

## DER and Inverter-based Resources Subcommittee

WebEx Only

August 17, 2021

1:00 p.m. – 4:00 p.m. ET

### Administration (1:00 – 1:05)

1. Scott Baker, chair, opened the meeting and reviewed the agenda.
2. Hamad Ahmed, secretary, reviewed the meeting participation guidelines.


### Order 2222 – Updated Staff Proposal on DER Aggregation (1:05 – 3:55)

3. PJM Staff continued presenting updates to the DER Aggregation straw proposal presented in March/April.
  - Sue Glatz, PJM, reviewed updates on Interconnection and PJM planning requirements.
  - Danielle Croop, PJM, reviewed updates on several topics within Market design, such as Market Participation Model, min/max size requirements, Capacity, Energy and Ancillary Services.
  - Ed Rich III, PJM, reviewed updates on several topics within settlements such as metering, DR participation, Day-ahead, DERA with DR, ownership share, balancing, Operating Reserves and several settlement examples.
  - Maddie Beban, PJM, reviewed updates on double counting with two examples of NEM use cases and discussed purposes of use cases.
  - Pete Langbein, PJM, discussed EDC coordination on topics such as Interconnection and registration/utility review. Peter also discussed key EDC responsibilities for order 2222, registration review timeline and use cases.
  - Donnie Bielak, PJM, discussed EDC coordination including operational coordination and utility overrides. Donnie stressed that the operation coordination model is still a work in progress, including the visual diagram on slide 120. Continued iteration on this model will be discussed at future meetings.

### Action items and next meeting agenda (3:55 – 4:00)

4. The facilitation team reviewed action items from the meeting and took requests for future agenda items.
  - Stakeholders discussed focusing on interconnection and planning related items at the upcoming EDC Coordination Workshop on September 21<sup>st</sup> given the length of discussion during the meeting.
  - Stakeholders requested follow-up on the following items:

1. Confirmation that FERC’s ‘first-use test’ of interconnection jurisdiction does not apply to DER Aggregations under Order 2222.
2. Whether or not a DER Aggregator would need to be a signatory to the RAA.
3. Overview/Education/Training on Power Meter and InSchedule tools.
4. Process flow diagrams for the DER registration / Utility Review Process.

<i>Future Meeting Dates and Materials</i>			Materials Due to Secretary 	Materials Published
<i>Date</i>	<i>Time</i>	<i>Location</i>	<b>5 p.m.</b>	<b>4 p.m.</b>
<i>September 14, 2021</i>	9:00 – 12:00	WebEx	<b>September 3, 2021</b>	<b>September 9, 2021</b>
<i>September 21, 2021–EDC Coordination workshop</i>	3:00 – 5:00	WebEx	<b>September 13, 2021</b>	<b>September 16, 2021</b>
<i>October 22, 2021</i>	9:00 – 4:00	WebEx	<b>October 14, 2021</b>	<b>October 19, 2021</b>
<i>November 9, 2021-EDC Coordination workshop</i>	3:00 – 5:00	WebEx	<b>November 1, 2021</b>	<b>November 4, 2021</b>
<i>November 22, 2021</i>	9:00 – 3:00	WebEx	<b>November 12, 2021</b>	<b>November 17, 2021</b>
<i>December 9, 2021-EDC Coordination workshop</i>	3:00 – 5:00	WebEx	<b>December 1, 2021</b>	<b>December 6, 2021</b>
<i>December 21, 2021</i>	9:00 – 4:00	WebEx	<b>December 13, 2021</b>	<b>December 16, 2021</b>

Author: Hamad Ahmed

## WebEx Meeting Attendance

Name	Company Name	Sector
Hamad Ahmed	PJM Interconnection	None
William Allen	Commonwealth Edison Company	Transmission Owner
David Anders	PJM Interconnection	None
Jared Anderson	American Transmission Company - Retired	
Jeff Baker	PJM Connect	
Scott Baker	PJM Interconnection	None
Joe Bowring	Monitoring Analytics	
Patrick Bruno	PJM Interconnection	None
Thomas Buhler	PJM Connect	
Jennifer Burke	Guidehouse Inc.	None
Zachary Callen	Illinois Commerce Commission	
Bruce Campbell	Enerwise Global Technologies, LLC	Other Supplier
David Canter	Appalachian Power Company (AEP Generation)	Transmission Owner

