

Market Implementation Committee
PJM Conference & Training Center, Audubon, PA
August 7, 2019
9:00 a.m. – 4:00 p.m. EPT

Administration

1. Ms. Bhavana Keshavamurthy and Ms. Lisa Morelli 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 July 10, 2019 Market Implementation Committee (MIC) meeting with **0 objections and 0 abstentions**.

A. Mr. Pat Bruno, PJM, provided an update on the recent FERC order directing PJM to postpone the 2022/2023 Base Residual Auction (BRA).

Endorsements/Approvals

2. **Manual 11 revisions**
Mr. Michael Olaleye, PJM, provided an overview of clarifications being added to Manual 11: Energy & Ancillary Services associated with regulation historical performance scores and reserve requirements.
The committee endorsed the manual revisions with 0 objections and 0 abstentions.
3. **Manual 18B revisions**
Ms. Terri Esterly, PJM, reviewed proposed revisions to Manual 18B: Energy Efficiency Measurement & Verification resulting from the periodic review which includes administrative updates and conforming revisions to FERC orders. Ms. Esterly sought endorsement of these manual revisions at first read.
The committee endorsed the manual revisions with 0 objections and 0 abstentions.
4. **Manual 27 and 28 revisions for Electric Storage Participation – FERC Order 841**
Mr. Andrew Levitt, PJM, provided a review of Manual 27: Open Access Transmission Tariff Accounting and Manual 28: Operating Agreement Accounting revisions associated with settlements changes related to FERC Order 841 compliance filing.
The committee endorsed the manual revisions with 0 objections and 1 abstention.
[Issue Tracking: Electric Storage Participation FERC Order 841](#)
5. **Modeling Units with Stability Limitations – Problem Statement & Issue Charge**
Mr. Robert O’Connell, Panda Power Funds, provided an overview of the problem statement and issue charge related to modeling units with stability limitations.
The committee approved the issue charge with 0 objections and 0 abstentions.
6. **Load Management Testing Requirements Issue Charge Modification**
Mr. Pete Langbein, PJM, reviewed the modifications to the Load Management Testing Requirements Issue Charge to include Price Responsive Demand (PRD) Testing. Mr. Langbein sought approval of the modified issue charge at first read.

The committee approved the modified issue charge with 1 objection and 0 abstentions.

[Issue Tracking: Load Management Testing Requirements](#)

7. **Opportunity Cost Calculator**

Mr. Glen Boyle, PJM, provided a summary of the work done by the MIC Special Sessions: Opportunity Cost Calculator. Mr. O'Connell, Panda Power Funds, moved and Ms. Adrien Ford, ODEC, seconded a motion to add the PJM package to the list of packages to be voted as it included changes to the manual language. Mr. Robert O'Connell, Panda Power Funds, provided a summary of the three Panda/Dominion proposals.

During the consideration of the vote, PJM staff stated the concerns they had with the elements of Panda/Dominion Packages 1-3 which would change the types of costs that could be included in the opportunity cost calculation. Ms. Susan Bruce, PJM Industrial Customer Coalition, echoed the same concerns. Mr. O'Connell proposed the Panda/Dominion 3' package to address these concerns. The committee reconvened after a 10 minute break during which stakeholders tried to determine the components of the Panda/Dominion 3' proposal. Ms. Morelli, PJM, proposed moving the vote to the September MIC to allow time for the package sponsors to finalize the components of the Panda/Dominion 3' proposal. There were no objections to this proposal.

The voting on this agenda item was deferred to the September MIC.

[Issue Tracking: Opportunity Cost Calculator](#)

First Readings

8. **Gas Contingency Cost Recovery**

Mr. Thomas DeVita, PJM, provided an overview of draft Tariff revisions associated with gas contingencies cost recovery. Mr. David Scarpignato, Calpine, stated that additional manual language updates may need to be considered in addition to the Tariff revisions to ensure PJM operators do not issue operating instructions for which generation owners will not be able to recover the cost. These revisions will be considered at the Operating Committee following Members Committee endorsement of the associated Tariff revisions.

9. **Load Management Testing Requirements**

Mr. Pete Langbein, PJM, provided an overview of the five Load Management Test proposals developed at the Demand Response Subcommittee. Mr. Jack O'Neill, PJM, provided a detailed overview of the proposed changes as part of the PJM proposal. Mr. Brian Kaufmann, Enel X, provided an overview of the CSP1 and CSP2 proposals.

[Issue Tracking: Load Management Testing Requirements](#)

Working Issues

10. **Five Minute Dispatch and Pricing**

- A. Ms. Catherine Tyler, Monitoring Analytics, presented education on LPC execution timeline, use of approved RT SCED cases, target interval difference, and its impact on energy and reserve settlements.
- B. Mr. Vijay Shah, PJM, presented education on the Locational Pricing Calculator (LPC) engine.

