

Markets and Reliability Committee The Chase Center on the Riverfront, Wilmington, DE March 23, 2017 9:00 a.m. – 2:20 p.m. EPT

#### Administration

Ms. Daugherty and Mr. Anders welcomed the participants, and provided the announcements and antitrust and code of conduct announcements.

Ms. Ginger Quintavalla discussed plans for and impact of the upgrade of certain PJM hardware anticipated to occur on March 30, 2017. She explained that the equipment is being proactively upgraded to enhance cybersecurity measures, and will necessitate temporary outages to several Member-facing applications. Finally, she discussed plans to communicate with Members regarding progress of the upgrade and availability of the affected applications.

#### Endorsements/Approvals

1. Draft Minutes

Minutes of the February 23, 2017 meeting of the Markets and Reliability Committee (MRC) were **<u>approved</u>** by acclamation with no objections or abstentions.

#### 2. PJM Manuals

- A. Mr. Chris Pilong reviewed proposed changes to Manual 13: Emergency Operations.
- B. Mr. Phil D'Antonio presented proposed revisions to Manual 37: Reliability Coordination.
- C. Mr. Phil D'Antonio reviewed proposed revisions to Manual 01: Control Center and Data Exchange Requirements.

Following discussion, items 2.A through 2.C were **<u>endorsed</u>** by acclamation with no objections or abstentions.

#### 3. FERC Order 825 – Shortage Pricing

Mr. Adam Keech reviewed the proposed Shortage Pricing / Operating Reserve Demand Curve solution and associated manual revisions. Following discussion, the committee **<u>endorsed</u>** the proposed OA, Tariff and manual revisions by acclamation with no objections and one abstention.

#### 4. Draft Pseudo-Tie Agreements

Ms. Jacqui Hugee reviewed two pseudo-tie agreements and Tariff and OA revisions shown below.

- Pro forma pseudo-tie agreement
- Pseudo-tie reimbursement agreement for pseudo-tie into PJM
- Associated Tariff and OA revisions



Ms. Hugee indicated that several stakeholders had requested updates to these proposed documents. Therefore the vote on these items was deferred to allow additional time to complete review and editing. The committee will be asked to vote on these proposed documents at a future meeting.

### 5. Cost Development Manual Revisions

Mr. Jeff Schmitt presented proposed revisions to Manual 15: Cost Development Guidelines regarding hourly offers and fuel cost policies. Ms. Catherine Mooney, Monitoring Analytics, presented proposed updates to section 2.3.1.1 Annual Review related to the MMU's review of fuel cost policies and communication of the MMU's recommendation to PJM and the market seller.

Ms. Susan Bruce proposed a friendly amendment to incorporate the MMU's proposed revisions. Mr. Gary Greiner objected to the being friendly and therefore it was not incorporated into the main motion.

Mr. Ed Tatum proposed a friendly amendment to modify fifth sentence of section 2.3.1.1 to read as follows: "The MMU shall provide the results of its evaluation, which may include a recommendation, to PJM and the Market Seller in writing by no later than August 1." There was no objection to this being friendly and therefore it was incorporated into the main motion. Mr. Tatum subsequently withdrew this amendment and therefore it was not included in the main motion.

Mr. David Scarpignato proposed a friendly amendment to the first sentence of section 2.3.2 to add the words "general, high-level" prior to "method of calculation". Mr. Jason Barker objected to this being friendly and therefore it was not incorporated into the main motion.

Following discussion, the committee **<u>endorsed</u>** the proposed manual revisions by acclamation with one objection and 20 abstentions.

## 6. Opportunity Cost Calculation

Mr. Bob O'Connell, Panda Power Funds, presented a proposed problem statement /issue charge regarding calculation of opportunity cost for units with less than three years of historical LMPs, and to address Capacity Performance non-performance charges. Following discussion, the committee **approved** the proposed problem statement / issue charge by acclamation with one objection and no abstentions.

#### 7. Modelling Generation Sr. Task Force (MGSTF)

Mr. Stan Williams presented the draft charter for the MGSTF. Following discussion, the committee **<u>approved</u>** the proposed draft charter by acclamation with no objections or abstentions.

## 8. Incremental Auction Sr. Task Force (IASTF)

Mr. Brian Chmielewski presented the draft charter for the IASTF. Following discussion, the committee **approved** the proposed draft charter by acclamation with no objections or abstentions.



