

Markets and Reliability Committee
The Chase Center on the Riverfront, Wilmington, DE
April 23, 2015
9:00 a.m. – 11:45 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 discussed an operational event which required implementation of demand response resources in the Pennelec zone on April 21-22, 2015. Mr. Bresler discussed the recently announced Tier 1 Synchronized Reserves billing adjustment, indicating that the analysis of the issue had been completed and that billing adjustments would begin in the April 2015 bill.

Endorsements/Approvals (9:05-10:25)

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

Minutes of the March 26, 2015 Markets and Reliability Committee (MRC) meeting were **approved** by acclamation with no objections or abstentions.

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

A. Mr. Mike Bryson presented proposed revisions to Manual 14D: Generator Operational Requirements regarding a recent NERC Advisory on Generator Governor Frequency Response. Following discussion, the proposed revisions were **approved** by acclamation with no objections or abstentions.

3. Energy Market Uplift Sr. Task Force (EMUSTF) (9:20-9:40)

Mr. Adam Keech presented revisions to rules regarding treatment of CT Lost Opportunity Cost (LOC) developed by the Energy Market Uplift Senior Task Force. He noted that at its last meeting the MRC had deferred action on the EMUSTF proposal to allow stakeholders to discuss potential proposed friendly amendments to the proposals. That additional discussion occurred at the EMUSTF at its meetings on April 1 and 17, 2015 and at the Operating Committee at its meeting on April 7, 2015. Once friendly amendment had been accepted at the March 26, 2015 MRC meeting and therefore was incorporated into the main motion. Mr. Keech discussed three proposed friendly amendments:

- A friendly amendment proposed by Dominion addressing excluding startup cost payment when a qualified unit ran during its Day Ahead committed period, which would not make unit owner “indifferent”. Mr. Travis Stewart, Gable Associates objected to this amendment and therefore it was not incorporated into the main motion.
- A friendly amendment proposed by PJM to clarify the term “temporally contiguous”. There were no objections to this amendment and therefore it was incorporated into the main motion.
- A friendly amendment proposed by Old Dominion Electric Cooperative (ODEC) to change the requirement for eligibility for LOC payments from two hour minimum run time to five two hour

minimum run time. Ms. Susan Bruce, PJM Industrial Customer Coalition (PJM ICC), objected to this amendment and therefore it was not incorporated into the main motion.

Following discussion the motion **failed** in a sector-weighted vote with 2.98 in favor.

Mr. Ed Tatum, ODEC, and Mr. Dave Scarpignato, Calpine, seconded proposed an alternate motion to include the EMUSTF endorsed motion changing the requirement for eligibility for LOC payments from two hour minimum run time to five hour minimum run time (the previously proposed ODEC friendly amendment), clarifying the term “temporally contiguous” and changing “for a reliability reason” to “due to a transmission constraint or other reliability issue” in section (f-1). Following discussion this proposed alternative motion was withdrawn.

Mr. Louis Slade, Dominion, proposed seconded an alternate motion to include the EMUSTF endorsed motion and address excluding startup cost payment when a qualified unit ran during its Day Ahead committed period, and clarify the term “temporally contiguous” (the Dominion and PJM previously proposed friendly amendments). Following discussion this proposed alternative motion was withdrawn.

Ms. Bruce, (PJM ICC) proposed and Ms. Ruth Ann Price, Delaware Division of the Consumer Advocate seconded an alternate motion to include the EMUSTF endorsed motion including the Dominion and PJM proposed friendly amendments, and revert the proposed eligibility requirement to the status quo (eliminating any changes to paragraph (f-1)). Following discussion the alternate motion **passed** with 4.59 in favor.

4. Residential DR Measurement & Verification (9:40-9:50)

Mr. Pete Langbein discussed PJM's intention to file in late April or May 2015 the Residential Demand Response Measurement and Verification Tariff revisions which were endorsed at the January 22, 2015 Members Committee meeting. Since these revisions will 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. Following discussion, the committee **endorsed** by acclamation with one objection and one abstention the proposed revision to include an additional Delivery Year to the transition plan.

5. Tariff Harmonization Sr. Task Force (9:50-10:00)

Ms. Janell Fabiano presented the draft charter for the Tariff Harmonization Sr. Task Force. Ms. Fabiano discussed proposed friendly amendments to change the second key work activity to read “Identify and propose resolutions to inconsistencies and ambiguities in the governing documents and manual 35” and to add a new key work activity to “Report to the MRC for guidance if any proposed changes to definitions or other language in PJM governing documents cannot be agreed to within the THSTF”. Following discussion, the committee **endorsed** the proposed charter by acclamation with no objections or abstentions.

