



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.

- 5. 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

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6. Modeling Units with Stability Limitations - Problem Statement & Issue Charge

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 CS website.

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.

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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

PJM Interconnection, LLC

PJM Interconnection, LLC

PJM Interconnection, LLC

PJM Interconnection, LLC

Author: Bhavana Keshavamurthy

Ciabattoni. Joe

Croop, Danielle

Holter, Natasha

Horger, Tim

In-Person Meeting Attendees

Names	Company Name	
Hendrzak, Chantal (Chair)	PJM Interconnection, LLC	
Keshavamurthy, Bhavana (Secretary)	PJM Interconnection, LLC	
Anders, David	PJM Interconnection, LLC	
Benchek, Jim	American Transmission Systems, Inc.	
Borgatti, Michael	Gabel and Associates	
Boyle , Glen	PJM Interconnection, LLC	
Brodbeck, John	EDP Renewables North America, LLC	
Bruce, Susan	McNees Wallace & Nurick LLC	
Bruno, Patrick	PJM Interconnection, LLC	
Canter, David	Appalachian Power Company	
Chmielewski, Brian	PJM Interconnection, LLC	

D'Alessandris, Lou FirstEnergy Solutions Corp. Davis, Jim **Dominion Energy** DeVita, Thomas PJM Interconnection, LLC Downs, Jere PJM Interconnection, LLC Fabiano, Janell PJM Interconnection, LLC Fernandez, Ray PJM Interconnection, LLC Filomena, Guy Customized Energy Solutions, Ltd. Foldare, Kenneth Tangible Ford. Adrien Old Dominion Electric Cooperative Genuario, Gabrielle PJM Interconnection, LLC PSEG Energy Resources and Trade LLC Greiner, Gary Hauske. Thomas PJM Interconnection, LLC

Horning, Lynn Marie Customized Energy Solutions, Ltd.* Hyzinski, Tom **GT Power Group** Josyula, Siva Monitoring Analytics, LLC American Municipal Power, Inc. Lieberman, Steve Lowe. Connie Dominion Virginia Power Lowenthal-Savy, Danielle Monitoring Analytics, LLC Lu, Chenchao PJM Interconnection, LLC

Monitoring Analytics, LLC Luna, Joel Midgley, Sharon Exelon Business Services Company, LLC Morelli, Lisa PJM Interconnection, LLC O'Connell, Robert PPGI Fund A/B Development, LLC Patel, Keyurbhai PJM Interconnection, LLC Pilong, Melissa PJM Interconnection, LLC

Customized Energy Solutions, Ltd.* Sasser, Jonathan Scarpignato, David Calpine Energy Services, L.P. Smith, Christen

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 Not Applicable Not Applicable Transmission Owner

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

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

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

Not Applicable

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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 Not Applicable

Webex Meeting Attendees

Names

Abramowitz, Jeremy Baker, Scott Bruno, Joshua Budney, Dave Burdis, Tim Campbell, Bruce Cocco, Michael Colbert, Cathleen Crystle, Gil Dasher, Brett

Dasrier, Drett
Davis, Elizabeth
DePillo, Ray
Diiorio, Michelle
DiNicola, Laura
Dixon, Chad
Dolan, Jim
Domian, Christin
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
Horstmann, John
Hsia, Eric
Hurwich, Mark
Janicki, Diane
Jardot, Gina
Johnson, Carl

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

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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

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