

Intermittent Resource Subcommittee  
PJM Conference and Training Center  
March 5, 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 September 18, 2017 meeting were approved.

## Education

Mr. Joe Mulhern provided an update on PJM's Solar Power Forecast and required meteorological data from solar resources. PJM will be requiring real-time meteorological data from solar parks greater than 3 MW and will be contacting solar owners to develop implementation plans. The goal is to be receiving data from all applicable plants by Q4-2018.

Mr. Andrew Levitt provided an update on Smart Inverter Standards. PJM is focused on Ride-Through capabilities for small generators and distributed energy resources which allow them to remain connected to the grid during system events or disturbances. IEEE Standard 1547-2018 was reviewed along with a briefing on the Three Categories of Ride-Through, responsibilities of distribution utilities and the consensus of a PJM system-wide ride through requirement.

Ms. Danielle Croop provided a briefing on the recent FERC Order 842 on Primary Frequency Response which requires all new small and large generators to install equipment to provide Primary Frequency Response Service. Droop and Deadband requirements were discussed along with exemptions to the order.

Mr. Scott Baker provided an update on the Distributed Energy Resources Subcommittee activities which include the crafting of two proposals around DER participation in PJM Markets and PJM's visibility of DER that does not participate in PJM's Markets. Polling is underway to solicit feedback on the packages to facilitate further development.

Mr. Scott Baker provided information on the FERC Final Rule, Order 841, in regards to Energy Storage Integration in Wholesale Electric Markets. The order lays out requirements for RTOs/ISOs to have an Electric Storage Participating model of which PJM will keep stakeholders informed of progression via special sessions of the PJM Markets Implementation Committee.

Mr. Jerry Bell reviewed proposed updates to PJM Manual 21 – Rules and Procedures for Determination of Generating Capacity. Changes highlighted include revised Wind and Solar Capacity Factors. The stakeholder review process for these proposed changes to Manual 21 will continue with a first read at the Planning Committee on March 8, 2018.

Mr. Jeff Bastian reviewed requirements for Intermittent Resources in PJM's RPM Markets. RPM timelines and business rules were reviewed along with clearing prices from the latest Base Residual Auction. Included was discussion of rules regarding aggregation of resources, seasonal capacity performance resources, and requests for winter Capacity Interconnection Rights.

Mr. Martelle Pitts demonstrated the features of recently released upgrades to [pjm.com](http://pjm.com) which include increased functionality surrounding the generation interconnection queues and generator deactivation pages in order to provide an easier user experience for stakeholders searching for information in these areas.

## Future Agenda Items

None at this time

## Future Meeting Dates

June 4, 2018	1:00 p.m.	WebEx
September 17, 2018	1:00 p.m.	WebEx
December 10, 2018	1:00 p.m.	WebEx

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.



# Draft Meeting Minutes

## In-Person Attendees:

Schuyler	Ken	PJM Interconnection, LLC	Not Applicable
Carl	Joseph	PJM Interconnection, LLC	Not Applicable
Bastian	Jeff	PJM Interconnection, LLC	Not Applicable
Mulhern	Joe	PJM Interconnection, LLC	Not Applicable
Levitt	Andrew	PJM Interconnection, LLC	Not Applicable
Croop	Danielle	PJM Interconnection, LLC	Not Applicable
Pitts	Martelle	PJM Interconnection, LLC	Not Applicable

## In Attendance via WebEx / Teleconference:

Achaab	Ed	AEP Energy Partners, Inc	Other Supplier
Ahmad	Syed	FERC	Not Applicable
Baker	Scott	PJM Interconnection, LLC	Not Applicable
Bell	Jerry	PJM Interconnection, LLC	Not Applicable
Broadbeck	John	EDP Renewables North America, LLC	Other Supplier
Cham	Edrissa	Tradewind Energy, Inc.	Not Applicable
Davis	James	Dominion Energy	Generation Owner
Dolan	Ryan	AEP Energy Partners, Inc.	Other Supplier
Feierabend	Rick	Dominion Virginia Power	Not Applicable
Feliks	Kent	Appalachian Power Company	Transmission Owner
Filomena	Guy	Customized Energy Solutions, Ltd	Not Applicable
Gilani	Rehan	ConEdison Energy Inc.	Other Supplier
Gramlich	Rob	Grid Strategies, LLC	Other Supplier
Hendrzak	Chantal	PJM Interconnection, LLC	Not Applicable
Johnston	Dave	Indiana Utility Regulatory Commission	Not Applicable
Kauffman	Brian	NRG Curtailment	Other Supplier
Leimann	John	Dominion Virginia Power	Not Applicable
Marzewski	Skyler	Monitoring Analytics	Not Applicable
Marton	David	First Energy Solutions Corp	Transmission Owner
Peoples	John	Duquesne Light Company	Transmission Owner
Shields	Tom	Iberdrola Renewables	Generation Owner
Whitehead	Jeffrey	Direct Energy Business Marketing, LLC	Other Supplier
Wiegand-Jackson	Laurie	North American Power Partners LLC	Other Supplier