#### 9. Replacement Capacity

Mr. Neal Fitch, NRG Power Marketing, presented a motion to reconsider the previously rejected problem statement /issue charge regarding procurement of replacement capacity in RPM Incremental Auctions. Mr. Joe Wadsworth moved and Mr. Bob O'Connell seconded the motion to reconsider. Following discussion, the committee **approved** the motion to reconsider by acclamation with eight objections and two abstentions.

Mr. O'Connell moved and Mr. Dana Horton seconded the updated posted proposed problem statement / issue charge. Mr. Bruce Campbell proposed a friendly amendment to strike the word "demonstrated" and insert the words "reported his concern" in the following sentence: "In the report presented at the January 2017 MIC meeting, the market monitor <del>demonstrated</del> reported his concerns that the high replacement percentages still persist for certain resources.

Mr. Tom Rutigliano proposed a friendly amendment to insert the words "and benefits" after "uses" in Key Work Activity 3. He also proposed to replace "deemed physical prior to" with eligible to offer into" in Key Work Activity 4. Mr. O'Connell did not accept these changes as friendly, and therefore they were not incorporated into the main motion.

Following discussion, the committee **approved** the proposed problem statement / issue charge by acclamation with ten objections and three abstentions.

#### First Readings

#### 10. Energy Market Uplift Sr. Task Force (EMUSTF)

Mr. David Anders presented the proposed Phase 3 solution endorsed by the EMUSTF. The committee will be asked to endorse the proposed solution at its next meeting.

11. Regulation Market Issues Sr. Task Force (RMISTF)

Mr. Eric Hsia presented the proposed regulation market enhancements endorsed by the RMISTF. The committee will be asked to endorse the proposed solution at its next meeting.

#### 12. Capacity Construct / Public Policy Sr. Task Force (CCPPSTF)

Mr. David Anders presented the draft charter for the CCPPSTF. The committee will be asked to approve the charter at its next meeting.

#### 13. PJM Manuals

- A. Mr. Michael Herman provided a first read on administrative updates to PJM Manual 14B: PJM Region Transmission Planning Process. Updates include: correcting wording in the Baseline Thermal Analysis section to match analytical procedures and changing all occurrences of "Special Protection System" to "Remedial Action Scheme" per a change to the NERC glossary of terms. The committee will be asked to endorse the proposed revisions at its next meeting.
- B. Mr. Herman presented a proposed new PJM Manual 14F: Competitive Planning Process, including



the decisional diagram. The committee will be asked to endorse the proposed revisions at its next meeting.

#### Informational Updates

14. Transmission Replacement Process Sr. Task Force (TRPSTF)

Mr. Paul McGlynn, Ms. Gloria Godson and Mr. Ed Tatum provided an update on TRPSTF activities not subject to the task force's hiatus related to the FERC Show Cause Order in Docket EL-16-71-000.

### Future Agenda Items

No new future agenda items were identified.

### Future Meeting Dates

April 27, 2017	9:00 a.m.	Wilmington, DE
May 25, 2017	9:30 a.m.	Wilmington, DE
June 22, 2017	9:00 a.m.	Wilmington, DE
July 27, 2017	9:00 a.m.	Wilmington, DE
August 24, 2017	9:30 a.m.	Wilmington, DE
September 28, 2017	9:00 a.m.	Wilmington, DE
October 26, 2017	9:00 a.m.	Wilmington, DE
November 30, 2017	9:00 a.m.	Wilmington, DE
December 21, 2017	9:30 a.m.	Wilmington, DE

Author: D. A. Anders

## CHAIR/SECRETARY

Daugherty	Suzanne	PJM Interconnection, LLC	Not Applicable
Anders	David	PJM Interconnection, LLC	Not Applicable

## **VOTING PARTICIPANTS**

Last Name	First Name	Company	Sector
Barker	Jason	Exelon Business Services Company, LLC	Transmission Owner
Benchek	Jim	FirstEnergy Solutions Corp.	Transmission Owner
Borgatti	Michael	Rep.'g Covanta Energy Group, LLC	Generation Owner
Borgatti	Michael	Rep.'g Elgin Energy Center, LLC	Generation Owner
Borgatti	Michael	Rep.'g Jersey Green Energy LLC	Other Supplier
Borgatti	Michael	Rep.'g Longview Power, LLC	Generation Owner
Borgatti	Michael	Rep.'g Moxie Freedom LLC	Generation Owner
Borgatti	Michael	Rep.'g Newark Energy Center, LLC	Generation Owner
Borgatti	Michael	Rep.'g NextEra Energy Marketing, LLC	Generation Owner



