

Markets and Reliability Committee
PJM Conference & Training Center, Audubon, PA
October 1, 2015
9:00 a.m. – 12:30 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 (9:05-10:30)

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

Minutes of the September 24, 2015 Markets and Reliability Committee (MRC) meeting were **approved** by acclamation with no objections or abstentions.

2. PJM Manuals (9:10-9:30)

- A. Mr. Mike Sitarchyk reviewed changes to Manual 40: Certification and Training Requirements.
- B. Mr. David Schweizer reviewed changes to Manual M10: Pre-Scheduling Operations.
- C. Mr. David Schweizer presented revisions to Manual 14D: Generator Operational Requirements which incorporate the results of the Cold Weather Resource Improvement process survey.
- D. Mr. Mike Herman reviewed revisions to Manual 14 series manuals regarding Multi-Driver Approach.

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

3. Price Formation (9:30-10:30)

- A. Mr. Stan Williams reviewed elements of the recently FERC issued Notice of Proposed Rulemaking (NOPR) related to price formation regarding sub-hourly settlements. He noted the many implications for PJM and Member system updates, as well as the timeline for response to the NOPR and ultimately implementation of any resulting FERC order.
- B. Mr. Adam Keech reviewed elements of the recently FERC NOPR related to price formation regarding shortage pricing. He also noted the timeline for response to the NOPR and ultimately implementation of any resulting FERC order.
- C. Ms. Adrien Ford reviewed the recently FERC issued NOPR related to price formation and the potential relationships with the Energy Market Offer Cap. She noted that in the NOPR the FERC indicated their intention to issue additional guidance related to the Energy Market Offer Cap requirements.
- D. Ms. Ford reviewed the history of Energy Market Offer Cap concerns and stakeholder actions, and noted the July 2015 request of the PJM Board of Managers for renewed stakeholder efforts toward reaching consensus on an update to the Offer Cap. She discussed stakeholder activities since the

Board request including consideration at the Market Implementation Committee, Members Committee Webinar, and regular and special MRC meetings. She noted that four individual proposals had been developed by stakeholders and vetted at the special MRC meetings. The four proposers had met in an effort to develop a pathway toward consensus, and produced a Potential Consensus Framework proposal which was reviewed at the September 24, 2015 special MRC meeting.

Ms. Ford reviewed the elements of the Potential Consensus Framework proposal. She provided two clarifications in response to questions received from stakeholders: that for cost-based offers greater than the proposed cap, PJM would dispatch units in merit order; and that PJM would produce a report on any events in which offers would be made greater than \$1,000. Mr. Anders discussed the voting protocols, and indicated that each of the four proposers have committed to withdraw their proposals should the Potential Consensus Framework reach supermajority support. Mr. Jeff Whitehead, Direct Energy, Mr. Steve Lieberman, ODEC, Mr. Dave Scarpignato, representing P3, and Dr. Joe Bowring, Independent Market Monitor, each confirmed their support for the Potential Consensus Framework proposal.

Following discussion the Potential Consensus Framework proposal was **endorsed** in a sector-weighted vote with 4.30 in favor.

First Readings (10:30-1:00)

4. Regulation Performance Impacts (10:30-10:50)

Mr. Eric Hsia presented the proposed resolution to operational regulation performance issues. The committee will be asked to endorse the associated revisions to Manual 11: Energy & Ancillary Services Markets Operations at its next meeting.

5. Regulation Market Issues Sr. Task Force (RMISTF) (10:50-11:05)

Mr. Dave Anders presented the draft charter for the RMISTF. He noted the proposed addition of six specific scope items highlighted in the proposed charter. These items were originally included in the Operating Committee's consideration of the issue discussed in item 4 above but were deferred to the RMISTF. The committee will be asked to approve the draft charter at its next meeting.

6. Incremental Auction Tariff Clean Up (11:05-11:15)

Ms. Jen Tribulski presented a Tariff revision for the Incremental Auctions concerning PJM's sale or purchase of capacity necessitated by the Capacity Performance Transition Auctions. The committee will be asked to endorse the proposed Tariff revisions at its next meeting.

7. PAR Task Force Update (11:15-11:30)

Mr. Berner presented proposed solutions regarding PAR transmission and withdrawal rights. The committee will be asked to endorse the proposed solution at its next meeting.

