

**Markets and Reliability Committee**  
**The Chase Center on the Riverfront, Wilmington, DE**  
**October 22, 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.

## Information (9:05-9:20)

### 1. Virtual Transactions in the PJM Energy Markets (9:05-9:20)

Mr. Adam Keech provided follow up on the discussion initiated at the October 19, 2015 Members Committee Webinar regarding the whitepaper entitled Virtual Transactions in the PJM Energy Markets recently published by PJM staff.

## Endorsements/Approvals (9:20-10:55)

### 2. Draft Minutes (9:20-9:25)

Minutes of the October 1, 2015 and October 16, 2015 meetings of the Markets and Reliability Committee (MRC) meeting were **approved** by acclamation with no objections or abstentions.

### 3. PJM Manuals (9:25-9:35)

A. Mr. Mark Sims presented proposed Manual 14B: PJM Regional Transmission Planning Process revisions regarding Winter Reliability Criteria in Planning. Following discussion, the committee **endorsed** the proposed manual revisions by acclamation with no objections and one abstention.

### 4. Tier 1 Compensation (9:35-9:55)

Mr. Adam Keech reviewed draft manual and tariff revisions associated with the Tier 1 Compensation proposal. Following discussion, the main motion **failed** in a sector-weighted vote with 2.72 in favor. Mr. Steve Lieberman, ODEC, proposed and Mr. Jim Jablonski, Public Power Association of New Jersey, seconded the IMM package as an alternate proposal. Following discussion the alternate motion **failed** in a sector-weighted vote with 2.87 in favor. No further action was taken, and current rules remain in effect.

### 5. Regulation Performance Impacts (9:55-10:10)

Mr. Eric Hsia presented the proposed resolution to operational regulation performance issues. Following discussion, the committee **endorsed** the associated revisions to Manual 11: Energy & Ancillary Services Markets Operations by acclamation with no objections or abstentions.

6. Regulation Market Issues Sr. Task Force (RMISTF) (10:10-10:20)

Mr. Dave Anders discussed the draft charter for the RMISTF. Mr. Jason Barker discussed the unique characteristics of hydro resources, and expressed expectation that they would be considered by the Task Force. Mr. Anders and Dr. Howard Haas both indicated that the identified Key Work Activities currently require such consideration. Following discussion the committee **approved** the draft charter by acclamation with no objections or abstentions.

7. Incremental Auction Tariff Clean Up (10:20-10:30)

Ms. Jen Tribulski presented a Tariff revision for the 2016/2017 Third Incremental Auction concerning PJM's sale or purchase of capacity necessitated by the Capacity Performance Transition Auctions. Following discussion the committee **endorsed** the proposed Tariff revisions in a sector-weighted vote with 4.59 in favor.

8. 2015 IRM Study Results (10:30-10:45)

Mr. Tom Falin reviewed the 2015 IRM Study Results. Following discussion the committee **endorsed** the recommended planning parameters by acclamation with five objections 19 abstentions.

9. Governing Documents Enhancement & Clarification Subcommittee (GDECS) (10:45-10:55)

Ms. Janell Fabiano presented the draft charter for the GDECS. Mr. Ed Tatum proposed a friendly amendment to change the first Key Work Activity to change "and resolve" to "and propose resolution of". There were no objections to this proposed amendment and therefore it was incorporated into the main motion. Following discussion the committee **approved** the draft charter by acclamation with no objections and two abstentions.

### First Readings (10:55-12:15)

10. Load Forecast Update (10:55-11:25)

- A. Mr. Tom Falin reviewed proposed revisions to Manual 19: Load Forecasting and Analysis regarding updates to the PJM load forecast model. The committee will be asked to endorse the proposed revisions at its next meeting.
- B. Mr. Jeff Bastian reviewed proposed revisions to Manual 18: PJM Capacity Market and Manual 18B: Energy Efficiency Measurement & Verification to accommodate EE Resources in the PJM Capacity Market when EE is reflected in the Peak Load Forecast. The committee will be asked to endorse the proposed revisions at its next meeting. Mr. Kormos noted that an additional special MRC meeting would be scheduled to continue vetting of the proposed Manual 18 and 18B revisions.

11. Governing Documents Enhancement & Clarification Subcommittee (GDECS) (11:25-11:35)

Ms. Janell Fabiano presented proposed definitional updates prepared by the GDECS. The committee will be asked to approve the proposed updates at its next meeting.

