



Markets and Reliability Committee
The Chase Center on the Riverfront, Wilmington, DE
August 27, 2015
9:00 a.m. – 12:00 noon 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.

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

1. <u>Draft Minutes (9:05-9:10)</u>

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

2. PJM Manuals (9:10-9:20)

A. Mr. D'Antonio will review changes to Manual 37: Reliability Coordination. Following discussion, the proposed revisions were **endorsed** by acclamation with no objections or abstentions.

3. External Capacity Transfer Rights (9:20-9:40)

Mr. Stu Bresler and Mr. Troy Fodor, Illinois Municipal Electric Agency, presented a proposal to address the Capacity Rights Issue Charge. Following discussion, the proposal was **endorsed** by acclamation with one objection and four abstentions.

4. Transparency of Operational Changes (9:40-9:55)

Mr. Joe Ciabattoni discussed a proposal regarding the Transparency of Operational Changes, including associated revisions to Manual 11: Energy & Ancillary Services Market Operations. Following discussion, the proposal was **endorsed** by acclamation with no objection and one abstention.

5. Markets Gateway (9:55-10:05)

Ms. Carla Thew discussed the evolution of eMkt to Markets Gateway, and Mr. Steve Shparber presented associated proposed Tariff revisions. Following discussion, the proposed revisions were **endorsed** by acclamation with no objections or abstentions.

First Readings (10:05-11:45)

6. Energy Market Offer Cap (10:05-10:45)

Ms. Marji Philips, Direct Energy, presented a motion and proposed revisions to the Energy Market Offer Cap. Dr. Joe Bowring discussed Energy Market Offer Cap principles important to the Independent Market Monitor. Mr. Steve Lieberman, ODEC, proposed an alternate motion based on a similar proposal considered by the Members Committee in November, 2014. Mr. Dave Scarpignato, Calpine,





indicated that several Generation Owners were developing an additional alternate proposal. An additional facilitated negotiation meeting was scheduled for September 9, 2015 following the Market Implementation Committee. The committee will be asked to endorse a proposal at its next meeting.

7. Tier 1 Compensation Proposals (10:45-11:00)

Mr. Adam Keech presented the Tier 1 Compensation proposal. The committee will be asked to endorse the proposal at its next meeting.

8. 2018/19 Base Residual Auction (11:00-11:15)

Mr. Stu Bresler provided an overview of the results of the 2018/19 Base Residual Auction.

9. 2016 PJM Capital and Expense Budgets (11:15-11:30)

Ms. Suzanne Daugherty provided an overview of the proposed 2016 PJM capital and expense budgets.

10. Special Protection Schemes (11:30-11:40)

Mr. Simon Tam discussed the Cloverdale-Lexington Winter 2016 outage and Bath County Stability SPS extension.

11. PJM Manuals (11:40-12:00)

- A. Mr. David Schweizer reviewed changes to Manual M10: Pre-Scheduling Operations. The Committee will be asked to endorse these proposed revisions at its next meeting.
- B. Mr. David Schweizer presented revisions to Manual 14D: Generator Operational Requirements which incorporate the results of the Cold Weather Resource Improvement process survey. The Committee will be asked to endorse these proposed revisions at its next meeting.
- C. Mr. Herman reviewed revisions to Manual14 series manuals regarding Multi-Driver Approach.
- D. Mr. Mike Sitarchyk reviewed changes to Manual 40: Certification and Training Requirements. The Committee will be asked to endorse these proposed revisions at its next meeting.
- E. The following PJM manuals were recently revised and posted. The updates were administrative in nature, and therefore did not require stakeholder review.
 - Manual 11: Energy & Ancillary Services Market Operations
 - Manual 39: Nuclear Plant Interface Coordination

Future Agenda Items (12:00)

No new future agenda items were identified.

Future Meeting Dates





Cantambara 2015	1.00 n m
September9, 2015	1:00 p.m.
October 1, 2015	9:00 a.m.
October 22, 2015	9:00 a.m.
November 19, 2015	9:00 a.m.
December 17, 2015	9:00 a.m.

