

Distributed Energy Resources Subcommittee PJM Conference and Training Center August 27, 2018 9:00 a.m. – 3:00 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 July 30th 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. Gledhill reviewed the process for stakeholders to sign up for the DERS email distribution list.
- 4. Mr. Baker reviewed the DERS work plan.

Non-Wholesale DER Observability

5. Mr. Baker and Mr. Pete Langbein, PJM, reviewed the results of the vote on a proposal to gain greater observability of non-wholesale DER / Behind-the-Meter-Generation resources, as well as comments received at the first read of the proposal at the Markets and Reliability Committee meeting on August 23rd. Stakeholders provided feedback on additional clarifications.

Wholesale DER Interconnection

6. Stakeholders began to look into an assessment of the PJM interconnection queue process for wholesale DER. Drew Adams, A.F. Mensah, Imelda Foley, University of Delaware, Brian Kauffman, EnerNOC, and Tom Rutigliano, representing Icetec, presented their input and requested PJM to provide additional information to help guide future stakeholder discussion. PJM staff resolved to come back to the next meeting with follow-up.

Wholesale Market Participation Agreements

7. Stakeholders reviewed the issue statement drafted by the Primary Frequency Response Senior Task Force regarding operational requirements for resources interconnecting under local jurisdiction and executing a Wholesale Market Participation Agreement with PJM and the Transmission Owner.

Order 841 – Electric Storage Resources – PJM Compliance Update

 Ms. Laura Walter, PJM, provided a brief update on PJM's draft proposal for compliance with FERC Order 841 on Electric Storage Resources. This issue is being worked in Special Sessions of the MIC. For more information, please find additional materials on the Issue Tracking page <u>here</u>.



Wholesale DER Market Rules – Ancillary Services

- 9. Mr. Andrew Levitt, PJM, presented the PJM Staff proposal for DER Ancillary Service participation.
- 10. Stakeholders reviewed solution options associated with wholesale DER Ancillary Service market participation in the solutions matrix.

Wrap-up – Action items, Future Agenda, and Closing Remarks (2:45 – 3:00)

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

Future Meeting Dates

October 4, 2018 October 31, 2018 November 30, 2018 9:00 a.m. - 3:00 p.m. 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 PJM Conference & Training Center/ WebEx

Attendance

Attendees	Company
Scott Baker (Facilitator)	PJM Interconnection, LLC
Andrew Gledhill (Secretary)	PJM Interconnection, LLC
Drew Adams	A.F. Mensah, Inc.
Tom Rutigliano	Achieving Equilibrium LLC
Katherine Hamilton	Advanced Energy Management Alliance AEMA
Paul Molta	Ameresco
Chris Norton	American Municipal Power, Inc.
Kristin Rothey	American Municipal Power, Inc.
Jim Benchek	American Transmission Systems, Inc.
Brock Ondayko	Appalachain Power Company
David Canter	Appalachian Power Company
Brian Vayda	Borough of Park Ridge, NJ
Stephen Kelly	Brookfield Energy Marketing LP
Rehan Gilani	ConEdison Energy, Inc.
Brian Wilkie	Consolidated Edison Solutions, Inc
Guy Filomena	Customized Energy Solutions, Ltd.
Carl Johnson	Customized Energy Solutions, Ltd.*
Jonathan Sasser	Customized Energy Solutions, Ltd.*
John Horstmann	Dayton Power & Light Company (The)
Bram Wilson	Diamond State Generation Partners, LLC
Jim Davis	Dominion Energy Marketing, Inc.
Michael Purdie	Dominion Virginia Power
Jorge Aguilera	Duke Energy Business Services LLC
Kenneth Jennings	Duke Energy Business Services LLC
John Sturgeon	Duke Energy Carolinas, LLC
Nancy Connelly	Duke Energy Ohio, Inc.

