

Market Implementation Committee PJM Conference & Training Center, Audubon, PA April 12, 2017 9:00 a.m. – 4:15 p.m. EPT

#### Administration

- 1. Ms. Chantal Hendrzak, PJM, and Ms. Christina Stotesbury, 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 March 8, 2017 Market Implementation Committee meeting by acclamation with <u>0</u> objections and <u>0</u> abstentions.
- 3. Ms. Christina Stotesbury, PJM, reviewed the active MIC issues on Issue Tracking

Ms. Lisa Morelli, PJM, provided a brief update on the Transient Shortage portion of FERC Order 825 that will go into effect on May 11, 2017. In the compliance filing submitted on March 1, PJM requested a later implementation date to coincide with the implementation of 5-minute settlements. PJM did not hear back by the March 31 deadline and will move forward with the May 11 implementation date as proposed in the Order. The proposed Operating Reserve Demand Curve (ORDC) changes that complement this Order are being worked through the PJM stakeholder process. The ORDC proposal will be voted at the Members Committee meeting on April 27. If the proposal passes, PJM is looking to implement changes to the ORDC around July 1, 2017, assuming FERC approval is received.

#### Endorsements/Approvals

4. Annual Revenue Requirements for new Black Start Units – Phase 1

Mr. Tom Hauske, PJM, presented the solution package for the Annual Revenue Requirements for new Black Start units. The Committee endorsed the package by acclamation with <u>0</u> objections and <u>8</u> abstentions.

- 5. Spot-in Transmission Service for Energy Imports from NYISO
  - A. Mr. Chris Pacella, PJM, reviewed the proposed solution for Package B.
  - B. Mr. John Rohrbach, ACES Power, reviewed concerns with the proposed solution to move the spot-in transmission service time from 9:00 a.m. to 10:00 a.m.

Due to concerns raised by stakeholders that the move to 10:00 a.m. would adversely impact other seams, the Committee deferred voting this item. Interested stakeholders will work to develop a more comprehensive approach to address market issues across all seams.

Issue Tracking: Spot-in Transmission Service for Energy Imports from NYISO

### Working Issues

### 6. **Opportunity Cost Calculator**

Ms. Jennifer Warner-Freeman, PJM, provided a brief update to the problem statement and issue charge that was approved at the March MRC, and reviewed the timeline to work this issue over the next few months. A Special Session on this topic is being scheduled and will be posted to the <u>MIC website</u>.



#### First Readings

### 7. FTR/ARR Order

Mr. Brian Chmielewski, PJM, provided a first read of conforming manual revisions related to the FERC Order impacting the annual ARR/FTR process. The Committee will be asked to endorse the manual revisions at the May MIC meeting.

#### 8. MSS – Pseudo-tied Generators and Dynamic Schedules Meter Correction Proposal

Mr. Ray Fernandez, PJM, provided a first read on the Pseudo-tied Generators and Dynamic Schedules Meter Correction proposal and governing document language that was endorsed by the Markets Settlements Subcommittee. The Committee will be asked to endorse the proposal and governing document revisions at the May MIC meeting.

#### 9. FTR Surplus Funds - Problem Statement & Issue Charge

Mr. Jeff Whitehead, Direct Energy, provided a first read of a problem statement and issue charge that addresses Day Ahead Surplus Congestion Funds and FTR Auction Revenue Surplus Funds. The committee will be asked to approve the problem statement and issue charge at the May MIC meeting.

### 10. Energy Efficiency Participation in Capacity Markets - Problem Statement & Issue Charge

- A. Ms. Denise Foster, PJM, provided a first read of a problem statement and issue charge that addresses state restrictions on energy efficiency resources participating in capacity markets. The committee will be asked to approve the problem statement and issue charge at the May MIC meeting.
- B. Dr. Joe Bowring, Monitoring Analytics, provided a response.

#### 11. Variable Operations & Maintenance Costs - Problem Statement & Issue Charge

- A. Mr. Jeff Schmitt, PJM, provided a first read of a problem statement and issue charge that addresses VOM costs as part of Fuel Cost Policies and the submission of cost-based offers. The committee will be asked to approve the problem statement and issue charge at the May MIC meeting.
- B. Mr. Joel Romero Luna, Monitoring Analytics, provided a response.