PJM Conference & Training Center, Audubon, PA PJM Conference & Training Center, Audubon, PA Wilmington, DE

Wilmington, DE Wilmington, DE

In Attendance (Chair/Secretary):

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

In Attendance (Voting Participants):

Barker, Jason	Exelon Business Services Company, LLC	Transmission Owner
Benchek, Jim	FirstEnergy Solutions Corp.	Transmission Owner
Brodbeck, John	EDP Renewables North America, LLC	Other Supplier
Bruce, Susan	Rep'g Letterkenny Industrial Development Authority	Electric Distributor
Bruce, Susan	Rep'g Linde LLC	End User Customer
Bruce, Susan	Rep'g Praxair, Inc.	End User Customer
Bruce, Susan	Rep'g Lehigh Portland Cement Company	End User Customer
Bruce, Susan	Rep'g Air Liquide Industrial U.S., LP	End User Customer
Bruce, Susan	Rep'g Air Products & Chemicals, Inc.	End User Customer
Bruce, Susan	Rep'g Kimberly-Clark Corporation	Generation Owner
Bruce, Susan	Rep'g Procter & Gamble Paper Products Company (The)	End User Customer
Bruce, Susan	Rep'g MeadWestvaco Corporation	End User Customer
Bruce, Susan	Rep'g Wellsboro Electric Company (pre-2008)	Electric Distributor
Bruce, Susan	Rep'g Trustees of the U of PA, dba University of Pennsylvania	End User Customer
Bruce, Susan	Rep'g Industrial Energy Users-Ohio	Other Supplier
Bruce, Susan	Rep'g Gerdau Ameristeel Energy, Inc.	Other Supplier
Campbell, Bruce	Rep'g EnergyConnect, Inc.	Other Supplier
Campbell, Bruce	Rep'g Mid-Atlantic Power Partners	Other Supplier
Cox, Jason	Dynegy Marketing & Trade, LLC	Generation Owner
Czigler, Frank	Public Service Electric & Gas Company	Transmission Owner
Dugan, Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Ellison, Alan	Grays Ferry Cogeneration Partnership	Generation Owner
Fitch, Neal	NRG Power Marketing LLC	Generation Owner
Foladare, Kenneth	IMG Midstream LLC	Generation Owner
Fondacci, Luis	North Carolina Electric Membership Corporation	Electric Distributor
Fuess, Jay	Rep'g PBF Power Marketing LLC	Generation Owner
Fuess, Jay	Rep'g Diamond State Generation Partners, LLC	Generation Owner
Fuess, Jay	Rep'g Castlebridge Energy Group, LLC	Other Supplier
Fuess, Jay	Rep'g Energy Consulting Services LLC	Other Supplier
Fuess, Jay	Rep'g Kuehne Chemical Company, Inc.	Other Supplier





Griffiths, Dan Rep'g Office of the Ohio Consumers' Counsel Griffiths, Dan Rep'g Division of the Public Advocate of State of Delaware

Griffiths, Dan Rep'g Illinois Citizens Utility Board Griffiths, Dan Rep'g West Virginia Consumer Advocate Division Griffiths, Dan Rep'g Pennsylvania Office of Consumer Advocate Griffiths, Dan Rep'g New Jersey Div. of the Ratepayer Advocate Griffiths, Dan Rep'g Indiana Office of Utility Consumer Counsel Griffiths, Dan Rep'g Office of the Attorney General, Kentucky Griffiths, Dan Rep'g Ofc... People's Counsel ... District of Columbia

Rep'g Maryland Office of Peoples Counsel Griffiths, Dan Hastings, David Rep'g Mercuria Energy America, Inc. Hastings, David Rep'g Twin Cities Power, LLC Hastings, David Rep'g SESCO Enterprises LLC Hastings, David Rep'g Northstar Trading Ltd.

Rep'g Town Square Energy East, LLC Hastings, David Hastings, David Rep'g Saracen Energy East LP Hendrix, Chris Texas Retail Energy, LLC Hoatson, Tom West Deptford Energy, LLC

Horstmann, John Dayton Power and Light Company (The) Jablonski, James Rep'g Borough of Park Ridge, New Jersey

Rep'g Borough of Milltown Jablonski, James

Jablonski, James Rep'g Borough of South River, New Jersey Rep'g Vineland Municipal Electric Utility Jablonski, James Jablonski, James Rep'g Borough of Seaside Heights, New Jersey Jablonski, James Rep'g Borough of Butler, Butler Electric Division

Rep'g Borough of Pemberton Jablonski, James

Jablonski, James Rep'g Borough of Lavallette, New Jersey Jablonski, James Rep'g Borough of Madison, New Jersey Johnson, Carl Rep'g Illinois Municipal Electric Agency

