



Market Implementation Committee
PJM Conference & Training Center, Audubon, PA
November 8, 2017
9:00 a.m. – 3:20 p.m. EPT

Administration

- 1. Ms. Christina Stotesbury and Ms. Chantal Hendrzak, PJM, provided announcements and reviewed the Antitrust, Code of Conduct, and Public Meetings/Media Participation Guidelines.
- 2. The committee approved the draft minutes from the October 11, 2017 Market Implementation Committee meeting by acclamation with 0 objections and 0 abstentions.
- 3. Ms. Christina Stotesbury, PJM, and Ms. Chantal Hendrzak, reviewed the active MIC issues on <u>Issue Tracking</u> and proposed updating issue statuses to address and resolve open issues, and recommended closing a number of issues within the MIC and subcommittees of the MIC.

The following MIC issues will be closed:

Operating Parameter Definitions, pending implementation of new parameter Soak Time planned for 2019 Efficiency of PJM MISO Real-Time Interchange Spot-in Transmission Service for Energy Imports from NYISO Annual Revenue Requirements for new Black Start units

Shortage Pricing Operating Reserve Demand Curve (ORDC) – Order 825

The following MIC Subcommittee issues will be closed:

Sub-Hourly Settlements – Order 825

Pseudo-Tied Generators and Dynamic Schedules End-of-Month Meter Correction

4. Mr. Foluso Afelumo, PJM, provided a brief update on security changes to the Account Manager tool.

Endorsements/Approvals

- 5. Proposed FTR Credit Requirements for Transmission Upgrades Mr. Hal Loomis, PJM, reviewed a proposed change in FTR credit requirements to reduce exposure posed by congestion reductions resulting from major transmission upgrades. The committee endorsed the proposal by acclamation with 1 objection and 0 abstentions.
- 6. Proposed changes to Price Responsive Demand for Capacity Performance requirements Mr. Pete Langbein, PJM, reviewed four proposals that came from the Demand Response Subcommittee to update Price Responsive Demand for Capacity Performance requirements. The IMM offered a new proposal and Whisker removed their proposal prior to voting. The committee approved two of the three proposals. The PJM package was endorsed with 171 in favor (83%), 35 opposed (17%) and 14 abstentions. Package C was endorsed with 116 in favor (62%), 72 opposed (38%) and 21 abstentions. The IMM package was not endorsed with 28 in favor (15%), 164 opposed (85%) and 20 abstentions.





7. Manual 11, 18, 27, 28, and 29 Revisions for 5-minute Settlements

Mr. Ray Fernandez, PJM, presented revisions to Manuals 11, 18, 27, 28, and 29 associated with the implementation of 5-Minute Settlements. The committee endorsed the manual revisions by acclamation with 0 objections and 8 abstentions.

8. Distributed Energy Resources (DER) Charter

Mr. Scott Baker, PJM, provided an update on the Distributed Energy Resource issue that has been worked at Special Sessions of the MIC, and presented two charters to convert the effort to a subcommittee.

The committee approved the amended charter (Item 8B) with 160 in favor (92%), 14 opposed (8%) and 12 abstentions. The original charter failed majority motion with 26 in favor (17%), 130 opposed (83%) and 28 abstentions.

First Readings

9. FTR Modeling, Performance & Surplus

Mr. Brian Chmielewski, PJM, presented a first read of proposals addressing 3 problem statements and issue charges that have been worked in the FTRMPS Special Sessions of the MIC.

- A. Long Term FTR Modeling Enhancements for Future Transmission Expansions
- B. FTR Auction Case Performance
- C. FTR Surplus

The committee will be asked to endorse a proposal for each issue at the December meeting.

10. Seasonal DR Aggregation Registration Rules – Problem Statement and Issue Charge

Mr. Steve Doremus, EnerNOC, presented a first read of a problem statement and issue charge to address the aggregation of summer and winter Demand Response MWs for the Capacity Performance Annual Requirement. The committee will be asked to endorse the problem statement and issue charge at the December meeting.

