

Energy Price Formation Sr. Task Force PJM Conference and Training Center September 26, 2018 10:30 a.m. – 4:00 p.m. EPT

### Administration

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- 1. Mr. Dave Anders and Mr. Vijay Shah provided announcements, reviewed the Anti-trust, Code of Conduct and PJM meeting guidelines policies and performed in-room roll-call
- 2. The Senior Task Force approved draft minutes from the August 22, 2018 Energy Price Formation Senior Task Force (EPFSTF) meeting.

### **Operating Reserve Demand Curve (ORDC)**

- 3. ORDC Discussion
  - A. Dr. Catherine Tyler, IMM, provided a presentation on the latest IMM proposal for the EPFSTF on ORDC.
  - B. Dr. Patricio Rocha Garrido, PJM, answered questions related to PJM ORDC proposal from the August 22, 2018 EPFSTF meeting.

### Simulation Results

 Simulation Results – Dr. Anthony Giacomoni, PJM, provided a presentation for simulation results of the PJM proposal for EPFSTF. In addition to the presentation, data for the simulation results has been posted with the meeting materials.

Settlement Changes for Reserve Consolidation

5. Settlement Changes – Mr. Ray Fernandez, PJM, reviewed potential Settlement changes for consolidated Synchronized Reserve Market.

### Matrix

 Matrix – Mr. Dave Anders led a discussion capturing design components, options and packages to the EPFSTF Matrix focusing on the short term goals. Dr. Catherine Tyler, IMM and Ms. Lisa Morelli, PJM, reviewed the latest version of IMM and PJM packages, respectively.





## Future Agenda Items

### Future Meeting Dates

Author: Vijay Shah

### Attendees (In Person)

Last Name, First Name	Company	Sector	
Anders, David	PJM Interconnection, LLC Not Applica		
Benchek, Jim	American Transmission Systems, Inc.	Transmission Owner	
Bernabeu, Emanuel	PJM Interconnection, LLC	Not Applicable	
Borgatti, Michael	Gabel and Associates Not Applical		
Bowring, Joe	Monitoring Analytics, LLC	Not Applicable	
Chao, Hung-Po	PJM Interconnection, LLC Not Applicab		
Fitch, Neal	NRG Power Marketing LLC	Generation Owner	
Foladare, Kenneth	Tangibl     Not Applicable		
Greening, Michele	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner	
Horger, Tim	PJM Interconnection, LLC	Not Applicable	
Johnson, Carl	Customized Energy Solutions, Ltd.*	Not Applicable	
Keech, Adam	PJM Interconnection, LLC	Not Applicable	
Kenney, Susan	PJM Interconnection, LLC	Not Applicable	
Kogut, George	New York Power Authority	Other Supplier	
Lowe, Connie	Dominion Virginia Power	Not Applicable	
Marcino, Angelo	PJM Interconnection, LLC Not Applicable		
Maxwell, Melissa	PJM Interconnection, LLC	Not Applicable	
Morelli, Lisa	PJM Interconnection, LLC	Not Applicable	
Nix, Emma	PJM Interconnection, LLC	Not Applicable	
Park, Jinny	PJM Interconnection, LLC	Not Applicable	
Perera, Asanga	PJM Interconnection, LLC Not Applicable		
Pratzon, David	GT Power Group Not Applicable		
Rohrbach, John	Southern Maryland Electric Cooperative	Electric Distributor	
Scarpignato, David	Calpine Energy Services, L.P. Generation Ow		
Schneider, Jonathan	FirstEnergy Solutions Corp. Transmission (		
Shah, Vijay	PJM Interconnection, LLC	Not Applicable	
Sweeney, Rory	eney, Rory RTO Insider Not Applica		
Trayers, Barry	Citigroup Energy, Inc. Other Supplier		



Tribulski, Jennifer	PJM Interconnection, LLC	Not Applicable	
Tyler, Catherine	Monitoring Analytics	Not Applicable	
Warshel, Kim	PJM Interconnection, LLC	Not Applicable	
Whitehead, Jeffrey	GT Power Group	Not Applicable	
Wilkie, Brian	Rockland Electric Company	Transmission Owner	

