Primary Frequency Response Senior Task Force (PFRSTF) PJM Conference and Training Center October 9, 2017 9:00 a.m. – 4:00 p.m. EPT

Administration (9:00am-9:15am)

φjm

- 1. Ms. Michelle Souder provided the Anti-trust and Code of Conduct announcements, completed the roll call and approval of minutes.
- 2. Glen Boyle shared that the Charter was approved at the September 28, 2017 Markets & Reliability Committee meeting.

Education (9:15am-10:45am)

- 3. Mr. Eric Hsia, PJM, provided a brief overview on PJM's comments to FERC's Primary Frequency Response NOPR which was due September 14, 2017.
- 4. Ms. Lin Franks, AES, provided an overview of primary frequency response from inverter-based technology.

Break (10:45am-11:00am)

Education (11:00am-12:00pm)

5. Mr. Alex Giarratano, ERCOT, provided an overview of the requirements and operations for primary frequency response in ERCOT.

Lunch (12:00pm-12:45pm)

Matrix Review (12:45pm-2:00pm)

6. Ms. Danielle Croop, PJM, reviewed the interests that were identified in the matrix from a PJM perspective. Mr. Glen Boyle led the discussion to capture stakeholder interest identification.

Break (2:00pm-2:15pm)

Matrix Review (2:15pm-3:50pm)

7. Mr. Vince Stefanowicz, PJM, reviewed the draft design components. Mr. Glen Boyle solicited additional design components and solution options from stakeholders.

Future Agenda Items (3:50pm-4:00pm)

October 27, 2017
December 1, 2017
December 20, 2017
January 24, 2018

"∄∕pjm

9:00 a.m. 9:00 a.m. 9:00 a.m. 9:00 a.m. PJM Conference & Training Center/ WebEx PJM Conference & Training Center/ WebEx PJM Conference & Training Center/ WebEx PJM Conference & Training Center/WebEx

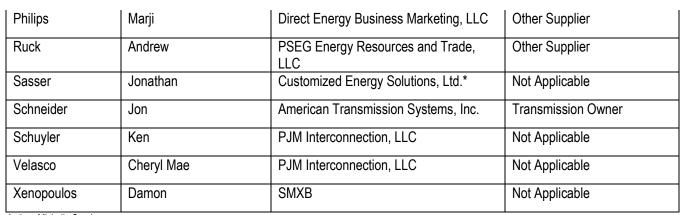
In-Person Attendees:

Last Name	First Name	Company	Sector
Bennent	Daniel	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Borgatti	Michael	Gabel and Associates	Not Applicable
Ciabattoni	Joe	PJM Interconnection, LLC	Not Applicable
Croop	Danielle	PJM Interconnection, LLC	Not Applicable
Foladare	Kenneth	Tangibl	Not Applicable
Franks	Lin	AES Energy Storage, LLC	Generation Owner
Gordon	Brad	NERC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Hyzinski	Tom	GT Power Group	Not Applicable
Lowe	Connie	Dominion Virginia Power	Not Applicable
Park	Jinny	PJM Interconnection, LLC	Not Applicable
Poole	Karen	Dominion Virginia Power	Not Applicable
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Seiler	Kenneth	PJM Interconnection, LLC	Not Applicable
Souder	David	PJM Interconnection, LLC	Not Applicable
Souder	Michelle	PJM Interconnection, LLC	Not Applicable
Stefanowicz	Vincent	PJM Interconnection, LLC	Not Applicable
Tutino	Joey	PJM Interconnection, LLC	Not Applicable
Whitehead	Jeffrey	GT Power Group	Not Applicable

In Attendance via Web Ex / Teleconference:						
Last Name	First Name	Company	Sector			

Ahmed	Syed	The Federal Energy Regulatory Commission	Not Applicable
Ainspan	Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Benchek	Jim	FirstEnergy Solutions Corp.	Transmission Owner
Berlinski	Mike	Customized Energy Solutions, Ltd.*	Not Applicable
Berner	Aaron	PJM Interconnection, LLC	Not Applicable
Bolan	Martin	FirstEnergy Solutions Corp.	Transmission Owner
Bonner	Charles	Dominion Virginia Power	Not Applicable
Brodbeck	John	EDP Renewables North America, LLC	Other Supplier
Endress	Eric	PJM Interconnection, LLC	Not Applicable
Filomena	Guy	Customized Energy Solutions, Ltd.	Not Applicable
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Giarratano	Alex	ERCOT	Not Applicable
Genuario	Gabrielle	PJM Interconnection, LLC	Not Applicable
Heimbach	Mark	PJM Interconnection, LLC	Not Applicable
Hils	Doug	Duke Energy Kentucky, Inc.	Transmission Owner
Hohenshilt	Jennifer	Bayonne Plant Holding, L.L.C.	Generation Owner
Johnson	Carl	Customized Energy Solutions, Ltd.	Not Applicable
Kimmel	David	PJM Interconnection, LLC	Not Applicable
Kogut	George	New York Power Authority	Other Supplier
Levitt	Andrew	PJM Interconnection, LLC	Not Applicable
Mabry	David	McNees Wallace & Nurick LLC	Not Applicable
Midgley	Sharon	Atlantic City Electric Company	Electric Distributor
Mindham	David	ITC Mid-Atlantic Development LLC	Other Supplier
Murphy	Shaun	PJM Interconnection, LLC	Not Applicable
O'Connell	Robert	Mattawoman Energy, LLC	Generation Owner
Ondayko	Brock	Appalachian Power Company	Transmission Owner
Pakula	Maggie	Invenergy, LLC	Generation Owner
Patten	Kevin	Appalachian Power Company	Transmission Owner

.∄∕pjm[°]



Author: Michelle Souder

. ρjm

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.

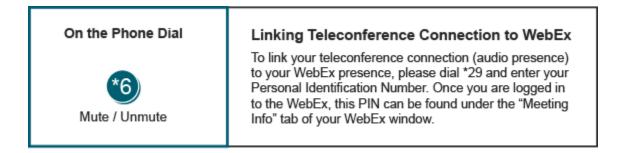
Code of Conduct:

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:

, pjm

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 stakeholder meetings for internal and training purposes, and your participation at such meetings indicates your consent to the same.



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.