6. Generator Offer Flexibility (10:00-10:15)

Mr. Dave Pratzon, representing Calpine, presented an updated proposed problem statement and issue charge regarding the need for more flexible market offers for physical generating resources. The issue

will be assigned to a new senior task force. Following discussion, the committee **approved** the proposed problem statement and issue charge by acclamation with two objections and no abstentions.

7. Regional Planning Process Senior Task Force (RPPTF) (10:15-10:25)

Mr. Barrett discussed the status of the RPPTF's activities regarding the Multi-Driver Approach (MDA), including a recommendation that the MRC direct the Planning Committee to develop Manual revisions to incorporate guidelines for consideration of generation interconnection projects under the MDA, and to place the RPPTF on hiatus pending future FERC action regarding Order No. 1000. Following discussion, the committee **approved** by acclamation with no objections and one abstention direct the Planning Committee to develop Manual revisions to incorporate guidelines for consideration of generation interconnection projects under the MDA, and to place the RPPTF on hiatus pending future FERC action regarding Order No. 1000.

First Readings (10:25-10:55)

8. Timing of Day Ahead Market (10:25-10:40)

Mr. Keech presented a proposed problem statement and issue charge related to the timing of Day Ahead market. The committee will be asked to approve the proposed problem statement and issue charge at its next meeting. At stakeholder request initial educational special sessions of the MRC will be held prior to the next MRC meeting.

9. PJM Manuals (10:40-10:55)

- A. Mr. Glen Boyle reviewed changes to Manual 36: System Restoration. The Committee will be asked to endorse these proposed revisions at its next meeting.
- B. Ms. Nancy Huang reviewed changes to Manual 03: Transmission Operations. The Committee will be asked to endorse these proposed revisions at its next meeting.
- C. Ms. Nancy Huang reviewed changes to Manual 38: Operations Planning. The Committee will be asked to endorse these proposed revisions at its next meeting.

Interim Fee for Virtual Transactions (INCs/DECs and UTCs)

Ms. Noha Sidhom, Inertia Power, discussed a proposal to impose an interim fixed fee for INCs/DECs and UTCs. The fee would be in place until Energy Market Uplift Senior Task Force finalizes a proposal and FERC approves that proposal. The committee will be asked to approve the proposal at its next meeting.

Informational Items (10:55-12:05)

10. Capacity Performance (10:55-11:25)

Mr. Andy Ott responded to stakeholder questions regarding PJM's response to the recent FERC deficiency notice related to Capacity Performance and plans for the upcoming Base Residual Auction.

11. Manual 39: Nuclear Plant Interface Coordination (11:25-11:35)

Mr. Mike Bryson discussed recent administrative revisions to Manual 39.

12. PJM-MISO Joint Operating Agreement (11:35-11:45)

Mr. Stu Bresler discussed a pending revision to the PJM-MISO Joint Operating Agreement regarding enhancements to the requirements to addition of flowgates being added to the market-to-market coordination list.

Future Agenda Items (11:45)

No new future agenda items were identified.

Future Meeting Dates

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| May 28, 2015 | 9:00 a.m. | Wilmington, DE |
| June 25, 2015 | 9:00 a.m. | Wilmington, DE |
| July 23, 2015 | 9:00 a.m. | Wilmington, DE |
| August 27, 2015 | 9:00 a.m. | Wilmington, DE |
| September 24, 2015 | 9:00 a.m. | Wilmington, DE |
| 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 |

In Attendance (Chair/Secretary):

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

In Attendance (Voting Participants):

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| Barker, Jason | Exelon Business Services Company, LLC | Transmission Owner |
| Benchek, Jim | FirstEnergy Solutions Corp. | Transmission Owner |
| Bleiweis, Bruce | DC Energy LLC | Other Supplier |
| Brodbeck, John | Potomac Electric Power Company | Electric Distributor |
| Bruce, Susan | Rep.'g Linde LLC | End User Customer |
| Bruce, Susan | Rep.'g Letterkenny Industrial Development Authority | Electric Distributor |
| 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 Praxair, Inc. | End User Customer |
| Bruce, Susan | Rep.'g Kimberly-Clark Corporation | Generation Owner |
| Bruce, Susan | Rep.'g Industrial Energy Users-Ohio | Other Supplier |
| 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 |



