



Market Implementation Committee
PJM Conference & Training Center, Audubon, PA
January 11, 2017
9:00 a.m. – 2:40 p.m. EPT

Administration

- 1. Ms. Christina Stotesbury, PJM, 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 December 14, 2016 Market Implementation Committee meeting by acclamation with 0 objections and 0 abstentions.
- 3. Ms. Christina Stotesbury reviewed the active MIC issues on *Issue Tracking*
- 4. Mr. Ronnie Bailey, Dominion, reviewed a temporary RAS in the Dominion Transmission Zone to account for the Yorktown generation facility retirement.

Endorsements/Approvals

5. FERC Order 825 - Shortage Pricing

Ms. Lisa Morelli, PJM, reviewed the proposed package to change the Operating Reserve Demand Curve and price shortage conditions in real time, and the associated revisions to Manual 11: Energy & Ancillary Services Market Operations. PJM will request in the compliance filing submitted on January 11, 2017, that the FERC extend the implementation date to coincide with the implementation of 5-minute settlements in February 2018, opposed to May 2017 as the Order suggests. The committee endorsed the proposed package and Manual 11 revisions by acclamation with $\underline{0}$ objections and $\underline{20}$ abstentions.

6. NCEMC Problem Statement and Issue Charge

Ms. Debbie Britt, NCEMC, reviewed a pseudo-tie meter correction problem statement and issue charge that will be worked at the Market Settlements Subcommittee. The committee approved the problem statement and issue charge by acclamation with <u>0</u> objections and <u>0</u> abstentions.

7. Manual 11 Revisions

Mr. Michael Olaleye, PJM, reviewed revisions to Manual 11: Energy & Ancillary Services Market Operations to account for the updated Regulation Requirement from the RMISTF. **The committee endorsed the Manual 11 revisions by acclamation with 0 objections and 8 abstentions.**

8. Manual 27 Revisions

Mr. Ray Fernandez, PJM, reviewed revisions to Manual 27: Open Access Transmission Tariff Accounting as part of an annual review process. **The committee endorsed the Manual 27 revisions by acclamation with 0 objections and 0 abstentions.**





Working Issues

9. Annual Revenue Requirements for new Black Start Units

Mr. Tom Hauske, PJM, continued the discussion on Annual Revenue Requirements for new Black Start units and presented a solution option for consideration. Additional options and packages may be sent to the MIC Chair or Secretary in advance of the February MIC meeting.

Issue tracking: Annual Revenue Requirements for new Black Start Units

10. Spot-in Transmission Service for Energy Imports from NYISO

Mr. Chris Pacella, PJM, provided an update on the Spot-in Transmission Service Special Session meeting held on December 21, and reviewed next steps. A revised problem statement and issue charge was presented for the consideration of additional energy import solutions on all seams. Mr. David Hastings, Market Interconnection, LLC, motioned to approve and Mr. Bob O'Connell, Main Line Electricity Market Consultants, seconded the motion to vote on the amended problem statement and issue charge. The amended problem statement and issue charge were approved by acclamation with <u>0</u> objections and <u>0</u> abstentions.

<u>Issue Tracking: Spot-in Transmission Service for Energy Imports from NYISO</u>

Additional Updates

11. FERC NOPR Updates

- A. Ms. Lisa Morelli, PJM, provided an update the Notice of Proposed Rulemaking related to pricing Fast Start Resources, as part of the price formation proceeding.
- B. Mr. Andrew Levitt, PJM, provided an update on the Notice of Proposed Rulemaking related to Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators.

Both NOPRs will be reviewed again at the January 23rd MC Webinar.

12. Seasonal Capacity Deficiency Letter

Ms. Jennifer Tribulski, PJM, provided an update on the seasonal capacity deficiency notice response.

13. Motions to Lodge and for Commencement of Compliance Process of the IMM for PJM

Dr. Joe Bowring, Monitoring Analytics, presented historical replacement capacity examples and provided comment on the <u>Motions to Lodge</u> and for Commencement of Compliance Process submitted on behalf of Monitoring Analytics on December 30, 2016. Ms. Jen Tribulski, PJM, provided PJM's perspective on the motions as well.