8. RPM Scenario Analysis (11:30-11:45)

Mr. Jeff Bastian discussed plans for the annual RPM scenario analysis. He asked that stakeholders submit any additional scenario requests to the RPM hotline, and indicated that the final scenario list would be discussed with the committee at its next meeting.

9. Load Forecast Update (11:45-12:05)

Mr. Tom Falin reviewed proposed revisions to the PJM load forecast model. Mr. Jeff Bastian discussed associated revisions to Manual 18: PJM Capacity Market and Manual 18B: Energy Efficiency Measurement & Verification. These proposed revisions will be provided for a first read at the next MRC meeting. Mr. Kormos indicated that an additional meeting would be scheduled to allow greater stakeholder understanding of the proposals.

10. Preliminary 2015 IRM Study Results (12:05-12:20)

Mr. Tom Falin reviewed preliminary 2015 IRM Study Results. The committee will be asked to endorse the 2015 IRM Study Results at its next meeting.

11. Underperformance Risk Management in RPM/CP (12:20-12:35)

Mr. Bob O'Connell, on behalf of the members of the Supplier Caucus, discussed a proposed Problem Statement and Issue Charge related to Underperformance Risk Management in RPM/CP. The committee will be asked to approve the proposed Problem Statement and Issue Charge at its next meeting.

12. Events Out of Seller's Control (12:35-12:50)

Mr. Ken Foladare, on behalf of the members of the Supplier Caucus, discussed a proposed Problem Statement and Issue Charge related to Events Out of Seller's Control. The committee will be asked to endorse the proposed Problem Statement and Issue Charge at its next meeting.

13. PJM Manuals (12:50-1:00)

A. Mr. Mark Sims presented proposed Manual 14B: PJM Regional Transmission Planning Process revisions regarding Winter Reliability Criteria in Planning. The Committee will be asked to approve these proposed revisions at its next meeting.

Future Agenda Items (1:00)

No new future agenda items were identified.

Future Meeting Dates

October 22, 2015	9:00 a.m.	Wilmington, DE
November 19, 2015	9:00 a.m.	Wilmington, DE
December 17, 2015	9:00 a.m.	Wilmington, DE

Author: D. A. Anders

In Attendance (Chair/Secretary):

Kormos, Michael	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
Beitel, Callias	Uncia Energy LP - Series B	Other Supplier
Benchek, Jim	FirstEnergy Solutions Corp.	Transmission Owner
Bleiweis, Bruce	DC Energy LLC	Other Supplier
Borgatti, Michael	Rep'g York County Solid Waste and Refuse Authority	Generation Owner
Borgatti, Michael	Rep'g Covanta Energy Group, Inc.	Generation Owner
Borgatti, Michael	Rep'g Jersey Green Energy LLC	Other Supplier
Borgatti, Michael	Rep'g NextEra Energy Power Marketing, LLC	Generation Owner
Borgatti, Michael	Rep'g Northampton Generating Company L.P.	Generation Owner
Borgatti, Michael	Rep'g RC Cape May Holdings, LLC	Generation Owner
Bruce, Susan	Rep'g Linde LLC	End User Customer
Bruce, Susan	Rep'g Letterkenny Industrial Development Authority	Electric Distributor
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 Gerdau Ameristeel Energy, Inc.	Other Supplier
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 Kimberly-Clark Corporation	Generation Owner
Campbell, Bruce	Rep'g Mid-Atlantic Power Partners	Other Supplier
Campbell, Bruce	Rep'g EnergyConnect, Inc.	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
Evrard, David	Pennsylvania Office of Consumer Advocate	End User Customer
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 Energy Consulting Services LLC	Other Supplier
Fuess, Jay	Rep'g Icetec.com, Inc.	Other Supplier
Fuess, Jay	Rep'g Kuehne Chemical Company, Inc.	Other Supplier
Fuess, Jay	Rep'g PBF Power Marketing LLC	Generation Owner
Fuess, Jay	Rep'g Church Hill Solar Farm, LLC	Generation Owner
Fuess, Jay	Rep'g Castlebridge Energy Group, LLC	Other Supplier
Fuess, Jay	Rep'g Diamond State Generation Partners, LLC	Generation Owner
Garnett, Bryan	Duke Energy Business Services LLC	Transmission Owner
Godson, Gloria	Potomac Electric Power Company	Electric Distributor
Greening, Michele	Talen Energy Marketing, LLC	Generation Owner
Griffiths, Dan	Rep'g Ofc... People's Counsel ... District of Columbia	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 West Virginia Consumer Advocate Division	End User Customer
Griffiths, Dan	Rep'g New Jersey Div. of the Ratepayer Advocate	End User Customer
Griffiths, Dan	Rep'g Maryland Office of Peoples Counsel	End User Customer
Griffiths, Dan	Rep'g Office of the Attorney General, Kentucky	End User Customer
Griffiths, Dan	Rep'g Office of the Ohio Consumers' Counsel	End User Customer
Guerry, Katie	EnerNOC, Inc.	Other Supplier
Hastings, David	Rep'g Northstar Trading Ltd.	Other Supplier
Hastings, David	Rep'g Saracen Energy East LP	Other Supplier
Hastings, David	Rep'g SESCO Enterprises LLC	Other Supplier
Hastings, David	Rep'g Twin Cities Power, LLC	Other Supplier
Hastings, David	Rep'g Mercuria Energy America, Inc.	Other Supplier
Hastings, David	Rep'g Town Square Energy East, LLC	Other Supplier
Hoatson, Tom	West Deptford Energy, LLC	Generation Owner
Horstmann, John	Dayton Power and Light Company (The)	Transmission Owner
Horton, Dana	Appalachian Power Company (AEP Generation)	Transmission Owner
Jablonski, James	Rep'g Vineland Municipal Electric Utility	Electric Distributor
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 Borough of Lavallette, New Jersey	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
Jardot, Gina	Essential Power Rock Springs, LLC	Transmission 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 Municipal Light Company	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 Indiana Municipal Power Agency	Generation Owner
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
Kogut, George	New York Power Authority	Other Supplier
Lacy, Catharine	Virginia Electric & Power Company	Transmission Owner
Lieberman, Steven	Old Dominion Electric Cooperative	Electric Distributor
Ma, Alex	Invenergy, LLC	Generation Owner
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
O'Connell, Robert	PPGI Fund A/B Development, LLC	Generation Owner
Pakela, Greg	DTE Energy Trading, Inc.	Other Supplier