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| 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 |
| Campbell, Bruce | Rep.'g EnergyConnect, Inc. | Other Supplier |
| Campbell, Bruce | Rep.'g Mid-Atlantic Power Partners | Other Supplier |
| Carrier, Ron | Direct Energy Business, LLC | Other Supplier |
| Citrolo, John | Public Service Electric & Gas Company | Transmission Owner |
| Dugan, Chuck | East Kentucky Power Cooperative, Inc. | Transmission Owner |
| Etnoyer, Scott | MEG Generating Company, LLC | 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 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 |
| Fuess, Jay | Rep.'g PBF Power Marketing LLC | Generation Owner |
| Fuess, Jay | Rep.'g Energy Consulting Services LLC | Other Supplier |
| Fuess, Jay | Rep.'g Kuehne Chemical Company, Inc. | Other Supplier |
| Fuess, Jay | Rep.'g Icetec.com, Inc. | Other Supplier |
| Greening, Michele | PPL Electric Utilities Corp. dba PPL Utilities (LSE) | Transmission Owner |
| Griffiths, Dan | Rep.'g Indiana Office of Utility Consumer Counsel | End User Customer |
| Griffiths, Dan | Rep.'g Office of the Ohio Consumers' Counsel | End User Customer |
| Griffiths, Dan | Rep.'g New Jersey Div. of the Ratepayer Advocate | End User Customer |
| Griffiths, Dan | Rep.'g Pennsylvania Office of Consumer Advocate | End User Customer |
| Griffiths, Dan | Rep.'g Division of the Public Advocate of State of Delaware | End User Customer |
| Griffiths, Dan | Rep.'g Maryland Office of Peoples Counsel | End User Customer |
| Griffiths, Dan | Rep.'g West Virginia Consumer Advocate Division | End User Customer |
| Hastings, David | Rep.'g Twin Cities Power, LLC | Other Supplier |
| Hastings, David | Rep.'g SESCO Enterprises LLC | Other Supplier |
| Hastings, David | Rep.'g Mercuria Energy America, Inc. | Other Supplier |
| Hastings, David | Rep.'g Solios Power LLC | Other Supplier |
| Hastings, David | Rep.'g Saracen Energy East LP | Other Supplier |
| Hastings, David | Rep.'g Northstar Trading Ltd. | 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 |
| Isabell, Sean | KASS Commodities, LLC | Other Supplier |
| 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 |

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| 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 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 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 |
| 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 |
| Ma, Alex | Invenergy, LLC | Generation Owner |
| Meier, Mariko | EnerNOC, Inc. | Other Supplier |
| Melnyk, Markian | Atlantic Grid Operations A, LLC | Other Supplier |
| Merola, Becky | Noble Americas Gas & Power Corp. | Other Supplier |
| Norton, Chris | American Municipal Power, Inc. | Electric Distributor |
| Pakela, Greg | DTE Energy Trading, Inc. | Other Supplier |
| Peoples, John | Duquesne Light Company | Transmission Owner |

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| Powell, Delbert | Pure Energy, Inc. | Other Supplier |
| Pratzon, David | Rep.'g Dynegy Marketing & Trade, LLC | Generation 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 |
| Riding, MQ | Essential Power Rock Springs, LLC | Transmission Owner |
| Rivera, Diana | Rock Island Clean Line LLC | Other Supplier |
| 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 Achieving Equilibrium LLC | Other Supplier |
| 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 |
| Scarp, David | Calpine Energy Services, L.P. | Generation Owner |
| Scoglietti, Barbara | Tangent Energy Solutions, Inc. | Other Supplier |
| Slade, Louis | Virginia Electric & Power Company | Transmission Owner |
| Smith, Rusty | Solea Energy, LLC | Other Supplier |
| Stewart, Travis | Rep.'g York County Solid Waste and Refuse Authority | Generation Owner |
| Stewart, Travis | Rep.'g NextEra Energy Power Marketing, LLC | Generation Owner |
| Stewart, Travis | Rep.'g RC Cape May Holdings, LLC | Generation Owner |
| Stewart, Travis | Rep.'g Covanta Energy Group, Inc. | Generation Owner |
| Stewart, Travis | Rep.'g Jersey Green Energy 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):

