

Draft Minutes



Special MIC – Distributed Energy Resources (DER) PJM Conference and Training Center April 10, 2017 9:30 a.m. – 3:30 p.m. EST

Administration

- 1. Mr. Baker called the meeting to order.
- 2. Mr. Gledhill will reviewed meeting participation guidelines and the minutes from the March 2nd meeting. Attendance was taken offline from a combination of in-person and WebEx attendees.
- 3. Mr. Baker reviewed the Work Plan, reviewed the agenda, and asked for amendments to the agenda.

Station Power DER

4. Mr. Levitt provided a recap of a recent PJM site visit to a solar/storage facility. The example was used to discuss the accounting for battery charging under Station Power rules, and clarification of rules related to these types of facilities. Through discussion, additional clarity was asked for on the project's metering configuration.

PJM Report on Distributed Energy Resources

5. Mr. Langbein provided a walk-through of a recently published report on Distributed Energy Resources that participate in PJM Markets as Demand Response. The report can be found here.

Consensus Based Issue Resolution Process

Mr. Baker led a review of the solutions matrix with stakeholders, focusing discussion on existing and new solution options. This discussion will continue at the group's next meeting.

Planning Committee Update

7. Mr. Berner reviewed items related to DER that were sent to the Planning Committee for discussion.

Discussion of Storage Voltage Distribution System Impacts

8. Mr. Levitt led a discussion on the distribution impacts of storage resources participating in PJM markets. The suggestion was made to see if this should incorporated into the DR registration process and whether the Demand Response Subcommittee should be consulted

Stakeholder Case Studies

9. Mr. Adams, AF Mensah, presented a project case study regarding distributed and behind-the-meter battery storage, including discussion of metering configuration and operation. The purpose of this case study was to discuss market rules and interconnection procedures today, and test the application of solutions options in the matrix this type of a project.

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10. Mr. Harripersad, True Green Capital, presented on experience with the small generator interconnection process through discussion of their solar projects in the PJM territory.

Wrap-up and Future Agenda Items

11. Mr. Baker summarized action items, asked stakeholders for future discussion topics, and brought the meeting to a close.

Future Meeting Dates

May 1, 2017 May 19, 2017 June 1, 2017 June 20, 2017 July 7, 2017 August 1, 2017 August 18, 2017 August 31, 2017 September 18, 2017	9:30 a.m – 3:30 p.m. 1:00 p.m. – 4:00 p.m. 9:00 a.m – 12:00 p.m. 1:00 p.m. – 4:00 p.m. 9:00 a.m – 12:00 p.m. 9:00 a.m – 12:00 p.m. 1:00 p.m. – 4:00 p.m. 9:00 a.m. – 12:00 p.m.	PJM Conference & Training Center/ WebEx
August 31, 2017	9:00 a.m. – 12:00 p.m.	PJM Conference & Training Center/ WebEx
September 18, 2017	9:00 a.m. – 12:00 p.m.	PJM Conference & Training Center/ WebEx
October 4, 2017	1:00 p.m. – 4:00 p.m.	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
Wayne Wittman	A.F. Mensah, Inc.	Other Supplier
Benjamin Lowe	Alevo	Not Applicable
Ryan Jones Chris Norton	Allegheny Electric Cooperative, Inc. American Municipal Power, Inc.	Electric Distributor Electric Distributor
Kent Feliks	Appalachain Power Company	Transmission Owner
Brock Ondayko	Appalachain Power Company	Transmission Owner
Kevin Kilgallen	Avangrid Renewables, LLC	Generation Owner
Marek Kaczanowski	Baltimore Gas and Electric Company	Transmission Owner
James Jablonski	Borough of Butler, Butler Electric Division	Electric Distributor
David Scarpignato	Calpine Energy Services, L.P.	Generation Owner
Tom Hoatson	Carroll County Energy LLC	Other Supplier
Bruce Campbell	Cpower	Other Supplier
Mike Berlinski	Customized Energy Solutions, Ltd.*	Not Applicable
Guy Filomena	Customized Energy Solutions, Ltd.*	Not Applicable
Carl Johnson	Customized Energy Solutions, Ltd.*	Not Applicable
Jonathan Sasser	Customized Energy Solutions, Ltd.*	Not Applicable
John Horstmann	Dayton Power & Light Company (The)	Transmission Owner
Joseph DeLosa	DE Public Service Commission	Not Applicable
John Farber	DE Public Service Commission	Not Applicable