11. Fast Start Pricing Compliance Filing Details

- A. Mr. Ray Fernandez, PJM, reviewed changes to the lost opportunity cost credit calculations related to the implementation of fast start pricing.
- B. A summary document listing all the filings related to Fast Start Pricing was posted as an informational item.

12. Interregional Incremental Auction Revenue Rights

Note: This agenda item was deferred to the September MIC due to meeting time constraints.

Members are encouraged to review the posted materials and provide additional proposals to the FTRGroup@pjm.com.

[Issue Tracking: Interregional Incremental Auction Revenue Rights](#)

Additional Updates

13. FERC Order 844 Updates

Mr. Rami Dirani, PJM, provided an update on the additional uplift data postings that will be available due to the approval of FERC Order 844.

14. Marginal Line Loss Surplus Allocation

Mr. Stan Williams, PJM, provided an update on the Marginal Line Loss Surplus Allocation. Mr. Williams stated that additional updates including detailed plans on the issuance of billing adjustments will be shared by PJM at future Stakeholder meetings.

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](#).

Net Energy Injections Quarterly Report

Materials are posted as informational only.

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](#).

PJM Manual 03 Attachment E Automatic Sectionalizing Schemes

Materials are posted as informational only.

Future Meeting Dates

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	Company Name	Sector
Morelli, Lisa (Chair)	PJM Interconnection, LLC	Not Applicable
Keshavamurthy, Bhavana (Secretary)	PJM Interconnection, LLC	Not Applicable
Anders, David	PJM Interconnection, LLC	Not Applicable
Baizman, Aaron	PJM Interconnection, LLC	Not Applicable
Benček, Jim	American Transmission Systems, Inc.	Transmission Owner
Bleiweis, Bruce	DC Energy LLC	Other Supplier
Borgatti, Michael	Gabel and Associates	Not Applicable
Bowring, Joe	Monitoring Analytics, LLC	Not Applicable
Boyle, Glen	PJM Interconnection, LLC	Not Applicable
Brodbeck, John	EDP Renewables North America, LLC	Other Supplier
Brown, Rich	PJM Interconnection, LLC	Not Applicable
Bruce, Susan	McNees Wallace & Nurick LLC	Not Applicable
Bruno, Patrick	PJM Interconnection, LLC	Not Applicable
Canter, David	Appalachian Power Company	Transmission Owner
Carroll, Rebecca	PJM Interconnection, LLC	Not Applicable
Chmielewski, Brian	PJM Interconnection, LLC	Not Applicable
Colbert, Cathleen	NRG Power Marketing LLC	Generation Owner
D'Alessandris, Lou	FirstEnergy Solutions Corp.	Transmission Owner
D'Antonio, Phil	PJM Interconnection, LLC	Not Applicable
Davis, Jim	Dominion Energy	Transmission Owner
Dirani, Rami	PJM Interconnection, LLC	Not Applicable
Esterly, Theresa	PJM Interconnection, LLC	Not Applicable
Fabiano, Janell	PJM Interconnection, LLC	Not Applicable
Fernandez, Ray	PJM Interconnection, LLC	Not Applicable
Filomena, Guy	Customized Energy Solutions, Ltd.	Not Applicable
Foldare, Kenneth	Tangible	Not Applicable
Ford, Adrien	Old Dominion Electric Cooperative	Electric Distributor
Greening, Michele	PJM Interconnection, LLC	Transmission Owner
Greiner, Gary	PSEG Energy Resources and Trade LLC	Other Supplier
Hauske, Thomas	PJM Interconnection, LLC	Not Applicable
Horger, Tim	PJM Interconnection, LLC	Not Applicable
Horning, Lynn Marie	Customized Energy Solutions, Ltd.*	Not Applicable
Horstmann, John	Dayton Power & Light Company (The)	Transmission Owner
Hudis, Gabriella	Jersey Green Energy LLC	Other Supplier
Hyzinski, Tom	GT Power Group	Not Applicable
Johnson, Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Kauffman, Brian	EnerNOC, Inc.	Other Supplier
Kogut, George	New York Power Authority	Other Supplier
Langbein, Pete	PJM Interconnection, LLC	Not Applicable
Levitt, Andrew	PJM Interconnection, LLC	Not Applicable

