

Markets and Reliability Committee The Chase Center on the Riverfront, Wilmington, DE May 28, 2015 9:00 a.m. – 12:45 p.m. EPT

Administration (9:00-9:05)

Mr. Kormos welcomed stakeholders to the meeting and Mr. Anders provided the Anti-trust and Code of Conduct announcements.

Mr. Mike Bryson provided a brief description of an operational event in the AEP zone which occurred in the afternoon of May 27, 2015. He noted that approximately 25 MW of load had been shed in the zone for less than three hours due to a transmission emergency outage.

Ms. Daugherty provided an update on the previously announced CT Lost Opportunity Cost billing adjustment. She noted that the total billing adjustment was expected to be in the range of \$7-\$15 million. The final value was expected to be finalized during early June 2015, and individual generators will be contacted during the month of June 2015 with the details of the proposed billing adjustments applicable to their units.

Endorsements/Approvals (9:05-10:30)

1. Draft Minutes (9:05-9:10)

Minutes of the April 23, 2015 Markets and Reliability Committee (MRC) meeting were **<u>approved</u>** by acclamation with no objections or abstentions.

- 2. PJM Manuals (9:10-9:30)
 - A. Mr. Glen Boyle reviewed changes to Manual 36: System Restoration. The proposed revisions resulted from the required annual review of the manual.
 - B. Ms. Nancy Huang reviewed changes to Manual 03: Transmission Operations. The proposed revisions resulted from the required annual review of the manual.
 - C. Ms. Nancy Huang reviewed changes to Manual 38: Operations Planning.

Following discussion, the proposed revisions in items 2.A t 2.C were **<u>endorsed</u>** by acclamation with no objections or abstentions. For item 2.B, action on section 2.1.1 was deferred to a later meeting of the MRC, and the MRC **<u>endorsed</u>** the remainder of the Manual 03 revisions by acclamation with no objections or abstentions.

3. Timing of Day Ahead Market (9:30-9:45)

Ms. Adrien Ford presented a proposed problem statement and issue charge related to the timing of Day Ahead market in response to the recent FERC order in Docket Nos. EL14-24-000 and RM14-2-000. Following discussion, the proposed problem statement and issue charge were **<u>approved</u>** by acclamation with no objections and one abstention.



4. Interim Fee for Virtual Transactions (INCs/DECs and UTCs) (9:45-10:30)

Ms. Noha Sidhom, Inertia Power, presented a motion to impose an interim fixed fee for INCs/DECs and UTCs. She also presented an alternative motion that would impose the proposed fee on UTC transactions only. The proposed fees would expire in six months. Following discussion the main motion <u>failed</u> in a sector-weighted vote with 1.32 in favor. The alternate motion also <u>failed</u> in a sector-weighted vote with 1.56 in favor.

First Readings (10:30-12:45)

5. FERC Order 1000 Proposal Fee Update (10:30-10:40)

Mr. Paul McGlynn provided a brief update on the planned filing related to proposal fees, noting that actual experience with evaluation of proposals indicated that the endorsed proposal fee may require adjustment. He indicated that PJM would delay filing the previously endorsed proposal fee and that the MRC will be asked to act on a proposed revision to the proposal fees at a future meeting.

6. FTR/ARR Senior Task Force (FTRSTF) (10:40-11:00)

Mr. Dave Anders and Mr. Stu Bresler discussed the work of the FTRSTF, and potential paths forward. Mr. Anders discussed the charter and actions of the FTRSTF, including development of approximately 28 proposed solution packages, on which consensus was not reached. He noted that the FTRSTF recommended that the MRC terminate the task force. Mr. Bresler discussed the balance between the FTR funding levels and the reduction in allocation of ARRs in the current planning year. He also noted the related open docket before the FERC, and the Independent Market Monitor's discussion of the potential for additional FERC filings. Mr. Steve Lieberman, ODEC, requested that an agenda item be added to the June 25, 2015 MRC agenda for consideration of a potential propped motion similar to Package 22.

