>
<th>Date</th>
<th>Time</th>
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<tr>
<td>March 13, 2019</td>
<td>1:00 p.m.</td>
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<td>June 19, 2019</td>
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<td>September 18, 2019</td>
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<td>December 9, 2019</td>
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Author: Joseph M. Carl

Antitrust:
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 re-direct 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.
### In-Person Attendees:

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<thead>
<tr>
<th>Name</th>
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<tr>
<td>Schuyler</td>
<td>Ken</td>
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<td>Carl</td>
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<td>Mulhern</td>
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### In Attendance via WebEx / Teleconference:

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<td>Anders</td>
<td>Dave</td>
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Not Applicable