Onyinye Caven	Salil LLC	
Sean Chang	Shell Energy North America (US), L.P.	Other Supplier
Nancy Connelly	Duke Energy Ohio, Inc.	Transmission Owner
Kerinia Cusick	Center for Renewables Integration	
Michael Dailey	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Louis D'Alessandris	American Transmission Systems, Inc.	Transmission Owner
Elizabeth Davis	PJM Interconnection	None
Joseph DeLosa	New Jersey Board of Public Utilities	
Brett Denby	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Meredith Dibert	Pennsylvania Department of Environmental Protection	
Laura DiNicola	firstenergy	
Mamadou Diong	Dominion Virginia Power	Transmission Owner
Christin Domian	Duquesne Light Company	Transmission Owner
Rachel Elkins	American Transmission Systems, Inc.	Transmission Owner
David Ellis	Public Service Electric & Gas Company	Transmission Owner
Christine Ericson	Illinois Commerce Commission	
Guy Filomena	Customized Energy Solutions, Ltd.	None
Kenneth Foadare	Geenex Solar LLC	Other Supplier
Adrien Ford	Old Dominion Electric Cooperative	Electric Distributor
Rod Gagen ES	Dominion Virginia Power	Transmission Owner
Michael Gahimer	Indiana Office of Utility Consumer Counselor (IN OUCC)	
Jill Gates	PJM Interconnection	
Terry Gates	Appalachian Power Company (AEP Generation)	Transmission Owner
Suzanne Glatz	PJM Interconnection	None
Craig Glazer	PJM Interconnection	None
Michele Greening	PJM Interconnection	None
Prusha Hasan	Advanced Energy Economy	
Thomas Hauske	PJM Interconnection	None
Chad Heitmeyer	Appalachian Power Company (AEPSCO)	Transmission Owner

Suzanne Herel	PJM Interconnection	None
Nels Hoplin	Trans-Allegheny Interstate Line Company	Transmission Owner
Lynn Marie Horning	Customized Energy Solutions, Ltd.	None
John Horstmann	Dayton Power & Light Company (The)	Transmission Owner
Steven Hughes	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Benjamin Hunter	BSHunter	
Tom Hyzinski	GT Power Group, LLC	None
Diane Janicki	Boston Energy Trading and Marketing LLC	Other Supplier
Gina Jardot	NRG Curtailment Solutions, Inc.	Other Supplier
Carl Johnson	Customized Energy Solutions, Ltd.	None
Nathaniel Johnson	Appalachian Power Company (AEP Generation)	Transmission Owner
David Johnston	Other	
Samuel Kayne	Delaware PSC	
Stephen Kelly	Brookfield Renewable Trading and Marketing LP (BSMH)	Other Supplier
George Kogut	New York Power Authority	Other Supplier
Katherine Legates	Appalachian Power Company (AEP Generation)	Transmission Owner
CONNIE LOWE	Dominion Virginia Power	Transmission Owner
Anthony Madonna	EnergyHub	
Katharine McCormick	Illinois Commerce Commission	
Paul McGlynn	PJM Interconnection	None
Timothy McInerney	Commonwealth Edison Company	Transmission Owner
Sharon Midgley	Exelon Business Services Company, LLC	Transmission Owner
Nancy Muhl	PJM Interconnection	None
Emma Nix	Jersey Green Energy LLC	Other Supplier
Chris Norton	American Municipal Power, Inc.	Electric Distributor
James Okenfuss	Savion, LLC	
Aasawari Pawar	Orsted Onshore North America, LLC	Generation Owner
John Peoples	Duquesne Light Company	Transmission Owner