7. Timing of Day Ahead Market (11:00-12:30)

Mr. Mike Kormos led continued discussion of the proposed timeline for clearing in the PJM Day-ahead market. Ms. Adrien Ford discussed the requirements of the FERC orders, and provided an educational presentation on the current gas and electric market timing as well as changes to the future gas market timing. She also presented data regarding historical Day-Ahead market clearing times, and the results of a poll conducted to gather information regarding participants' preferences and needs related to timing of gas purchase and nomination and bidding into the electricity markets. Mr. Joe Wadsworth, Vitol, presented data regarding timing of natural gas trading and discussed the challenges participants face with making bids in more than one RTO as well as experience with modified electric market timing in ISO-NE. Mr. Kormos this issue will continue to be vetted at an additional special session of the MRC on June 10, 2015 and at the June 25, 2015 regular MRC meeting. FERC Filing is required on July 23, 2015.

8. PJM Manuals (12:30-12:45)

A. Ms. Adrien Ford discussed proposed updates to Manual 19: Load Forecasting and Analysis. The Committee will be asked to endorse these proposed revisions at its next meeting.



B. Mr. Ron Deloach discussed proposed revisions to Manual 3A: Energy Management System (EMS) Model Updates and Quality Assurance (QA). The Committee will be asked to endorse these proposed revisions at its next meeting.

Future Agenda Items (12:45)

No new future agenda items were identified.

Future Meeting Dates

July 23, 2015 9:00 a.m. Wilmington August 27, 2015 9:00 a.m. Wilmington September 24, 2015 9:00 a.m. Wilmington October 22, 2015 9:00 a.m. Wilmington November 19, 2015 9:00 a.m. Wilmington
December 17, 2015 9:00 a.m. Wilmington

In Attendance (Chair/Secretary):

Kormos, Michael Anders, Dave PJM Interconnection, LLC PJM Interconnection, LLC Not Applicable Not Applicable

In Attendance (Voting Participants):

Evelon Ducinese Convices Company, LLC	
	Transmission Owner
Uncia Energy LP - Series B	Other Supplier
FirstEnergy Solutions Corp.	Transmission Owner
DC Energy LLC	Other Supplier
Rep.'g York County Solid Waste and Refuse Authority	Generation Owner
Rep.'g Covanta Energy Group, Inc.	Generation Owner
Rep.'g RC Cape May Holdings, LLC	Generation Owner
Rep.'g Jersey Green Energy LLC	Other Supplier
Potomac Electric Power Company	Electric Distributor
Rep.'g Kimberly-Clark Corporation	Generation Owner
Rep.'g Industrial Energy Users-Ohio	Other Supplier
Rep.'g Trustees of the U of PA, dba University of Pennsylvania	End User Customer
Rep.'g Wellsboro Electric Company (pre-2008)	Electric Distributor
Rep.'g MeadWestvaco Corporation	End User Customer
Rep.'g Procter & Gamble Paper Products Company (The)	End User Customer
Rep.'g Gerdau Ameristeel Energy, Inc.	Other Supplier
Rep.'g Air Products & Chemicals, Inc.	End User Customer
Rep.'g Air Liquide Industrial U.S., LP	End User Customer
Rep.'g Lehigh Portland Cement Company	End User Customer
Rep.'g Praxair, Inc.	End User Customer
	DC Energy LLC Rep.'g York County Solid Waste and Refuse Authority Rep.'g Covanta Energy Group, Inc. Rep.'g RC Cape May Holdings, LLC Rep.'g RC Cape May Holdings, LLC Rep.'g Jersey Green Energy LLC Potomac Electric Power Company Rep.'g Kimberly-Clark Corporation Rep.'g Industrial Energy Users-Ohio Rep.'g Industrial Energy Users-Ohio Rep.'g Trustees of the U of PA, dba University of Pennsylvania Rep.'g Wellsboro Electric Company (pre-2008) Rep.'g MeadWestvaco Corporation Rep.'g Procter & Gamble Paper Products Company (The) Rep.'g Gerdau Ameristeel Energy, Inc. Rep.'g Air Products & Chemicals, Inc. Rep.'g Air Liquide Industrial U.S., LP Rep.'g Lehigh Portland Cement Company





Bruce, Susan Bruce, Susan Citrolo, John Dugan, Chuck Ellison, Alan Etnover, Scott Evrard, David Fitch, Neal Foladare, Kenneth Fondacci, Luis Gardner, Michelle Greening, Michele Griffiths, Dan Hastings, David Hastings, David Hastings, David Hastings, David Hastings, David Hastings, David Hoatson, Tom Horstmann, John Horton, Dana Hurwich, Mark Jablonski, James Johnson, Carl Johnson, Carl

