

**Markets and Reliability Committee**  
**The Chase Center on the Riverfront, Wilmington, DE**  
**March 31, 2016**  
**9:00 a.m. – 12:30 p.m. EPT**

## Administration

Ms. Suzanne Daugherty welcomed stakeholders to the meeting and reviewed the agenda, and Mr. Dave Anders provided the Anti-trust and Code of Conduct announcements.

## Endorsements/Approvals

### 1. Draft Minutes

Minutes of the February 25, 2016 meeting of the Markets and Reliability Committee (MRC) meeting were **approved** by acclamation with no objections or abstentions.

### 2. PJM Manuals

- A. Mr. Ryan Nice presented proposed revisions to Manual 01: Control Center and Data Exchange Requirements.
- B. Mr. Adam Keech presented proposed revisions to Manual 06: Financial Transmission Rights.
- C. Mr. Tong Zhao presented proposed revisions to Manual 11: Energy & Ancillary Services due to the implementation of Capacity Performance. Mr. Cocco proposed a friendly amendment to change the initial sentence of the third bullet of section 2.3.3 from “Generation Capacity Resources are considered Capacity Performance Resources for purposes of determining the applicable PLS for the resource if they cleared any MW as the Capacity Performance product for the Delivery Year” to “Generation Capacity Resources are considered Capacity Performance Resources for the purposes of determining the applicable PLS if they have a daily Capacity Performance obligation for any MW of Capacity Performance product for that delivery day”.
- D. Mr. Tong Zhao presented proposed revisions to Manual 11: Energy & Ancillary Services Market Operations due to Day-Ahead Market timeline changes.

Following discussion, the committee **endorsed** the proposed revisions in items 2.A, 2.B and 2.D by acclamation with no objections or abstentions. The committee **endorsed** the proposed revisions in item 2.C by acclamation with no objections and one abstention.

### 3. Confidential Market Data Postings

Mr. Tom Zadlo presented proposed revisions to the confidential market data postings provisions in Manual 33: Administrative Services for PJM Interconnection Agreement. Following discussion, the committee **endorsed** the proposed revisions by acclamation with two objections and one abstention.

#### 4. Operating Parameter Definitions

Mr. Jeff Schmitt presented main motion comprising proposed revisions to Operating Parameter definitions in Manuals 11: Energy & Ancillary Services Market Operations, 15: Cost Development Guidelines and 28: Operating Agreement Accounting. Mr. Bob O'Connell discussed the published alternate motion which modifies the main motion to amend the definition of Cold/Warm/Hot Start-up time for combined cycle units. Following discussion, the committee **endorsed** the main motion by acclamation with no objections or abstentions.

#### 5. Performance Assessment Hour Ramp Rate

Ms. Rebecca Stadelmeyer presented proposed revisions to the Tariff and Manual 18: PJM Capacity Market related the Performance Assessment Hour Ramp Rate interim solution. She noted a technical correction to Manual 18 section 8.4A to change "generation resources" to "capacity resources"; there were no objections to this correction. Following discussion, the committee **endorsed** the proposed revisions in a sector-weighted vote with 3.85 in favor.

#### 6. Regional Transmission and Energy Scheduling Practices

Mr. Chris Pacella presented proposed revisions to Regional Transmission and Energy Scheduling Practices being made as a result of PJM's day-ahead energy market timeline adjustment. Following discussion, the committee **endorsed** the proposed revisions by acclamation with no objections or abstentions.

#### 7. Governing Documents Enhancement & Clarification Subcommittee (GDECS)

- A. Ms. Janell Fabiano presented additional proposed Tariff, Operating Agreement and Reliability Assurance Agreement revisions related to updated definitions and Markets Governing Documents Clean-up developed by the GDECS. Following discussion, the committee **endorsed** the proposed revisions by acclamation with no objections or abstentions.
- B. Ms. Jennifer Tribulski discussed clarifications to previously endorsed GDECS revisions, noting minor updates to the previously endorsed revisions.
- C. Mr. Steve Shparber presented proposed revisions to the Tariff, OA and RAA regarding non-substantive reorganization/relocation of definitions within the documents. The committee will be asked to endorse the proposed revisions at its next meeting.

