



Energy Price Formation Sr. Task Force PJM Conference and Training Center March 29, 2018 9:30 a.m. – 4:00 p.m. EPT

### Administration

- 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
- The Senior Task Force approved meeting minutes from the March 5, 2018 Energy Price Formation Senior Task Force meeting.

### Senior Task Force Charter and Work Plan

- 3. Mr. Dave Anders provided an update on the Charter for the Energy Price Formation Sr. Task Force (EPFSTF). The Charter was approved at the Markets and Reliability Committee meeting on March 22, 2018 meeting.
- 4. Mr. Anders provided an update on the workplan and meeting schedule for the EPFSTF.

## Identification of Design Criteria

- 5. Identification of Design Criteria
  - A. Mr. Dave Anders led a discussion around identification of design criteria for key work activity item 2 from the issue charge and reviewed design criteria that were captured at the March 5, 2018 EPFSTF meeting.

### Identification of Gaps for Reserve Markets

- 6. Identification of Gaps for Energy and Reserve Markets
  - A. Mr. Dave Anders provided background information on identification of gaps for key work activity item 3 from the issue charge.
  - B. Ms. Lisa Morelli, PJM, gave a presentation on gaps to consider for Reserve Market and Shortage Pricing between EPFSTF criteria and current market design from PJM perspective
  - C. Dr. Catherine Tyler, IMM, gave a presentation on gaps to consider for Reserve Market and Shortage Pricing between EPFSTF criteria and current market design from IMM perspective

### **ERCOT Presentation on ORDC**

7. Mr. David Maggio, ERCOT, gave a presentation on how ERCOT's Operating Reserves and Reliability Deployment Price Adders are incorporated into real-time prices, their purpose and how they work.

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# **Options Matrix**

8. Mr. Dave Anders led a discussion to capture design components to build the options Matrix for EPFSTF focusing on Shortage pricing and Reserves pricing.

## Future Agenda Items

# **Future Meeting Dates**

April 18, 2018	1:00 p.m.	PJM Conference & Training Center/ WebEx
May 4, 2018	9:00 a.m.	PJM Conference & Training Center/ WebEx
May 23, 2018	9:30 a.m.	PJM Conference & Training Center/ WebEx
June 8, 2018	9:00 a.m.	PJM Conference & Training Center/ WebEx
June 25, 2018	10:00 a.m.	PJM Conference & Training Center/ WebEx
July 17, 2018	9:30 a.m.	PJM Conference & Training Center/ WebEx
August 6, 2018	10:00 a.m.	PJM Conference & Training Center/ WebEx
August 22, 2018	10:00 a.m.	PJM Conference & Training Center/ WebEx
September 10, 2018	10:00 a.m.	PJM Conference & Training Center/ WebEx

Author: Vijay Shah

# In Attendance (In Person)

Name	Company	Sector
Anders, David	PJM Interconnection, LLC	Not Applicable
Barker, Jason	Exelon Business Services Company, LLC	Transmission Owner
Bruce, Susan	McNees Wallace & Nurick LLC	Not Applicable
Burdis, Tim	PJM Interconnection, LLC	Not Applicable
Callaghan, Chris	PJM Interconnection, LLC	Not Applicable
Ciabattoni, Joseph	PJM Interconnection, LLC	Not Applicable
Dirani, Rami	PJM Interconnection, LLC	Not Applicable
Fitch, Neal	NRG Power Marketing LLC	Generation Owner
Fondacci, Luis	North Carolina Electric Membership Corporation	Electric Distributor
Ford, Adrien	Old Dominion Electric Cooperative	Electric Distributor
Fuess, Christian	Other	Not Applicable
Fuess, James	PBF Power Marketing LLC	Generation Owner
Gardner, Michelle	NextEra Energy Power Marketing, LLC	Generation Owner
Giacomoni, Anthony	PJM Interconnection, LLC	Not Applicable
Hendrzak, Chantal	PJM Interconnection, LLC	Not Applicable
Hyzinski, Tom	GT Power Group	Not Applicable
Keech, Adam	PJM Interconnection, LLC	Not Applicable
Kenney, Susan	PJM Interconnection, LLC	Not Applicable
Kilgallen, Kevin	Avangrid Renewables LLC	Generation Owner
Kogut, George	New York Power Authority	Other Supplier
Lieberman, Steven	American Municipal Power, Inc.	Electric Distributor