Lieberman, Steve	American Municipal Power, Inc.	Electric Distributor
Marcino, Angelo	PJM Interconnection, LLC	Not Applicable
McGlynn, Paul	PJM Interconnection, LLC	Not Applicable
Midgley, Sharon	Exelon Business Services Company, LLC	Transmission Owner
Nix, Emma	PJM Interconnection, LLC	Not Applicable
O'Connell, Robert	PPGI Fund A/B Development, LLC	Generation Owner
OHara, Christopher	PJM Interconnection, LLC	Not Applicable
Olaleye, Michael	PJM Interconnection, LLC	Not Applicable
Philips, Darlene	PJM Interconnection, LLC	Not Applicable
Pilong, Melissa	PJM Interconnection, LLC	Not Applicable
Poulos, Greg	CAPS	Not Applicable
Rumsey, Amanda	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Scarpignato, David	Calpine Energy Services, L.P	Generation Owner
Smith, Christen	RTO Insider	Not Applicable
Suh, Jung	Calpine Energy Services, L.P	Generation Owner
Sweeney, Rory	GT Power Group	Not Applicable
Toomey, Megan	Talen Energy Marketing, LLC	Generation Owner
Tribulski, Jennifer	PJM Interconnection, LLC	Not Applicable
Tyler, Catherine	Monitoring Analytics, LLC	Not Applicable
Whitehead, Jeffrey	GT Power Group	Not Applicable
Williams, Stanley	PJM Interconnection, LLC	Not Applicable

Webex Meeting Attendees

Adams, Chris	East Kentucky Power Cooperative, Inc.	Transmission Owner
Baker, Scott	PJM Interconnection, LLC	Not Applicable
Binder, Gerry	SESCO Enterprises LLC	Other Supplier
Bruno, Joshua	PJM Interconnection, LLC	Not Applicable
Bryson, Mike	PJM Interconnection, LLC	Not Applicable
Budney, Dave	PJM Interconnection, LLC	Not Applicable
Burdis, Tim	PJM Interconnection, LLC	Not Applicable
Campbell, Bruce	EnergyConnect, Inc.	Other Supplier
Carmean, Greg	OPSI	Not Applicable
Chandler, Kent	Public Utilities Commission of Kentucky	Not Applicable
Chintapalli, Raj	BP Energy Company	Power Marketer
Cocco, Michael	Old Dominion Electric Cooperative	Electric Distributor
Coultas, Ann	Invenergy, LLC	Generation Owner
Coyne, Suzanne	PJM Interconnection, LLC	Not Applicable
Croop, Danielle	PJM Interconnection, LLC	Not Applicable
Crystle, Gil	UGI Development Company	Transmission Owner
Davis, Elizabeth	PJM Interconnection, LLC	Not Applicable
DePillo, Ray	PSEG Energy Resources and Trade LLC	Transmission Owner
Diiorio, Michelle	PSEG Energy Resources and Trade LLC	Transmission Owner
Dillon, Matt	UGI Development Company	Generation Owner
DiNicola, Laura	FirstEnergy Solutions Corp.	Transmission Owner
Dirani, Rami	PJM Interconnection, LLC	Not Applicable
Dixon, Chad	Customized Energy Solutions. Ltd	Not Applicable
Dolan, Jim	PJM Interconnection, LLC	Not Applicable
Domian, Christin	Mitsubishi Electric Power Products Inc.	Not Applicable
Drom, Richard	Eckert Seamans	Not Applicable
Dugan, Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Durinsky, Mike	FirstEnergy Solutions Corp.	Transmission Owner
Ericson, Christine	Illinois Commerce Commission	Not Applicable
Fan, Zhenyu	PJM Interconnection, LLC	Not Applicable
Feller, John	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner