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| Ainspan, Malcolm | Energy Curtailment Specialists, Inc. | Other Supplier |
| Allen, Wesley | Red Wolf Energy Trading, LLC | Other Supplier |
| Arcaro, David | Morgan Stanley Capital Group, Inc. | Other Supplier |
| Bainbridge, Thomas | FirstEnergy Solutions Corporation | Transmission Owner |
| Bearden, Joel | Cargill Power Markets LLC | Other Supplier |
| Bleiweis, Bruce | DC Energy, L.L.C. | Other Supplier |
| Bloom, David | Baltimore Gas and Electric Company | Transmission Owner |
| Borgatti, Michael | Jersey Green Energy LLC | Other Supplier |
| Brownell, Stanley | SJC LLC | Not Applicable |
| Canter, David | AEP | Transmission Owner |



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| Carmean, Gregory | OPSI | Not Applicable |
| Carro, Dan | Dominion Virginia Power | Not Applicable |
| Cox, Jason | Dynegy Power Marketing, Inc. | Generation Owner |
| Coyle, William | Dominion Virginia Power | Not Applicable |
| Czigler, Frank | PSEG | Transmission Owner |
| Dailey, Mike | Northern Virginia Electric Cooperative (NOVEC) | Electric Distributor |
| Davis, Connie | Cleveland Public Power | Electric Distributor |
| DeGeeter, Ralph | Public Service Commission of Maryland | Not Applicable |
| DeLosa, Joseph | State of Delaware Public Service Commission | Not Applicable |
| Denavas, Joe | Potomac Electric Power Company | Electric Distributor |
| Dessenger, Harry | Customized Energy Solutions, Ltd.* | Not Applicable |
| Ellison, Alan | Grays Ferry Cogeneration Partnership | Generation Owner |
| Engle, Andrew | XO Energy MA, LP | Other Supplier |
| Ergovic, Ivana | Nexus Capital Partners LLC | Not Applicable |
| Fallon, Kevin | SIR Capital Management, L.P. | Not Applicable |
| Farber, John | Delaware Public Service Commission | Not Applicable |
| Farrell, Nick | Northern States Power Company | Other Supplier |
| Fernandes, John | Renewable Energy Systems Americas | Not Applicable |
| Filomena, Guy | Customized Energy Solutions, Ltd.* | Not Applicable |
| Fort, Jim | Energy Authority, Inc. (The) | Other Supplier |
| Fukuda, Shin | Carlson Capital, L.P. | Not Applicable |
| Gebolys, Debbie | Public Utilities Commission of Ohio | Not Applicable |
| Gilani, Rehan | ConEdison Energy, Inc. | Other Supplier |
| Glucoft, Evan | JMB Capital Partners, L.P. | Not Applicable |
| Grant, Annalee | SNL Energy | Not Applicable |
| Hall, Walter | Maryland Public Service Commission | Not Applicable |
| Hanson, Mark | Illinois Commerce Commission | Not Applicable |
| Haynes, Greg | Energy Authority, Inc. (The) | Other Supplier |
| Heidorn, Richard | RTO Insider | Not Applicable |
| Herel, Suzanne | RTO Insider | Not Applicable |
| Hitch, George | Dominion Virginia Power | Not Applicable |
| Hull, James | Exion Energy, Inc. | Other Supplier |
| Huntoon, Stephen | Energy Counsel, LLP | Not Applicable |
| Hurwich, Mark | Elliott Bay Energy Trading, LLC | Other Supplier |
| Janicki, Diane | Boston Energy Trading and Marketing LLC | Generation Owner |
| Jardot, Gina | Essential Power, LLC | Generation Owner |
| Judson, Judith | Customized Energy Solutions | Not Applicable |
| Kerecman, Joseph | Calpine Energy Services, L.P. | Generation Owner |
| Kerman, Feliks | Visium Asset Management | Not Applicable |
| Kingston, Amber | Aces Power Marketing | Not Applicable |