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
Pratzon, David	GT Power Group	Not Applicable
Price, Ruth	Division of the Public Advocate of the State of Delaware	End User Customer
Rocha-Garrido, Patricio	PJM Interconnection, LLC	Not Applicable
Scarpignato, David	Calpine Energy Services, L.P.	Generation Owner
Shah, Vijay	PJM Interconnection, LLC	Not Applicable
Stewart, Travis	Gabel and Associates	Not Applicable
Suh, Jung	Calpine Energy Services, L.P.	Generation Owner
Sweeney, Rory	RTO Insider	Not Applicable
Tyler, Catherine	Monitoring Analytics	Not Applicable
Velasco, Cheryl Mae	PJM Interconnection, LLC	Not Applicable
Warshel, Kim	PJM Interconnection, LLC	Not Applicable
Whitehead, Jeffrey	GT Power Group	Not Applicable

# In Attendance (Teleconference)

Name	Company	Sector
Ainspan, Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Anderson, Jared	S&P Global	Not Applicable
Belley, Guillaume	Merrill Lynch Commodities, Inc.	Other Supplier
Bickerstaff, Dean	Hartree Partners	Other Supplier
Bolan, Martin	FirstEnergy Solutions Corp.	Transmission Owner
Bonner, Charles	Dominion Virginia Power	Not Applicable
Campbell, Bruce	EnergyConnect, Inc.	Other Supplier
Carmean, Gregory	OPSI	Not Applicable
Cawley, Troy	PJM Interconnection, LLC	Not Applicable
Chen, Jennifer	Natural Resources Defense Council	Not Applicable
Cocco, Michael	Old Dominion Electric Cooperative	Electric Distributor
Covino, Susan	PJM Interconnection, LLC	Not Applicable
Cox, EdwardP	Appalachian Power Company	Transmission Owner
Croop, Danielle	PJM Interconnection, LLC	Not Applicable
Crystle, Gil	UGI Development Company	Transmission Owner
Davis, Elizabeth	Talen Energy Marketing, LLC	Generation Owner
Davis, James	Dominion Energy Marketing, Inc.	Generation Owner





DeBellis, Eric	Environmental Law and Policy Center	Not Applicable
DeLosa, Joseph	DE Public Service Commission	Not Applicable
Denby, Brett	Novec	Not Applicable
DePillo, Raymond	PSEG Energy Resources and Trade LLC	Other Supplier
Dillon, Matthew	UGI Development Company	Generation Owner
Dolan, Ryan	American Municipal Power, Inc.	Electric Distributor
Dugan, Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Evrard, David	Pennsylvania Office of Consumer Advocate	End User Customer
Fereshetian, Damon	PJM Interconnection, LLC	Not Applicable
Fields, William	Maryland Office of Peoples Counsel	End User Customer
Filomena, Guy	Customized Energy Solutions, Ltd.	Not Applicable
Fink, Sari	Office of the Ohio Consumers' Counsel	End User Customer
Fort, Jim	The Energy Authority	Other Supplier
Garbaczewski, Bartosz	PSEG Energy Resources and Trade, LLC	Other Supplier
Genuario, Gabrielle	PJM Interconnection, LLC	Not Applicable
Gilani, Rehan	ConEdison Energy, Inc.	Other Supplier
Greiner, Gary	PSEG Energy Resources and Trade LLC	Other Supplier
Hanser, Erik	Michigan Public Service Commission	Not Applicable
Hauske, Thomas	PJM Interconnection, LLC	Not Applicable
Heinle, Frederick	Office of the People's Counsel	End User Customer
Heisey, Bradley	Wolf Hills Energy, LLC	Generation Owner
Helms, Joseph	Rainbow Energy Marketing Corporation	Other Supplier
Herel, Suzanne	RTO Insider	Not Applicable
Hoatson, Tom	Riverside Generating, LLC	Other Supplier
Hohenshilt, Jennifer	Talen Energy Marketing, LLC	Generation Owner
Holter, Natasha	PJM Interconnection, LLC	Not Applicable
Horstmann, John	Dayton Power & Light Company (The)	Transmission Owner
Hsia, Eric	PJM Interconnection, LLC	Not Applicable
Janicki, Diane	Boston Energy Trading & Marketing, LLC	Generation Owner
Jones, Ryan	Allegheny Electric Cooperative, Inc.	Electric Distributor
Kalle, Ibrahima	Tibiri Energies	Not Applicable
LaRocque, Matthew	PJM Interconnection, LLC	Not Applicable
Lazarus, Dana	ConEdison Energy, Inc.	Other Supplier
Leopold, Chris	Appalachian Power Company	Transmission Owner
Li, Kanning	PJM Interconnection, LLC	Not Applicable
Liang-Nicol, Cecilia	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Mabry, David	McNees Wallace & Nurick LLC	Not Applicable
Mariam, Yohannes	Office of the Peoples Counsel for the District of Columbia	End User Customer