Sector

Not Applicable Not Applicable **Other Supplier Other Supplier** Not Applicable Not Applicable **Electric Distributor** Electric Distributor **Transmission Owner Transmission Owner Transmission Owner Electric Distributor Other Supplier Other Supplier Other Supplier** Not Applicable Not Applicable Not Applicable **Transmission Owner Generation Owner Generation Owner** Not Applicable **Transmission Owner Generation Owner Other Supplier Transmission Owner**



Draft Minutes

John Peoples Alex Rosenblatt John Brodbeck Malcolm Ainspan Bruce Campbell Brian Kauffman Sharon Midgley **Dean Philips** Justin Price Anne Rericha Jon Schneider Ed Stein Mike Thorn Jed Trott **David Pratzon** Jeffrey Whitehead Stan Allison John Webster Mike Gahimer Min Zhu **David Hastings** David Mabry **Thomas Weeks** Erik Hanser **Christin Domian Ginny Kreitler** Joe DeLosa George Kogut David Brown Shelly Ann Maye **Brian Hamilton** Bob Beadle Neal Fitch **Courtney Lang** Julia Popova **Frederick Heinle Yohannes Mariam** Michael Cocco Jenjira Knernschield **Katie Treadway** Monica Jha Madalyn Beban

Duquesne Light Company Duquesne Light Company EDP Renewables North America, LLC Energy Curtailment Specialists, Inc. EnergyConnect, Inc. EnerNOC, Inc. **Exelon Business Services Company, LLC** FirstEnergy Solutions Corp. Galt Power Inc. **GT** Power Group **GT** Power Group Holocene Finance, LLC Icetec.com, Inc. IN Office of Utility Consumer Counselor Jane Street Group, LLC Market Interconnection LLC McNees Wallace & Nurick LLC Michigan Public Power Agency **Michigan Public Service Commission** Mitsubishi Electric Power Products Inc. National Audobon New Jersey Board of Public Utilities New York Power Authority NJ Board of Public Utilities North America Power Partners LLC North American Electric Reliability Corporation North Carolina Electric Membership Corporation NRG Power Marketing LLC NRG Power Marketing LLC **NRG Power Marketing LLC** Office of the Peoples Counsel for the District of Columbia Office of the Peoples Counsel for the District of Columbia **Old Dominion Electric Cooperative Old Dominion Electric Cooperative** One Energy, LLC PCI PJM Interconnection, LLC

Transmission Owner Transmission Owner Other Supplier Other Supplier Other Supplier Other Supplier **Transmission Owner Transmission Owner Transmission Owner Transmission Owner Transmission Owner Transmission Owner Transmission Owner** Other Supplier Not Applicable Not Applicable Other Supplier Other Supplier **End User Customer** Not Applicable Not Applicable Not Applicable **Generation Owner** Not Applicable Not Applicable Not Applicable Not Applicable Other Supplier Not Applicable **Other Supplier** Not Applicable **Electric Distributor Generation Owner Generation Owner Generation Owner End User Customer End User Customer** Electric Distributor **Electric Distributor** Not Applicable Not Applicable Not Applicable



Draft Minutes

Murty Bhavaraju **Danielle Croop Becky Davis** James Dolan David Egan **Damon Fereshetian** Andy Ford Suzanne Glatz Rebecca Hilderbrand David Kimmel Pete Langbein Andrew Levitt **Chuck Liebold** Susan McGill Joseph Mulhern Masha Nyemko Jack O'Neill **Keyur Patel** John Reynolds David Schweizer Jennifer Tribulski **Elizabeth Trinkle** Cheryl Mae Velasco Laura Walter Scott Razze George Beam John Feller James Rouland Gary Greiner David Ellis Hamza Gondal Garan Gunn Alex Stern Jim Sherman **Christopher Mahila** Tom Hoatson Suzanne Herel **Betty Watson Dave Turner** Kenneth Foladare Cynthia Kinser Ibrahima Kalle

PJM Interconnection, LLC Potomac Electric Power Company PPL Electric Utilities Corp. dba PPL Utilities PPL Electric Utilities Corp. dba PPL Utilities PPL Electric Utilities Corp. dba PPL Utilities PSEG Energy Resources and Trade LLC Public Service Electric & Gas Company Public Utilities Commission of Ohio (The) **Riverside Generating, LLC RTO** Insider SolarCity Tangent Energy Solutions, Inc. Tangibl Tennessee Department of Agriculture **Tibiri Energies**

Not Applicable **Electric Distributor** Transmission Owner **Transmission Owner Transmission Owner** Other Supplier **Transmission Owner** Transmission Owner **Transmission Owner Transmission Owner Transmission Owner** Not Applicable Other Supplier Not Applicable Not Applicable Other Supplier Not Applicable Not Applicable Not Applicable



Imelda Foley Eric Winkler University of Delaware Winkler Energy Consulting Not Applicable Not Applicable

Author: Andrew Gledhill

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