

Market Implementation Committee PJM Conference & Training Center, Audubon, PA December 14, 2016 9:00 a.m. – 3:00 p.m. EPT

#### Administration

- 1. Ms. Christina Stotesbury, PJM, provided announcements and reviewed the Antitrust, Code of Conduct, and Public Meetings/Media Participation Guidelines.
- 2. Minutes from the November 2, 2016 Market Implementation Committee meeting were approved by acclamation with **0** objections and **0** abstentions.
- 3. Ms. Christina Stotesbury, PJM, reviewed the MIC issues on Issue Tracking.

#### Endorsements/Approvals

4. Governing document language for Operating Parameters

Mr. Tom Hauske, PJM, presented proposed revisions to the PJM Tariff, and Manuals 11, 12, and 28 to unnest Operating Parameter definitions. The committee endorsed the governing document revisions by acclamation with <u>0</u> objections and <u>0</u> abstentions.

#### 5. Residual ARR Enhancements

Mr. Brian Chmielewski, PJM, presented the Residual ARR Enhancements issue and provided an overview of the proposed package and manual revisions. The committee endorsed the proposed package by acclamation with <u>1</u> objection and <u>0</u> abstentions.

#### 6. FTR Undiversified Credit Requirement

Mr. Harold Loomis, PJM, presented proposed revisions to the FTR undiversified credit adder that was developed at stakeholder request. The committee endorsed the proposed revisions with <u>88</u> votes in favor (72%), <u>34</u> objections (28%) and <u>15</u> abstentions.

#### Working Issues

#### 7. Annual Revenue Requirements for new Black Start Units

Mr. Tom Hauske, PJM, continued the discussion on Annual Revenue Requirements for new Black Start units, displayed the current matrix, and asked stakeholders to provide additional solution options. Mr. Hauske will present a proposed solution for consideration at the January meeting. *Issue tracking: Annual Revenue Requirements for new Black Start Units* 

#### 8. FERC Order 825 – Settlement Intervals

Mr. Ray Fernandez, PJM, provided an update on Order 825 5-minute settlements. PJM is proposing Tariff and Operating Agreement revisions to more clearly describe the settlement process and calculations. Proposed changes accounting for credits and charges to the Regulation, Synchronized Reserve, Non-Synchronized Reserve, Balancing Operating Reserve, Day-Ahead Operating Reserve, and Reactive Service



markets, including during a Performance Assessment Hour, were reviewed. Implicit Congestion and Losses examples were presented for discussion.

### First Readings

#### 9. FERC Order 825 – Shortage Pricing

Ms. Lisa Morelli, PJM, presented a first read of the current Shortage Pricing proposal including manual revisions. PJM recommends updating the Operating Reserve Demand Curve to include an additional Step 2 when additional reserves are required to meet transient shortage conditions. Stakeholders had the opportunity to provide additional solution options for consideration. The committee will be asked to endorse a proposal during the January MIC meeting.

Issue Tracking: Shortage Pricing Operating Reserve Demand Curve (ORDC) - Order 825

### 10. NCEMC Problem Statement and Issue Charge

Ms. Debbie Britt, NCEMC, presented a pseudo-tie meter correction problem statement and issue charge as part of the Market Settlements Subcommittee. The committee will be asked to approve the problem statement and issue charge during the January MIC.

#### 11. 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 will be asked to endorse these revisions during the January MIC. Revisions to Manual 12: Balancing Operations were presented for informational purposes only.

#### 12. 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 will be asked to endorse these revisions in January.

#### Additional Updates

# 13. FERC Order 831: Offer Caps

Mr. Adam Keech, PJM, provided an overview of FERC Order 831, and summarized how the Final Rule issued on November 17, 2016 impacts offer capping in the PJM Markets.

#### 14. Inter-Regional Coordination Activity

Mr. Tim Horger, PJM, reviewed Inter-Regional Coordination activity, including an update on the PSE&G/ConEd Wheel Modeling and PJM-NYISO JOA revisions.

# 15. Market Operations Price Transparency Update

Mr. Rami Dirani, PJM, presented a problem statement on market operations price transparency. This problem statement will seek endorsement at the December Markets and Reliability Committee meeting.

#### 16. Manual 15 Revisions

Mr. Jeff Schmitt, PJM, presented additional proposed revisions to Manual 15: Cost Development Guidelines regarding Fuel Cost Policies, accounting for discussion that occurred at the November 17 MRC meeting.



#### 17. Fuel Cost Policy Clarifications

Dr. Joe Bowring, Monitoring Analytics, provided follow-up discussion on gas penalties as part of Fuel Cost Policies.

#### 18. Manual 18 Revisions

Mr. Jeff Bastian, PJM, and Dr. Joe Bowring, Monitoring Analytics, at the request of stakeholders, reviewed new joint revisions on behalf of PJM and the IMM to Manual 18: PJM Capacity Market that was recently endorsed at the November 17 MRC.