#### First Readings (10:55-11:45)

##### Capacity Resources External to PJM's Footprint

Mr. Keech discussed a new problem statement and issue charged related to capacity resources external to PJM's footprint. The problem statement and issue charge will be reviewed with the April 25, 2016 Members Committee Webinar and the MRC will be asked to approve the documents at their first read at its April 28, 2016 meeting.

## 8. Short Circuit Breaker Replacement Upgrades in RTEP

Mr. Mark Sims discussed RTEP process enhancements related to short circuit breaker replacement and terminal equipment upgrades. Mr. Sims also discussed potential PJM Operating Agreement revisions that would implement the proposed change. The committee may be asked to endorse the proposed revisions at a future meeting.

## 9. Demand Response Emergency Energy Settlement Measurement and Verification

Mr. Pete Langbein presented proposed revisions to the Demand Response Emergency Energy Settlement Measurement and Verification process. The proposal will change the emergency energy default CBL from the “hour before” methodology to the current default economic CBL (3 day type with symmetric additive adjustment). The committee will be asked to endorse the proposed revisions at its next meeting.

## 10. PJM Manuals

- A. Mr. John Reynolds presented proposed revisions to PJM Manual 19: Load Forecasting and Analysis related to End-Use/Weather Variables. The Committee will be asked to endorse these proposed revisions at its next meeting.
- B. Mr. Sree Yeddanapudi presented proposed revisions to Manual 12: Balancing Operations to incorporate PJM Business Rules for Dynamic Transfers. The Committee will be asked to endorse these proposed revisions at its next meeting.

## Informational Items

### 11. Merchant Network Upgrades

Mr. Dave Egan discussed Tariff clean-up regarding Merchant Network Upgrades.

### 12. Offer Cap Notice of Proposed Rulemaking (NOPR)

Mr. Adam Keech provided an update on PJM’s planned response to the FERC NOPR: Offer Caps in the Markets Operated by Regional Transmission Organizations and Independent System Operators.

### 13. PPL Electric Utilities Special Protection Scheme (SPS) Retirement

Mr. Paul Santarelli, PPL Electric Utilities, discussed the retirement of the Susquehanna Unit 1 stability trip SPS in the PPL transmission zone.

### 14. Carolina “22” Special Protection Scheme (SPS) Retirement

Mr. Lagy Matthew discussed the retirement of the Carolina “22” SPS retirement effective February 2016.

## Future Agenda Items

No new future agenda items were identified.

## Future Meeting Dates

April 28, 2016	9:00 a.m.	Wilmington, DE
May 26, 2016	9:00 a.m.	Wilmington, DE
June 30, 2016	9:00 a.m.	Wilmington, DE
July 28, 2016	9:00 a.m.	Wilmington, DE
August 25, 2016	9:00 a.m.	Wilmington, DE
September 29, 2016	9:00 a.m.	Wilmington, DE
October 27, 2016	9:00 a.m.	Wilmington, DE
November 17, 2016	9:00 a.m.	Wilmington, DE
December 22, 2016	9:00 a.m.	Wilmington, DE

Author: D. A. Anders

## In Attendance (Chair/Secretary):

Daugherty, Suzanne	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
Benckek, Jim	FirstEnergy Solutions Corp.	Transmission Owner
Borgatti, Michael	Rep'g Jersey Green Energy LLC	Other Supplier
Borgatti, Michael	Rep'g Covanta Energy Group, LLC	Generation Owner
Borgatti, Michael	Rep'g Elgin Energy Center, LLC	Generation Owner
Borgatti, Michael	Rep'g Longview Power, LLC	Generation Owner
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 York County Solid Waste and Refuse Authority	Generation Owner
Brodbeck, John	EDP Renewables North America, LLC	Other Supplier
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 Industrials U.S., L.P.	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 Trustees of the University of Pennsylvania	End User Customer