Johnson, Carl Rep'g Northern Virginia Electric Cooperative (NOVEC)

Johnson, Carl Rep'g American Municipal Power, Inc. Johnson, Carl Rep'g Indiana Municipal Power Agency

Johnson, Carl Rep'g North Carolina Electric Membership Corporation

Johnson, Carl Rep'g Easton Utilities Commission Johnson, Carl Rep'g City of Dover, Delaware

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Electric Distributor

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Johnson, Carl	Rep'g Delaware Municipal Electric Corporation	Electric Distributor
Johnson, Carl	Rep'g Borough of Chambersburg (DTEET)	Electric Distributor
Johnson, Carl	Rep'g Central Virginia Electric Cooperative	Electric Distributor
Johnson, Carl	Rep'g Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson, Carl	Rep'g Old Dominion Electric Cooperative	Electric Distributor
Johnson, Carl	Rep'g Galt Power Inc.	Other Supplier
Johnson, Carl	Rep'g Hagerstown Light Department	Electric Distributor
Johnson, Carl	Rep'g Mont Alto, PA (Borough of)	Electric Distributor
Johnson, Carl	Rep'g Allegheny Electric Cooperative, Inc.	Electric Distributor
Johnson, Carl	Rep'g Williamsport, MD (Town of)	Electric Distributor
Johnson, Carl	Rep'g Energy Cooperative Association of PA	Other Supplier
Johnson, Carl	Rep'g Madison Gas & Electric Company	Other Supplier
Johnson, Carl	Rep'g North Carolina Municipal Power Agency # 1	Other Supplier
Johnson, Carl	Rep'g WPPI Energy	Other Supplier
Johnson, Carl	Rep'g Buckeye Power, Inc.	Electric Distributor
Johnson, Carl	Rep'g Thurmont Municipal Light Company	Electric Distributor
Kelly, Stephen	Brookfield Energy Marketing LP	Other Supplier
Kogut, George	New York Power Authority	Other Supplier
Kuhn, Tyler	Rep'g Citigroup Energy, Inc.	Other Supplier
Kuhn, Tyler	Rep'g DC Energy LLC	Other Supplier
Kurt, Amy	Rock Island Clean Line LLC	Other Supplier
Landis, Daniel	Hemsworth Capital LP	Other Supplier
Leonard, Ryan	IBERDROLA RENEWABLES, LLC	Generation Owner
Levine, Jeffrey	GDF SUEZ Energy Marketing NA, Inc.	Other Supplier
Lieberman, Steven	Old Dominion Electric Cooperative	Electric Distributor
Long, Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Melnyk, Markian	Atlantic Grid Operations A, LLC	Other Supplier
Merola, Becky	Noble Americas Gas & Power Corp.	Other Supplier
Moerner, Lisa	Virginia Electric & Power Company	Transmission Owner
Norton, Chris	American Municipal Power, Inc.	Electric Distributor
Pakela, Greg	DTE Energy Trading, Inc.	Other Supplier
Peoples, John	Duquesne Light Company	Transmission Owner
Philips, Marji	Direct Energy Business, LLC	Other Supplier
Prokop, Brenda	ITC Mid-Atlantic Development LLC	Other Supplier
Richardson, Frank (Chip)	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Riding, MQ	Essential Power Rock Springs, LLC	Transmission Owner
Rushing, Nathan	CPV Maryland, LLC	Generation Owner
Rutigliano, Tom	Rep'g Demansys Energy, LLC	Other Supplier
Rutigliano, Tom	Rep'g EMC Development Company, Inc.	Other Supplier
Rutigliano, Tom	Rep'g Enerwise Global Technologies, Inc.	Other Supplier
raugiano, rom	Top & Ellerwise Global Teelihologies, ille.	Other Supplier





Rutigliano, Tom Rep'g Achieving Equilibrium LLC Scarp, David Calpine Energy Services, L.P. Scoglietti, Barbara Tangent Energy Solutions, Inc. Sidhom, Noha Inertia Power I, LLC

Yu, Joel Rockland Electric Company

Other Supplier
Generation Owner
Other Supplier
Other Supplier
Transmission Owner

Other Supplier

In Attendance (Non-Voting Participants):

Ainspan, Malcolm

Allen, Wesley

Bainbridge, Thomas

Barkanic, Bob

Berger, Ken

Binder, Gerry

Energy Curtailment Specialists, Inc.