#### Additional Updates

#### 12. Fuel Cost Policy FAQ's and Transition Process

- A. Mr. Jeff Schmitt, PJM, provided a status update on Fuel Cost Policies, and noted the deadline to have all policies approved by May 15.
- B. Ms. Catherine Tyler, Monitoring Analytics, provided a response.

#### 13. Order 831: Offer Cap Update

Ms. Alpa Jani, PJM, provided an update on the Offer Cap compliance filing and reviewed the proposed timeline. Mr. Rami Dirani, PJM, presented details related to the technical implementation.

#### 14. Winter Capacity Interconnection Rights

Mr. Jeff Bastian, PJM, provided an update on winter CIRs.



#### 15. Manual 18 Revisions for Enhanced Aggregation Filing

Ms. Terri Esterly, PJM, presented conforming revisions to Manual 18: PJM Capacity Market, related to the Enhanced Aggregation filing (<u>Docket ER17-367</u>).

#### 16. FTR Auction Results

Mr. Asanga Perera, PJM, provided a follow-up update on information requested on the delayed posting for the March 2017 FTR Auction results.

### 17. FTR Forfeiture Update

Mr. Asanga Perera, PJM, provided an update on FTR forfeitures.

### 18. FTR Credit Exposure from Transmission Changes

Mr. Hal Loomis, PJM, informed the Committee of an upcoming Problem Statement that will be introduced at the Credit Subcommittee and Markets and Reliability Committee to address potential exposures that have been observed in the FTR Market.

#### 19. Black Start RFP Process

Mr. David Schweizer, PJM, reviewed plans related to the next RTO-wide Black Start RFP process.

### 20. BGE RAS Retirement

Mr. Eric Yeh, Exelon, provided an update on the BGE Remedial Action Scheme.

## 21. Automatic Sectionalizing Schemes

Mr. Lagy Mathew, PJM, provided an update on Automatic Sectionalizing Schemes.

#### 22. Manual 14D: Generator Operational Requirements

Mr. Joe Mulhern, PJM, reviewed proposed changes to Manual 14D related to requirements for solar parks.

#### 23. England & Red Bank Pricing Interfaces

Mr. Chris Callaghan, PJM, presented the England and Red Bank pricing interfaces.

#### 24. Ramapo PAR Update

Mr. Stan Williams, PJM, provided an update on Ramapo PAR cost allocation discussions with NYISO.

#### 25. Transmission Constraint Control Logic Paper

Mr. Angelo Marcino, PJM, provided a review on the Transmission Constraint Control Logic paper, which describes the logic used in PJM's market clearing engines to control transmission constraints and the impact of transmission constraint penalty factors on constraint shadow prices.

### **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.

#### Inter-Regional Coordination Activity

Mr. Stan Williams, PJM, was available to answer questions on Inter-Regional Coordination efforts. Materials are posted as informational only.

#### Manual 03 – Transmission Operations Review

Ms. Nicole Scott, PJM, was available to answer questions related to Manual 03, version 51 revisions. 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.

#### Future Meeting Dates

May 3, 2017 June 7, 2017 July 12, 2017 August 9, 2017 September 13, 2017 October 11, 2017 November 8, 2017 December 13, 2017 9:00 a.m. 9:00 a.m.

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#### Members in Attendance

Hendrzak, Chantal (Chair)	PJM Interconnection, LLC	Not
Stotesbury, Christina (Secretary)	PJM Interconnection, LLC	Not
Barker, Jason	Exelon Business Services Company, LLC	Tra
Bleiweis, Bruce	DC Energy LLC	Oth
Bolan, Martin	FirstEnergy Solutions Corp.	Tra
Brodbeck, John	EDP Renewables North America, LLC	Oth
Cox, Jason	Dynegy Power Marketing, Inc.	Ger
Filomena, Guy	Customized Energy Solutions, Ltd.*	Not
Fitch, Neal	NRG Power Marketing LLC	Ger
Fuess, James	PBF Power Marketing LLC	Ger
Greiner, Gary	PSEG Energy Resources and Trade LLC	Oth
Guerry, Katie	EnerNOC, Inc.	Oth
Horstmann, John	Dayton Power & Light Company (The)	Tra
Hudis, Gabriella	Jersey Green Energy LLC	Oth
Hyzinski, Tom	Talen Energy Marketing, LLC	Ger
Jardot, Gina	Essential Power Rock Springs, LLC	Tra