Bruce, Susan	Rep'g Industrial Energy Users-Ohio	Other Supplier
Bruce, Susan	Rep'g Wellsboro Electric Company	Electric Distributor
Bruce, Susan	Rep'g Kimberly-Clark Corporation	Generation Owner
Campbell, Bruce	Rep'g EnergyConnect, Inc.	Other Supplier
Campbell, Bruce	Rep'g Mid-Atlantic Power Partners	Other Supplier
Canter, David	Appalachian Power Company (AEP Generation)	Transmission Owner
Chew, Robin	Cambria Cogen Company	Generation Owner
Cox, Jason	Dynegy Marketing & Trade, LLC	Generation Owner
Dugan, Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Ellison, Alan	Grays Ferry Cogeneration Partnership	Generation Owner
Esposito, Patricia	TransCanada Power Marketing Ltd.	Other Supplier
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 Kuehne Chemical Company, Inc.	Other Supplier
Fuess, Jay	Rep'g Church Hill Solar Farm, LLC	Generation Owner
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
Greiner, Gary	Public Service Electric & Gas Company	Transmission Owner
Griffiths, Dan	Rep'g West Virginia Consumer Advocate Division	End User Customer
Griffiths, Dan	Rep'g Maryland Office of People's Counsel	End User Customer
Griffiths, Dan	Rep'g Illinois Citizens Utility Board	End User Customer
Griffiths, Dan	Rep'g Ohio Consumers' Counsel	End User Customer
Griffiths, Dan	Rep'g Indiana Office of Utility Consumer Counselor (IN OUCC)	End User Customer
Griffiths, Dan	Rep'g Office of the Attorney General, Kentucky	End User Customer
Griffiths, Dan	Rep'g Pennsylvania Office of Consumer Advocate	End User Customer
Griffiths, Dan	Rep'g New Jersey Division of Rate Counsel	End User Customer
Griffiths, Dan	Rep'g Delaware Division of the Public Advocate	End User Customer
Guerry, Katie	EnerNOC, Inc.	Other Supplier
Hastings, David	Rep'g SESCO Enterprises, LLC	Other Supplier
Hastings, David	Rep'g Solios Power Mid-Atlantic Trading LLC	Other Supplier
Hastings, David	Rep'g Northstar Trading Ltd.	Other Supplier
Hastings, David	Rep'g Town Square Energy East, LLC	Other Supplier
Hastings, David	Rep'g Saracen Energy East LP	Other Supplier

Hastings, David	Rep'g Twin Cities Power, LLC	Other Supplier
Hastings, David	Rep'g Mercuria Energy America, Inc.	Other Supplier
Helms, Joseph	Rainbow Energy Marketing Corporation	Other Supplier
Hoatson, Tom	West Deptford Energy, LLC	Generation Owner
Horstmann, John	Dayton Power & Light Company (The)	Transmission Owner
Hyzinski, Thomas	Talen Energy Marketing, LLC	Generation Owner
Jardot, Gina	Essential Power Rock Springs, LLC	Transmission Owner
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, Inc.	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 Borough of Mont Alto, Pennsylvania	Electric Distributor
Johnson, Carl	Rep'g Thurmont Municipal Light Company	Electric Distributor
Johnson, Carl	Rep'g Town of Williamsport (The)	Electric Distributor
Johnson, Carl	Rep'g Energy Cooperative Association of PA	Other Supplier
Johnson, Carl	Rep'g Madison Gas & Electric Co.	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 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
Lieberman, Steven	Old Dominion Electric Cooperative	Electric Distributor
Long, Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Melnyk, Markian	Atlantic Grid Operations A, LLC	Other Supplier
Merola, Becky	Noble Americas Gas & Power Corp.	Other Supplier
Moerner, Lisa	Virginia Electric & Power Company	Transmission Owner