Rep.'g Linde LLC Rep.'g Letterkenny Industrial Development Authority Public Service Electric & Gas Company East Kentucky Power Cooperative, Inc. Grays Ferry Cogeneration Partnership MEG Generating Company, LLC Pennsylvania Office of Consumer Advocate NRG Power Marketing LLC IMG Midstream LLC North Carolina Electric Membership Corporation NextEra Energy Power Marketing, LLC PPL Electric Utilities Corp. dba PPL Utilities (LSE) Rep.'g West Virginia Consumer Advocate Division Rep.'g Maryland Office of Peoples Counsel Rep.'g Office of the Ohio Consumers' Counsel Rep.'g Indiana Office of Utility Consumer Counsel Rep.'g Pennsylvania Office of Consumer Advocate Rep.'g New Jersey Div. of the Ratepayer Advocate Rep.'g Division of the Public Advocate of State of Delaware Rep.'g Twin Cities Power, LLC Rep.'g SESCO Enterprises LLC Rep.'g Mercuria Energy America, Inc. Rep.'g Solios Power LLC Rep.'g Saracen Energy East LP Rep.'g Northstar Trading Ltd. West Deptford Energy, LLC Dayton Power and Light Company (The) Appalachian Power Company (AEP Generation) Elliott Bay Energy Trading, LLC Rep.'g Borough of South River, New Jersey Rep.'g Borough of Milltown Rep.'g Borough of Park Ridge, New Jersey Rep.'g Borough of Seaside Heights, New Jersey Rep.'g Vineland Municipal Electric Utility Rep.'g Borough of Pemberton Rep.'g Borough of Butler, Butler Electric Division Rep.'g Borough of Madison, New Jersey Rep.'g Borough of Lavallette, New Jersey Rep.'g Indiana Municipal Power Agency Rep.'g American Municipal Power, Inc.

End User Customer Electric Distributor Transmission Owner Transmission Owner Generation Owner **Generation Owner** End User Customer **Generation Owner Generation Owner Electric Distributor** Generation Owner Transmission Owner End User Customer Other Supplier Other Supplier Other Supplier Other Supplier Other Supplier Other Supplier Generation Owner Transmission Owner Transmission Owner Other Supplier Electric Distributor **Electric Distributor Electric Distributor** Generation Owner **Electric Distributor**



Johnson, Carl Knies, Heather Kogut, George Lieberman, Steven Logsdon, Josh Lopez, Danielle Meier, Mariko Melnyk, Markian Merola, Becky Moerner, Lisa Pakela, Greg Peoples, John Philips, Marji Prokop, Brenda Riding, MQ Rohrbach, John Rohrbach, John Rushing, Nathan Scarp, David Scoglietti, Barbara

Rep.'g Northern Virginia Electric Cooperative (NOVEC) Rep.'g Illinois Municipal Electric Agency Rep.'g Hagerstown Light Department Rep.'g Mont Alto, PA (Borough of) Rep.'g Thurmont Municipal Light Company Rep.'g Williamsport, MD (Town of) Rep.'g Energy Cooperative Association of PA Rep.'g Madison Gas & Electric Company Rep.'g North Carolina Municipal Power Agency #1 Rep.'g WPPI Energy Rep.'g Buckeye Power, Inc. Rep.'g North Carolina Electric Membership Corporation Rep.'g Easton Utilities Commission Rep.'g City of Dover, Delaware Rep.'g Delaware Municipal Electric Corporation Rep.'g Borough of Chambersburg (DTEET) Rep.'g Central Virginia Electric Cooperative Rep.'g Blue Ridge Power Agency, Inc. Rep.'g Old Dominion Electric Cooperative Rep.'g Allegheny Electric Cooperative, Inc. Rep.'g Galt Power Inc. LM Power, LLC New York Power Authority Old Dominion Electric Cooperative Exion Energy, Inc. Ofc... People's Counsel ... District of Columbia EnerNOC, Inc. Atlantic Grid Operations A, LLC Noble Americas Gas & Power Corp. Virginia Electric & Power Company DTE Energy Trading, Inc. **Duquesne Light Company** Direct Energy Business, LLC ITC Mid-Atlantic Development LLC Essential Power Rock Springs, LLC Wabash Valley Power Association, Inc. Southern Maryland Electric Cooperative CPV Maryland, LLC Calpine Energy Services, L.P. Tangent Energy Solutions, Inc.