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Yohannes Mariam

Joe Ciabattoni

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Jeffrey Whitehead Direct Energy Business Marketing, LLC Other Supplier Jeff Currier Dominion Virginia Power Not Applicable Dominion Virginia Power Transmission Owner Randi Heise **Dominion Virginia Power Transmission Owner** Abhijit Rajan **Dominion Virginia Power Emily Wilmoth** Transmission Owner William Jett Duke Energy Business Services LLC **Transmission Owner** Bryan Garnett Duke Energy Ohio, Inc. Transmission Owner Christin Domian **Duquesne Light Company Transmission Owner** John Peoples **Duquesne Light Company Transmission Owner** Thomas Rutigliano Earth Networks Other Supplier East Kentucky Power Cooperative, Inc. **Transmission Owner** Chuck Dugan John Brodbeck EDP Renewables North America, LLC Other Supplier Katie Guerry EnerNOC, Inc. Other Supplier Exelon Generation Co., LLC **Sharon Midgley** Generation Owner Jim Benchek FirstEnergy Solutions Corp. **Transmission Owner David Marton** FirstEnergy Solutions Corp. **Transmission Owner** Jon Schneider FirstEnergy Solutions Corp. **Transmission Owner** Ed Stein FirstEnergy Solutions Corp. Transmission Owner Chad Wilhite FirstEnergy Solutions Corp. Transmission Owner Richard Ziegler FirstEnergy Solutions Corp. **Transmission Owner** Michael Borgatti Gabel and Associates Not Applicable Derek Hagaman GT Power Group Not Applicable **David Pratzon** GT Power Group Not Applicable John Webster Icetec.com, Inc. Other Supplier

John Kopinski ITC Mid-Atlantic Development LLC Other Supplier Main Line Electricity Market Consultants Robert O'Connell Not Applicable Not Applicable Morris Schreim Maryland Public Service Commission David Mabry McNees Wallace & Nurick LLC Not Applicable Not Applicable **Brian Hamilton** New Jersey Board of Public Utilities **Amber Williams** New York State Electric & Gas Corporation Other Supplier Jung Suh Noble Americas Energy Solutions LLC Other Supplier North Carolina Electric Membership Corporation Electric Distributor Robert Beadle James Manning North Carolina Electric Membership Corporation Electric Distributor Neal Fitch NRG Power Marketing LLC Generation Owner

Bruce RemmelOhio Edison Company (ATSI CSP)Transmission OwnerDave AndersPJM Interconnection, LLCNot ApplicableMurty BhavarajuPJM Interconnection, LLCNot ApplicableRich BrownPJM Interconnection, LLCNot Applicable

PJM Interconnection, LLC

Office of the Peoples Counsel for the D.C.

End User Customer

Not Applicable

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Not Applicable Zhenyu Fan PJM Interconnection, LLC Not Applicable Chantal Hendrzak PJM Interconnection, LLC Not Applicable Natasha Holter PJM Interconnection, LLC Not Applicable Eric Hsia PJM Interconnection, LLC Not Applicable Pete Langbein PJM Interconnection, LLC Not Applicable Andrew Levitt PJM Interconnection, LLC Not Applicable Erich Mauroschadt PJM Interconnection, LLC Not Applicable Esrick McCartha PJM Interconnection, LLC Not Applicable PJM Interconnection, LLC Not Applicable Sean McNamara Masha Nyemko PJM Interconnection, LLC Not Applicable Keyur Patel PJM Interconnection, LLC Not Applicable David Picarelli PJM Interconnection, LLC Not Applicable Ken Schuyler PJM Interconnection, LLC Not Applicable Steven Shparber PJM Interconnection, LLC Not Applicable Mike Ward PJM Interconnection, LLC Not Applicable Glenn Weiss PJM Interconnection, LLC Not Applicable Mark Marsan Public Service Electric & Gas Company **Transmission Owner** Harry Uniman Public Service Electric & Gas Company **Transmission Owner** Debbie Gebolys Public Utilities Commission of Ohio (The) Not Applicable Not Applicable Rory Sweeney RTO Insider Michele Greening Talen Energy Marketing, LLC Generation Owner Tom Hyzinski Talen Energy Marketing, LLC Generation Owner Barbara Scoglietti Tangent Energy Solutions, Inc. Other Supplier Chris Hendrix Other Supplier Texas Retail Energy, LLC Jim Fort The Energy Authority Other Supplier Wufan Jia The Mobility House Other Supplier Adesh Harripersad True Green Capital Not Applicable

Author: Andrew Gledhill

Pat Hayes

William Birnel

Provide feedback on the progress of this group: Facilitator Feedback Form Visit *learn.pjm.com*, an easy-to-understand resource about the power industry and PJM's role.

Union Electric Company d/b/a Ameren Missouri

West AR energy

Other Supplier

Not Applicable

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