Borgatti	Michael	Rep.'g York County Solid Waste and Refuse Authority	Generation Owner
Bruce	Susan	Rep.'g Air Products & Chemicals, Inc.	End User Customer
Bruce	Susan	Rep.'g ArcelorMittal USA LLC	End User Customer
Bruce	Susan	Rep.'g Gerdau Ameristeel Energy, Inc.	Other Supplier
Bruce	Susan	Rep.'g Industrial Energy Users-Ohio	Other Supplier
Bruce	Susan	Rep.'g Kimberly-Clark Corporation	Generation Owner
Bruce	Susan	Rep.'g Lehigh Portland Cement Company	End User Customer
Bruce	Susan	Rep.'g Letterkenny Industrial Development Authority	Electric Distributor
Bruce	Susan	Rep.'g Linde, LLC	End User Customer
Bruce	Susan	Rep.'g MeadWestvaco Corporation	End User Customer
Bruce	Susan	Rep.'g Praxair, Inc.	End User Customer
Bruce	Susan	Rep.'g Procter & Gamble Paper Products Company (The)	End User Customer
Bruce	Susan	Rep.'g Trustees of the University of Pennsylvania	End User Customer
Bruce	Susan	Rep.'g Wellsboro Electric Company	Electric Distributor
Campbell	Bruce	Rep.'g Enerwise Global Technologies, Inc.	Other Supplier
Campbell	Bruce	Rep.'g MidAtlantic Power Partners, LLC	Other Supplier
Cox	Jason	Dynegy Marketing and Trade, LLC	Generation Owner
Davis	James	Virginia Electric & Power Company	Transmission Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Ellison	Alan	Grays Ferry Cogeneration Partnership	Generation Owner
Esposito	Patricia	TransCanada Power Marketing Ltd.	Generation Owner
Fitch	Neal	NRG Power Marketing, LLC	Generation Owner
Fondacci	Luis	North Carolina Electric Membership Corporation	Electric Distributor
Garnett	Bryan	Duke Energy Business Services LLC	Transmission Owner
Greening	Michele	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Greiner	Gary	Public Service Electric & Gas Company	Transmission Owner
Griffiths	Dan	Rep.'g Delaware Division of the Public Advocate	End User Customer
Griffiths	Dan	Rep.'g Illinois Citizens Utility Board	End User Customer
Griffiths	Dan	Rep.'g Indiana Office of Utility Consumer Counselor (IN OUCC)	End User Customer
Griffiths	Dan	Rep.'g Maryland Office of People's Counsel	End User Customer
Griffiths	Dan	Rep.'g New Jersey Division of Rate Counsel	End User Customer
Griffiths	Dan	Rep.'g Office of the Attorney General, Kentucky	End User Customer
Griffiths	Dan	Rep.'g Office of the People's Counsel for the District of Columbia	End User Customer
Griffiths	Dan	Rep.'g Ohio Consumers' Counsel	End User Customer



Griffiths	Dan	Rep.'g Pennsylvania Office of Consumer Advocate	End User Customer
Griffiths	Dan	Rep.'g West Virginia Consumer Advocate Division	End User Customer
Guerry	Katie	EnerNOC, Inc.	Other Supplier
Hoatson	Tom	West Deptford Energy, LLC	Generation Owner
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Horton	Dana	Appalachian Power Company (AEP Generation)	Transmission Owner
Johnson	Carl	Rep.'g Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson	Carl	Rep.'g Borough of Chambersburg	Electric Distributor
Johnson	Carl	Rep.'g Borough of Mont Alto, Pennsylvania	Electric Distributor
Johnson	Carl	Rep.'g Buckeye Power, Inc.	Electric Distributor
Johnson	Carl	Rep.'g Central Virginia Electric Cooperative	Electric Distributor
Johnson	Carl	Rep.'g City of Dover, Delaware	Electric Distributor
Johnson	Carl	Rep.'g Delaware Municipal Electric Corporation, Inc.	Electric Distributor
Johnson	Carl	Rep.'g Easton Utilities Commission	Electric Distributor
Johnson	Carl	Rep.'g Energy Cooperative Association of PA	Other Supplier
Johnson	Carl	Rep.'g Galt Power, Inc.	Other Supplier
Johnson	Carl	Rep.'g Hagerstown Light Department	Electric Distributor
Johnson	Carl	Rep.'g Illinois Municipal Electric Agency	Electric Distributor
Johnson	Carl	Rep.'g Indiana Municipal Power Agency	Generation Owner
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 Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson	Carl	Rep.'g Old Dominion Electric Cooperative	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 WPPI Energy	Other Supplier
Kelly	Stephen	Brookfield Energy Marketing LP	Other Supplier
Kilgallen	Kevin	Avangrid Renewables, LLC	Generation Owner
Kogut	George	New York Power Authority	Other Supplier
Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor
Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Melnyk	Markian	Atlantic Grid Operations A, LLC	Other Supplier
O'Connell	Robert	PPGI Fund A/B Development, LLC	Generation Owner
Pratzon	David	Rep.'g Eastern Generation, LLC	Generation Owner