Peoples, John	Duquesne Light Company	Transmission Owner
Philips, Marji	Direct Energy Business, LLC	Other Supplier
Picardi, Matthew	Shell Energy North America (US), LP	Other Supplier
Prokop, Brenda	ITC Mid-Atlantic Development LLC	Other Supplier
Richardson, Frank (Chip)	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Rohrbach, John	Rep'g Southern Maryland Electric Cooperative	Electric Distributor
Rohrbach, John	Rep'g Wabash Valley Power Association, Inc.	Electric Distributor
Rutigliano, Tom	Rep'g Enerwise Global Technologies, Inc.	Other Supplier
Rutigliano, Tom	Rep'g Demansys Energy, LLC	Other Supplier
Rutigliano, Tom	Rep'g Achieving Equilibrium LLC	Other Supplier
Rutigliano, Tom	Rep'g EMC Development Company, Inc.	Other Supplier
Scarp, David	Calpine Energy Services, L.P.	Generation Owner
Scoglietti, Barbara	Tangent Energy Solutions, Inc.	Other Supplier
Sidhom, Noha	Inertia Power I, LLC	Other Supplier
Thompson, Matt	Property Endeavors, LLC	End User Customer
Trayers, Barry	Citigroup Energy, Inc.	Other Supplier
Wadsworth, Joe	Vitol Inc.	Other Supplier
Yu, Joel	Rockland Electric Company	Transmission Owner

In Attendance (Non-Voting Participants):

Ainspan, Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Allen, Wesley	Red Wolf Energy Trading, LLC	Other Supplier
Berger, Ken	Dominion Virginia Power	Not Applicable
Berlinski, Mike	Customized Energy Solutions	Not Applicable
Birnel, William	Westar Energy, Inc.	Other Supplier
Bloom, David	Baltimore Gas and Electric Company	Transmission Owner
Bolan, Martin	FirstEnergy Solutions Corporation	Transmission Owner
Bouchez, Nicole	New York ISO	Not Applicable
Bowring, Joseph	Monitoring Analytics, LLC	Not Applicable
Brightwell, David	Illinois Commerce Commission	Not Applicable
Cicero, Nick	FirstEnergy Solutions Corporation	Transmission Owner
Cook, Amanda	RTO Insider	Not Applicable
Cook, Patrick	Potomac Electric Power Company	Electric Distributor
Copeland, Doug	EDF Renewable Energy	Not Applicable
Crytle, Gil	UGI Development Company	Transmission Owner
D'Alessandris, Lou	FirstEnergy Solutions Corporation	Transmission Owner
Dannels, Jeff	ConEdison Energy Inc.	Other Supplier