Electric Distributor **Electric Distributor Electric Distributor** Electric Distributor **Electric Distributor Electric Distributor** Other Supplier Other Supplier Other Supplier Other Supplier **Electric Distributor Electric Distributor** Electric Distributor **Electric Distributor Electric Distributor Electric Distributor Electric Distributor Electric Distributor Electric Distributor** Electric Distributor Other Supplier Other Supplier Other Supplier **Electric Distributor** Other Supplier End User Customer Other Supplier Other Supplier Other Supplier Transmission Owner Other Supplier **Transmission Owner** Other Supplier Other Supplier Transmission Owner **Electric Distributor Electric Distributor** Generation Owner Generation Owner Other Supplier



Sidhom, Noha Skucas, Ruta Smith, Rusty Steele, Robert Wadsworth, Joe Yu, Joel

Inertia Power I, LLC Rep.'g MET MA, LLC Rep.'g Dyon, LLC Rep.'g Red Wolf Energy Trading, LLC Rep.'g Apple Group LLC Rep.'g Hexis Energy Trading, LLC Rep.'g Great Bay Energy I, LLC Rep.'g Alphataraxia Palladium LLC Rep.'g Southard Energy Partners LLC Rep.'g Liberty Hill Power LLC Rep.'g RJUMR Energy Partners Corp. (UTC) Rep.'g Yasmin Partners LLC Rep.'g Dufossat Capital I, LLC Rep.'g Greene Energy, LLC Rep.'g Falcon Energy, LLC Rep.'g Mac Trading, Inc Rep.'g E Minus LLC Rep.'g Pure Energy, Inc. Rep.'g Monterey MA, LLC Solea Energy, LLC Acorn Energy Trading, LLC Vitol Inc. **Rockland Electric Company**

Other Supplier None Other Supplier Transmission Owner

In Attendance (Non-Voting Participants):

Ainspan, Malcolm	Energy Curtailment Specialists, Inc.	С
Allen, Wesley	Red Wolf Energy Trading, LLC	0
Bearden, Joel	XO Energy MA, LP	С
Bloom, David	Baltimore Gas and Electric Company	Т
Bolan, Martin	FirstEnergy Solutions Corporation	Т
Carro, Dan	Dominion Virginia Power	Ν
Crystle, Gil	UGI Development Company	Т
Czigler, Frank	PSEG	Т
Demuynck, Rene	New Jersey Board of Public Utilities	Ν
Denavas, Joe	Potomac Electric Power Company	Ε
DeRosa, Jacqueline	Customized Energy Solutions	Ν
Dharmadhikari, Janhavi	Dominion Energy Marketing, Inc.	G
Eckes, Richard	Exion Energy, Inc.	С
Elkins, Brian	Greene Energy, LLC	С
Ellison, Alan	Grays Ferry Cogeneration Partnership	G

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



Esposito, Pati Filomena, Guy Fink, Sari Fisher, Amy Fletcher, Blake Fort, Jim Gabrieli, Tony Gebolys, Debbie Gell, Richard Gilani, Rehan Hagaman, Derek Halay, Alina Hayes, Patrick Hayik, Seth Herel, Suzanne Hitch, George Hull, James Huntoon, Stephen Hyzinski, Tom Janicki, Diane Jardot, Gina Jett, William Jones, Ryan Karrasch, Kim Kelly, Stephen Lacy, Catharine Leonard, Ryan Lewis, Cara Liang-Nicol, Cecilia Logsdon, Sebastian Lopez-Lopez, Tony Mallory, Kenneth Manning, James Martin, Claude Martin, Valerie McAdams, Julius Metzler, Jacob Miller, John Mok, Alan Nicolay, Christi