## 12. First Energy Black Oak Special Protective Scheme (SPS) Removal (11:35-11:45)

Mr. Evan Farrell and Mr. Larre Hozempa, First Energy discussed removal of the Black Oak SPS.

## 13. PJM Manuals (11:45-12:15)

- A. Mr. Ryan Nice discussed proposed revisions to Manual 01: Control Center and Data Exchange Requirements regarding interpersonal communication requirements for NERC COM-001-2. The Committee will be asked to endorse these proposed revisions at its next meeting.
- B. Ms. Nicole Scott discussed proposed revisions to Manual 03: Transmission Operations regarding the bi-annual review to update operating procedures. The Committee will be asked to endorse these proposed revisions at its next meeting.
- C. Ms. Chidiogo Ike-Egbonu discussed proposed clarifying revisions to Manual 12: Balancing Operations. The Committee will be asked to endorse these proposed revisions at its next meeting.
- D. Mr. Eric Hsia discussed proposed Manual 13: Emergency Operations revisions regarding updates to Day Ahead Scheduling Reserve and additional updates. The Committee will be asked to endorse these proposed revisions at its next meeting.
- E. Mr. McGlynn discussed proposed revisions to Manual 14B: PJM Regional Transmission Planning Process regarding the considering Energy market Uplift in the development of candidate RTEP projects. The Committee will be asked to endorse these proposed revisions at its next meeting.
- F. Mr. Michael Herman presented proposed revisions to Manual 14B: PJM Regional Transmission Planning Process regarding NERC TPL-001-4 standards. The Committee will be asked to endorse these proposed revisions at its next meeting.

## Future Agenda Items (12:15)

No new future agenda items were identified.

## Future Meeting Dates

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

## 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
Benchek, Jim	FirstEnergy Solutions Corp.	Transmission Owner

Bernier, Luc	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Birnel, William	Westar Energy, Inc.	Other Supplier
Borgatti, Michael	Rep'g Northampton Generating Company L.P.	Generation Owner
Borgatti, Michael	Rep'g Covanta Energy Group, Inc.	Generation Owner
Borgatti, Michael	Rep'g RC Cape May Holdings, LLC	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 York County Solid Waste and Refuse Authority	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
Cox, Jason	Dynegy Marketing & Trade, LLC	Generation Owner
Czigler, Frank	Public Service Electric & Gas Company	Transmission Owner
Day, Jason	Oceanside Power LLC	Other Supplier
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
Fernandes, John	RES America Developments, Inc.	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 Kuehne Chemical Company, Inc.	Other Supplier
Fuess, Jay	Rep'g Icetec.com, Inc.	Other Supplier
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 Energy Consulting Services LLC	Other Supplier

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 Maryland Office of Peoples Counsel	End User Customer
Griffiths, Dan	Rep'g Division of the Public Advocate of State of Delaware	End User Customer
Griffiths, Dan	Rep'g Virginia Division of Consumer Counsel	End User Customer
Griffiths, Dan	Rep'g Office of the Ohio Consumers' Counsel	End User Customer
Griffiths, Dan	Rep'g Indiana Office of Utility Consumer Counsel	End User Customer
Griffiths, Dan	Rep'g Office of the Attorney General, Kentucky	End User Customer
Griffiths, Dan	Rep'g Ofc... People's Counsel ... District of Columbia	End User Customer
Griffiths, Dan	Rep'g West Virginia Consumer Advocate Division	End User Customer
Griffiths, Dan	Rep'g Pennsylvania Office of Consumer Advocate	End User Customer
Griffiths, Dan	Rep'g New Jersey Div. of the Ratepayer Advocate	End User Customer
Griffiths, Dan	Rep'g Illinois Citizens Utility Board	End User Customer
Guerry, Katie	Rep'g EnerNOC, Inc.	Other Supplier
Guerry, Katie	Rep'g Direct Energy Business, LLC	Other Supplier
Guistwhite, Jeff	EnergyConnect, Inc.	Other Supplier
Hendrix, Chris	Texas Retail Energy, 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 Borough of Madison, New Jersey	Electric Distributor
Jablonski, James	Rep'g Borough of Butler, Butler Electric Division	Electric Distributor
Jablonski, James	Rep'g Borough of Pemberton	Electric Distributor
Jablonski, James	Rep'g Borough of Lavallette, New Jersey	Electric Distributor
Jablonski, James	Rep'g Vineland Municipal Electric Utility	Electric Distributor
Jablonski, James	Rep'g Borough of Park Ridge, New Jersey	Electric Distributor
Jablonski, James	Rep'g Borough of Milltown	Electric Distributor
Jablonski, James	Rep'g Borough of South River, New Jersey	Electric Distributor
Jablonski, James	Rep'g Borough of Seaside Heights, New Jersey	Electric Distributor
Johnson, Carl	Rep'g Allegheny Electric Cooperative, Inc.	Electric Distributor
Johnson, Carl	Rep'g Galt Power Inc.	Other Supplier
Johnson, Carl	Rep'g Old Dominion Electric Cooperative	Electric Distributor
Johnson, Carl	Rep'g Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson, Carl	Rep'g Central Virginia Electric Cooperative	Electric Distributor
Johnson, Carl	Rep'g Borough of Chambersburg (DTEET)	Electric Distributor
Johnson, Carl	Rep'g Delaware Municipal Electric Corporation	Electric Distributor