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Johnson, Carl Kauffman. Brian Kogut, George Lieberman, Steven Midgley, Sharon Pakela, Greg Powers, Sean Rohrbach, John Sasser, Jonathan Scarpignato, David Suh, Jung Trayers, Barry Vavda, Brian Wadsworth, Joseph Whitehead, Jeffrey Yu, Joel

#### Also in Attendance

Bastian. Jeff Benner, Scott Bowring, Joe Bowring, Joseph Bryson, Mike Callaghan, Chris Chmielewski, Brian Ciabattoni, Joe Dantonio, Phil Dirani, Rami Drauschak, Lisa Driscoll, Mary Ellen Esterly, Terri Fernandez, Ray Foladare, Kenneth Foster, Denise Genuraio, Gabrella Griffiths. Dan Haas, Howard Hagaman, Derek Hauske. Thomas Havik, Seth Holland, Risa Holter, Natasha Jani, Alpa Loomis, Harold Lowe. Connie Luna, Joel Mabry, David Marcino, Angelo Mathew, Lagy Mooney, Catherine Morell. Lisa Mulhern, Joe

Customized Energy Solutions, Ltd.\* NRG Curtailment Solutions New York Power Authority American Municipal Power, Inc. Exelon Business Services Company, LLC DTE Energy Trading, Inc. Linde Energy Services, Inc. Southern Maryland Electric Cooperative Customized Energy Solutions, Ltd.\* Calpine Energy Services, L.P. Noble Americas Energy Solutions LLC Citigroup Energy, Inc. American PowerNet Management, L.P. Vitol Inc. Direct Energy Business Marketing, LLC Rockland Electric Company

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O'Connell, Robert Pacella. Chris Perera, Asanga Poulos, Gregg Pratzon, David Schmitt, Jeff Schweizer, David Scott. Nicole Shparber, Steven Smith, Melissa Souder, Rich Stadelmeyer, Rebecca Sweeney, Rory Tyler, Catherine Walter, Laura Warner-Freeman, Jennifer Williams, Stanley

#### Attended via WebEx / Teleconference

Atkins. Blain Austin, Larry Baker, Scott Benchek, Jim Bhavaraju, Murty Britt, Debbie Bruno, Pat Budney, Dave Campbell, Bruce Canchi, Devendra Carmean. Gregory Carpenter, Christopher Chintapalli, Raj Coyne, Suzanne Croop, Danielle Daugherty, Suzanne DeLosa, Joseph Depillo, Raymond Dessender, Harry Dhuri, Bhushan Dickson, Douglas DiNicola, Laura Domian, Christin Dugan, Chuck Engelby, Ben Falin, Tom Fan. Zhenvu Farber, John Fitzpatrick, Brian Gebolys, Debbie Gouda, John Greening, Michele Halay, Alina

Main Line Electricity Market Consultants PJM Interconnection. LLC PJM Interconnection. LLC Consumer Advocates of PJM States GT Power Group PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection. LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection. LLC RTO Insider Monitoring Analytics, LLC PJM Interconnection, LLC PJM Interconnection. LLC PJM Interconnection, LLC

OPSI

Not Applicable Not Applicable

Duke Energy Business Services LLC PJM Interconnection. LLC PJM Interconnection, LLC FirstEnergy Solutions Corp. PJM Interconnection, LLC North Carolina Electric Membership Corporation PJM Interconnection, LLC PJM Interconnection, LLC EnergyConnect, Inc. Monitoring Analytics, LLC VECO Power Trading, LLC BP Energy Company PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC **DE Public Service Commission** PSEG Energy Resources and Trade LLC Customized Energy Solutions, Ltd.\* PJM Interconnection, LLC New Jersey Board of Public Utilities FirstEnergy Solutions Corp Mitsubishi Electric Power Products Inc. East Kentucky Power Cooperative, Inc. Aces Power Marketing PJM Interconnection, LLC PJM Interconnection. LLC **DE Public Service Commission** PJM Interconnection, LLC Public Utilities Commission of Ohio (The) Old Dominion Electric Cooperative PPL Electric Utilities Corp. dba PPL Utilities Federal Energy Regulatory Commission

