



DER Ride Through Task Force PJM Conference and Training Center January 15, 2019 9:00 a.m. – 3:00 p.m. EPT

Administration (9:00-9:15)

1. Ms. Susan McGill opened the meeting and welcomed those attending in person and on the phone.

Mr. Jonathan Thompson reviewed the Anti-Trust Policy, Code of Conduct, and Media Participation Policy. No media identified themselves as present.

Education (9:15-12:00)

2. Problem Statement and Charge Document Review

Mr. Emanuel Bernabeu, PJM, reviewed the Problem Statement and Issue Charge for the DER Ride Through Task Force.

3. PJM Concern/Transmission Education/Workshop Summary

Mr. Andrew Levitt presented background on DER Ride Through, the concerns of DER Ride Through from a transmission operator perspective, and give a summary of previous DER workshops. Background on IEEE-1547-2018 was also given

4. PJM 2031 DER Trip and Ride Through Impact Study

Ms. Christina Catalano presented PJM plans for a dynamic power flow simulation to study the impact of widespread fault-triggered DER tripping on PJM. The study will be performed with input from relevant utilities.

5. Dominion Arc Flash Study

Mr. Jonathan Deverick, Dominion, will present about Dominion's Arc Flash Study. Background was given on safety concerns of hot line work and DER's effects on distribution safety.

6. Distribution Side Perspective on DER Ride Through

Mr. Mamadou Diong, Dominion, will give perspective from the distribution side on DER Ride Through.

CBIR Process (1:00-2:30)

7. CBIR Process Overview

Ms. Janell Fabiano, PJM, presented an overview of the CBIR Process.

8. Matrix Review

Ms. Susan McGill reviewed the initial matrix. PJM had initial interests identified and asked for more interests from stakeholders.

9. Workplan Review

Ms. Susan McGill reviewed the workplan.





Not Applicable

Future Agenda Items (2:30-3:00)

Participants had the opportunity to request the addition of any new items to the agenda of a future meeting. Additional education was requested for background on the operation and protection of the distribution system and its interactions with the transmission system.

Future Meeting Dates

February 12, 2019	9:00 a.m.	PJM Conference & Training Center/ WebEx
March 13, 2019	9:00 a.m.	PJM Conference & Training Center/ WebEx
April 02, 2019	9:00 a.m.	PJM Conference & Training Center/ WebEx
April 23, 2019	9:00 a.m.	PJM Conference & Training Center/ WebEx

In Person Attendance

Beban, Madalyn	PJM Interconnection, LLC	Not Applicable
Catalano, Christina	PJM Interconnection, LLC	Not Applicable
Chen, Yang	PJM Interconnection, LLC	Not Applicable
Choi, Byoungkon	PJM Interconnection, LLC	Not Applicable
Ciabattoni, Joseph	PJM Interconnection, LLC	Not Applicable
Fabiano, Janell	PJM Interconnection, LLC	Not Applicable
Fix, Terry	Dominion Energy	Generation Owner
Kauffman, Brian	EnerNOC, Inc.	Other Supplier
Kogut, George	New York Power Authority	Other Supplier
Levitt, Andrew	PJM Interconnection, LLC	Not Applicable
Malladi, Brindavani	PJM Interconnection, LLC	Not Applicable
Matheson, Eric	Pennsylvania Public Utility Commission	Not Applicable
McGill, Susan	PJM Interconnection, LLC	Not Applicable
Mishra, Chetan	Dominion Virginia Power	Not Applicable
Sweeney, Rory	GT Power Group	Not Applicable
Hoang, Liem	PJM Interconnection, LLC	Not Applicable
Sliwa, Stan	PJM Interconnection, LLC	Not Applicable
Deverick, Jonathan	Dominion Energy	Not Applicable
Diong, Mamadou	Dominion Energy	Not Applicable
Mousa, Ahmed	PSEG	Not Applicable

PJM Interconnection, LLC

Teleconference Attendance

Fernandes, Anisha

Sherman, Bob	Public Service Electric & Gas Company	Not Applicable
Malladi, Brindavani	PJM Interconnection, LLC	Not Applicable
Campbell, Bruce	EnergyConnect, Inc.	Other Supplier
Trayers, Barry	Citigroup Energy, Inc.	Other Supplier
Colbert, Cathleen	NRG Power Marketing LLC	Generation Owner
Mertz, Christopher	Virginia Electric & Power Company	Transmission Owner
Domian, Christin	Duquesne Light Company	Transmission Owner
Ericson, Christine	Illinois Commerce Commission	Not Applicable
Dugan, Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
LOWE, CONNIE	Dominion Virginia Power	Not Applicable
Anders, David	PJM Interconnection, LLC	Not Applicable
Canter, David	Appalachian Power Company	Transmission Owner
Mabry, David	McNees Wallace & Nurick LLC	Not Applicable





Kou, Derek Kozhuharov, Dimitar Velez, Francisco Gunn, Garan Carmean, Greg Whitehead, Jeffrey Hohenshilt, Jennifer

Zhao, Jeff
Benchek, Jim
Horstmann, John
Sasser, Jonathan
Thompson, Jonathan
Scheyler, Ken
Patel, Keyur
Hoang, Liem
D'Alessandris, Lou
Collette, Lucas

Horning, Lynn Marie Ainspan, Malcolm Garbini, Marjorie Smith, Mark Connelly, Nancy Gilani, Rehan Gebhardt, Scott Glatz, Suzanne McGill, Susan Ahmad, Syed Hoatson, Tom Hyzinski, Tom

fan, zhenyu

Weaver, Tom

Mariam, Yohannes

Dominion

Delaware Municipal Electric Corporation, Inc.

Dominion

Public Service Electric & Gas Company Organization of PJM States, Inc

GT Power Group

Talen Energy Marketing, LLC

Dominion

American Transmission Systems, Inc. Dayton Power & Light Company (The) Customized Energy Solutions, Ltd.*

PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC FirstEnergy Solutions Corp. Duquesne Light Company

LMH Energy

Energy Curtailment Specialists, Inc. Potomac Electric Power Company

American Electric Power Duke Energy Ohio, Inc. ConEdison Energy, Inc.

Pennsylvania Public Utility Commission

PJM Interconnection, LLC PJM Interconnection, LLC

The Federal Energy Regulatory Commission

Riverside Generating, LLC

GT Power Group American Electric Power

Office of the Peoples Counsel for the District of

Columbia

PJM Interconnection, LLC

Not Applicable Electric Distributor

Transmission Owner

Not Applicable

Not Applicable
Not Applicable
Not Applicable
Generation Owner
Not Applicable

Transmission Owner

Transmission Owner Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable

Transmission Owner
Transmission Owner
Not Applicable

Other Supplier
Electric Distributor
Not Applicable
Transmission Owner

Other Supplier Not Applicable Not Applicable

Not Applicable
Not Applicable
Other Supplier
Not Applicable
Not Applicable
End User Customer

Not Applicable

Author: Jonathan Thompson

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



Mute / Unmute

Linking Teleconference Connection to WebEx

To link your teleconference connection (audio presence) to your WebEx presence, please dial *29 and enter your Personal Identification Number. Once you are logged in to the WebEx, this PIN can be found under the "Meeting Info" tab of your WebEx window.

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.