



Markets and Reliability Committee The Chase Center on the Riverfront, Wilmington, DE March 26, 2015 9:00 a.m. – 12:15 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. Bresler discussed the recently announced Tier 1 Synchronized Reserves billing adjustment, indicating that the expected value of the billing adjustment will be approximately \$72.5 million for the entire period. He also indicated that a new MSRS report is under development which will allow participants to see their own impact. Mr. Anders noted that the annual request had been sent for all Members to re-verify the sector for which they qualify and to submit an updated Affiliate Disclosure form. These are required to be submitted by April 30, 2015.

Endorsements/Approvals (9:05-10:45)

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

Minutes of the February 26, 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. Tong Zhao presented revisions to Manual 11: Energy & Ancillary Services Market Operations regarding Demand Bid Screening.
- B. Ms. Danielle Martini reviewed changes to Manual 12: Balancing Operations regarding regulation testing.

Following discussion, the proposed revisions in items 2.A and 2.B were **endorsed** by acclamation with no objections or abstentions.

3. FTR Revisions (9:30-9:45)

Mr. Tim Horger presented non-substantial FTR revisions related to the FTR Auction clearing deadline, clarification of FTR monthly/daily trading and clarification of wording in the Tariff related to Long Term FTR rules. Following discussion the Committee **endorsed** the proposed revisions by acclamation with no objections and one abstention.

4. Energy Market Uplift Sr. Task Force (9:45-10:15)

Mr. Stu Bresler presented two proposals developed by the Energy Market Uplift Senior Task Force (EMUSTF). The first proposes that the MRC direct the Planning Committee (PC) to develop rules to require that uplift formally be treated as an input to the Regional Transmission Expansion Plan (RTEP).





Following discussion the Committee **endorsed** this proposal by acclamation with five objections and one abstention.

The second proposal regards revisions to rules governing treatment of CT Lost Opportunity Cost. Mr. Dave Pratzon proposed a friendly amendment to replace the phrase "for a reliability reason" in section (f-1) of the proposed revisions with the phrase "due to a transmission constraint or other reliability issue" to be consistent with section (f-2). There were no objections to this being considered friendly and therefore it was incorporated into the main motion. Mr. Steve Lieberman requested clarification that the changes to section 5, LOC Credit Methodology, related to self-scheduled units that the higher of the available cost or price curves would apply. Mr. Bresler confirmed that this was correct. Mr. Ed Tatum proposed a friendly amendment to defer action on the start-up, notification and no-load time portion of the proposal for one month to allow additional discussion at the EMUSTF. Ms. Ruth Ann Price objected to this being a friendly amendment. Ms. Price moved and Ms. Bruce seconded that the motion be deferred for one month to allow the EMUSTF to further discuss (but not re-vote) the start-up, notification and no-load time portion of the proposal. Following discussion, the motion to defer for one month was approved by acclamation with two objections and one abstention.

5. Demand Response Forecast for Use in RTEP (10:15-10:30)

Mr. Tom Falin discussed a proposed change to demand response modeling assumptions in Load Deliverability Analyses. Ms. Rebecca Stadelmeyer proposed a friendly amendment to add the following phrase to the end of the second paragraph of the proposed revisions: "The forecast is based on the PJM final summer season Committed DR amount, where the Committed DR means all DR that has committed through RPM, Base Residual Auction and all Incremental Auctions, or a Fixed Resource Requirement plan", and to delete the following sentence from the first numbered bullet of the proposed revisions: "Committed DR includes all DR that has committed through RPM or a Fixed Resource Requirement plan." There was no objection to this being considered friendly, and therefore was incorporated into the main motion. Following discussion the Committee endorsed the proposed revisions by acclamation with no objections or abstentions.

6. <u>FERC Order 1000 (10:30-10:45)</u>

Mr. Steve Herling discussed the recent FERC ruling on PJM's Order 1000 compliance filing and proposed revisions. Following discussion the Committee **endorsed** the proposed revisions by acclamation with no objections and one abstention. Mr. Kormos noted that the Members Committee would be asked to endorse the proposed revisions at its meeting on March 26, 2015.

First readings (10:45-11:45)

7. Residential DR Measurement & Verification (10:45-11:00)

Mr. Pete Langbein discussed PJM's intention to file in late April 2015 the Residential Demand Response Measurement and Verification Tariff revisions which were endorsed at the January 22, 2015 Members Committee meeting. Since these revisions may not become effective before the next Base Residual Auction, the endorsed Tariff revisions have been updated to include an additional Delivery





Year to the transition plan. The committee will be asked to endorse the proposed update to the revisions at its next meeting.