Davis, Connie	Cleveland Public Power	Electric Distributor
DeLosa, Joseph	State of Delaware Public Service Commission	Not Applicable
Denavas, Joe	Potomac Electric Power Company	Electric Distributor
DePillo, Raymond	PSEG	Transmission Owner
Dessenger, Harry	Customized Energy Solutions, Ltd.*	Not Applicable
Dinicola, Laura	FirstEnergy Solutions Corporation	Transmission Owner
Doremus, Steven	EnerNOC, Inc.	Other Supplier
Engle, Andrew	XO Energy MA, LP	Other Supplier
Esposito, Pati	Energy Cooperative Association of PA	Other Supplier
Farber, John	Delaware Public Service Commission	Not Applicable
Farmer, Miles	Natural Resources Defense Council	Not Applicable
Feierabend, Rick	Dominion Virginia Power	Not Applicable
Filomena, Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Fort, Jim	Energy Authority, Inc. (The)	Other Supplier
Gebolys, Debbie	Public Utilities Commission of Ohio	Not Applicable
Gell, Richard	Ontario Power Generation Inc.	Other Supplier
Hagaman, Derek	GT Power Group	Not Applicable
Halay, Alina	The Federal Energy Regulatory Commission	Not Applicable
Hall, Walter	Maryland Public Service Commission	Not Applicable
Hanson, Mark	Illinois Commerce Commission	Not Applicable
Harmon, Mike	Ameren Energy Marketing Company	Generation Owner
Hebert, Chris	Hazle Spindle, LLC	Other Supplier
Heidorn, Richard	RTO Insider	Not Applicable
Henry, Michelle	FirstEnergy Solutions Corporation	Transmission Owner
Herel, Suzanne	RTO Insider	Not Applicable
Hitch, George	Dominion Virginia Power	Not Applicable
Holland, Cynthia	New Jersey Board of Public Utilities	Not Applicable
Holmes, Chris	Alstom Grid	Not Applicable
Horning, Lynn	LMH Consulting	Not Applicable
Huntoon, Stephen	Energy Counsel, LLP	Not Applicable
James, Denise	Dominion Energy Marketing, Inc.	Generation Owner
Janicki, Diane	Boston Energy Trading and Marketing LLC	Generation Owner
Josyula, Siva	Monitoring Analytics	Not Applicable
Josyula, Siva	Monitoring Analytics, LLC	Not Applicable
Juhrden, Jane	Pepco Holdings Incorporated	Not Applicable
Kaczanowski, Marek	Baltimore Gas and Electric Company	Transmission Owner
Karrasch, Kim	IGS Energy	Not Applicable