#### 19. Extended Transmission Outages

Ms. Nancy Huang, PJM, presented extended transmission outages for the winter of 2016/2017.

### 20. Day-Ahead Market Results Posting

Mr. Todd Keech, PJM, provided an update on the Day-Ahead Market results posting time and reviewed future enhancements to synchronize the posting systems.

### 21. New Services Queue Application Process

Mr. Ahmad Hamad, PJM, provided an update on the new services queue application process which is a more robust system to enhance the user experience when submitting a new application for service.

#### **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.

#### FTR FERC Order Update

On September 15, 2016 the FERC issued a compliance directive requiring two specific FTR reforms regarding <u>Balancing Congestion and Stage 1 Retired Source Points.</u> Protests have been filed at the FERC in response to PJM's compliance filing on November 14, 2016. PJM is actively reviewing these comments and will likely respond. In order to properly align with the commencement of the 2017/2018 Annual ARR Allocation, PJM will plan on presenting draft Manual 6 language at the January MIC meeting. The draft manual language will contain the implementation details highlighted in PJM's compliance filing. PJM has asked the FERC for a February 1, 2017 effective date for changes regarding Stage 1A replacements and a June 1, 2017 effective date for changes regarding Balancing Congestion and excess FTR congestion revenues.

Mr. Brian Chmielewski and Mr. Asanga Perera, PJM, were available during the meeting to answer questions.

#### 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**

January 11, 2017 February 8, 2017 March 8, 2017 April 12, 2017 May 3, 2017 June 7, 2017 July 12, 2017 August 9, 2017 September 13, 2017 October 11, 2017 November 8, 2017 December 13, 2017

#### **In-Person Attendees:**

Hendrzak, Chantal (Chair) Stotesbury, Christina (Secretary) Anders. David Barker, Jason Benchek, Jim Bowring, Joe Bresler, Stu Britt, Debbie Brodbeck, John Brown, Rich Bryson, Mike Ciabattoni, Joe Coyne, Suzanne Dirani, Rami Drauschak, Lisa Driscoll, MaryEllen Esposito-Hils, Pati Fabiano, Janell Fernandez, Ray Filomena, Guv Fitch. Neal Foladare, Kenneth Fondacci. Luis Fuess, James Hagaman, Derek Hauske, Thomas Holland, Risa Horger, Tim Horstmann, John Horton. Dana Hudis, Gabriella Hyzinski, Tom Jardot, Gina

9:00 a.m. 9:00 a.m.

PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection. LLC Exelon Business Services Company, LLC FirstEnergy Solutions Corp. Monitoring Analytics, LLC PJM Interconnection, LLC North Carolina Electric Membership Corporation EDP Renewables North America, LLC PJM Interconnection, LLC TransCanada Power Marketing Ltd. PJM Interconnection, LLC PJM Interconnection, LLC Customized Energy Solutions, Ltd.\* NRG Power Marketing LLC Tangibl North Carolina Electric Membership Corporation PBF Power Marketing LLC GT Power Group PJM Interconnection, LLC PJM Interconnection. LLC PJM Interconnection, LLC Dayton Power & Light Company (The) Appalachian Power Company Jersey Green Energy LLC Talen Energy Marketing, LLC Essential Power Rock Springs, LLC

PJM Interconnection – Conference & Training Center PJM Interconnection – Conference & Training Center

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# **Minutes**

Johnson, Carl Kauffman, Brian Keech, Adam Keech, Todd Kenney, Susan Kogut, George Lieberman, Steven LoBue, Dan Longo, Lauren Loomis, Harold Mabry, David Midgley, Sharon O'Connell, Robert Olaleye, Michael Pakela, Greg Pratzon, David Scarpignato, David Schmitt, Jeff Schuyler, Kenneth Shparber, Steven Smith. Melissa Stadelmever, Rebecca Strella, Lauren Suh, Jung Sweeney, Rory Tribulski, Jennifer Whitehead, Jeffrey

#### In Attendance via Web-Ex / Teleconference:

Ainspan, Malcolm Austin, Larry Baker. Scott Batta. Michael Birnel. Bill Bloom, David Bolan, Martin Bonanni, John Bruno, Pat Campbell, Bruce Carmean, Gregory Carro, Dan Croop, Danielle Crvstle. Gil Cocco, Michael Cox, Jason DeLosa, Joe Dessender, Harry Diamant, Martin Dillon, Matt DiNicola, Laura Domain, Christin Dugan, Chuck

