



Distributed Energy Resources Subcommittee PJM Conference and Training Center October 31, 2018 9:00 a.m. – 2:00 p.m. EDT

<u>Distributed Energy Resource (DER)</u> is a generation or electric energy storage resource connected at distribution voltages and/or connected behind a load meter.

### Administration

- 1. Mr. Baker called the meeting to order, reviewed the agenda and asked for amendments to the agenda.
- 2. Mr. Gledhill reviewed meeting participation guidelines and the minutes from the October 4th meeting of the Distributed Energy Resources Subcommittee. In-room attendance was taken and teleconference attendance was taken offline from the list of WebEx attendees.
- 3. Mr. Baker reviewed the DERS work plan.
- 4. Joe Mulhern, PJM, provided a brief informational update on the status of the BTMG observability data collection process. This is currently under discussion at the System Operations Subcommittee Transmisssion.

## Wholesale DER Interconnection

- 5. Mr. Baker reviewed interests captured at the last meeting and discussed how they were grouped.
- 6. Stakeholders continued the Consensus Based Issue Resolution process by identifying design components and solution options. Additional design components were added and PJM will post the updated matrix for further discussion at the November 30 meeting.
- 7. Andrew Levitt, PJM, provided an update on the state interconnection policy analysis that was presented at the last meeting, based on comments received. PJM plans to add more states and additional detail for discussion at a future meeting.

### Wholesale Market Participation Agreements (WMPA) – Operational Requirements

8. Jim Burlew, PJM, addressed legal issues around including operational requirements, such as primary frequency response, in the WMPA. This will continue to be discussed at a future meeting..

### Wholesale DER Market Rules (11:15 – 12:00; 12:45 – 1:30)

- 9. Skyler Marzewski, Monitoring Analytics, presented on the co-location of Demand Response and Generation.
- 10. Pete Langbein, PJM, reviewed the DR Status Quo in the solutions matrix for customers that have both Demand Response and Generation at the same site providing ancillary services. PJM will next move





to presenting manual language for further discussion.

# Wrap-up – Action items, Future Agenda, and Closing Remarks

11. Mr. Baker closed the meeting by reviewing action items and previewing topics for the next meeting.

# Future Meeting Dates

### **Attendance**

Attendees	Company	Sector
Scott Baker (Facilitator)	PJM Interconnection, LLC	Not Applicable
Andrew Gledhill (Secretary)	PJM Interconnection, LLC	Not Applicable
Drew Adams	A.F. Mensah, Inc.	Other Supplier
Tom Rutigliano	Achieving Equilibrium LLC	Other Supplier
Chris Norton	American Municipal Power, Inc.	Electric Distributor
Kristin Rothey	American Municipal Power, Inc.	Electric Distributor
Jim Benchek	American Transmission Systems, Inc.	Transmission Owner
Brock Ondayko	Appalachain Power Company	Transmission Owner
Terry Gates	Appalachian Power Company	Transmission Owner
Rehan Gilani	ConEdison Energy, Inc.	Other Supplier
Guy Filomena	Customized Energy Solutions, Ltd.	Not Applicable
Carl Johnson	Customized Energy Solutions, Ltd.*	Not Applicable
Jonathan Sasser	Customized Energy Solutions, Ltd.*	Not Applicable
Michael Natrin	Delmarva Power & Light Company	Electric Distributor
Bram Wilson	Diamond State Generation Partners, LLC	Generation Owner
Jim Davis	Dominion Energy Marketing, Inc.	Generation Owner
Connie Lowe	Dominion Virginia Power	Not Applicable
Jorge Aguilera	Duke Energy Business Services LLC	Transmission Owner
Ken Jennings	Duke Energy Business Services LLC	Generation Owner
Corey Stancombe	Duke Energy Kentucky, Inc.	Transmission Owner
Nancy Connelly	Duke Energy Ohio, Inc.	Transmission Owner
Bryan Garnett	Duke Energy Ohio, Inc.	Transmission Owner



