



Market Implementation Committee
PJM Conference & Training Center, Audubon, PA
June 12, 2019
9:00 a.m. – 12:15 p.m. EPT

## Administration

 Ms. Bhavana Keshavamurthy and Ms. Chantal Hendrzak provided announcements; reviewed the Antitrust, Code of Conduct, Public Meetings/Media Participation and the WebEx Participant Identification Requirement.

The Committee approved the draft minutes from the May 15, 2019 MIC meeting with **0 objections and 0** abstentions.

Ms. Jennifer Tribulski, PJM, provided an update on the recent FERC clarification order in the FTR waiver proceeding. On June 5, 2019, in Docket Nos. ER18-2068-000 and ER18-2068-001, the Commission issued an Order Establishing Paper Hearing and Settlement Judge Procedures in response to PJM's clarification of the Commission's January 30, 2019 order denying PJM's request for waiver of certain liquidation rules related to an FTR default. The Commission is holding the paper hearing in abeyance pending the settlement process for 90 days, with the ability to seek a 30-day extension. The first settlement conference is scheduled to be held on June 19, 2019.

## **Endorsements/Approvals**

2. Five Minute Dispatch and Pricing

Mr. Siva Josyula, Monitoring Analytics, presented the problem statement and issue charge related to Five Minute Dispatch and Pricing.

The committee approved the Issue Charge with 0 objections and 1 abstention.

#### First Readings

3. Periodic Review of Manual 18

Ms. Terri Esterly, PJM, provided a first read of Manual 18 revisions as part of the periodic review.

4. Periodic Review of Manual 28

Mr. Ray Fernandez, PJM, provided a first read of Manual 28 revisions as part of the periodic review.

- Manual 11, 15, and 18 revisions for Electric Storage Participation FERC Order 841
  - A. Ms. Laura Walter, PJM, provided a brief background on Order 841, and reviewed changes to Manual 11 – Energy & Ancillary Services Market Operations & Manual 18 – PJM Capacity Market, related to the FERC Order 841 compliance filing.
  - B. Ms. Danielle Croop, PJM, provided a review of Manual 15 Cost Development Guidelines changes related to cost offers for batteries and flywheels.

Issue Tracking: Electric Storage Participation FERC Order 841





## 6. Modeling Units with Stability Limitations – Problem Statement & Issue Charge This agonda item will be presented as a first road at the July MIC. Mr. Pebert O'Connell.

This agenda item will be presented as a first read at the July MIC. Mr. Robert O'Connell, Panda Power Funds, will provide a first read of a problem statement and issue charge related to modeling units with stability limitations.

## Working Issues

## 7. Fast Start Pricing Order

Mr. Keyur Patel, PJM, reviewed updates on the fast start pricing implementation. Mr. Ray Fernandez, PJM, reviewed examples related to the fast start pricing implementation over payment issue. The fast start pricing implementation target date is January 2020. PJM will communicate the exact date once it has been finalized.

## 8. Interregional Incremental Auction Revenue Rights

Mr. Brian Chmielewski, PJM, provided education on Interregional Incremental Auction Revenue Rights (IARR).

Issue Tracking: Interregional Incremental Auction Revenue Rights

## Additional Items

## 9. Fuel Cost Policy Annual Review

Ms. Melissa Pilong, PJM, provided an overview of the Fuel Cost Policy deadlines for the upcoming annual review.

#### Informational Section

#### Credit Subcommittee (CS)

Meeting materials will be posted to the <u>CS website</u>.

## **Demand Response Subcommittee (DRS)**

Meeting materials will be posted to the DRS web site.

#### Intermittent Resources Subcommittee (IRS)

Meeting materials will be posted to the IRS web site.

#### **Interregional Coordination Update**

Materials are posted as informational only.

#### Market Settlements Subcommittee (MSS)

Meeting materials are posted to the MSS web site.

### **Report on Market Operations**

The Report on Market Operations will be reviewed during the MC Webinar.





## **Future Meeting Dates**

July 10, 2019	9:00 a.m.	PJM Conference & Training Center/ WebEx
August 7, 2019	9:00 a.m.	PJM Conference & Training Center/ WebEx
September 11, 2019	9:00 a.m.	PJM Conference & Training Center/ WebEx
October 16, 2019	9:00 a.m.	PJM Conference & Training Center/ WebEx
November 13, 2019	9:00 a.m.	PJM Conference & Training Center/ WebEx
December 11, 2019	9:00 a.m.	PJM Conference & Training Center/ WebEx