14. 2017/2018 ARR/FTR Process

Mr. Brian Chmielewski, PJM, provided an update on the PJM <u>compliance filing</u> submitted to the FERC on November 14, 2016 impacting the annual ARR/FTR process, and provided details on the timeline and communication plan to introduce the corresponding ARR/FTR changes.

15. Synchronized Reserve Events in Emergency Procedures Application

Mr. David Hislop, PJM, provided an update on the effort to add Synchronized Reserve events back into EP.





16. **NYIS Interface Definition**

Mr. Tim Horger, PJM, provided an update on the NYIS Interface Definition to support the post ConEd Wheel implementation, and was available to answer guestions on the Inter-Regional Coordination efforts.

Future Agenda Requests

Mr. Dave Pratzon, GT Power Group, requested a future agenda item at the MIC or MC Webinar for PJM to present more details, such as pricing, the clearing mechanism, and model used, for the 10,000 MW from the 3rd Incremental Transition Auction.

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 <u>DRS web site</u>.

Intermittent Resources Subcommittee (IRS)

Meeting materials will be posted to the <u>IRS web site.</u>

Inter-Regional Coordination Activity

Mr. Tim Horger, PJM, was available during the meeting to answer questions related to Inter-Regional Coordination efforts.

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

| February 8, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |
|--------------------|-----------|--|
| March 8, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |
| April 12, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |
| May 3, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |
| June 7, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |
| July 12, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |
| August 9, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |
| September 13, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |
| October 11, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |
| November 8, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |
| December 13, 2017 | 9:00 a.m. | PJM Interconnection – Conference & Training Center |





Members in Attendance

Hendrazak, Chantal (Chair) Stotesbury, Christina (Secretary)

Barker, Jason Benchek, Jim Brodbeck, John Filomena, Guy Fitch, Neal Foladare, Kenneth Ford. Adrien Greiner, Gary Horstmann, John Hyzinski, Tom Jardot, Gina

Johnson, Carl Kauffman, Brian Kogut, George Lieberman, Steven Midgley, Sharon O'Connell, Robert Stern. Alexander Suh, Jung Trayers, Barry Wadsworth, Joseph

Yu. Joel

PJM Interconnection, LLC PJM Interconnection, LLC

Exelon Business Services Company, LLC

FirstEnergy Solutions Corp.

EDP Renewables North America, LLC Customized Energy Solutions, Ltd.* NRG Power Marketing LLC Tangibl Consulting, LLC PJM Interconnection, LLC

PSEG Energy Resources and Trade LLC Dayton Power & Light Company (The) Talen Energy Marketing, LLC Essential Power Rock Springs, LLC Customized Energy Solutions, Ltd.* NRG Curtailment Solutions

New York Power Authority Old Dominion Electric Cooperative Exelon Business Services Company, LLC Main Line Electricity Market Consultants Public Service Electric & Gas Company Noble Americas Energy Solutions LLC

Citigroup Energy, Inc.

Vitol Inc.

Rockland Electric Company

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

Also in Attendance

Advena, Chris Anders, David Borgatti, Michael Bowring, Joe Brown, Rich Canter, David Carroll. Rebecca

Ciabattoni. Joe Drauschak, Lisa Driscoll, Mary Ellen Fabiano, Janell Fernandez, Ray Fuess, Jay Griffiths, Dan

Chmielewski, Brian

Hagaman, Derek Hastings, David Hauske, Thomas Hislop, David Holland, Risa Horger, Tim Levitt, Andrew Mabry, David McLaverty, Megan PJM Interconnection, LLC PJM Interconnection, LLC

Gabel and Associates Monitoring Analytics, LLC PJM Interconnection, LLC Appalachian Power Company PJM Interconnection, LLC

PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC White Pine Energy Consulting Consumer Advocates of PJM States

GT Power Group

Market Interconnection LLC PJM Interconnection, LLC McNees Wallace & Nurick LLC PJM Interconnection, LLC