8. Tariff Harmonization Sr. Task Force (11:00-11:15)

Ms. Janell Fabiano presented the draft charter for the Tariff Harmonization Sr. Task Force. She noted that a friendly amendment had been proposed to add the phrase "and ambiguities in the governing documents and manual 35" in the second work activity. The committee will be asked to approve the proposed charter at its next meeting.

9. Generator Offer Flexibility (11:15-11:30)

Mr. Dave Pratzon, representing Calpine, presented a proposed problem statement and issue charge regarding the need for more flexible market offers for physical generating resources. The committee will be asked to approve the proposed problem statement and issue charge at its next meeting.

10. PJM Manuals (11:30-12:15)

- A. Mr. Dave Souder presented proposed revisions to Manual 14D: Generator Operational Requirements regarding a recent NERC Advisory on Generator Governor Frequency Response. The Committee will be asked to endorse these proposed revisions at its next meeting.
- B. Mr. Jeff Bastian presented proposed revisions to Manual 18: PJM Capacity Market regarding implementation of Capacity Performance. The Committee will be asked to endorse these proposed revisions at its next meeting should the FERC accept the recent Capacity Performance related filings before then.

Future Agenda Items (12:15)

Future Meeting Dates

April 22 201E	0.20 a m	Wilmington DE
April 23, 2015	9:30 a.m.	Wilmington, DE
May 28, 2015	9:30 a.m.	Wilmington, DE
June 25, 2015	9:30 a.m.	Wilmington, DE
July 23, 2015	9:30 a.m.	Wilmington, DE
August 27, 2015	9:30 a.m.	Wilmington, DE
September 24, 2015	9:30 a.m.	Wilmington, DE
October 22, 2015	9:30 a.m.	Wilmington, DE
November 19, 2015	9:30 a.m.	Wilmington, DE
December 17, 2015	9:30 a.m.	Wilmington, DE

In Attendance (Chair/Secretary):

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



In Attendance (Voting Participants):

Exelon Business Services Company, LLC **Transmission Owner** Barker, Jason

Bleiweis, Bruce DC Energy LLC

Rep.'g Jersey Green Energy LLC Borgatti, Michael

Borgatti, Michael Rep.'g NextEra Energy Power Marketing, LLC

Borgatti, Michael Rep.'g Covanta Energy Group, Inc.

Borgatti, Michael Rep.'g York County Solid Waste and Refuse Authority

Borgatti, Michael Rep.'g RC Cape May Holdings, LLC Brodbeck, John Potomac Electric Power Company Bruce, Susan Rep.'g Kimberly-Clark Corporation Bruce, Susan Rep.'g Industrial Energy Users-Ohio

Bruce, Susan Rep.'g Trustees of the U of PA, dba University of Pennsylvania

Bruce, Susan Rep.'g Wellsboro Electric Company (pre-2008)

Bruce, Susan Rep.'g MeadWestvaco Corporation

Bruce, Susan Rep.'g Procter & Gamble Paper Products Company (The)

Bruce, Susan Rep.'g Gerdau Ameristeel Energy, Inc. Bruce, Susan Rep.'g Air Products & Chemicals, Inc. Bruce, Susan Rep.'g Air Liquide Industrial U.S., LP Bruce, Susan Rep.'g Lehigh Portland Cement Company

Rep.'g Praxair, Inc. Bruce, Susan Bruce, Susan Rep.'g Linde LLC

Bruce, Susan Rep.'g Letterkenny Industrial Development Authority

Campbell, Bruce Rep.'g Mid-Atlantic Power Partners

Campbell, Bruce Rep.'g EnergyConnect, Inc.

Canter, David Appalachian Power Company (AEP Generation)

Citrolo, John Public Service Electric & Gas Company

Cox, Jason Dynegy Marketing & Trade, LLC Dugan, Chuck East Kentucky Power Cooperative, Inc.

Etnoyer, Scott MEG Generating Company, LLC Fitch, Neal NRG Power Marketing LLC

Foladare, Kenneth **IMG Midstream LLC**

Fuess, Jay

Fondacci, Luis North Carolina Electric Membership Corporation

Fuess, Jay Rep.'g Icetec.com, Inc.