Fitzpatrick, Brian	PJM Interconnection, LLC	Not Applicable
Gebolys, Debbie	Public Utilities Commission of Ohio (The)	Not Applicable
George, Brian	FERC	Not Applicable
Gilani, Rehan	ConEdison Energy, Inc.	Other Supplier
Guntle, Vince	UGI Development Company	Generation Owner
Hanser, Erik	Michigan Public Service Commission	Not Applicable
Harmon, Mike	Union Electric Company d/b/a Ameren Missouri	Other Supplier
Hastings, David	Market Interconnection LLC	Not Applicable
Hauske, Thomas	PJM Interconnection, LLC	Not Applicable
Heisey, Bradley	Wolf Hills Energy, LLC	Generation Owner
Helms, Joe	Rainbow Energy Marketing Corporation	Other Supplier
Herel, Suzanne	PJM Interconnection, LLC	Not Applicable
Hilaski, Steve	Potomac Electric Power Company	Electric Distributor
Hoatson, Tom	LS Power	Not Applicable
Hurwich, Mark	Elliott Bay Energy Trading, LLC	Other Supplier
Hyatt, John	Monitoring Analytics, LLC	Not Applicable
Hyzinski, Tom	GT Power Group	Not Applicable
Janicki, Diane	Boston Energy Trading & Marketing, LLC	Generation Owner
Jens, Tom	Blackoak Capital	Other Supplier
Jett, William	Duke Energy Business Services LLC	Generation Owner
Jones, Ryan	CCS Energy	Other Supplier
Kelly, Stephen	Brookfield Energy Marketing LP	Other Supplier
Kenney, Susan	PJM Interconnection, LLC	Not Applicable
Kilgallen, Kevin	Avangrid Renewables, LLC	Generation Owner
Kimmel, David	PJM Interconnection, LLC	Not Applicable
Kozhuharov, Dimitar	Delaware Municipal Electric Corporation, Inc.	Electric Distributor
LaRocque, Matthew	PJM Interconnection, LLC	Not Applicable
Leasure, Jill	Keystone-Conemaugh Projects, LLC	Other Supplier
Lejcar, Jamie	Allegheny Electric Cooperative, Inc.	Electric Distributor
Liang-Nicol, Cecilia	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Libbos, Robin	FirstEnergy Solutions Corp.	Transmission Owner
Logan, Sharon	The Federal Energy Regulatory Commission	Not Applicable
Long, Matthew	Appalachain Power Company	Transmission Owner
Mariam, Yohannes	Office of the Peoples Counsel for the District of Columbia	End User Customer
Markiewicz, Cindy	FirstEnergy Solutions Corp.	Transmission Owner
Martin, Valerie	The Federal Energy Regulatory Commission	Not Applicable
Matheson, Doug	EnerNOC, Inc.	Other Supplier
McGlynn, Paul	PJM Interconnection, LLC	Not Applicable
Messina, Emmy	PJM Interconnection, LLC	Not Applicable
Miller, John	Commonwealth Edison Company	Transmission Owner
Monzon, Stephanie	PJM Interconnection, LLC	Not Applicable
Nowell, Cynthia	Potomac Electric Power Company	Electric Distributor
O'Boyle, Brian	Consolidated Edison Solutions, Inc.	Transmission Owner
Ondayko, Brock	Appalachain Power Company	Transmission Owner
O'Neill, Jack	PJM Interconnection, LLC	Not Applicable
Pakela, Gregory	DTE Energy Trading, Inc.	Other Supplier
Park, Jinny	PJM Interconnection, LLC	Not Applicable
Patel, Keyurbhai	PJM Interconnection, LLC	Not Applicable
Pawar, Aasawari	First Solar	Not Applicable
Pelletier, Eveline	Hydro-Quebec	Not Applicable
Peoples, John	Duquesne Light Company	Transmission Owner
Perera, Asanga	PJM Interconnection, LLC	Not Applicable
Pilong, Chris	PJM Interconnection, LLC	Not Applicable
Powers, Sean	Linde, LLC	End User Customer
Price, Ruth	Division of the Public Advocate of the State of Delaware	End User Customer
Rajan, Abhijit	Dominion Resources	Not Applicable

Redwine, Arlo	FERC	Not Applicable
Robinson, Becky	Vistra Energy	Not Applicable
Rohrbach, John	ACES Power	Not Applicable
Romine, Robert	LS Power	Not Applicable
Ruck, Andrew	PSEG Energy Resources and Trade LLC	Transmission Owner
Salaneck, Alexandra	Monitoring Analytics, LLC	Not Applicable
Sasser, Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
Scheidecker, Paul	PJM Interconnection, LLC	Not Applicable
Schmitt, Jeff	PJM Interconnection, LLC	Not Applicable
Schum, Alice	Illinois Municipal Electric Agency	Electric Distributor
Schweizer, David	PJM Interconnection, LLC	Not Applicable
Shah, Vijay	PJM Interconnection, LLC	Not Applicable
Shanker, Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Silveira, Fabiano	Strom Power, LLC	Other Supplier
Singer, Chad	Fellon McCord	Not Applicable
Sotkiewicz, Paul	E-Cubed Policy Associates LLC	Not Applicable
Stone, Andy	PJM Interconnection, LLC	Not Applicable
Sturgeon, John	Duke Energy Carolinas, LLC	Other Supplier
Swalwell, Brad	Tangent Energy	Other Supplier
Toomey, Megan	Talen Energy Marketing, LLC	Generation Owner
Vayda, Brian	Borough of Park Ridge, NJ	Electric Distributor
Walter, Laura	PJM Interconnection, LLC	Not Applicable
Ward, Michael	PJM Interconnection, LLC	Not Applicable
Webster, John	Icetek.com, Inc.	Other Supplier
Wehnes, Kathleen	Maryland Department of the Environment	Not Applicable
Wei, Jane	Monitoring Analytics, LLC	Not Applicable
Wilson, James	Wilson Energy Economics	Not Applicable
Zhao, Jenny	Appalachian Power Company	Transmission Owner