Asanga Perera	New York ISO	
Christopher Pilog	PJM Interconnection	None
Ruth Price	Delaware Division of the Public Advocate	
Michael Purdie	Dominion Virginia Power	Transmission Owner
Lawrence Rahmes	Electric Power Engineers	
Ryann Reagan	New Jersey Board of Public Utilities	
Tomas Rodriguez	Organization of PJM States, Inc.	
Alexa Rooney	PPL Electric Utilities Corp. dba PPL Utilities (TO)	Transmission Owner
Alex Rosenblatt	Duquesne Light Company	Transmission Owner
James Rouland	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Jonathan Sasser	Customized Energy Solutions, Ltd.	None
David Scarpignato	Calpine Energy Services, L.P.	Generation Owner
Kenneth Schisler	Enerwise Global Technologies, LLC	Other Supplier
Ken Schuyler	PJM Interconnection	None
Bahaa Seireg	Rockland Electric Company	Transmission Owner
Evan Shearer	Duke Energy Business Services LLC	Transmission Owner
James Sorrels	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Alexander Stern	Public Service Electric & Gas Company	Transmission Owner
Rob Stupar	Invenergy Energy Management LLC	Generation Owner
Heather Svenson	Public Service Electric & Gas Company	Transmission Owner
Rory Sweeney	GT Power Group, LLC	None
Kevin Thundiyl	Exelon Generation Co., LLC (NEV_XLON)	Generation Owner
Andrea Tighe	CAPS	
James Tobia	FirstEnergy Services	
Jennifer Tribulski	PJM Interconnection	None
Catherine Tyler	Monitoring Analytics	
Betty Watson	Affirmed Energy LLC	Other Supplier
Kathleen Wehnes	Maryland Department of the Environment	

Christopher Wehr	Ohio Edison Company (EDC)	Electric Distributor
Brett White	Pine Gate Mid-Atlantic, LLC	Other Supplier
Jeffrey Whitehead	GT Power Group	
Amy Willey	Delaware Public Service Commission	
Fernie Williams	East Kentucky Power Cooperative, Inc.	Transmission Owner
Emily Wilmoth ES	Dominion Virginia Power	Transmission Owner
De Andre Wilson	Maryland Public Service Commission	
Art Wolfe	Ohio Power Company	Transmission Owner
Damon Xenopoulos	Other	
Michael Yoder	RTO Insider	
Kyungjin Yoo	Monitoring Analytics	
Vivian Younes	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner

**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.

**Public Meetings/Media Participation:**

Unless otherwise noted, PJM stakeholder meetings are open to the public and to members of the media. Members of the media are asked to announce their attendance at all PJM stakeholder meetings at the beginning of the meeting or at the point they join a meeting already in progress. Members of the Media are reminded that speakers at PJM meetings cannot be quoted without explicit permission from the speaker. PJM Members are reminded that "detailed transcriptional meeting notes" and white board notes from "brainstorming sessions" shall not be disseminated. Stakeholders are also not allowed to create audio, video or online recordings of PJM meetings. PJM may create audio, video or online recordings of stakeholder meetings for internal and training purposes, and your participation at such meetings indicates your consent to the same.

**Participant Identification in Webex:**

When logging into the Webex desktop client, please enter your real first and last name as well as a valid email address. Be sure to select the "call me" option. PJM support staff continuously monitors Webex connections during stakeholder meetings. Anonymous users or those using false usernames or emails will be dropped from the teleconference.

<p><b>On the Phone, Dial</b></p>  <p><b>*6</b></p> <p>to Mute/Unmute</p>	<p><b>Linking Teleconference Connection to Webex</b></p> <p>When logging in to the meeting, access Webex first and select the "call me" feature to receive a direct call to your phone. Using this feature will connect your name to your Webex presence.</p>
---	---

## Join a Meeting

1. Join meeting in the Webex desktop client
2. Enter name (*First and Last\**) and corporate email
3. Under “Select Audio Option” select “Call Me” option from the dropdown menu

*\*Note: Anonymous users or those using false usernames or emails will be dropped from the teleconference.*

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