Author: Bhavana Keshavamurthy

## In-Person Meeting Attendees

Names
Hendrzak, Chantal (Chair)
Keshavamurthy, Bhavana (Secretary)
Anders, David
Benchek, Jim
Borgatti, Michael
Boyle , Glen
Brodbeck, John
Bruce, Susan
Bruno, Patrick
Canter, David
Chmielewski, Brian
Ciabattoni, Joe
Croop,Danielle

D'Alessandris, Lou Davis, Jim DeVita, Thomas Downs, Jere Fabiano, Janell Fernandez, Ray Filomena, Guy Foldare, Kenneth Ford, Adrien Genuario, Gabrielle Greiner, Gary Hauske, Thomas Holter, Natasha Horger, Tim Horning, Lynn Marie Hyzinski, Tom Josyula, Siva Lieberman, Steve

Lowenthal-Savy, Danielle

Lowe, Connie

Lu, Chenchao Luna, Joel Midgley, Sharon Morelli, Lisa O'Connell, Robert Patel, Keyurbhai Pilong, Melissa Sasser, Jonathan Scarpignato, David Smith, Christen **Company Name** 

PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
American Transmission Systems, Inc.

Gabel and Associates

PJM Interconnection, LLC

EDP Renewables North America, LLC McNees Wallace & Nurick LLC PJM Interconnection, LLC Appalachian Power Company PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC FirstEnergy Solutions Corp.

Dominion Energy

PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
Customized Energy Solutions, Ltd.

Tangible

Old Dominion Electric Cooperative PJM Interconnection, LLC

PSEG Energy Resources and Trade LLC

PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC

Customized Energy Solutions, Ltd.\*

GT Power Group Monitoring Analytics, LLC American Municipal Power, Inc. Dominion Virginia Power Monitoring Analytics, LLC PJM Interconnection, LLC Monitoring Analytics, LLC

Exelon Business Services Company, LLC

PJM Interconnection, LLC PPGI Fund A/B Development, LLC PJM Interconnection, LLC PJM Interconnection, LLC

Customized Energy Solutions, Ltd.\* Calpine Energy Services, L.P

RTO Insider

Sector
Not Applicable
Not Applicable
Not Applicable
Transmission Owner
Not Applicable
Not Applicable
Other Supplier
Not Applicable
Not Applicable
Transmission Owner
Not Applicable
Transmission Owner
Not Applicable
Not Applicable
Not Applicable
Transmission Owner

Transmission Owner
Not Applicable
Other Supplicable
Not Applicable
Other Supplicable
Not Applicable

Not Applicable

Not Applicable Electric Distributor Not Applicable Not Applicable Not Applicable Transmission Owner Not Applicable Generation Owner Not Applicable Not Applicable Not Applicable Generation Owner Not Applicable Generation Owner Not Applicable





Starkov, Stefan Suh, Jung Sweeney, Rory Tang, James Thomas, Jack Toomey, Megan Trayers, Barry Tribulski, Jennifer Walter, Laura Whitehead, Jeffrey PJM Interconnection, LLC
Calpine Energy Services, L.P
GT Power Group
PJM Interconnection, LLC
PJM Interconnection, LLC
Talen Energy Marketing, LLC
Citigroup Energy, Inc.
PJM Interconnection, LLC
PJM Interconnection, LLC
GT Power Group

Not Applicable Generation Owner Not Applicable Not Applicable Not Applicable Generation Owner Other Supplier Not Applicable Not Applicable

## **Webex Meeting Attendees**

Abramowitz, Jeremy Baker, Scott Bruno, Joshua

Names

Bruno, Joshua Budney, Dave Burdis, Tim Campbell, Bruce

Cocco, Michael Colbert, Cathleen Crystle, Gil Dasher, Brett Davis, Elizabeth DePillo, Ray

Diiorio, Michelle DiNicola, Laura Dixon, Chad Dolan, Jim Domian, Christin Drom, Richard

Drom, Richard Duensing, Allison Dugan, Chuck Durinsky, Mike Fan, Zhenyu Feller, John Gates, Terry

Garnett, Bryan Gilani, Rehan Guntle, Vince Hanser, Erik Hastings, David Heinle, Erik Heisey, Bradley Herel, Suzanne Hoatson, Tom Hohenshilt, Jennifer

Hsia, Eric Hurwich, Mark Janicki, Diane Jardot, Gina

Johnson, Carl

Horstmann, John

Company Name

FERC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC EnergyConnect, Inc.

Old Dominion Electric Cooperative NRG Power Marketing LLC UGI Development Company Energy Authority, Inc. (The) PJM Interconnection, LLC

PSEG Energy Resources and Trade LLC PSEG Energy Resources and Trade LLC First Energy Solutions Corp.

FirstEnergy Solutions Corp. Customized Energy Solutions. Ltd PJM Interconnection, LLC

Mitsubishi Electric Power Products Inc.