Fuess, Jay Rep.'g Kuehne Chemical Company, Inc. Fuess, Jay Rep.'g Church Hill Solar Farm, LLC Fuess, Jay Rep.'g PBF Power Marketing LLC

Fuess, Jay Rep.'g Diamond State Generation Partners, LLC Fuess, Jay Rep.'g Castlebridge Energy Group, LLC

Griffiths, Dan Rep.'g New Jersey Div. of the Ratepayer Advocate

Rep.'g Energy Consulting Services LLC

Other Supplier Other Supplier

Generation Owner

Generation Owner

Generation Owner

Generation Owner

Electric Distributor

Generation Owner

Other Supplier

End User Customer Electric Distributor

End User Customer

End User Customer

Other Supplier

End User Customer

Electric Distributor

Other Supplier

Other Supplier

Transmission Owner

Transmission Owner

Generation Owner

Transmission Owner

Generation Owner

Generation Owner

Generation Owner

Electric Distributor

Other Supplier

Other Supplier

Generation Owner

Generation Owner

Generation Owner

Other Supplier

Other Supplier

End User Customer



Griffiths, Dan	Rep.'g West Virginia Consumer Advocate Division	End User Customer
Griffiths, Dan	Rep.'g Indiana Office of Utility Consumer Counsel	End User Customer
Griffiths, Dan	Rep.'g Division of the Public Advocate of State of Delaware	End User Customer
Griffiths, Dan	Rep.'g Office of the Ohio Consumers' Counsel	End User Customer
Griffiths, Dan	Rep.'g Maryland Office of Peoples Counsel	End User Customer
Hoatson, Tom	West Deptford Energy, LLC	Generation Owner
Horstmann, John	Dayton Power and Light Company (The)	Transmission Owner
Jablonski, James	Rep.'g Borough of South River, New Jersey	Electric Distributor
Jablonski, James	Rep.'g Borough of Milltown	Electric Distributor
Jablonski, James	Rep.'g Borough of Park Ridge, New Jersey	Electric Distributor
Jablonski, James	Rep.'g Borough of Seaside Heights, New Jersey	Electric Distributor
Jablonski, James	Rep.'g Vineland Municipal Electric Utility	Electric Distributor
Jablonski, James	Rep.'g Borough of Pemberton	Electric Distributor
Jablonski, James	Rep.'g Borough of Butler, Butler Electric Division	Electric Distributor
Jablonski, James	Rep.'g Borough of Madison, New Jersey	Electric Distributor
Jablonski, James	Rep.'g Borough of Lavallette, New Jersey	Electric Distributor
Johnson, Carl	Rep.'g Indiana Municipal Power Agency	Generation Owner
Johnson, Carl	Rep.'g American Municipal Power, Inc.	Electric Distributor
Johnson, Carl	Rep.'g Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson, Carl	Rep.'g Illinois Municipal Electric Agency	Electric Distributor
Johnson, Carl	Rep.'g Hagerstown Light Department	Electric Distributor
Johnson, Carl	Rep.'g Mont Alto, PA (Borough of)	Electric Distributor
Johnson, Carl	Rep.'g Thurmont, MD (Town of)	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 North Carolina Electric Membership Corporation	Electric Distributor
Johnson, Carl	Rep.'g Easton Utilities Commission	Electric Distributor
Johnson, Carl	Rep.'g City of Dover, Delaware	Electric Distributor
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 Allegheny Electric Cooperative, Inc.	Electric Distributor
Johnson, Carl	Rep.'g Galt Power Inc.	Other Supplier
Kelly, Stephen	Brookfield Energy Marketing LP	Other Supplier



Koaut, George

Other Supplier

Nogui, George	New Tork Fower Additionly	Other Supplier
Leonard, Ryan	IBERDROLA RENEWABLES, LLC	Generation Owner
Lieberman, Steven	Old Dominion Electric Cooperative	Electric Distributor
Long, Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Marton, Dave	FirstEnergy Solutions Corp.	Transmission Owner
McAlister, Lisa	American Municipal Power, Inc.	Electric Distributor
Meier, Mariko	EnerNOC, Inc.	Other Supplier
Merola, Becky	Noble Americas Gas & Power Corp.	Other Supplier
Moerner, Lisa	Virginia Electric & Power Company	Transmission Owner
Peoples, John	Duquesne Light Company	Transmission Owner
Pratzon, David	Rep.'g Calpine Energy Services, L.P.	Generation Owner
Pratzon, David	Rep.'g Liberty Electric Power, LLC	Generation Owner
Prokop, Brenda	ITC Mid-Atlantic Development LLC	Other Supplier
Rainey, Frank	PEI Power Corporation	Generation Owner
Richardson, Frank (Chip)	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Riding, MQ	Essential Power Rock Springs, LLC	Transmission Owner
Rohrbach, John	Rep.'g Southern Maryland Electric Cooperative	Electric Distributor
Rohrbach, John	Rep.'g Wabash Valley Power Association, Inc.	Electric Distributor
Rushing, Nathan	CPV Maryland, LLC	Generation Owner
Rutigliano, Tom	Rep.'g EMC Development Company, Inc.	Other Supplier
Rutigliano, Tom	Rep.'g Achieving Equilibrium LLC	Other Supplier

New York Power Authority

Scarpignato (Scarp),

Rutigliano, Tom

Rutigliano, Tom

David

Trayers, Barry Citigroup Energy, Inc.