Not Applicable

Other Supplier

Transmission Owner

Not Applicable Not Applicable Not Applicable

Not Applicable Transmission Owner

Not Applicable Not Applicable

Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable

Not Applicable Not Applicable Not Applicable Not Applicable

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Morelli, Lisa
Olaleye, Michael
Pacella, Chris
Perera, Asanga
Pratzon, David
Price, Ruth
Schreim, Morris
Shparber, Steven

Slagel, Ron Souder, Rich Stadelmeyer, Rebecca

Strella, Lauren Sweeney, Rory Tribulski, Jennifer

Tribulski, Jennifer Williams, Stanley

PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC GT Power Group

Division of the Public Advocate of the State of Delaware

Maryland Public Service Commission

PJM Interconnection, LLC

Other

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

RTO Insider

PJM Interconnection, LLC PJM Interconnection, LLC

Not Applicable
Not Applicable
Not Applicable
Not Applicable
Not Applicable
End User Customer
Not Applicable
Not Applicable

Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable

In Attendance via WebEx / Teleconference

Ainspan, Malcolm Austin, Larry Bailey, Ronnie Baker, Scott Berlinski, Mike Binder, Gerry Bloom, David

Bloom, David Bolan, Martin Britt, Debbie

Britt, Debbie
Brodbeck, John
Budney, Dave
Campbell, Bruce
Campbell, Zachary

Cocco, Michael
Cox, Jason
Crider, Craig
Croop, Danielle
Crystle, Gil
Dadourian, John
D'Alessandris, Lou

DeLosa, Joseph

DePillo, Ray

Dickson, Douglas Dillon, Matt DiNicola, Laura Dirani, Rami Dugan, Chuck Fan, Zhenyu Farber, John

Ford. Adrien

Garnett, Bryan Gebolys, Debbie Gell, Richard Godson, Gloria Greening, Michele Energy Curtailment Specialists, Inc.

PJM Interconnection, LLC

Virginia Electric & Power Company

PJM Interconnection, LLC

Customized Energy Solutions, Ltd.*

SESCO Enterprises LLC

Baltimore Gas and Electric Company

FirstEnergy Solutions Corp.

North Carolina Electric Membership Corporation

EDP Renewables North America, LLC

PJM Interconnection, LLC EnergyConnect, Inc. FTI Consulting

Old Dominion Electric Cooperative Dynegy Power Marketing, Inc. Virginia Electric & Power Company

PJM Interconnection, LLC

UGI Utilities, Inc.

Monitoring Analytics, LLC
FirstEnergy Solutions Corp.
DE Public Service Commission
Public Service Electric & Gas Company
New Jersey Board of Public Utilities

UGI Utilities, Inc.

FirstEnergy Solutions Corp. PJM Interconnection, LLC

East Kentucky Power Cooperative, Inc.

PJM Interconnection, LLC
DE Public Service Commission
PJM Interconnection, LLC
Duke Energy Ohio, Inc.

Public Utilities Commission of Ohio (The) Ontario Power Generation Inc.

Potomac Electric Power Company

PPL Electric Utilities Corp. dba PPL Utilities

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

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

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

Not Applicable





Greiner, Gary Guerry, Katie Hannah, Kyle Hanser, Erik Hoatson, Tom Horton, Dana

Hugee, Jacqulynn Hyatt, John

J.M.

Hsia, Eric

Jablonski, James Janicki, Diane Keech, Jason Kenney, Susan Kilgallen, Kevin Kimmel, David Kingston, Amber Kliner, Alicia

Kingston, Amber Kliner, Alicia Lacy, Catharine Leasure, Jill Lejcar, Jamie Liang-Nicol, Cecilia Libbos, Robin LoBue, Dan

Logan, Sharon Mancuso, Melanie Mariam, Yohannes

Markiewicz, Cindy McAlister, Lisa McLaughlin, Jeffrey Michelle Henry Miller, John Mok, Alan Mooney, Catherine

Morelli, Lisa Olinger, Robert Ondayko, Brock Pakela, Gregory Park, Jinny Patel, Keyur Patten, Kevin Peoples, John Pilong, Chris

Pope, Susan Price, Mark Rajan, Abhijit Rayhorn, Carolyn Reeping, Bob Robson, Matt

Rocha-Garrido, Patricio

Rohrbach, John Rothey, Kristin Rutigliano, Tom Public Service Electric & Gas Company

EnerNOC. Inc.