Working Issues

11. Market Path/Interface Pricing Point Alignment

Mr. John Dadourian, Monitoring Analytics, and Mr. Tim Horger, PJM, reviewed the Market Path/Interface Pricing Point Alignment issue and presented a proposed joint solution. Stakeholders were given an opportunity to offer additional design components and solution options. If you have a solution package to include, please send to the MIC Chair or Secretary prior to the December 13 MIC.

12. Transmission Penalty Factors

Mr. Devendra Canchi, Monitoring Analytics, reviewed the Transmission Penalty Factors issue and matrix. Stakeholders were given an opportunity to offer interests and design components and are encouraged to send suggested additions to the matrix prior to the December 13 MIC.





Additional Updates

13. Interregional Coordination Activity

Mr. Tim Horger, PJM, provided an update on Interregional Coordination efforts.

14. Operationalizing Gas Pipeline Contingencies

Mr. Brian Fitzpatrick, PJM, provided an update on continuing efforts to operationalize gas pipeline contingencies.

15. Market Operations Price Transparency Issue

Mr. Rami Dirani, PJM, provided an update on the Market Operations Price Transparency issue worked in Special Sessions of the MIC.

16. Net Energy Injections – Quarterly Report

Ms. Jennifer Warner-Freeman, PJM, reviewed the 3rd Quarter Net Energy Injections report.

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.

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

December 13, 2017	9:00 a.m.	PJM Interconnection – Conference & Training Center
January 10, 2018	9:00 a.m.	PJM Interconnection – Conference & Training Center
February 7, 2018	9:00 a.m.	PJM Interconnection – Conference & Training Center
March 7, 2018	9:00 a.m.	PJM Interconnection – Conference & Training Center
April 4, 2018	9:00 a.m.	PJM Interconnection – Conference & Training Center
May 2, 2018	9:00 a.m.	PJM Interconnection – Conference & Training Center
June 6, 2018	9:00 a.m.	PJM Interconnection – Conference & Training Center

In-person Attendees

Hendrzak, Chantal (Chair)	PJM Interconnection, LLC	Not Applicable
Stotesbury, Christina (Secretary)	PJM Interconnection, LLC	Not Applicable
Afelumo, Foluso	PJM Interconnection, LLC	Not Applicable





Anders, David Barker, Jason Benchek, Jim Bleiweis, Bruce

Borgatti, Michael Carmean, Gregory

Chmielewski, Brian Ciabattoni, Joseph

Ciabattoni, Joseph Dirani, Rami Drauschak, Lisa Fabiano, Janell Fernandez, Ray Filomena, Guy Foladare, Kenneth

Ford, Adrien
Fuess, Jay
Greiner, Gary
Hauske, Thomas
Holter, Natasha
Horger, Tim

Horstmann, John Hudis, Gabriella Hyzinski, Tom Jani, Alpa Jardot, Gina Johnson, Carl

Kauffman, Brian Keech, Adam Kogut, George Langbein, Pete Lieberman, Steven Loomis, Harold

Lu, Chen Midgley, Sharon

Morelli, Lisa
O'Connell, Robert
Pilong, Melissa
Pratzon, David

Scarpignato, David Schmitt, Jeffrey Suh, Jung

Sweeney, Rory

PJM Interconnection, LLC

Exelon Business Services Company, LLC

FirstEnergy Solutions Corp.

DC Energy LLC
Gabel and Associates

OPSI

PJM Interconnection, LLC PJM Interconnection, LLC

Customized Energy Solutions, Ltd.

Tangibl

Old Dominion Electric Cooperative White Pine Energy Consulting

PSEG Energy Resources and Trade LLC

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

Dayton Power & Light Company (The)

Jersey Green Energy LLC

GT Power Group

PJM Interconnection, LLC

Essential Power Rock Springs, LLC

Customized Energy Solutions, Ltd.*

NRG Curtailment Solutions
PJM Interconnection, LLC
New York Power Authority
PJM Interconnection, LLC
American Municipal Power, Inc.
PJM Interconnection, LLC
PJM Interconnection, LLC

Exelon Business Services Company, LLC

PJM Interconnection, LLC

PPGI Fund A/B Development, LLC

PJM Interconnection, LLC

GT Power Group

Calpine Energy Services, L.P. PJM Interconnection, LLC

Noble Americas Energy Solutions LLC

RTO Insider

Not Applicable

Transmission Owner

Transmission Owner

Other Supplier Not Applicable Not Applicable

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Not Applicable Other Supplier Not Applicable





Trayers, Barry Tribulski, Jennifer Wadsworth, Joseph Warner-Freeman, Jennifer

Whitehead, Jeffrey

Wilson, Bram Xu. Xu Citigroup Energy, Inc. PJM Interconnection, LLC

Vitol Inc.