Johnson, Carl	Rep'g City of Dover, Delaware	Electric Distributor
Johnson, Carl	Rep'g Easton Utilities Commission	Electric Distributor
Johnson, Carl	Rep'g North Carolina Electric Membership Corporation	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
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
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
Peoples, John	Duquesne Light Company	Transmission Owner
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
Rohrbach, John	Rep'g Wabash Valley Power Association, Inc.	Electric Distributor
Rohrbach, John	Rep'g Southern Maryland Electric Cooperative	Electric Distributor
Rushing, Nathan	CPV Maryland, LLC	Generation Owner
Rutigliano, Tom	Rep'g Enerwise Global Technologies, Inc.	Other Supplier
Rutigliano, Tom	Rep'g EMC Development Company, Inc.	Other Supplier
Rutigliano, Tom	Rep'g Demansys Energy, LLC	Other Supplier

Rutigliano, Tom	Rep'g Achieving Equilibrium LLC	Other Supplier
Scarp, David	Calpine Energy Services, L.P.	Generation Owner
Sitaraman, Nicole	Ofc... People's Counsel ... District of Columbia	End User Customer
Skucas, Ruta	Rep'g RJUMR Energy Partners Corp.	Other Supplier
Skucas, Ruta	Rep'g Property Endeavors, LLC	End User Customer
Skucas, Ruta	Rep'g Solea Energy, LLC	Other Supplier
Skucas, Ruta	Rep'g Falcon Energy, LLC	Other Supplier
Skucas, Ruta	Rep'g Greene Energy, LLC	Other Supplier
Skucas, Ruta	Rep'g Dufossat Capital I, LLC	Other Supplier
Skucas, Ruta	Rep'g Velocity American Energy Master I, LP	Other Supplier
Skucas, Ruta	Rep'g Yasmin Partners LLC	Other Supplier
Skucas, Ruta	Rep'g Liberty Hill Power LLC	Other Supplier
Skucas, Ruta	Rep'g Alphataraxia Palladium LLC	Other Supplier
Skucas, Ruta	Rep'g Monterey MA, LLC	Other Supplier
Skucas, Ruta	Rep'g Great Bay Energy I, LLC	Other Supplier
Skucas, Ruta	Rep'g Hexis Energy Trading, LLC	Other Supplier
Skucas, Ruta	Rep'g Apple Group LLC	Other Supplier
Skucas, Ruta	Rep'g Red Wolf Energy Trading, LLC	Other Supplier
Skucas, Ruta	Rep'g Dyon, LLC	Other Supplier
Skucas, Ruta	Rep'g MET MA, LLC	Other Supplier
Skucas, Ruta	Rep'g Mac Trading, Inc	Other Supplier
Skucas, Ruta	Rep'g E Minus LLC	Other Supplier
Skucas, Ruta	Rep'g Pure Energy, Inc.	Other Supplier
Skucas, Ruta	Rep'g Southard Energy Partners LLC	Other Supplier
Williams, Michael	Black Oak Energy, LLC	Other Supplier
Yu, Joel	Rockland Electric Company	Transmission Owner

### In Attendance (Non-Voting Participants):

Ainspan, Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Bainbridge, Thomas	FirstEnergy Solutions Corporation	Transmission Owner
Blair, Tom	Monitoring Analytics	Not Applicable
Bloom, David	Baltimore Gas and Electric Company	Transmission Owner
Chen, Jennifer	NRDC/FERC Project	Not Applicable
Chiulli, Peter	NextEra Energy Power Marketing, LLC	Generation Owner
Christian, Adam	Red Wolf Energy Trading, LLC	Other Supplier
Coffman-Smith, Andrew	SNL Energy	Not Applicable
D'Alessandris, Lou	FirstEnergy Solutions Corporation	Transmission Owner