Trimble, John Alternative Utility Services, Inc.

Rep.'g Demansys Energy, LLC

Direct Energy Business, LLC

Rep.'g Enerwise Global Technologies, Inc.

Wadsworth, Joe Vitol Inc.

In Attendance (Non-Voting Participants):

Ainspan, Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Bainbridge, Thomas	FirstEnergy Solutions Corporation	Transmission Owner
Bearden, Joel	XO Energy MA, LP	Other Supplier
Beltes, Alex	The NorthBridge Group	Not Applicable
Birnel, William	Westar Energy, Inc.	Other Supplier
Bleiweis, Bruce	DC Energy, L.L.C.	Other Supplier
Bloom, David	Baltimore Gas and Electric Company	Transmission Owner
Bolan, Martin	FirstEnergy Solutions Corporation	Transmission Owner
Caddell, Ted	RTO Insider	Not Applicable
Carmean, Gregory	OPSI	Not Applicable



Chen, Jennifer	Sustainable FERC	Projects
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Cox, Phil	AEP
Czigler, Frank	PSEG

Davis, Connie Cleveland Public Power

DeGeeter, Ralph Public Service Commission of Maryland Denavas, Joe Potomac Electric Power Company Dessender, Harry Customized Energy Solutions, Ltd.*

EnerNOC, Inc. Doremus, Steven Eisner, Merry **RTO Insider** Ellis, Jeff Genbright, LLC

Ellison, Alan **Grays Ferry Cogeneration Partnership**

Erbrick, Michael MICS

Farber, John Delaware Public Service Commission

Feierabend, Rick **Dominion Virginia Power** Fort, Jim Energy Authority, Inc. (The) Freeman, Michael **Emerald Energy Consulting LLC** Fuerst, Gary FirstEnergy Solutions Corporation Gebolys, Debbie Public Utilities Commission of Ohio

Gilani, Rehan ConEdison Energy, Inc.

Godson, Gloria Potomac Electric Power Company

Graessley, Eric The Federal Energy Regulatory Commission

Guerry, Katie EnerNOC, Inc.

Hall, Walter Maryland Public Service Commission Hanson, Mark Illinois Commerce Commission

Hastings, David Market Interconnection Consulting Service

RTO Insider Heidorn, Richard

Hilaski, Steve Pepco Holdings Incorporated Hitch, George **Dominion Virginia Power** Huntoon, Stephen Energy Counsel, LLP Hyzinski, Tom PPL EnergyPlus, L.L.C.

Janicki, Diane Boston Energy Trading and Marketing LLC Jett, Paul **Duke American Transmission Company**

Customized Energy Solutions

Judson-Mcqueeney,

Judith

Kilgallen, Kevin **Emerald Energy Consulting LLC**

Kingston, Amber Aces Power Marketing

ITC Mid-Atlantic Development LLC Kopinski, John

Lacy, Catharine **Dominion Resources**

Liang-Nicol, Cecilia FirstEnergy Solutions Corporation

Logan, Sharon The Federal Energy Regulatory Commission

Loudenburg, Zack Aces Power Marketing Not Applicable

Transmission Owner Transmission Owner

Electric Distributor

Not Applicable

Electric Distributor

Not Applicable

Other Supplier Not Applicable

Other Supplier

Generation Owner

Not Applicable

Not Applicable

Not Applicable

Other Supplier

Not Applicable

Transmission Owner

Not Applicable

Other Supplier

Electric Distributor

Not Applicable

Other Supplier

Not Applicable

Transmission Owner

Generation Owner

Not Applicable

Not Applicable

Not Applicable

Not Applicable

Other Supplier

Not Applicable

Transmission Owner

Not Applicable

Not Applicable



Luna, Joel Monitoring Analytics
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
Matheson, Eric Pennsylvania Public Utility Commission
Miller, John Commonwealth Edison Company

Murphy, Lauren SNL Energy

Nowell, Cynthia Pepco Holdings Incorporated

Ondayko, Brock AEP

Orlando, Jim Northern Indiana Public Service Company

Owens, Christina ACES

Owens, George Downes Associates, Inc.