Kingston, Amber	Aces Power Marketing	Not Applicable
Kurt, Amy	Rock Island Clean Line LLC	Other Supplier
Leonard, Ryan	Iberdrola Renewables, LLC	
Lewis, Cara	Public Service Electric & Gas Company	Transmission Owner
Liang-Nicol, Cecilia	FirstEnergy Solutions Corporation	Transmission Owner
Logan, Sharon	The Federal Energy Regulatory Commission	Not Applicable
Loudenburg, Zack	Aces Power Marketing	Not Applicable
Mahoney, Julie	New York State Electric & Gas Corporation	Other Supplier
Manning, James	North Carolina Electric Membership Corporation	Electric Distributor
Mariam, Yohannes	Office of the Peoples Counsel for the District of Columbia	Not Applicable
Martin, Valerie	The Federal Energy Regulatory Commission	Not Applicable
Mason, Kimberly	PHI	Not Applicable
Matheson, Douglas	EnerNOC, Inc.	Other Supplier
McAdams, Julius	Red Wolf Energy Trading, LLC	Other Supplier
McClendon, Michelle	Customized Energy Solutions	Not Applicable
McDaniel, John	Baltimore Gas & Electric	Transmission Owner
Metzler, Jacob	Castleton Commodities Merchant Trading L.P.	Other Supplier
Miller, John	Commonwealth Edison Company	Transmission Owner
Mok, Alan	Duke Energy Business Services LLC	Transmission Owner
Monroe, Alicia	The Federal Energy Regulatory Commission	Not Applicable
Noewer, Sharon	FirstEnergy Solutions Corporation	Transmission Owner
Nowell, Cynthia	Pepco Holdings Incorporated	Not Applicable
O'Connell, Robert	Main Line Electricity Market Consultants	Not Applicable
Ondayko, Brock	AEP	Transmission Owner
Parikh, Lopa	EEl	Not Applicable
Patel, Munjal	PSEG	Transmission Owner
Patten, Kevin	American Electric Power	Transmission Owner
Peebles, Andy	Saracen Energy East LP	Other Supplier
Perrotti, Frank	New Jersey Board of Public Utilities	Not Applicable
Peters, James	ITC Mid-Atlantic Development LLC	Other Supplier
Phillips, Amanda	ACES	Not Applicable
Pratzon, David	GT Power Group	Not Applicable
Price, Ruth	Delaware Public Advocates Office	Not Applicable
Rainey, Frank	PEI Power Corporation	Generation Owner
Reid, Ryan	ACES	Not Applicable
Reuter, Rob	Pepco Holdings Incorporated	Not Applicable
Ring, Paul	Energy Choice Matters	Not Applicable

Robins, Pip	EMC Development Company, Inc.	Other Supplier
Salaneck, Alexandra	Monitoring Analytics, LLC	Not Applicable
Sasser, Jonathan	Customized Energy Solutions	Not Applicable
Schneider, Jonathan	FirstEnergy Solutions Corporation	Transmission Owner
Seelaus, Andrew	EMC Development Company, Inc.	Other Supplier
Seelaus, Tim	EMC Development Company, Inc.	Other Supplier
Shaffer, Brian	Atlantic City Electric	Electric Distributor
Shanker, Roy	Hydro Quebec	Not Applicable
Slifer, Diane	P3 Energy	Not Applicable
Smith, Andrew	SNL Energy	Not Applicable
Sprouse, Donald	Superior Appalachian Pipeline	Not Applicable
Stubbe, Judy	Duke Energy Business Services, Inc.	Generation Owner
Stuchell, Jeff	FirstEnergy Solutions Corporation	Transmission Owner
Tatum, Ed	Old Dominion Electric Cooperative	Electric Distributor
Theodore, Sharon	Electric Power Supply Association	Not Applicable
Thomas, Glen	GT Power Group	Not Applicable
VanderLaan, William	Illinois Commerce Commission	Not Applicable
Villatoro, Karen	The Federal Energy Regulatory Commission	Not Applicable
Vogel, Anne	American Electric Power	Transmission Owner
Walker, Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Weaver, David	Exelon	Transmission Owner
Weber, Adam	Union Electric Company d/b/a Ameren Missouri	Other Supplier
Wellborn, Samir	The Federal Energy Regulatory Commission	Not Applicable
Wilhite, Chad	FirstEnergy Solutions Corporation	Transmission Owner
Wilmoth, Emily	Dominion Virginia Power	Not Applicable
Wilson, James	Wilson Energy Economics	Not Applicable
Yohannes, Mariam	Office of the Peoples Counsel for the District of Columbia	Not Applicable
York, Katherine	Tennessee Valley Authority (The)	Other Supplier
Yun, Michelle	Exelon	Transmission Owner

In Attendance (PJM Participants):

Antonelli, Diane	PJM Interconnection, LLC	Not Applicable
Barrett, Francis	PJM Interconnection, LLC	Not Applicable
Bastian, Jeff	PJM Interconnection, LLC	Not Applicable
Berner, Aaron	PJM Interconnection, LLC	Not Applicable
Blackwell, Terry	PJM Board of Managers	Not Applicable
Boston, Terry	PJM Interconnection, LLC	Not Applicable

