



As of November 9, 2021

DER and Inverter-based Resources Subcommittee – EDC Coordination Workshop WebEx Only October 26, 2021 1:00 p.m. – 4:00 p.m. ET

Administration (1:00 - 1:05)

- 1. Scott Baker opened the meeting and reviewed the agenda.
- 2. Hamad Ahmed reviewed the meeting participation guidelines.

Order 2222 - Market Participation Agreement (1:05 - 2:00)

- 3. Thomas DeVita, PJM, discussed a draft, pro forma market participation service agreement as part of the DER Aggregation Market Participation Model.
 - Thomas reviewed a preliminary pro forma market participation service agreement and addressed several questions and concerns from stakeholders.

Order 2222 – Utility Coordination (2:00 – 3:50)

- 4. PJM and utility staff discussed draft metering and telemetry requirements for DER Aggregations.
 - Danielle Croop, PJM, briefly discussed telemetry data requirement for Capacity, Energy only, Regulation and Reserves.
- 5. Utilities provided feedback on several topics within order 2222.
 - Ed Stein, Ohio Edison Company, discussed high level flowchart for revenue data movement for Energy and EDC recommendations on several topics such as Operation coordination model, single Pnode model requirement, data sharing, BTM metering plus telemetry and Cyber Security.
 - Flora Flygt, Grid X Partners representing PPL, discussed Pnode mapping, PJM and EDC's roles and responsibilities on registration. Flora reviewed several other topics such as Metering, Telemetry, Settlement, Planning and the implementation timeline.

Action items and next meeting agenda (3:50 – 4:00)

6. The facilitation team reviewed action items from the meeting and took requests for future agenda items.

Future Meeting Dates and Materials		Materials Due to Secretary	Materials Published	
Date	Time	Location	5 p.m.	4 p.m.
October 28, 2021	9:00 – 4:00	WebEx	October 20, 2021	October 25, 2021
November 9, 2021-EDC Coordination workshop	3:00 - 5:00	WebEx	November 1, 2021	November 4, 2021
November 22, 2021	9:00 - 3:00	WebEx	November 12, 2021	November 17, 2021





As of November 9, 2021

December 9, 2021-EDC Coordination workshop	3:00 - 5:00	WebEx	December 1, 2021	December 6, 2021
December 21, 2021	9:00 – 4:00	WebEx	December 13, 2021	December 16, 2021

Author: Hamad Ahmed

WebEx Meeting Attendance

Name	Company Name	Sector
Hamad Ahmed	PJM Interconnection	None
David Anders	PJM Interconnection	None
Jeff Baker	PJM Connect	
Scott Baker	PJM Interconnection	None
George Beam	PPL Elec Utilities Corp dba PPL Utilities (PPL POLR Small C&I)	Transmission Owner
Jim Benchek	FirstEnergy Corporation	
Michael Borgatti	PJM Committee Voting Generic Account	
Joe Bowring	Monitoring Analytics	
Aaron Breidenbaugh Michael Bryson	Centrica Business Solutions Optimize, LLC PJM Internal	Other Supplier
Zachary Callen	Illinios Commerce Commission	
Bruce Campbell	Enerwise Global Technologies, LLC	Other Supplier
Mahila Christopher	Public Utilities Commission of Ohio	
Kerinia Cusick	Center for Renewables Integration	
Louis D'Alessandris	American Transmission Systems, Inc.	Transmission Owner
Behnam Danai	Open Access Technology International, Inc.	None
Joseph DeLosa	New Jersey Board of Public Utilities	
Brett Denby	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Thomas DeVita	PJM Interconnection	None
Mamadou Diong	Dominion Virginia Power	Transmission Owner
Ryan Dolan	Dayton Power & Light Company (The) (EDC)	Transmission Owner
Chuck Dugan	East Kentucky Power Cooperative, Inc.	Transmission Owner
David Ellis	Public Service Electric & Gas Company	Transmission Owner
zhenyu fan	PJM Interconnection	None
Guy Filomena	Customized Energy Solutions, Ltd.	None
Flora Flygt	American Transmission Company - Retired	
Kenneth Foladare	Geenex Solar LLC	Other Supplier