Patel, Munjal PSEG

Patten, Kevin American Electric Power

Prendergast, Michael Public Service Electric & Gas Company

Rajan, Abhijit Dominion Resources

Reid, Ryan ACES

Rolashevich, Peter The Federal Energy Regulatory Commission

Sasser, Jonathan Customized Energy Solutions
Schum, Alice Illinois Municipal Electric Agency
Scott, Astrid Cahaya Power Marketing LLC

Sharp, Michael Duke Energy Business Services, Inc.

Sidhom, Noha Inertia Power I, LLC Smyth, Dermot ConEdison Energy Inc.

Sock, Bryan PSEG Energy Resources and Trade LLC Stadelmeyer, Rebecca Exelon Business Services Company, LLC

Stuchell, Jeff FirstEnergy Solutions Corporation

Thomas, Glen GT Power Group

Thumm, Brian ITC Mid-Atlantic Development LLC

Vogel, Anne American Electric Power

Walker, Jennifer Exelon Business Services Company, LLC

Weaver, David PECO Energy Company

Weber, Adam Union Electric Company d/b/a Ameren Missouri Wellborn, Samir The Federal Energy Regulatory Commission

Williams, Carl FuelCell Energy

Wilson, James Wilson Energy Economics

Wisersky, Megan Madison Gas & Electric Company York, Katherine Tennessee Valley Authority (The) Yu, Haibin Calpine Energy Services, L.P. Not Applicable Generation Owner

Other Supplier
Not Applicable

Not Applicable
Not Applicable

Transmission Owner

Not Applicable
Not Applicable

Not Applicable

Transmission Owner Other Supplier Not Applicable

Other Supplier

Transmission Owner Transmission Owner

Transmission Owner

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

Generation Owner Other Supplier Other Supplier

Transmission Owner
Transmission Owner
Transmission Owner

Not Applicable
Other Supplier

Transmission Owner Transmission Owner

Transmission Owner
Other Supplier
Not Applicable

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



In Attendance (PJM Participants):

	r un uno punto j.
Baker, Scott	PJM Interconnection, LLC
Bastian, Jeff	PJM Interconnection, LLC
Bhavarju, Murty	PJM Interconnection, LLC
Boyle, Glen	PJM Interconnection, LLC
Bratspis, David	PJM Interconnection, LLC
Bresler, Stu	PJM Interconnection, LLC
Brown, Richard	PJM Interconnection, LLC
Bruno, Patrick	PJM Interconnection, LLC
Bryson, Michael	PJM Interconnection, LLC
Daugherty, Suzanne	PJM Interconnection, LLC
Dolan, James	PJM Interconnection, LLC
Dotter, Ray	PJM Interconnection, LLC
Driscoll, Mary Ellen	PJM Interconnection, LLC
Duane, Vince	PJM Interconnection, LLC
Ennis, Brad	PJM Interconnection, LLC
Fabiano, Janell	PJM Interconnection, LLC
Falco, Christine	PJM Interconnection, LLC
Falin, Thomas	PJM Interconnection, LLC
Foster, Neel	PJM Board of Managers
Glazer, Craig	PJM Interconnection, LLC
Gordon, Brad	PJM Interconnection, LLC
Hartung, Dean	PJM Interconnection, LLC
Hendrzak, Chantal	PJM Interconnection, LLC
Herling, Steven	PJM Interconnection, LLC
Holland, Risa	PJM Interconnection, LLC
Horger, Tim	PJM Interconnection, LLC
Horowitz, Shira	PJM Interconnection, LLC
Hsia, Eric	PJM Interconnection, LLC
Hugee, Jacqulynn	PJM Interconnection, LLC
Keech, Jason	PJM Interconnection, LLC
Kelley, Michael	PJM Interconnection, LLC
Lahey, Richard	PJM Board of Managers
Langbein, Pete	PJM Interconnection, LLC
LaRocque, Matthew	PJM Interconnection, LLC
Lusska, Kirsten	PJM Interconnection, LLC
Manion, Evelyn	PJM Interconnection, LLC
Martini, Danielle	PJM Interconnection, LLC
McGlynn, Paul	PJM Interconnection, LLC

Not Applicable Not Applicable



McLaverty, Megan
Noonan, Tom
O'Neill, Jack
Patel, Keyur
Schmitt, Jeff
Schuyler, Ken
Sechrist, Erin
Shparber, Steve
Snyder, Sue
Souder, Dave
Stotesbury, Christina
Swimm, Nora C.
Tribulski, Jennifer
Williams, Stan
Withrow, David
Zhao, Tong

PJM	Interconnection, LLC
PJM	Interconnection, LLC

Not Applicable Not Applicable

Author: Name