Customized Energy Solutions, Ltd.\* NRG Curtailment Solutions. Ltd\* PJM Interconnection. LLC PJM Interconnection, LLC PJM Interconnection. LLC New York Power Authority Old Dominion Electric Cooperative **Competitive Energy Services** Talen Energy Marketing, LLC PJM Interconnection, LLC McNees Wallace & Nurick LLC Exelon Business Services Company, LLC Main Line Electricity Consultants PJM Interconnection, LLC DTE Energy Trading, Inc. GT Power Group Calpine Energy Services, L.P. PJM Interconnection, LLC PJM Interconnection. LLC PJM Interconnection, LLC PJM Interconnection. LLC PJM Interconnection. LLC PJM Interconnection, LLC Noble Americas Energy Solutions LLC RTO Insider PJM Interconnection, LLC Direct Energy Business Marketing, LLC

Energy Curtailment Specialists, Inc. PJM Interconnection. LLC PJM Interconnection, LLC Dominion Virginia Power Westar Energy, Inc. Baltimore Gas and Electric Company FirstEnergy Solutions Corp. NRG Power Marketing LLC PJM Interconnection, LLC EnergyConnect, Inc. Organization of PJM States Dominion Virginia Power PJM Interconnection, LLC UGI Development Company Old Dominion Electric Cooperative Dynegy Power Marketing, Inc. **DE Public Service Commission** Customized Energy Solutions, Ltd.\* Eastern Generation, LLC UGI Energy Services, LLC FirstEnergy Solutions Corp. Mitsubishi Electric Power Products Inc. East Kentucky Power Cooperative, Inc.

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# **Minutes**

Eirich, Christpher A. Erbrick. Michael Farber, John Fondacci, Luis Foster. Dana Garnett, Bryan Gilani, Rehan Gorman, Kevin Greening, Michele Greiner, Gary Hagaman, Derek Hanser, Erik Hargett, Christopher Harmon, Michael Hepplewhite. Peter Herbert. Chris Hoatson, Tom Hsia. Eric Hugee, Jacqulynn Janicki, Diane Johnson, Nick Keech, Jason Kilgallen, Kevin Kraemer, Neil Kuhn, Tyler Lacy, Catharine Langbein, Peter Leicar. Jamie Liang-Nicol, Cecilia Manning, James McAlister, Lisa Mooney, Catherine Niswonger, Benjamin Norton, Chris Ondayko, Brock Olinger, Robert Patel, Keyur Peoples, John Price. Mark Prokop, Brenda Rajan, Abhijit Rayhorn, Carolyn Robson, Matt Rothey, Kristin Rutigliano, Tom Saini, Ishwar Sasser, Jonathan Schuvler, Ken Scoglietti, Barbara Shah, Vijay Shannon, Gary Stern, Alexander Summers, Ted

GBE Energy Marketing Inc. Dhast Co. LLC **DE Public Service Commission** North Carolina Electric Membership Corporation PPGI Fund A/B Development, LLC. Duke Energy Ohio, Inc. ConEdison Energy, Inc. Highlands Energy Group LLC (The) PPL Electric Utilities Corp. PSEG Energy Resources and Trade LLC GT Power Group Michigan Public Service Commission ConEdison Energy, Inc. Union Electric Company d/b/a Ameren Missouri DC Energy, LLC Beacon Power, LLC Riverside Generating, LLC PJM Interconnection, LLC PJM Interconnection, LLC Boston Energy Trading & Marketing, LLC Tenaska Power Services Co. PJM Interconnection, LLC Iberdrola XO Energy, LLC DC Energy, LLC Dominion Virginia Power PJM Interconnection, LLC Allegheny Electric Cooperative, Inc. Monongahela Power Company d/b/a Allegheny Power North Carolina Electric Membership Corporation American Municipal Power, Inc. Monitoring Analytics, LLC DC Energy, LLC American Municipal Power, Inc. Appalachian Power Company Keystone Projects PJM Interconnection, LLC Duquesne Light Company DC Energy Mid-Atlantic, LLC ITC Mid-Atlantic Development LLC Dominion Virginia Power Dominion Virginia Power SESCO Enterprises LLC American Municipal Power, Inc. Achieving Equilibrium LLC Macquarie Energy LLC Customized Energy Solutions, Ltd\* PJM Interconnection. LLC Tangent Energy Solutions, Inc. PJM Interconnection, LLC AEP Energy Partners, Inc. Public Service Electric & Gas Company Direct Energy Business Marketing, LLC

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Tapia, Evans Tatum, Ed Theodore, Sharon Thompson, Matthew Trayers, Barry Treisch, Brianna Villeneuve, Alexandre Ward, Michael Warner-Freeman, Jennifer White, Doug Wilhite, Chad Williams, Amber Williams, Stanley Wilmoth, Emily Wisersky, Megan

BioUrja Power, LLC American Municipal Power Electric Power Supply Association XO Energy, LLC Citigroup Energy, Inc. Interstate Gas Supply, Inc. Mag Energy Solutions, Inc. PJM Interconnection, LLC PJM Interconnection, LLC North Carolina Electric Membership Corporation FirstEnergy Solutions Corp. New York State Electric & Gas Corporation PJM Interconnection, LLC Dominion Virginia Power Madison Gas & Electric Co.

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Author: Christina Stotesbury

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