PJM Interconnection, LLC

GT Power Group

Diamond State Generation Partners, LLC

PJM Interconnection, LLC

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

WebEx Attendees

Abdelhamid, Nadeen Ainspan, Malcolm Anderson, Jared Bazar, Kevin

Bennett, Stephen Binder, Gerry Birnel, William Bolan, Martin Bonner, Kevin

Bowring, Joe Boyle, Glen Britt, Debbie Brodbeck, John Brown, Rich

Bruno, Patrick Budney, Dave Burdis, Tim Campbell, Bruce Canchi, Devendra Carroll, Rebecca

Cerchio, Jerry Chen, Jennifer Chintapalli, Raj

Cawley, Troy

Chocarro Aguirrebengoa, Iker

Cocco, Michael Cox, Phil

Coyne, Suzanne Croop, Danielle Crystle, Gil

Cummings, Bridgid Dadourian, John Dantonio, Phil North Carolina Electric Membership Corporation

Energy Curtailment Specialists, Inc.

S & P Global

PJM Interconnection, LLC PJM Interconnection, LLC SESCO Enterprises LLC Westar Energy, Inc.

FirstEnergy Solutions Corp. PJM Interconnection, LLC Monitoring Analytics, LLC PJM Interconnection, LLC

North Carolina Electric Membership Corporation EDP Renewables North America, LLC

PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
EnergyConnect, Inc.
Monitoring Analytics, LLC
PJM Interconnection, LLC

PJM Interconnection, LLC

Monitoring Analytics, LLC Natural Resources Defense Council

Galt Power Inc.

E.ON Climate & Renewables North America, Inc.

Old Dominion Electric Cooperative Appalachian Power Company PJM Interconnection, LLC PJM Interconnection, LLC UGI Development Company PJM Interconnection, LLC Monitoring Analytics, LLC PJM Interconnection, LLC Electric Distributor

Other Supplier
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Generation Owner
Electric Distributor

Transmission Owner
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Transmission Owner
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PJM©2017





Dasher, Brett

Daugherty, Suzanne

Davis, James DeLosa, Joseph DePillo, Ray

Dessender, Harry Dillon, Matthew Dimartino, Denise

Dolan, Jim

Domian, Christin

Doremus, Steven

Driscoll, Mary Ellen

Drom, Richard Dugan, Chuck

Egan, Amanda Endress, Eric Esterly, Theresa

Feierabend, Rick Fitch, Neal

Fox, Angela Gahimer, Mike

Garnett, Bryan Gebolys, Debbie

Genuario, Gabrielle

Giacomoni, Anthony

Gilani, Rehan Glazer, Craig Gledhill, Andrew

Gorman, Kevin

Guerry, Katie

Hanser, Erik Harmon, Mike

Hastings, David Hatch, Kevin Hayik, Seth

Haynes, Greg Heinle, Frederick Helms, Joseph

Hlggins, Sharon Hilaski, Steve

Hoatson, Tom Hohenshilt, Jennifer Energy Authority, Inc. (The)
PJM Interconnection, LLC

Dominion Energy Marketing, Inc.
DE Public Service Commission

PSEG Energy Resources and Trade, LLC

Customized Energy Solutions, Ltd. UGI Development Company PJM Interconnection, LLC PJM Interconnection, LLC

Mitsubishi Electric Power Products Inc.

EnerNOC, Inc.

PJM Interconnection, LLC

Eckert Seamans

East Kentucky Power Cooperative, Inc.

PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
Dominion Virginia Power
NRG Power Marketing LLC
Wylan Energy, L.L.C.