### Attendees (Teleconference)

Last Name, First Name	Company	Sector	
Ainspan, Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier	
Anderson, Jared	S&P Global	Not Applicable	
Austin, Larry	PJM Interconnection, LLC	Not Applicable	
Belley, Guillaume	Merrill Lynch Commodities, Inc.	Other Supplier	
Brodbeck, John	EDP Renewables North America, LLC	Other Supplier	
Burdis, Tim	PJM Interconnection, LLC	Not Applicable	
Campbell, Bruce	EnergyConnect, Inc.	Other Supplier	
Carmean, Gregory	OPSI	Not Applicable	
Carroll, Rebecca	PJM Interconnection, LLC	Not Applicable	
Chen, Hong	PJM Interconnection, LLC	Not Applicable	
Chen, Jay	Shell Energy North America (US), LP	Other Supplier	
Chung, Taewoo	Millenium	Not Applicable	
Cocco, Michael	Old Dominion Electric Cooperative	Electric Distributor	
Coyne, Suzanne	PJM Interconnection, LLC	Not Applicable	
Croop, Danielle	PJM Interconnection, LLC	Not Applicable	
DeLosa, Joseph	DE Public Service Commission	Not Applicable	
Depillo, Raymond	PSEG Energy Resources and Trade LLC	Other Supplier	
DiNicola, Laura	FirstEnergy Solutions Corp.	Transmission Owner	
Fereshetian, Damon	PJM Interconnection, LLC Not Applicab		
Filomena, Guy	Customized Energy Solutions, Ltd.	Not Applicable	
Ford, Adrien			
Gilani, Rehan	ConEdison Energy, Inc.	Other Supplier	
Hastings, David	Market Interconnection LLC	Not Applicable	
Helms, Joseph	Rainbow Energy Marketing Corporation	Other Supplier	
Hendrzak, Chantal	PJM Interconnection, LLC	Not Applicable	
Hoatson, Tom	Riverside Generating, LLC	Other Supplier	
Hohenshilt, Jennifer	Talen Energy Marketing, LLC	Generation Owner	
Holter, Natasha PJM Interconnection, LLC		Not Applicable	
Huang, Henry	Constellation Energy Services, Inc.	Other Supplier	
Hull, James	RWE	Other Supplier	



Hyzinski, Tom	ki, Tom GT Power Group		
Iyer, Shrikant	Exelon Generation Co., LLC	Generation Owner	
Janicki, Diane	Boston Energy Trading & Marketing, LLC	Generation Owner	
Jha, Monica	PCI	Not Applicable	
Kelly, Stephen	Brookfield Energy Marketing LP	Other Supplier	
Kemmerer, Kieran	S&P Global Platts	Not Applicable	
Kent, Chandler	Other	Not Applicable	
Klein, Abram	Appian Way Energy Partners MidAtlantic, LLC	Other Supplier	
Kreitler, Ginny	National Audobon	Not Applicable	
Libbos, Robin	FirstEnergy Solutions Corp.	Transmission Owner	
Long, Glenn	PJM Interconnection, LLC	Not Applicable	
Lutterbeck, Felix	Other	Not Applicable	
Mahila, Christopher	Public Utilities Commission of Ohio (The)	Not Applicable	
Markiewicz, Cindy	FirstEnergy Solutions Corp.	Transmission Owner	
Matzen, Jeff	Dominion Retail, Inc.	Not Applicable	
Mohan, Syam	RWE	Other Supplier	
Nash, Garth	Bruce Power Inc.	Other Supplier	
Ondayko, Brock	Appalachain Power Company	Transmission Owner	
Pakela, Gregory	DTE Energy Trading, Inc.	Other Supplier	
Pakula, Maggie	Invenergy, LLC	Generation Owner	
Pang, Michael	Merrill Lynch Commodities, Inc.	Other Supplier	
Patel, Keyur	PJM Interconnection, LLC	Not Applicable	
Pelletier, Eveline	Hydro-Quebec Not Applicable		
Philips, Marjorie	Direct Energy Business, LLC Other Supplier		
Pierce, Clayton	EnerNOC, Inc.	Other Supplier	
Rinkoski, Marie	Exelon Generation Co,	Generation Owner	
Rushing, Nathan	CPV Maryland, LLC	Generation Owner	
Sasser, Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable	
Schreim, Morris	Maryland Public Service Commission	Not Applicable	
Shanker, Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier	
Sturgeon, John	Duke Energy Carolinas, LLC	Other Supplier	
Thompson, James	Commonwealth Edison Company	Transmission Owner	
VanderLaan, D. William	Illinois Commerce Commission	Not Applicable	
Vargo, Daniel	Allegheny Electric Cooperative, Inc.	Electric Distributor	
Ward, Michael	PJM Interconnection, LLC	Not Applicable	
Warshel, Kim	PJM Interconnection, LLC	Not Applicable	
Wilhite, Chad	FirstEnergy Solutions Corp. Transmission Ow		





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

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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.

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Join a Meeting	<ol> <li>Join meeting in the WebEx desktop client</li> <li>Enter name (<i>First and Last*</i>) and corporate email</li> <li>Under "Select Audio Option" select "Call Me" option from the dropdown menu</li> </ol>	

\*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 *learn.pjm.com*, an easy-to-understand resource about the power industry and PJM's role.