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Hamilton, Brian Hanser. Erik Hastings, David Hoatson, Tom Hohenshilt, Jennifer Horton, Dana Hsia, Eric Hugee, Jacqulynn Hurwich, Mark Hyatt, John Janicki, Diane Jett. William Jha, Monica Johnson, Carl Johnston, Dave Jones, Ryan Kaczanowski, Marek Kelly, Kyo Kilgallen, Kevin Kim, Caleb Kimmel, David Kormos, Michael Kraemer, Neil Kuhn, Tyler Lange, Nathan LaRocque, Matthew Larry, Steven Leasure, Jill Lejcar, Jamie Liang-Nicol, Cecilia Libbos, Robin Logan, Sharon Lukach, Jaclynn Mariam, Yohannes Markiewicz, Cynthia Martin, Valerie Marton, David McLaughlin, Jeffrey Metzler, Jakob Miller, John Olaleye, Michael Olenick, Cory Ondayko, Brock O'Neill, Jack Patel. Kevurbhai Peoples, John Picarelli, David Pilona. Chris Price. Ruth Prokop, Brenda Rajan, Abhijit Ramsey, James Renda, Michael

Public Power & Utility of New Jersey, LLC Michigan Public Service Commission DHastCo West Deptford Energy II, LLC Talen Energy Marketing, LLC Appalachian Power Company PJM Interconnection, LLC PJM Interconnection. LLC Elliott Bay Energy Trading, LLC Monitoring Analytics, LLC Boston Energy Trading & Marketing, LLC Duke Energy Business Services LLC PCI Customized Energy Solutions, Ltd.\* Indiana Utility Regulatory Commission Allegheny Electric Cooperative, Inc. Baltimore Gas and Electric Company Southern Company Services as agent for Southern Power Company Avangrid Renewables, LLC Baltimore Gas and Electric Company PJM Interconnection. LLC Exelon Generation Co., LLC XO Energy MA, L.P. DC Energy, LLC VECO Power Trading, LLC PJM Interconnection, LLC Tenaska Power Services Co. **Keystone Projects** Customized Energy Solutions, Ltd.\* Monongahela Power Company d/b/a Allegheny Power FirstEnergy Solutions Corp. The Federal Energy Regulatory Commission PJM Interconnection, LLC Office of the Peoples Counsel for the District of Columbia FirstEnergy Solutions Corp. Federal Energy Regulatory Commission FirstEnergy Solutions Corp. PJM Interconnection. LLC Castleton Commodities Merchant Trading L.P. Commonwealth Edison Company PJM Interconnection, LLC West Oaks Energy, LP Appalachain Power Company PJM Interconnection, LLC PJM Interconnection, LLC Duquesne Light Company PJM Interconnection, LLC PJM Interconnection, LLC Delaware Public Service Commission ITC Mid-Atlantic Development LLC Dominion Resources Suffolk Fund LLC VECO Power Trading, LLC

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Riehl, John Robins, Pip Rothey, Kristin Rutigliano, Tom Schneider, Jon Schuyler, Ken Scoglietti, Barbara Seelaus, Tim Sitarchyk, Mike Strella, Lauren Tangirala, Subha Thomson, Heather Tsao, Stephanie Ward, Michael Weiss, Glenn Wilhite. Chad Williams, Amber Wilmoth, Emily Wood, Gordon Wood, Gordon Xenopoulos, Damon Yeh. Eric

Federal Energy Regulatory Commission EMC Development Company, Inc. American Municipal Power, Inc. Achieving Equilibrium LLC FirstEnergy Solutions Corp. PJM Interconnection, LLC Tangent Energy Solutions, Inc. EMC Development Company, Inc. PJM Interconnection, LLC PJM Interconnection, LLC ABB Mid-Atlantic Renewable Energy SPGlobal PJM Interconnection, LLC PJM Interconnection, LLC FirstEnergy Solutions Corp. New York State Electric & Gas Corporation Dominion Virginia Power ETC Endure Energy L.L.C. ETC Endure Energy L.L.C. Stone Mattheis Xenopoulos & Brew, PC Baltimore Gas and Electric Company

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

Author: Christina Stotesbury

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