IN Office of Utility Consumer Counselor

Duke Energy Ohio, Inc.

Public Utilities Commission of Ohio (The)

PJM Interconnection, LLC PJM Interconnection, LLC ConEdison Energy, Inc. PJM Interconnection, LLC PJM Interconnection, LLC

Highlands Energy Group LLC (The)

EnerNOC, Inc.

Michigan Public Service Commission

Union Electric Company d/b/a Ameren Missouri

Market Interconnection LLC PJM Interconnection, LLC Monitoring Analytics, LLC Energy Authority, Inc. (The) Office of the People's Counsel

Rainbow Energy Marketing Corporation

Duke Energy Commercial Asset Management, Inc.

Potomac Electric Power Company Riverside Generating, LLC

Talen Energy Marketing, LLC

Other Supplier

Not Applicable Generation Owner

Not Applicable

Other Supplier Not Applicable

Generation Owner

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Generation Owner





Holdbrook, Ruth Holland, Risa Horton, Dana Hsia, Eric Hurwich, Mark Hyatt, John Janicki, Diane

Jayachandran, Marilyn

Jett, William Josyula, Siva

Kaczanowski, Marek Karnik, Rashmi Kazerooni, Hamid

Keeney, Jerry Kelly, Stephen Kenney, Susan Kilgallen, Kevin Kimmel, David Kingston, Amber Kinser, Cynthia

LaRocque, Matthew Lee, Lori Murphy Lejcar, Jamie Leopold, Chris

Knies, Heather

Liang-Nicol, Cecilia Libbos, Robin Lind, Clarke Logan, Sharon

Lokhandwalla, Faizmin

Long, Glenn Loudenburg, Zack Lowe, Connie Mabry, David Mack, Amanda Mancuso, Melanie Marcino, Angelo Mariam, Yohannes Markiewicz, Cindy

Martin , Valerie Marton, David Marzewski, Skyler Northern Virginia Electric Cooperative

PJM Interconnection, LLC Appalachian Power Company PJM Interconnection, LLC Elliott Bay Energy Trading, LLC Monitoring Analytics, LLC

Boston Energy Trading & Marketing, LLC

PJM Interconnection, LLC

Duke Energy Business Services LLC

Monitoring Analytics, LLC

Baltimore Gas and Electric Company

Other

Talen Energy Marketing, LLC
Dynegy Marketing & Trade, LLC
Brookfield Energy Marketing LP
PJM Interconnection, LLC
Avangrid Renewables LLC
PJM Interconnection, LLC

North Carolina Electric Membership Corporation

Tennessee Department of Agriculture EDF Trading North America, LLC PJM Interconnection, LLC PJM Interconnection, LLC

Allegheny Electric Cooperative, Inc. Appalachian Power Company

Monongahela Power Company d/b/a Allegheny Power

FirstEnergy Solutions Corp. Powerex Corporation

The Federal Energy Regulatory Commission

Dynegy

PJM Interconnection, LLC

Pennsylvania Renewable Resources, Associates

Dominion Virginia Power
McNees Wallace & Nurick LLC

NextEra Energy Power Marketing, LLC

FirstEnergy Solutions Corp. PJM Interconnection, LLC

Office of the Peoples Counsel for the District of Columbia

FirstEnergy Solutions Corp.

The Federal Energy Regulatory Commission

FirstEnergy Solutions Corp. Monitoring Analytics, LLC Electric Distributor Not Applicable

Transmission Owner

Not Applicable
Other Supplier
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Generation Owner

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Matheson, Doug McAlister, Lisa McCaffree, Matthew

McDaniel, John McLaverty, Megan Mercier, Christian Metzler, Jakob

Miller, John Nanavati, Shaina Nawaz, Zainab Nix, Emma

Norton, Chris Olaleye, Michael Ondayko, Brock O'Neill, Jack Pacella, Chris Pakela, Greg Patel, Keyur

Peebles, Andy Pelletier, Eveline

Patten, Kevin

Peoples, John Philips, Marjorie Piovesan, Lori

Poulos, Greg

Powers, Sean Price, Mark Price, Ruth

Prokop, Brenda

Rajan, Abhijit Ramsey, James Rayhorn, Carolyn

Reid, Ryan Reis, Raffi

Riehl, John

Ritchie, Sandra Robinson, Maria Robson, Matt

Rohrbach, John Rothey, Kristin

Ruck, Andrew Rushing, Nathan EnerNOC, Inc.