Pakela, Greg	DTE Energy Trading, Inc.	Other Supplier
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
Rutigliano, Tom	Rep'g Achieving Equilibrium LLC	Other Supplier
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 Earth NetWorks, Inc.	Other Supplier
Scarpignato, David	Rep'g Calpine Energy Services, L.P.	Generation Owner
Sitaraman, Nicole	Office of the People's Counsel for the District of Columbia	End User Customer
Trayers, Barry	Citigroup Energy, Inc.	Other Supplier
Wadsworth, Joe	Vitol Inc.	Other Supplier
Whitehead, Jeffrey	Direct Energy Business, 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	NRG Curtailment Solutions, Inc.	Other Supplier
Bloom, David	Baltimore Gas and Electric Company	Transmission Owner
Bolan, Martin	FirstEnergy Solutions Corporation	Transmission Owner
Carmean, Gregory	OPSI	Not Applicable
Carro, Dan	Dominion Virginia Power	Not Applicable
Chen, Jennifer	NRDC/FERC Project	Not Applicable
Collins, Leonard	Delaware Public Advocates Office	Not Applicable
Crystle, Gil	UGI Development Company	Transmission Owner
Currier, Jeffrey	Virginia Electric & Power Company	Transmission Owner
Czigler, Frank	PSEG	Transmission Owner
Davis, Connie	Cleveland Public Power	Electric Distributor
Denavas, Joe	Pepco Holdings Incorporated	Not Applicable
DePillo, Raymond	PSEG	Transmission Owner
Dessenger, Harry	Customized Energy Solutions, Ltd.*	Not Applicable
Dinicola, Laura	FirstEnergy Solutions Corporation	Transmission Owner
Erbrick, Michael	MICS	Not Applicable
Farber, John	Delaware Public Service Commission	Not Applicable
Feierabend, Rick	Dominion Virginia Power	Not Applicable
Fiano, Anna	KeyTex Energy, LLC	Other Supplier

Filomena, Guy	Customized Energy Solutions	Not Applicable
Fisher, Amy	Homer City Generation, L.P.	Generation Owner
Frost, Jodi	Moxie Freedom LLC	Other Supplier
Gebolys, Debbie	Public Utilities Commission of Ohio	Not Applicable
Gorman, Kevin	Highlands Energy Group LLC (The)	Other Supplier
Greening, Michele	Talen Energy Marketing, LLC	Generation Owner
Hanson, Mark	Illinois Commerce Commission	Not Applicable
Harmon, Mike	Ameren Energy Marketing Company	Generation Owner
Helmick, Douglas	GenOps LLC	Other Supplier
Herel, Suzanne	RTO Insider	Not Applicable
Hilaski, Steve	Pepco Holdings Incorporated	Not Applicable
Hitch, George	Dominion Virginia Power	Not Applicable
Huntoon, Stephen	Energy Counsel, LLP	Not Applicable
Janicki, Diane	Boston Energy Trading and Marketing LLC	Generation Owner
Jett, William	Duke Energy Business Services, Inc.	Generation Owner
Kaczanowski, Marek	Baltimore Gas and Electric Company	Transmission Owner
Kingston, Amber	Aces Power Marketing	Not Applicable
Logan, Sharon	The Federal Energy Regulatory Commission	Not Applicable
Mariam, Yohannes	Office of the Peoples Counsel for the District of Columbia	Not Applicable
Martin, Valerie	The Federal Energy Regulatory Commission	Not Applicable
Metzler, Jakob	Castleton Commodities Merchant Trading L.P.	Other Supplier
Midgley, Sharon	Exelon	Transmission Owner
Miller, John	Commonwealth Edison Company	Transmission Owner
Mok, Alan	Duke Energy Business Services LLC	Transmission Owner
Moore, John	The Sustainable FERC Project	Not Applicable
Nadel, Steven	PPL	Transmission Owner
Ondayko, Brock	AEP	Transmission Owner
Patrylo, Bob	H-P Energy Resources LLC	Other Supplier
Patten, Kevin	American Electric Power	Transmission Owner
Peebles, Andy	Saracen Energy East LP	Other Supplier
Phillips, Marji	Direct Energy Business, LLC	Other Supplier
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
Rismiller, Randy	The Illinois Commerce Commission	Not Applicable