Eckert Seamans Saracen Energy

East Kentucky Power Cooperative, Inc. FirstEnergy Solutions Corp.

PJM Interconnection, LLC

PPL Electric Utilities Corp. dba PPL Utilities

Appalachian Power Company

Duke Energy ConEdison Energy, Inc.

UGI Development Company Michigan Public Service Commission Market Interconnection LLC

D.C. Office of the People's Counsel Wolf Hills Energy, LLC PJM Interconnection, LLC

LS Power

Talen Energy Marketing, LLC Dayton Power & Light Company (The)

PJM Interconnection, LLC Elliott Bay Energy Trading, LLC Boston Energy Trading & Marketing, LLC

Nautilus Power, LLC Customized Energy Solutions, Ltd.\* Sector

Not Applicable
Not Applicable
Not Applicable
Not Applicable
Not Applicable
Other Supplier
Electric Distribut
Generation Owr
Transmission O

Electric Distributor Generation Owner Transmission Owner Other Supplier Not Applicable Transmission Owner Transmission Owner Transmission Owner Not Applicable Not Applicable

Not Applicable Not Applicable Not Applicable Not Applicable Other Supplier Transmission Owner Transmission Owner Not Applicable

Transmission Owner Transmission Owner Transmission Owner Other Supplier Generation Owner Not Applicable Not Applicable Generation Owner Not Applicable Not Applicable

Not Applicable
Generation Owner
Transmission Owner
Not Applicable
Other Supplier
Generation Owner
Generation Owner
Not Applicable





Keenan, Mathew Kelly, Stephen Kenney, Susan Kimmel, David Kozhuharov, Dimitar Leicar, Jamie Levitt, Andrew

Libbos, Robin Long, Matthew Mae Velasco, Cheryl Markiewicz, Cindy Martin, Valerie Monzon, Stephanie O'Boyle, Brian Ondayko, Brock Pakela, Gregory

Pelletier, Eveline Peoples, John Philips, Darlene Philips, Marjorie Poelstra, Tabatha Promubol, Jimmy Rajan , Abhijit Reeping, Bob Rohrbach, John Rumsey, Amanda Russo, Michael Salaneck, Alexandra

Schum, Alice Schuyler, Ken Shah, Vijay Shanker, Roy Sillin, John Stefanowicz, Vince Stone, Andy Sturgeon, John

Tangirala, Subha Warshel, Kim Williams, Stanley Wilson, Bram Wisersky, Megan

Xu,Xu Zhou, Ming Elwood Energy

Brookfield Energy Marketing LP PJM Interconnection, LLC PJM Interconnection, LLC

Delaware Municipal Electric Corporation, Inc.

Allegheny Electric Cooperative, Inc.

PJM Interconnection, LLC FirstEnergy Solutions Corp. Appalachain Power Company PJM Interconnection, LLC FirstEnergy Solutions Corp.

The Federal Energy Regulatory Commission

PJM Interconnection, LLC

Consolidated Edison Solutions, Inc. Appalachain Power Company DTE Energy Trading, Inc.

Hydro-Quebec

**Duquesne Light Company** PJM Interconnection, LLC Direct Energy Business, LLC Appalachian Way Energy Partners Shell Energy North America (US), LP

**Dominion Resources** Ohio Edison Company **ACES Power** 

PPL Electric Utilities Corp. dba PPL Utilities Monitoring Analytics, LLC

Monitoring Analytics, LLC Illinois Municipal Electric Agency PJM Interconnection, LLC PJM Interconnection, LLC H.Q. Energy Services (U.S.), Inc.

The Federal Energy Regulatory Commission

PJM Interconnection, LLC PJM Interconnection, LLC Duke Energy Carolinas, LLC

ABB

PJM Interconnection, LLC PJM Interconnection, LLC

EFW. Inc

Madison Gas & Electric Co. PJM Interconnection, LLC

PSEG Energy Resources and Trade LLC

**Generation Owner** 

Other Supplier Not Applicable Not Applicable Electric Distributor Electric Distributor Not Applicable

**Transmission Owner** Transmission Owner Not Applicable

Transmission Owner Not Applicable Not Applicable

Transmission Owner **Transmission Owner** 

Other Supplier Not Applicable Transmission Owner Not Applicable

Other Supplier Not Applicable Other Supplier Not Applicable Transmission Owner

Not Applicable Transmission Owner Not Applicable Not Applicable Electric Distributor Not Applicable

Not Applicable Other Supplier Not Applicable Not Applicable Not Applicable Other Supplier Not Applicable Not Applicable Not Applicable Not Applicable

Other Supplier Not Applicable

Transmission Owner

PJM©2019 5