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| Knight, Chris | Argus Media | Not Applicable |
| Kohli, John | Franklin Templeton Investments | Not Applicable |
| Kopon, Owen | Steel Producers | Not Applicable |
| Kramer, Neil | XO Energy MA, LP | Other Supplier |
| Lacy, Catharine | Dominion Resources | Not Applicable |
| Laura, DiNicola | FirstEnergy Solutions Corporation | Transmission Owner |
| Lewis, Cara | Public Service Electric & Gas Company | Transmission Owner |
| Liang-Nicol, Cecilia | FirstEnergy Solutions Corporation | Transmission Owner |
| Ligas, Matt | Vitol Inc. | Other Supplier |
| Logan, Sharon | The Federal Energy Regulatory Commission | Not Applicable |
| Logsdon, Josh | Exion Energy, Inc. | Other Supplier |
| Logsdon, Sebastian | Exion Energy, Inc. | Other Supplier |
| Loudenburg, Zack | Aces Power Marketing | Not Applicable |
| Luna, Joel | Monitoring Analytics | Not Applicable |
| Mahoney, Julie | New York State Electric & Gas Corporation | Other Supplier |
| Manning, James | North Carolina Electric Membership Corporation | Electric Distributor |
| Martin, Valerie | The Federal Energy Regulatory Commission | Not Applicable |
| Marton, Dave | FirstEnergy Solutions Corporation | Transmission Owner |
| McAdams, Julius | Red Wolf Energy Trading, LLC | Other Supplier |
| McAlister, Lisa | American Municipal Power, Inc. | Generation Owner |
| McGuirk, Brian | Direct Energy Business, LLC | Other Supplier |
| Mcrae, Todd | Dynasty Power | Other Supplier |
| Metzler, Jacob | Castleton Commodities Merchant Trading L.P. | Other Supplier |
| Miller, John | Commonwealth Edison Company | Transmission Owner |
| Mok, Alan | Duke Energy Business Services LLC | Generation Owner |
| Moll, Dan | Surveyor Capital | Not Applicable |
| Nowell, Cynthia | Pepco Holdings Incorporated | Not Applicable |
| Ondayko, Brock | AEP | Transmission Owner |
| Orlando, Jim | Northern Indiana Public Service Company | Other Supplier |
| Owens, Christina | ACES | Not Applicable |
| Owens, George | Downes Associates, Inc. | Other Supplier |
| Ozkan, Deniz | Atlantic Grid Operations A, LLC | Other Supplier |
| Patten, Kevin | American Electric Power | Transmission Owner |
| Patterson, Paul | Glenrock Associates | Not Applicable |
| Peebles, Andy | Saracen Energy East LP | Other Supplier |
| Powell, Delbert | Pure Energy, Inc. | Other Supplier |
| Price, Ruth | Delaware Public Advocates Office | Not Applicable |
| Rajan, Abhijit | Dominion Resources | Not Applicable |
| Reiss, Greg | Millenium Partners | Not Applicable |
| Richardson, Frank | PPL | Transmission Owner |

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| Robins, Pip | EMC Development Company, Inc. | Other Supplier |
| Ruberto, Jay | FirstEnergy Solutions Corporation | Transmission Owner |
| Saini, Ishwar | Macquarie Energy LLC | Other Supplier |
| Sasser, Jonathan | Customized Energy Solutions | Not Applicable |
| Schneider, Jonathan | FirstEnergy Solutions Corporation | Transmission Owner |
| Schum, Alice | Illinois Municipal Electric Agency | Electric Distributor |
| Schuster, Brad | XO Energy MA, LP | Other Supplier |
| Scott, Chance | Northern States Power Company | Other Supplier |
| Seelaus, Andrew | EMC Development Company, Inc. | Other Supplier |
| Seelaus, Tim | EMC Development Company, Inc. | Other Supplier |
| Senchak, Scott | Cannon Asset Management LLC | Not Applicable |
| Shanker, Roy | Hydro Quebec | Not Applicable |
| Sheehan, Kelli | XO Energy MA, LP | Other Supplier |
| Sheehan, Shawn | XO Energy MA, LP | Other Supplier |
| Shelton, Chris | Millenium Power, Inc | Not Applicable |
| Sidhom, Noha | Inertia Power I, LLC | Other Supplier |
| Skucas, Ruta | Pierce Atwood LLP | Not Applicable |
| Smyth, Dermot | ConEdison Energy Inc. | Other Supplier |
| Sock, Bryan | PSEG Energy Resources and Trade LLC | Transmission Owner |
| Stadelmeyer, Rebecca | Exelon Business Services Company, LLC | Transmission Owner |
| Stanley, Keith | Wolfe Research, LLC | Not Applicable |
| Staska, Stephanie | Twin Cities Power, LLC | Other Supplier |
| Sunseri, Patrick | Twin Cities Power, LLC | Other Supplier |
| Thomas-Friel, Felicia | Energy Council of New Jersey | Not Applicable |
| Topping, Elizabeth | The Federal Energy Regulatory Commission | Not Applicable |
| Trayers, Barry | Citigroup Energy Inc. | Other Supplier |
| 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 | PECO Energy Company | Transmission Owner |
| Wellborn, Samir | The Federal Energy Regulatory Commission | Not Applicable |
| Wernert, Jeff | Hoosier Energy REC, Inc. | Not Applicable |
| Wilhite, Chad | FirstEnergy Solutions Corporation | Transmission Owner |
| Wilson, James | Wilson Energy Economics | Not Applicable |
| Wisersky, Megan | Madison Gas & Electric Company | Other Supplier |
| Wood, Gordon | ETC Endure Energy, LLC | Other Supplier |
| York, Katherine | Tennessee Valley Authority (The) | Other Supplier |