Boyle, Stephen	PJM Interconnection, LLC	Not Applicable
Bresler, Stu	PJM Interconnection, LLC	Not Applicable
Brown, Richard	PJM Interconnection, LLC	Not Applicable
Bryson, Michael	PJM Interconnection, LLC	Not Applicable
Budney, David	PJM Interconnection, LLC	Not Applicable
Burlew, Jim	PJM Interconnection, LLC	Not Applicable
Carroll, Rebecca	PJM Interconnection, LLC	Not Applicable
Ciabattoni, Joe	PJM Interconnection, LLC	Not Applicable
Cummings, Bridgid	PJM Interconnection, LLC	Not Applicable
Daugherty, Suzanne	PJM Interconnection, LLC	Not Applicable
Dirani, Rami	PJM Interconnection, LLC	Not Applicable
DuPont Kidd, Paula	PJM Interconnection, LLC	Not Applicable
Egan, Amanda	PJM Interconnection, LLC	Not Applicable
Ennis, Brad	PJM Interconnection, LLC	Not Applicable
Esterly, Teri	PJM Interconnection, LLC	Not Applicable
Fabiano, Janell	PJM Interconnection, LLC	Not Applicable
Falco, Christine	PJM Interconnection, LLC	Not Applicable
Falin, Thomas	PJM Interconnection, LLC	Not Applicable
Fernandez, Ray	PJM Interconnection, LLC	Not Applicable
Ford, Adrien	PJM Interconnection, LLC	Not Applicable
Glazer, Craig	PJM Interconnection, LLC	Not Applicable
Gledhill, Andrew	PJM Interconnection, LLC	Not Applicable
Gray, Jeff	PJM Interconnection, LLC	Not Applicable
Hartung, Dean	PJM Interconnection, LLC	Not Applicable
Hauske, Thomas	PJM Interconnection, LLC	Not Applicable
Hendrzak, Chantal	PJM Interconnection, LLC	Not Applicable
Herling, Steven	PJM Interconnection, LLC	Not Applicable
Herman, Michael	PJM Interconnection, LLC	Not Applicable
Holland, Risa	PJM Interconnection, LLC	Not Applicable
Hugee, Jacquelyn	PJM Interconnection, LLC	Not Applicable
Keech, Adam	PJM Interconnection, LLC	Not Applicable
Kelley, Michael	PJM Interconnection, LLC	Not Applicable
Lahey, Richard	PJM Board of Managers	Not Applicable
LaRocque, Matthew	PJM Interconnection, LLC	Not Applicable
Manion, Evelyn	PJM Interconnection, LLC	Not Applicable
McGlynn, Paul	PJM Interconnection, LLC	Not Applicable
McLaverly, Megan	PJM Interconnection, LLC	Not Applicable

McNamara, Sean	PJM Interconnection, LLC	Not Applicable
Mooney, Molly	PJM Interconnection, LLC	Not Applicable
Morelli, Lisa	PJM Interconnection, LLC	Not Applicable
Noonan, Tom	PJM Interconnection, LLC	Not Applicable
Ott, Andrew L.	PJM Interconnection, LLC	Not Applicable
Phillips, Darlene	PJM Interconnection, LLC	Not Applicable
Quevada, Jason	PJM Interconnection, LLC	Not Applicable
Reynolds, John	PJM Interconnection, LLC	Not Applicable
Rocha, Patricio	PJM Interconnection, LLC	Not Applicable
Schmitt, Jeff	PJM Interconnection, LLC	Not Applicable
Schuyler, Ken	PJM Interconnection, LLC	Not Applicable
Schweizer, David	PJM Interconnection, LLC	Not Applicable
Sechrist, Erin	PJM Interconnection, LLC	Not Applicable
Shparber, Steve	PJM Interconnection, LLC	Not Applicable
Sims, Mark	PJM Interconnection, LLC	Not Applicable
Sitarchyk, Mike	PJM Interconnection, LLC	Not Applicable
Slusser, Jeff	PJM Interconnection, LLC	Not Applicable
Snyder, Sue	PJM Interconnection, LLC	Not Applicable
Stadmeyer, Rebecca	PJM Interconnection, LLC	Not Applicable
Stotesbury, Christina	PJM Interconnection, LLC	Not Applicable
Swimm, Nora C.	PJM Interconnection, LLC	Not Applicable
Tribulski, Jennifer	PJM Interconnection, LLC	Not Applicable
Velasco, Cheryl	PJM Interconnection, LLC	Not Applicable
Ward, Mike	PJM Interconnection, LLC	Not Applicable
Weiss, Glenn	PJM Interconnection, LLC	Not Applicable
Williams, Stan	PJM Interconnection, LLC	Not Applicable
Withrow, David	PJM Interconnection, LLC	Not Applicable