As of November 9, 2021

Adrien Ford	Old Dominion Electric Cooperative	Electric Distributor
Debbie Gebolys	Other	
Rehan Gilani	ConEdison Energy, Inc.	Other Supplier
Suzanne Glatz	PJM Interconnection	None
Craig Glazer	PJM Interconnection	None
Michele Greening	PJM Interconnection	None
Gary Hartman	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Rebecca Hilderbrand	EY	
Tom Hoatson	West Deptford Energy, LLC	Generation Owner
Lynn Marie Horning	Customized Energy Solutions, Ltd.	None
John Horstmann	Dayton Power & Light Company (The)	Transmission Owner
Gerit Hull	American Municipal Power, Inc.	Electric Distributor
Benjamin Hunter	BSHunter	Elocato Biothibator
Tom Hyzinski	gtpghyzinsk	
Gina Jardot	NRG Curtailment Solutions, Inc.	Other Supplier
William Jett	Duke Energy Business Services LLC	Transmission Owner
Carl Johnson	Customized Energy Solutions, Ltd.	None
David Johnston	Other	
Duan lance	Alleghery Fleshie Cooperative Jac	Clastria Distributor
Ryan Jones	Allegheny Electric Cooperative, Inc.	Electric Distributor
Clark Kaml	Power System Engineering	Oller O celler
Stephen Kelly	Brookfield Renewable Trading and Marketing LP (BSMH)	Other Supplier
Brady Klein	EnergyHub	0, 0, 1
George Kogut	New York Power Authority	Other Supplier
Dimitar Kozhuharov	State Commissions	
Takis Laios	Appalachian Power Company (AEP Transmission)	Transmission Owner
Steven Lieberman	American Municipal Power, Inc.	Electric Distributor
CONNIE LOWE	Dominion Virginia Power	Transmission Owner
Leonid Lyakhovich	Public Service Electric & Gas Company	Transmission Owner
Doug Matheson	Enel X North America, Inc.	Other Supplier
Brian McArdle	NextEra Energy Marketing, LLC	Other Supplier
John McCombIII	PJM Interconnection	None





As of November 9, 2021

Katharine McCormick	Illinois Commerce Commission	
Christian McDewell	Pennsylvania Public Utility Commission	
Paul McGlynn	PJM Interconnection	None
Justin McNeil	Kentucky Public Service Commission	
Terrence Moran	Public Service Electric & Gas Company	Transmission Owner
Nancy Muhl	PJM Interconnection	None
Koushy Nareshkumar	Potomac Electric Power Company	Electric Distributor
Nathaniel Nichols	PECO Energy Company	Transmission Owner
Chris Norton	American Municipal Power, Inc.	Electric Distributor
Brock Ondayko	AEP Energy Partners, Inc. (AEP Gen Resources)	Transmission Owner
Amanda Parker	Pennsylvania Electric Company	Electric Distributor
Greg Poulos	PJM Committee Voting Generic Account	
N: 1 - D - #	DDI SI A A ANNO CONTRACTOR (TO)	T
Nicholas Pratt	PPL Electric Utilities Corp. dba PPL Utilities (TO)	Transmission Owner
Ruth Price	Delaware Division of the Public Advocate	None
Farrokh Rahimi	Open Access Technology International, Inc.	None
John Rainey	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Jim REILLY	Reilly Associates	
John Rohrbach	Wabash Valley Power Association, Inc.	Electric Distributor
Alexa Rooney	PPL Electric Utilities Corp. dba PPL Utilities (TO)	Transmission Owner
Alex Rosenblatt	Duquesne Light Company	Transmission Owner
Jonathan Sasser	Customized Energy Solutions, Ltd.	None
David Scarp	Calpine Energy Services, L.P.	Generation Owner
Maida Session	Duke Energy Ohio, Inc. (EDC)	Transmission Owner
William Sharkazy III	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Evan Shearer	Duke Energy Business Services LLC	Transmission Owner
James Sorrels	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Rebecca Stadelmeyer	PJM Interconnection	None





As of November 9, 2021

Vincent Stefanowicz	PJM Interconnection	None
Alexander Stern	Public Service Electric & Gas Company	Transmission Owner
Rory Sweeney	GT Power Group, LLC	None
Kevin Thundiyil	Exelon Generation Co., LLC (NEV_XLON)	Generation Owner
Andrea Tighe	CAPS	
Jim Waight	Siemens Industry, Inc.	Other Supplier
Jerry Warchol	Dominion Virginia Power (EDC)	Transmission Owner
Kathleen Wehnes	Maryland Department of the Environment	
Christopher Wehr	Ohio Edison Company (EDC)	Electric Distributor
Jeffrey Whitehead	GT Power Group	
Amy Willey	Delaware Public Service Commission	
Damon Xenopoulos	Other	
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.

On the Phone, Dial



to Mute/Unmute

Linking Teleconference Connection to Webex

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.





As of November 9, 2021

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: <u>Facilitator Feedback Form</u>
Visit <u>learn.pjm.com</u>, an easy-to-understand resource about the power industry and PJM's role.