In Attendance (PJM Participants):

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| Barrett, Francis | PJM Interconnection, LLC | Not Applicable |
| Bastian, Jeff | PJM Interconnection, LLC | Not Applicable |
| Boston, Terry | PJM Interconnection, LLC | Not Applicable |
| Boyle, Glen | 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 |
| Brown, Richard | PJM Interconnection, LLC | Not Applicable |
| Bruno, Patrick | 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 |
| Daugherty, Suzanne | PJM Interconnection, LLC | Not Applicable |
| Dirani, Rami | PJM Interconnection, LLC | Not Applicable |
| Driscoll, Mary Ellen | PJM Interconnection, LLC | Not Applicable |
| Egan, Amanda | PJM Interconnection, LLC | Not Applicable |
| Ennis, Brad | PJM Interconnection, LLC | Not Applicable |
| Fabiano, Janell | PJM Interconnection, LLC | Not Applicable |
| Falco, Christine | PJM Interconnection, LLC | Not Applicable |
| Fernandez, Ray | PJM Interconnection, LLC | Not Applicable |
| Ford, Adrien | PJM Interconnection, LLC | Not Applicable |
| Foster, Denise | PJM Interconnection, LLC | Not Applicable |
| Foster, Neel | PJM Board of Managers | Not Applicable |
| Franks, Chris | PJM Interconnection, LLC | Not Applicable |
| Hartung, Dean | PJM Interconnection, LLC | Not Applicable |
| Herling, Steven | PJM Interconnection, LLC | Not Applicable |
| Horowitz, Shira | PJM Interconnection, LLC | Not Applicable |
| Hsia, Eric | PJM Interconnection, LLC | Not Applicable |
| Huang, Nancy | PJM Interconnection, LLC | Not Applicable |
| Hugee, Jacquelyn | PJM Interconnection, LLC | Not Applicable |
| Keech, Adam | PJM Interconnection, LLC | Not Applicable |
| Keech, Jason | PJM Interconnection, LLC | Not Applicable |
| Keech, Todd | PJM Interconnection, LLC | Not Applicable |
| Kirby, James | PJM Interconnection, LLC | Not Applicable |
| Koza, Frank | PJM Interconnection, LLC | Not Applicable |
| Langbein, Pete | PJM Interconnection, LLC | Not Applicable |
| LaRocque, Matthew | PJM Interconnection, LLC | Not Applicable |
| Lee, Lori Murphy | PJM Interconnection, LLC | Not Applicable |
| Manion, Evelyn | PJM Interconnection, LLC | Not Applicable |

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| McGlynn, Paul | PJM Interconnection, LLC | Not Applicable |
| McLaverty, Megan | PJM Interconnection, LLC | Not Applicable |
| McLeod, Ian | 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 |
| Park, Ginny | PJM Interconnection, LLC | Not Applicable |
| Patel, Keyur | PJM Interconnection, LLC | Not Applicable |
| Perera, Asanga | PJM Interconnection, LLC | Not Applicable |
| Schneider, Howard | PJM Board of Managers | Not Applicable |
| Schweizer, David | PJM Interconnection, LLC | Not Applicable |
| Sechrist, Erin | PJM Interconnection, LLC | Not Applicable |
| Shparber, Steve | PJM Interconnection, LLC | Not Applicable |
| Slusser, Jeff | PJM Interconnection, LLC | Not Applicable |
| Snyder, Sue | PJM Interconnection, LLC | Not Applicable |
| Souder, Dave | PJM Interconnection, LLC | Not Applicable |
| Souder, Michelle | PJM Interconnection, LLC | Not Applicable |
| Swimm, Nora C. | PJM Interconnection, LLC | Not Applicable |
| Tribulski, Jennifer | PJM Interconnection, LLC | Not Applicable |
| Ward, Mike | PJM Interconnection, LLC | Not Applicable |
| Warshel, Kimberly | PJM Interconnection, LLC | Not Applicable |

Author: D. A. Anders