

Draft Meeting Minutes



Distributed Energy Resources Subcommittee PJM Conference and Training Center March 2, 2018 9:00 a.m. - 12:00 p.m. EDT

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

Administration

- 1. Mr. Gledhill called the meeting to order and reviewed the agenda.
- 2. Mr. Gledhill reviewed meeting participation guidelines. Attendance was taken in the room and WebEx attendance was taken offline. Minutes from the January 31st meeting of the Distributed Energy Resources Subcommittee were reviewed.
- 3. Mr. Andrew Levitt made several informational announcements:
 - a. NERC series of webinars on inverter-based resources
 - b. February 28th meeting with Transmission Owners group on DER "ride through"
 - c. FERC issues Final Rule on Electric Storage Participation in Regional Markets
 - d. FERC Technical Conference on Distributed Energy Resources (April 10-11)

Wholesale DER Metering and Accounting

- 4. Mr. Levitt, PJM, presented on PJM's second draft proposal for energy market participation at sites with both curtailment and wholesale DER, which takes an integrated approach.
- 5. Mr. Andrew Levitt, PJM, and Mr. Tom Rutigliano, representing Icetec, shared some follow-up items on break down of metering and accounting responsibilities (i.e. PowerMeter, InSchedule, DER Hub, etc). Discussion on an accounting proposal for wholesale energy storage that has the ability to directly serve load was deferred to the March 26th meeting.

Design Components and Solution Options Review

6. Mr. Levitt and Mr. Rutigliano led a discussion in the matrix on solution options and proposals for energy and ancillary services, highlighting the areas in which the PJM and Icetec proposals differ.

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Polling

7. Mr. Gledhill and Mr. Baker presented questions for an upcoming poll and solicit stakeholder feedback. Poll results are planned to be discussed at the March 26th meeting.

Wrap-up and Future Agenda Items

8. Mr. Gledhill summarized action items and the meeting was adjourned.

Future I	Meeting	Dates

March 26, 2018	9:00 a.m. – 3:00 p.m.	PJM Conference & Training Center/ WebEx
April 25, 2018	9:00 a.m. – 3:00 p.m.	PJM Conference & Training Center/ WebEx
June 8, 2018	9:00 a.m. – 3:00 p.m.	PJM Conference & Training Center/ WebEx
June 29, 2018	9:00 a.m. – 3:00 p.m.	PJM Conference & Training Center/ WebEx
July 30, 2018	9:00 a.m. – 3:00 p.m.	PJM Conference & Training Center/ WebEx
August 27, 2018	9:00 a.m. – 3:00 p.m.	PJM Conference & Training Center/ WebEx
October 4, 2018	9:00 a.m. – 3:00 p.m.	PJM Conference & Training Center/ WebEx
October 31, 2018	9:00 a.m. – 3:00 p.m.	PJM Conference & Training Center/ WebEx
November 30, 2018	9:00 a.m. – 3:00 p.m. 9:00 a.m. – 3:00 p.m.	PJM Conference & Training Center/ WebEx PJM Conference & Training Center/ WebEx

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
Maria Robinson	Advanced Energy Economy	Not Applicable
Ed Achaab	AEP Energy Partners, Inc.	Other Supplier
Yazan Alsmadi	AEP Ohio Transmission Company, Inc.	Transmission Owner
Prashant Kansal	AEP Ohio Transmission Company, Inc.	Transmission Owner
Ryan Dolan	American Municipal Power, Inc.	Electric Distributor
Brock Ondayko	Appalachain Power Company	Transmission Owner
Craig Kotras	Baltimore Gas and Electric Company	Transmission Owner
Maya Prica	Case Western Reserve University	Not Applicable
Rehan Gilani	Consolidated Edison Energy, Inc.	Other Supplier
Bruce Campbell	Cpower	Other Supplier
Guy Filomena	Customized Energy Solutions, Ltd.*	Not Applicable
Carl Johnson	Customized Energy Solutions, Ltd.*	Not Applicable
John Horstmann	Dayton Power & Light Company (The)	Transmission Owner
David Hastings	Dhast Co	Not Applicable
Marjorie Philips	Direct Energy Business, LLC	Other Supplier
James Davis	Dominion Energy Marketing, Inc.	Generation Owner
Sandra Hopkins	Dominion Virginia Power	Transmission Owner
Connie Lowe	Dominion Virginia Power	Transmission Owner
Steve Steinkuhl	Duke Energy Business Services LLC	Transmission Owner

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Transmission Owner

Duke Energy Ohio, Inc.