Red Wolf Energy Trading, LLC

FirstEnergy Solutions Corporation

Talen Energy Marketing, LLC

Dominion Virginia Power

SESCO Enterprises LLC

Bloom, David
Bonanni, John
NRG Power Marketing, L.L.C.
Bowring, Joseph
Monitoring Analytics, LLC
Burke, John
West Deptford Energy, LLC

Carmean, Gregory OPSI

Caylor, Ryan Tudor, Pickering, Holt & Co.

Chan. Carlotta PSEG

Chen, Jennifer NRDC/FERC Project

Cocco, Michael Old Dominion Electric Cooperative
Crystle, Gil UGI Development Company
Currier, Jeffrey Virginia Electric & Power Company

Davis, Connie Cleveland Public Power

DeLosa, Joseph State of Delaware Public Service Commission

Demuynck, Rene
Denavas, Joe
Dinicola, Laura
Potomac Electric Power Company
FirstEnergy Solutions Corporation
Perber, John
Delaware Public Service Commission

Feierabend, Rick Dominion Virginia Power

Fernandes, John Renewable Energy Systems Americas
Fernandez, Jonathan The Federal Energy Regulatory Commission

Filomena, Guy

Customized Energy Solutions, Ltd.*

Fletcher, Blake ETC Endure Energy, LLC

Gebolys, Debbie Public Utilities Commission of Ohio Gorman, Kevin Highlands Energy Group LLC (The) Gouda, John Old Dominion Electric Cooperative

Gretz, Neil PSEG

Harmon, Mike Ameren Energy Marketing Company

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

Not Applicable

Not Applicable

Not Applicable

Not Applicable

Other Supplier

Not Applicable

Other Supplier

Electric Distributor

Generation Owner

Transmission Owner





Herel, Suzanne RTO Insider

Hilaski, Steve Pepco Holdings Incorporated

Huntoon, Stephen Energy Counsel, LLP

Hyzinski, Tom Talen Energy Marketing, LLC

lyer, Shrikant Exelon

Jacobs, Mike Union of Concerned Scientists

James, Denise Dominion Energy Marketing, Inc.

Janicki, Diane Boston Energy Trading and Marketing LLC
Jett, William Duke Energy Business Services, Inc.

Johnson, Nick Penn State University

Johnson, Nick

Kingston, Amber
Lacy, Catharine
LaFrance, Nathan

Tenaska Power Services Co.
Aces Power Marketing
Dominion Resources
Texas Retail Energy, LLC

Lewis, Cara Public Service Electric & Gas Company
Liang-Nicol, Cecilia FirstEnergy Solutions Corporation

Logan, Sharon The Federal Energy Regulatory Commission

Lopez, Danielle Office of the Peoples Counsel for the District of Columbia

Loudenburg, Zack Aces Power Marketing
Lowe, Connie Dominion Virginia Power

Ma, Alex Invenergy LLC

Mahoney, Julie New York State Electric & Gas Corporation

Mariam, Yohannes Office of the Peoples Counsel for the District of Columbia

Martin, Valerie The Federal Energy Regulatory Commission

Marton, Dave FirstEnergy Solutions Corporation
May, Sheri Duke Energy Business Services LLC
McAdams, Julius Red Wolf Energy Trading, LLC
McAlister, Lisa American Municipal Power, Inc.

Metzler, Jacob Castleton Commodities Merchant Trading L.P.

Miller, John Commonwealth Edison Company

O'Connor, Siobhan The Energy Authority

Ondayko, Brock AEP Parikh, Lopa EEI

Patten, Kevin American Electric Power

Pratzon, David GT Power Group
Price, Mark DC Energy
Reid, Ryan ACES

Rogers, Alan Kuehne Chemical Company, Inc.

Rolashevich, Peter The Federal Energy Regulatory Commission

Ruiz, Pablo The Brattle Group

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Transmission Owner

Not Applicable

Other Supplier Not Applicable Other Supplier Not Applicable

Not Applicable



Saini, Ishwar Macquarie Energy LLC Salaneck, Alexandra Monitoring Analytics, LLC Sanada, Cristy New York ISO

Sasser, Jonathan **Customized Energy Solutions**

Shanker, Roy Hydro Quebec

Sillin, John The Federal Energy Regulatory Commission Stubbe, Judy Duke Energy Business Services, Inc.