Energy Cooperative Association of PA Customized Energy Solutions, Ltd.* America's Natural Gas Alliance Homer City Generation, L.P. ETC Endure Energy, LLC Energy Authority, Inc. (The) PPL Energy Plus, LLC Public Utilities Commission of Ohio Ontario Power Generation Inc. ConEdison Energy, Inc. **GT** Power Group The Federal Energy Regulatory Commission Union Electric Company d/b/a Ameren Missouri Monitoring Analytics, LLC **RTO** Insider **Dominion Virginia Power** Exion Energy, Inc. Energy Counsel, LLP PPL EnergyPlus, L.L.C. Boston Energy Trading and Marketing LLC Essential Power, LLC Duke Energy Business Services, Inc. Allegheny Electric Cooperative, Inc. **IGS Energy** Brookfield Renewable Energy Marketing US LLC **Dominion Resources** Iberdrola Renewables, LLC Public Service Electric & Gas Company FirstEnergy Solutions Corporation Exion Energy, Inc. Bryndan Associates, Inc. DC office of The Peoples Council North Carolina Electric Membership Corporation North Carolina Electric Membership Corporation The Federal Energy Regulatory Commission Red Wolf Energy Trading, LLC Castleton Commodities Merchant Trading L.P. Commonwealth Edison Company **Duke Energy Business Services LLC** Macquarie Energy LLC

Other Supplier Not Applicable Not Applicable **Generation Owner** Other Supplier Other Supplier Transmission Owner Not Applicable Other Supplier Other Supplier Not Applicable Not Applicable Other Supplier Not Applicable Not Applicable Not Applicable Other Supplier Not Applicable Transmission Owner **Generation Owner Generation Owner** Generation Owner **Transmission Owner** Not Applicable Other Supplier Not Applicable **Generation Owner** Transmission Owner **Transmission Owner** Other Supplier Not Applicable **End-Use Customer Electric Distributor Electric Distributor** Not Applicable Other Supplier Other Supplier Transmission Owner Generation Owner Other Supplier



O'Connell, Robert O'Connor, Siobhan Ondayko, Brock Orlando, Jim Ozkan, Deniz Patten, Kevin Philips, Marji Pratzon, David Prendergast, Michael Price, Mark Rohrbach, John Rutigliano, Tom Saini, Ishwar Sasser, Jonathan Schafer, Anita Schum, Alice Shanker, Roy Sock, Bryan Stadelmeyer, Rebecca Staska, Stephanie Stubbe, Judy Vogel, Anne Weaver, David Weber, Adam Wehr, Christopher Wilhite, Chad Williams, Carl Wisersky, Megan Wong, Ray York, Katherine

Main Line Electricity Market Consultants The Energy Authority AEP Northern Indiana Public Service Company Atlantic Grid Operations A, LLC American Electric Power **Direct Energy Business, LLC GT** Power Group Public Service Electric & Gas Company DC Energy Southern Maryland Electric Cooperative Achieving Equilibrium, LLC Macquarie Energy LLC **Customized Energy Solutions** Duke Energy Business Services, Inc. Illinois Municipal Electric Agency Hydro Quebec PSEG Energy Resources and Trade LLC Exelon Business Services Company, LLC Twin Cities Power, LLC Duke Energy Business Services, Inc. American Electric Power PECO Energy Company Union Electric Company d/b/a Ameren Missouri FirstEnergy Solutions Corporation FirstEnergy Solutions Corporation FuelCell Energy Madison Gas & Electric Company Ontario Power Generation Inc. Tennessee Valley Authority (The)

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

In Attendance (PJM Participants):

Boyle, Glen Bratspis, David Bresler, Stu Bryson, Michael Carroll, Rebecca Chiemilewski, Brian Ciabattoni, Joe Daugherty, Suzanne PJM Interconnection, LLC Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable



DeLoach, Ron Driscoll, Mary Ellen Egan, Amanda Fabiano, Janell Fan, Zhenyu Fernandez, Ray Ford, Adrien Foster, Denise Hartung, Dean Hauske, Thomas Hendrzak, Chantal Hoang, Liem Holland, Risa Horger, Tim Horowitz, Shira Hsia, Eric Huang, Nancy Keech, Jason Kelley, Michael Kormos, Michael J. Manion, Evelyn McGlynn, Paul McLaverty, Megan McNamara, Sean Morelli, Lisa Noonan, Tom Patel, Keyur Schmitt, Jeff Sechrist, Erin Shparber, Steve Slusser, Jeff Snyder, Sue Souder, Michelle Swimm, Nora C. Ward, Mike

Author: D. A. Anders

PJM Interconnection, LLC PJM Interconnection, LLC

Not Applicable Not Applicable