Rebecca Hilderbrand

# **Draft Minutes**

Uchenna Nwaichi Duke Energy Ohio, Inc. Transmission Owner Janessa Kent **Duquesne Light Company** Transmission Owner John Peoples **Duquesne Light Company** Transmission Owner Alex Rosenblatt **Duquesne Light Company** Transmission Owner John Brodbeck EDP Renewables North America, LLC Other Supplier John Brodbeck EDP Renewables North America, LLC Other Supplier Malcolm Ainspan Energy Curtailment Specialists, Inc. Other Supplier Bruce Campbell Other Supplier EnergyConnect, Inc. Nathan Charles **Enphase Energy** Not Applicable Chad Singer Fellon McCord Not Applicable Lou D'Alessandris FirstEnergy Solutions Corp. Transmission Owner Justin Price FirstEnergy Solutions Corp. Transmission Owner Jed Trott Galt Power Inc. Other Supplier Sean Baur GlidePath Development LLC Not Applicable Tom Hyzinski GT Power Group Not Applicable David Pratzon GT Power Group Not Applicable John Webster Icetec.com, Inc. Other Supplier Jay Marhoefer Intelligent Generation LLC Other Supplier Marc Thrum Intelligent Generation LLC Other Supplier Megan Wisersky Madison Gas & Electric Company Other Supplier David Mabry McNees Wallace & Nurick LLC Not Applicable Christin Domian Mitsubishi Electric Power Products Inc. Not Applicable Skyler Marzewski Monitoring Analytics, LLC Not Applicable George Kogut Other Supplier New York Power Authority NJ Board of Public Utilities David Brown Not Applicable **Brian Hamilton** North American Electric Reliability Corporation Not Applicable Courtney Lang NRG Power Marketing LLC Generation Owner Christopher Wehr Ohio Edison Company Transmission Owner Madalyn Beban PJM Interconnection, LLC Not Applicable Glen Boyle PJM Interconnection, LLC Not Applicable Troy Cawley PJM Interconnection, LLC Not Applicable Joseph Ciabattoni PJM Interconnection, LLC Not Applicable Danielle Croop PJM Interconnection, LLC Not Applicable Michael Del Viscio PJM Interconnection, LLC Not Applicable Thomas DeVita PJM Interconnection, LLC Not Applicable David Egan PJM Interconnection, LLC Not Applicable Damon Fereshetian PJM Interconnection, LLC Not Applicable Andy Ford PJM Interconnection, LLC Not Applicable Suzanne Glatz PJM Interconnection, LLC Not Applicable Andrew Gledhill PJM Interconnection, LLC Not Applicable Chantal Hendrzak PJM Interconnection, LLC Not Applicable

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Not Applicable

PJM Interconnection, LLC



Imran Khan	PJM Interconnection, LLC	Not Applicable
Pete Langbein	PJM Interconnection, LLC	Not Applicable
Joe Mulhern	PJM Interconnection, LLC	Not Applicable
Keyur Patel	PJM Interconnection, LLC	Not Applicable
John Reynolds	PJM Interconnection, LLC	Not Applicable
Ken Schuyler	PJM Interconnection, LLC	Not Applicable
Henry Thomas	PJM Interconnection, LLC	Not Applicable
Cheryl Mae Velasco	PJM Interconnection, LLC	Not Applicable
Laura Walter	PJM Interconnection, LLC	Not Applicable
Stanley Williams	PJM Interconnection, LLC	Not Applicable
Marj Garbini	Potomac Electric Power Company	Electric Distributor
Scott Razze	Potomac Electric Power Company	Electric Distributor
George Beam	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
James Rouland	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
William Sharkazy III	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Gary Greiner	PSEG Energy Resources and Trade LLC	Other Supplier
Kriti Dawadi	Public Service Electric & Gas Company	Transmission Owner
David Ellis	Public Service Electric & Gas Company	Transmission Owner
Albert Grisolia	Public Service Electric & Gas Company	Transmission Owner
Garan Gunn	Public Service Electric & Gas Company	Transmission Owner
Alex Stern	Public Service Electric & Gas Company	Transmission Owner
Christopher Mahila	Public Utilities Commission of Ohio (The)	Not Applicable
Tom Hoatson	Riverside Generating, LLC	Other Supplier
Roleto Mangonon	Rockland Electric Company	Transmission Owner
Kenneth Foladare	Tangibl	Not Applicable
Edrissa Cham	Tradewind Energy, Inc.	Not Applicable
Imelda Foley	University of Delaware	Not Applicable
Chad Dixon	Viridity Energy, Inc.	Other Supplier
Eric Winkler	Winkler Energy Consulting	Transmission Owner

#### Author: Andrew Gledhill

#### 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.

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