DeLosa, Joseph	State of Delaware Public Service Commission	Not Applicable
Demuynck, Rene	New Jersey Board of Public Utilities	Not Applicable
Dickson, Douglas	New Jersey Board of Public Utilities	Not Applicable
Edmondson, Lucy	North Carolina Utilities Commission	Not Applicable
Engle, Andrew	XO Energy MA, LP	Other Supplier
Everngam, Scott	The Federal Energy Regulatory Commission	Not Applicable
Farber, John	Delaware Public Service Commission	Not Applicable
Feierabend, Rick	Dominion Virginia Power	Not Applicable
Ferrell, Evan	FirstEnergy Solutions Corporation	Transmission Owner
Filomena, Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Fletcher, Blake	ETC Endure Energy, LLC	Other Supplier
Fort, Jim	Energy Authority, Inc. (The)	Other Supplier
Gebolys, Debbie	Public Utilities Commission of Ohio	Not Applicable
Gebre, Gebre	Lantar Energy LLC	Other Supplier
Giles, Steven	Allegheny Electric Cooperative, Inc.	Electric Distributor
Goode, Cory	Yes Energy LLC	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
Hayes, Patrick	Union Electric Company d/b/a Ameren Missouri	Other Supplier
Hayik, Seth	Monitoring Analytics, LLC	Not Applicable
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
Hozempa, Lawrence	FirstEnergy Solutions Corporation	Transmission Owner
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
Johnson, Chris	DC Energy	Other Supplier
Jones, Edward	Monterey Enterprises, LLC	Not Applicable
Kaczanowski, Marek	Baltimore Gas and Electric Company	Transmission Owner
Kohl, Lauren	Monterey Enterprises, LLC	Not Applicable
Kopan, Owen	Steel Producers	Not Applicable
Kueker, Daniel	J-Power USA	Not Applicable
Kuzma, Jason	Perkins Coie	Not Applicable



Lacy, Catharine	Dominion Resources	Not Applicable
Leimann, John	Dominion Virginia Power	Not Applicable
Leonard, Ryan	Iberdrola Renewables, LLC	
Logan, Sharon	The Federal Energy Regulatory Commission	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
Marton, Dave	FirstEnergy Solutions Corporation	Transmission Owner
Marzewski, Skyler	Monitoring Analytics, LLC	Not Applicable
McAdams, Julius	Red Wolf Energy Trading, LLC	Other Supplier
McAlister, Lisa	American Municipal Power, Inc.	Generation Owner
McLawhorn, James	North Carolina Utilities Commission	Not Applicable
Mcrae, Todd	Dynasty Power	Other Supplier
Metzler, Jakob	Castleton Commodities Merchant Trading L.P.	Other Supplier
Mok, Alan	Duke Energy Business Services LLC	Transmission Owner
O'Connor, Siobhan	The Energy Authority	Other Supplier
Ondayko, Brock	AEP	Transmission Owner
Orlando, Jim	Northern Indiana Public Service Company	Other Supplier
Ozkan, Deniz	Atlantic Grid Operations A, LLC	Other Supplier
Peters, James	ITC Mid-Atlantic Development LLC	Other Supplier
Pratzon, David	GT Power Group	Not Applicable
Presthus, Tom	American Electric Power	Transmission Owner
Price, Mark	DC Energy	Other Supplier
Reeping, Robert	FirstEnergy Solutions Corporation	Transmission Owner
Reuter, Rob	Pepco Holdings Incorporated	Not Applicable
Ricks, Michael	Customized Energy Solutions	Not Applicable
Robson, Matt	SESCO Enterprises LLC	Other Supplier
Russo, Michael	Monitoring Analytics, LLC	Not Applicable
Ryan, Patrick	Southard Energy Partners LLC	Other Supplier
Sanada, Cristy	New York ISO	Not Applicable
Sasser, Jonathan	Customized Energy Solutions	Not Applicable
Schneider, Jonathan	FirstEnergy Solutions Corporation	Transmission Owner
Schum, Alice	Illinois Municipal Electric Agency	Electric Distributor
Seelaus, Andrew	EMC Development Company, Inc.	Other Supplier
Shanker, Roy	Hydro Quebec	Not Applicable