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Matzen, Jeff	Dominion Retail, Inc.	Not Applicable
Mendelsohn, Mark	Noble Americas Gas & Power Corp.	Other Supplier
Merola, Becky	Noble Americas Energy Solutions LLC	Other Supplier
Metzler, Jakob	Castleton Commodities Merchant Trading L.P.	Transmission Owner
Midgley, Sharon	Exelon Business Services Company, LLC	Transmission Owner
Moorty, Sainath	ERCOT	Not Applicable
Nawaz, Zainab	NJ Board of Public Utilities	Not Applicable
Nichols, Lloyd	Commonwealth Chesapeake Company, LLC	Generation Owner
O'Connell, Robert	PPGI Fund A/B Development, LLC	Generation Owner
O'Hara, Brian	Mercuria Energy Inc.	Other Supplier
Ondayko, Brock	Appalachain Power Company	Transmission Owner
Pakula, Maggie	Invenergy, LLC	Generation Owner
Pang, Michael	Merrill Lynch Commodities, Inc.	Other Supplier
Patel, Keyurbhai	PJM Interconnection, LLC	Not Applicable
Philips, Marjorie	Direct Energy Business, LLC	Other Supplier
Picardi, Matt	Shell Energy North America (US), LP	Other Supplier
Powers, Sean	Linde Energy Services, Inc.	End User Customer
Rajan, Abhijit	Dominion Resources	Not Applicable
Rohrbach, John	Southern Maryland Electric Cooperative	Electric Distributor
Ruck, Andrew	PSEG Energy Resources and Trade, LLC	Other Supplier
Saini, Ishwar	Macquarie Energy LLC	Other Supplier
Sanders, Melanie	Exelon Business Services Company, LLC	Transmission Owner
Sasser, Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
Scheidecker, Paul	PJM Interconnection, LLC	Not Applicable
Shanker, Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Shaw, Pamela	ERCOT	Not Applicable
Shegarfi, Roozbeh	Exelon Energy Company	Transmission Owner
Sillin, John	The Federal Energy Regulatory Commission	Not Applicable
Slagel, Ronald	Other	Not Applicable
Sock, Bryan	PSEG Energy Resources and Trade LLC	Transmission Owner
Stefanowicz, Vincent	PJM Interconnection, LLC	Not Applicable
Stoddard, Robert	Power Market Economics	Not Applicable
Thundiyil, Kevin	Exelon Energy Company	Transmission Owner
Tibbetts, Maeve	Pierce Atwood	Not Applicable
Tsao, Stephanie	SPGlobal	Not Applicable
Vargo, Daniel	Allegheny Electric Cooperative, Inc.	Electric Distributor
Ward, Michael	PJM Interconnection, LLC	Not Applicable
Wei, Jane	Monitoring Analytics	Not Applicable
Wiegand-Jackson, Laurie	North America Power Partners LLC	Other Supplier





Wilkie, Brian	Consolidated Edison Solutions, Inc	Other Supplier
Wilson, James	Wilson Energy Economics	Not Applicable
Zhao, Tong	PJM Interconnection, LLC	Not Applicable

#### Antitrust

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