Christin Domian **Duquesne Light Company Transmission Owner** Janessa Kent **Duquesne Light Company Transmission Owner** Tom Rutigliano Earth Networks Other Supplier East Kentucky Power Cooperative, Inc. Chuck Dugan **Transmission Owner** Malcolm Ainspan Energy Curtailment Specialists, Inc. Other Supplier EnerNOC, Inc. Katie Guerry Other Supplier Nathan Charles **Enphase Energy** Not Applicable Lloyd Kolb EnSync Energy Systems Not Applicable Jim Benchek FirstEnergy Solutions Corp. **Transmission Owner** Martin Bolan FirstEnergy Solutions Corp. **Transmission Owner David Marton** FirstEnergy Solutions Corp. **Transmission Owner** Jon Schneider FirstEnergy Solutions Corp. **Transmission Owner** Ed Stein **Transmission Owner** FirstEnergy Solutions Corp. Other Supplier Jed Trott Galt Power Inc Not Applicable **GT Power Group** Tom Hyzinski David Pratzon **GT Power Group** Not Applicable Jeffrey Whitehead Not Applicable **GT Power Group** John Webster Other Supplier Icetec.com, Inc. Dave Johnston Indiana Utility Regulatory Commission Not Applicable Not Applicable Stacy Sherwood Maryland Public Service Commission David Mabry McNees Wallace & Nurick LLC Not Applicable Thomas Weeks Michigan Public Power Agency Generation Owner Skyler Marzewski Monitoring Analytics Not Applicable Navigant Consulting, Inc. Not Applicable Brett Feldman David Brown New Jersey Board of Public Utilities Not Applicable Michael Winka Not Applicable New Jersey Board of Public Utilities NextEra Energy Power Marketing, LLC Generation Owner Eric Rodriguez Reyes Not Applicable **Brian Hamilton** North American Electric Reliability Corporation North Carolina Electric Membership Corporation Electric Distributor Robert Beadle Jennifer Chen NRDC Not Applicable NRG Curtailment Solutions Other Supplier Brian Kauffman Office of the Peoples Counsel for the D.C. **End User Customer** Frederick Heinle Bruce Remmel Ohio Edison Company (ATSI CSP) Transmission Owner Adrien Ford Old Dominion Electric Cooperative Electric Distributor Katie Treadway One Energy, LLC Not Applicable **Gregory Carmean OPSI** Not Applicable Not Applicable Murty Bhavaraju PJM Interconnection, LLC PJM Interconnection, LLC Not Applicable Rich Brown Joe Ciabattoni PJM Interconnection, LLC Not Applicable

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Author: Andrew Gledhill

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Jason Connell PJM Interconnection, LLC Not Applicable Suzanne Coyne PJM Interconnection, LLC Not Applicable Elizabeth Davis PJM Interconnection, LLC Not Applicable Mary Ellen Driscoll PJM Interconnection, LLC Not Applicable David Egan PJM Interconnection, LLC Not Applicable Not Applicable Eric Endress PJM Interconnection, LLC Gabrielle Genuario PJM Interconnection, LLC Not Applicable Suzanne Glatz PJM Interconnection, LLC Not Applicable Chantal Hendrzak PJM Interconnection, LLC Not Applicable Tahmina Khan PJM Interconnection, LLC Not Applicable Pete Langbein PJM Interconnection, LLC Not Applicable Andrew Levitt PJM Interconnection, LLC Not Applicable Joseph Mulhern PJM Interconnection, LLC Not Applicable Masha Nyemko PJM Interconnection, LLC Not Applicable Steven Pincus PJM Interconnection, LLC Not Applicable John Reynolds PJM Interconnection, LLC Not Applicable Jason Shoemaker PJM Interconnection, LLC Not Applicable Elizabeth Trinkle PJM Interconnection, LLC Not Applicable Cheryl Mae Velasco PJM Interconnection, LLC Not Applicable Electric Distributor Marjorie Garbini Potomac Electric Power Company Scott Razze Potomac Electric Power Company Electric Distributor PPL Electric Utilities Corp. dba PPL Utilities James Stover **Transmission Owner** Sam Giordano PSEG Energy Resources and Trade LLC **Transmission Owner** David Ellis Public Service Electric & Gas Company **Transmission Owner** Tim Fagan Public Service Electric & Gas Company Transmission Owner Rich Marinelli Public Service Electric & Gas Company **Transmission Owner** Ahmed Mousa Public Service Electric & Gas Company Transmission Owner Jim Sherman Public Service Electric & Gas Company **Transmission Owner** Alex Stern Public Service Electric & Gas Company **Transmission Owner** Harry Uniman Public Service Electric & Gas Company **Transmission Owner** Tom Hoatson Riverside Generating, LLC Other Supplier SolarCity Not Applicable **Betty Watson** Generation Owner George Beam Talen Energy Marketing, LLC Kenneth Foladare Not Applicable **Tangibl** Cynthia Kinser Tennessee Department of Agriculture Not Applicable Imelda Foley University of Delaware Not Applicable Susan Covino Unknown Not Applicable Eric Winkler Winkler Energy Consulting Not Applicable

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