Dominion Virginia Power

Michigan Public Service Commission

Riverside Generating, LLC Appalachian Power Company PJM Interconnection, LLC PJM Interconnection, LLC Monitoring Analytics, LLC

CCI

Borough of Butler, Butler Electric Division Boston Energy Trading & Marketing, LLC

PJM Interconnection, LLC PJM Interconnection, LLC Avangrid Renewables, LLC PJM Interconnection, LLC

North Carolina Electric Membership Corporation Federal Energy Regulatory Commission (The)

Dominion Virginia Power Keystone Projects

Allegheny Electric Cooperative, Inc.

Monongahela Power Company d/b/a Allegheny Power

FirstEnergy Solutions Corp. Talen Energy Marketing, LLC

Federal Energy Regulatory Commission (The) Allegheny Energy Supply Company, L.L.C.

Office of the Peoples Counsel for the District of Columbia

FirstEnergy Solutions Corp.
PJM Interconnection, LLC
PJM Interconnection, LLC
First Energy Solutions Corp.
Commonwealth Edison Company
Duke Energy Business Services LLC

Monitoring Analytics, LLC PJM Interconnection, LLC Keystone Projects

Appalachian Power Company DTE Energy Trading, Inc. PJM Interconnection, LLC PJM Interconnection, LLC Appalachian Power Company Duquesne Light Company PJM Interconnection, LLC

FTI Consulting

DC Energy Mid-Atlantic, LLC Dominion Resources Dominion Virginia Power Ohio Edison Company SESCO Enterprises LLC PJM Interconnection, LLC

Achieving Equilibrium LLC

Southern Maryland Electric Cooperative American Municipal Power, Inc.

Transmission Owner Other Supplier

Not Applicable Not Applicable Other Supplier

Transmission Owner

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

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

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

End User Customer Transmission Owner Not Applicable Not Applicable Transmission Owner

Transmission Owner
Transmission Owner
Transmission Owner
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Transmission Owner
Other Supplier

Not Applicable
Not Applicable
Transmission Owner
Transmission Owner

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

Transmission Owne Other Supplier Not Applicable Electric Distributor Electric Distributor Other Supplier





Salaneck, Alexandra Sasser, Jonathan Schmitt, Jeff Schneider, Jon Schuyler, Ken Scoglietti, Barbara Shanker, Roy Shaver, Rebecca Sillin, John Souder, Dave Stern, Alex Summers, Ted Tangirala, Subha Tatum, Ed

Thompson, Matthew Thomson, Heather Treisch, Brianna Tsao, Stephanie Urbin, Greg Walter, Laura Ward, Michael

Warner-Freeman, Jennifer

Weiss, Glenn Whitehead, Jeff Wicks, Tonja Wilhite, Chad Wilmoth, Emily Wilson, James Wood, Gordon Wunderlich, David Monitoring Analytics, LLC

Customized Energy Solutions, Ltd.*

PJM Interconnection, LLC FirstEnergy Solutions Corp. PJM Interconnection, LLC Tangent Energy Solutions, Inc. H.Q. Energy Services (U.S.), Inc. FirstEnergy Solutions Corp.

Federal Energy Regulatory Commission (The)

PJM Interconnection, LLC

Public Service Electric & Gas Company Direct Energy Business Marketing, LLC

US ABB

American Municipal Power, Inc.

XO Energy MA, L.P.

Mid-Atlantic Renewable Energy Coalition

Interstate Gas Supply, Inc.

S&P Global

Baltimore Gas and Electric Company

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

Direct Energy Business Marketing, LLC

Duquesne Light Company FirstEnergy Solutions Corp. Dominion Virginia Power Wilson Energy Economics ETC Endure Energy L.L.C. Royal Bank of Canada

Not Applicable Not Applicable Not Applicable

Transmission Owner

Not Applicable Other Supplier Other Supplier Transmission Owner

Not Applicable Not Applicable Transmission Owner

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

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

Transmission Owner Not Applicable Not Applicable Other Supplier Other Supplier

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