Robson, Matt	SESCO Enterprises LLC	Other Supplier
Rugh, Chris	EverPower Wind Holdings, Inc.	Generation Owner
Santarelli, Paul	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Sasser, Jonathan	Customized Energy Solutions	Not Applicable
Semrau, Keith	Cleveland Public Power	Electric Distributor
Shanker, Roy	Hydro Quebec	Not Applicable
Sidhom, Noha	Inertia Power I, LLC	Other Supplier
Sillin, John	The Federal Energy Regulatory Commission	Not Applicable
Singer, Chad	Fellon McCord	Not Applicable
Slifer, Diane	P3 Energy	Not Applicable
Summers, Ted	Direct Energy Business, LLC	Other Supplier
Thomas, Glen	GT Power Group	Not Applicable
Thompson, Matthew	XO Energy MA, LP	Other Supplier
Thomson, Heather	Michigan Alternative & Renewable Energy Center	Not Applicable
Tibbetts, Maeve	Pierce Atwood LLP	Not Applicable
Von Pinho, Frederico	NextEra Energy Power Marketing, LLC	Generation Owner
Walker, Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Watson, Mark	Platts	Not Applicable
Weber, Adam	Union Electric Company d/b/a Ameren Missouri	Other Supplier
Wilhite, Chad	FirstEnergy Solutions Corporation	Transmission Owner
Wilmoth, Emily	Dominion Virginia Power	Not Applicable
Wisersky, Megan	Madison Gas & Electric Company	Other Supplier
Wynn, Laura	Stone, Mattheis, Xenopoulos, & Brew, PC	Not Applicable
Xenopoulos, Damon	Stone, Mattheis, Xenopoulos, & Brew, PC	Not Applicable
York, Katherine	Tennessee Valley Authority (The)	Other Supplier

### In Attendance (PJM Participants):

Almgren, Ake	PJM Board of Managers	Not Applicable
Barrett, Francis	PJM Interconnection, LLC	Not Applicable
Berner, Aaron	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
Bryson, Michael	PJM Interconnection, LLC	Not Applicable
Budney, David	PJM Interconnection, LLC	Not Applicable
Carroll, Rebecca	PJM Interconnection, LLC	Not Applicable
Caven, Augustine	PJM Interconnection, LLC	Not Applicable

Coll, Daniel	PJM Interconnection, LLC	Not Applicable
Coyne, Suzanne	PJM Interconnection, LLC	Not Applicable
Cummings, Bridgid	PJM Interconnection, LLC	Not Applicable
Driscoll, Mary Ellen	PJM Interconnection, LLC	Not Applicable
Duane, Vince	PJM Interconnection, LLC	Not Applicable
Egan, Dave	PJM Interconnection, LLC	Not Applicable
Ennis, Brad	PJM Interconnection, LLC	Not Applicable
Fabiano, Janell	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
Foster, Denise	PJM Interconnection, LLC	Not Applicable
Foster, Neel	PJM Board of Managers	Not Applicable
Glazer, Craig	PJM Interconnection, LLC	Not Applicable
Hsia, Eric	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
Kormos, Michael J.	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
Manion, Evelyn	PJM Interconnection, LLC	Not Applicable
Matthew, Lagy	PJM Interconnection, LLC	Not Applicable
McGlynn, Paul	PJM Interconnection, LLC	Not Applicable
McLaverly, Megan	PJM Interconnection, LLC	Not Applicable
Monzon, Stephanie	PJM Interconnection, LLC	Not Applicable
Nice, Ryan	PJM Interconnection, LLC	Not Applicable
Noonan, Tom	PJM Interconnection, LLC	Not Applicable
O'Brien, Tom	PJM Interconnection, LLC	Not Applicable
O'Neill, Jack	PJM Interconnection, LLC	Not Applicable
Ott, Andrew L.	PJM Interconnection, LLC	Not Applicable
Pacella, Christopher	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
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
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
Ward, Mike	PJM Interconnection, LLC	Not Applicable
Weiss, Glenn	PJM Interconnection, LLC	Not Applicable
Williams, Stan	PJM Interconnection, LLC	Not Applicable
Yeddanapudi, Sree	PJM Interconnection, LLC	Not Applicable
Zadlo, Thomas	PJM Interconnection, LLC	Not Applicable
Zhao, Tong	PJM Interconnection, LLC	Not Applicable