Stuchell, Jeff FirstEnergy Solutions Corporation Tatum, Ed Old Dominion Electric Cooperative Theodore, Sharon **Electric Power Supply Association**

Thomas, Glen GT Power Group Thompson, Matthew XO Energy MA, LP

Villatoro, Karen The Federal Energy Regulatory Commission

Vo. Kevin Tudor, Pickering, Holt & Co. Vogel, Anne American Electric Power

Walker, Jennifer Exelon Business Services Company, LLC Weber, Adam Union Electric Company d/b/a Ameren Missouri Wellborn, Samir The Federal Energy Regulatory Commission

Wilhite, Chad FirstEnergy Solutions Corporation

Wilmoth, Emily Dominion Virginia Power Wilson, James Wilson Energy Economics

Wisersky, Megan Madison Gas & Electric Company

Wong, Bryant **ABB Group**

York, Katherine Tennessee Valley Authority (The) Yu, Haibin Calpine Energy Services, L.P.

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

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

Not Applicable

Transmission Owner

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

In Attendance (PJM Participants):

Barrett. Francis PJM Interconnection, LLC Not Applicable Boston, Terry PJM Interconnection, LLC Not Applicable Boyle, Stephen PJM Interconnection, LLC Not Applicable Bratspis, David PJM Interconnection, LLC Not Applicable Bresler, Stu PJM Interconnection, LLC Not Applicable Burlew, Jim PJM Interconnection, LLC Not Applicable Ciabattoni, Joe PJM Interconnection, LLC Not Applicable D'Antonio, Phil Not Applicable PJM Interconnection, LLC PJM Interconnection, LLC Not Applicable Daugherty, Suzanne Dotter, Ray PJM Interconnection, LLC Not Applicable Driscoll, Mary Ellen PJM Interconnection, LLC Not Applicable Duane, Vince PJM Interconnection, LLC Not Applicable Egan, Amanda PJM Interconnection, LLC Not Applicable





Ennis, Brad PJM Interconnection, LLC Fabiano, Janell PJM Interconnection, LLC Ford, Adrien PJM Interconnection, LLC Glazer, Craig PJM Interconnection, LLC Hartung, Dean PJM Interconnection, LLC Hauske, Thomas PJM Interconnection, LLC Herling, Steven PJM Interconnection, LLC Herman, Michael PJM Interconnection, LLC Horger, Tim PJM Interconnection, LLC Hsia, Eric PJM Interconnection, LLC Hugee, Jacqulynn PJM Interconnection, LLC Keech, Adam PJM Interconnection, LLC Keech, Jason PJM Interconnection, LLC Kelley, Michael PJM Interconnection, LLC LaRocque, Matthew PJM Interconnection, LLC Lloyd, Katy PJM Interconnection, LLC Lopez, Veronica PJM Interconnection, LLC Manion, Evelyn PJM Interconnection, LLC Martini, Danielle PJM Interconnection, LLC McGlynn, Paul PJM Interconnection, LLC McNamara, Sean PJM Interconnection, LLC Noonan, Tom PJM Interconnection, LLC O'Brien, Tom PJM Interconnection, LLC Ott, Andrew L. PJM Interconnection, LLC Patel, Anita PJM Interconnection, LLC Pilong, Chris PJM Interconnection, LLC Quintavalla, Ginger PJM Interconnection, LLC Robinson, Charles PJM Board of Managers Schmitt, Jeff PJM Interconnection, LLC Schneider, Howard PJM Board of Managers Schuyler, Ken PJM Interconnection, LLC Schweizer, David PJM Interconnection, LLC Sechrist, Erin PJM Interconnection, LLC Shparber, Steve PJM Interconnection, LLC Snyder, Sue PJM Interconnection, LLC Sotkiewicz, Paul PJM Interconnection, LLC Souder, Dave PJM Interconnection, LLC Swimm, Nora C. PJM Interconnection, LLC Tam, Simon PJM Interconnection, LLC Thew, Carla PJM Interconnection, LLC

Not Applicable Not Applicable





Velasco, Cheryl Ward, Mike Weiss, Glenn Williams, Stan

PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC Not Applicable Not Applicable Not Applicable Not Applicable

Author: D. A. Anders