American Municipal Power, Inc.

Comverge Inc.

Baltimore Gas and Electric Company

PJM Interconnection, LLC MAG Energy Solutions, Inc.

Castleton Commodities Merchant Trading L.P.

Commonwealth Edison Company

North Carolina Electric Membership Corporation

NJ Board of Public Utilities
PJM Interconnection, LLC
American Municipal Power, Inc.
PJM Interconnection, LLC
Appalachain Power Company
PJM Interconnection, LLC
PJM Interconnection, LLC
DTE Energy Trading, Inc.
PJM Interconnection, LLC
Appalachain Power Company

Hydro-Quebec

Duquesne Light Company Direct Energy Business, LLC Powerex Corporation

Saracen Energy East LP

CAPS

Linde Energy Services, Inc. DC Energy Mid-Atlantic, LLC

Division of the Public Advocate of the State of Delaware

ITC Mid-Atlantic Development LLC

Dominion Resources Suffolk Fund LLC Dominion Virginia Power Buckeye Power, Inc.

Other

The Federal Energy Regulatory Commission

PJM Interconnection, LLC Advanced Energy Economy, Inc.

SESCO Enterprises LLC

Southern Maryland Electric Cooperative

American Municipal Power, Inc.

PSEG Energy Resources and Trade, LLC

CPV Maryland, LLC

Other Supplier

Electric Distributor

Not Applicable

Transmission Owner

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Generation Owner





Rutigliano, Tom
Saini, Ishwar
Sasser, Jonathan
Scheidecker, Paul
Schneider, Jon
Schreim, Morris
Schweizer, David
Segner, Sharon
Shanker, Roy
Sillin, John
Singer, Chad
Skucas, Ruta
Snyder Sue

Singer, Chad
Skucas, Ruta
Snyder, Sue
Sock, Bryan
Souder, Dave
Souder, Rich
Stewart, Travis
Stone, Andy
Tangirala, Subha
Thomson, Heather
Tibbetts, Maeve

Tsao, Stephanie Tse, Felix Tyler, Catherine Vayda, Brian Velasco, Cheryl Mae

Tique, John

Velasco, Cheryl Mae
Villeneuv, Alexandre
Ward, Michael
Wei, Jane
Wicks, Tonja
Wilhite, Chad
Wilkie, Brian
Williams, Amber
Williams, Stanley
Wilmoth, Emily
Wilson, James
Wolfe, Alice
Yang, Dan

Achieving Equilibrium LLC Macquarie Energy LLC

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

Maryland Public Service Commission

PJM Interconnection, LLC LS Power Transmission, LLC H.Q. Energy Services (U.S.), Inc.

The Federal Energy Regulatory Commission

Fellon McCord Pierce Atwood

PJM Interconnection, LLC

PSEG Energy Resources and Trade, LLC

PJM Interconnection, LLC PJM Interconnection, LLC Gable and Associates PJM Interconnection, LLC

ABB

Mid-Atlantic Renewable Energy

Pierce Atwood

New York State Electric & Gas Corporation

SPGlobal

Inertia Power I, LLC
Monitoring Analytics
Borough of Park Ridge, NJ
PJM Interconnection, LLC
MAG Energy Solutions, Inc.
PJM Interconnection, LLC
Monitoring Analytics, LLC
Duquesne Light Company
FirstEnergy Solutions Corp.
Consolidated Edison Solutions, Inc

New York State Electric & Gas Corporation PJM Interconnection, LLC Dominion Virginia Power Wilson Energy Economics Blue Ridge Power Agency, Inc.

Parma Energy LLC

Other Supplier
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Author: Christina Stotesbury

Provide feedback on the progress of this group: <u>Facilitator Feedback Form</u>

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