Sillin, John	The Federal Energy Regulatory Commission	Not Applicable
Sprouse, Donald	Superior Appalachian Pipeline	Not Applicable
Staska, Stephanie	Apollo Energy Services	Not Applicable
Stubbe, Judy	Duke Energy Business Services, Inc.	Generation Owner
Tatum, Ed	Old Dominion Electric Cooperative	Electric Distributor
Taylor, Geoff	Falcon Energy, LLC	Other Supplier
Villatoro, Karen	The Federal Energy Regulatory Commission	Not Applicable
Vogel, Anne	American Electric Power	Transmission Owner
Walker, Jacquie	Yes Energy LLC	Not Applicable
Walker, Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Wang, Tingting	AEP	Transmission Owner
Weaver, David	Exelon	Transmission Owner
Webster, John	Icetek.com, Inc.	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
Wisersky, Megan	Madison Gas & Electric Company	Other Supplier
Wood, Gordon	ETC Endure Energy, LLC	Other Supplier
Xenopoulos, Damon	Stone, Mattheis, Xenopoulos, & Brew, PC	Not Applicable
York, Katherine	Tennessee Valley Authority (The)	Other Supplier
Zhou, Yuan	Castleton Commodities Merchant Trading L.P.	Other Supplier

### In Attendance (PJM Participants):

Baker, Scott	PJM Interconnection, LLC	Not Applicable
Barrett, Francis	PJM Interconnection, LLC	Not Applicable
Bastian, Jeff	PJM Interconnection, LLC	Not Applicable
Bhavaraju, Murty	PJM Interconnection, LLC	Not Applicable
Boston, Terry	PJM Interconnection, LLC	Not Applicable
Boyle, Glen	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
Burdis, Tim	PJM Interconnection, LLC	Not Applicable
Burlew, Jim	PJM Interconnection, LLC	Not Applicable
Church, Laura	PJM Interconnection, LLC	Not Applicable

Daugherty, Suzanne	PJM Interconnection, LLC	Not Applicable
Dirani, Rami	PJM Interconnection, LLC	Not Applicable
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
Endress, Eric	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
Fan, Zhenyu	PJM Interconnection, LLC	Not Applicable
Ford, Adrien	PJM Interconnection, LLC	Not Applicable
Foster, Denise	PJM Interconnection, LLC	Not Applicable
Glazer, Craig	PJM Interconnection, LLC	Not Applicable
Gledhill, Andrew	PJM Interconnection, LLC	Not Applicable
Hauske, Thomas	PJM Interconnection, LLC	Not Applicable
Hoang, Liem	PJM Interconnection, LLC	Not Applicable
Holland, Risa	PJM Interconnection, LLC	Not Applicable
Hsia, Eric	PJM Interconnection, LLC	Not Applicable
Hugee, Jacquelyn	PJM Interconnection, LLC	Not Applicable
Ike-Egbuonu, Chidiogo	PJM Interconnection, LLC	Not Applicable
Keech, Adam	PJM Interconnection, LLC	Not Applicable
Keech, Jason	PJM Interconnection, LLC	Not Applicable
Kelley, Michael	PJM Interconnection, LLC	Not Applicable
Kinsey, Jean	PJM Board of Managers	Not Applicable
Langbein, Pete	PJM Interconnection, LLC	Not Applicable
LaRocque, Matthew	PJM Interconnection, LLC	Not Applicable
Manion, Evelyn	PJM Interconnection, LLC	Not Applicable
Martini, Danielle	PJM Interconnection, LLC	Not Applicable
McGlynn, Paul	PJM Interconnection, LLC	Not Applicable
McLaverty, Megan	PJM Interconnection, LLC	Not Applicable
McNamara, Sean	PJM Interconnection, LLC	Not Applicable
Mooney, Molly	PJM Interconnection, LLC	Not Applicable
Nice, Ryan	PJM Interconnection, LLC	Not Applicable
Ott, Andrew L.	PJM Interconnection, LLC	Not Applicable
Phillips, Darlene	PJM Interconnection, LLC	Not Applicable
Pilong, Chris	PJM Interconnection, LLC	Not Applicable

Quevada, Jason	PJM Interconnection, LLC	Not Applicable
Robinson, Charles	PJM Board of Managers	Not Applicable
Rocha, Patricio	PJM Interconnection, LLC	Not Applicable
Scott, Nicole	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
Slusser, Jeff	PJM Interconnection, LLC	Not Applicable
Snyder, Sue	PJM Interconnection, LLC	Not Applicable
Stadelmeyer, 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

Author: D. A. Anders