Pratzon	David	Rep.'g Essential Power Rock Springs, LLC	Transmission Owner
Pratzon	David	Rep.'g Wheelabrator Frackville Energy Co., Inc.	Generation Owner
Pratzon	David	Rep.'g WM Renewable Energy, L.L.C.	Generation Owner
Prokop	Brenda	ITC Interconnection LLC	Transmission Owner
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 Earth Networks, Inc.	Other Supplier
Rutigliano	Tom	Rep.'g EMC Development Company, Inc.	Other Supplier
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Scoglietti	Barbara	Tangent Energy Solutions, Inc.	Other Supplier
Trayers	Barry	Citigroup Energy, Inc.	Other Supplier
Wadsworth	Joe	Vitol Inc.	Other Supplier
Whitehead	Jeffrey	Direct Energy Business, LLC	Other Supplier
Yu	Joel	Rockland Electric Company	Transmission Owner

# **NON-VOTING PARTICIPANTS**

Last Name	First Name	Company	Sector
Altun	Rukiye	ABB	Not Applicable
Azar	Abe	Deutsche Bank	Not Applicable
Bainbridge	Tom	FirstEnergy Solutions Corp.	Transmission Owner
Batta	Mike	Virginia Electric & Power Company	Transmission Owner
Bearden	Joel	XO Energy MA, L.P.	Other Supplier
Berlinski	Michael	Customized Energy Solutions, Ltd.	Not Applicable
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Bonner	Charles	Dominion Energy Marketing, Inc.	Transmission Owner
Bowring	Joel	Monitoring Analytics, LLC	Not Applicable
Brouillette	Kyle	Indiana Municipal Power Agency	Generation Owner
Carro	Dan	Dominion Energy Marketing, Inc.	Transmission Owner
Celestine	Kizi	American Electric Power Inc.	Not Applicable
Chen	Jennifer	NRDC	Not Applicable
Crockett	Valerie	Tennessee Valley Authority (The)	Other Supplier
Dalessandris	Lou	FirstEnergy Solutions Corp.	Transmission Owner
Davis	Matt	Carlson Capital	Not Applicable
Day	Jason	Oceanside Power, LLC	Other Supplier



Delaney	Dylan	Cove Key Management	Not Applicable
Dickson	Douglas	New Jersey Board of Public Utilities	Not Applicable
Farber	John	DE Public Service Commission	Not Applicable
Feierabend	Rick	Dominion Energy Marketing, Inc.	Transmission Owner
Fernandes	John	Invenergy, LLC	Generation Owner
Fitch	George	Dominion Energy Marketing, Inc.	Transmission Owner
Fok	Kevin	LG Chem	Not Applicable
Gallagher	William	A.F. Mensah Inc.	Other Supplier
Gilani	Rehan	Consolidated Edison Energy, Inc.	Other Supplier
Godson	Gloria	Exelon Business Services Company, LLC	Transmission Owner
Gray	Jeff	Gray PLLC	Not Applicable
Haigh	Michael	Prudential	Not Applicable
Hanser	Erik	Michigan Public Service Commission	Not Applicable
Hawkins	Peterson	Luminus	Not Applicable
Hebert	Chris	Beacon Power, LLC	Other Supplier
Hilaski	Steve	Potomac Electric Power Company	Electric Distributor
Hitt	Carrie	NextEra Energy Marketing, LLC	Generation Owner
Hnatyshyn	Murray	Dynasty Power, Inc.	Other Supplier
Horning	Lynn	LMH Energy	Not Applicable
Huntoon	Stephen	Energy Counsel LLP	Not Applicable
Jacobs	Mike	UCS	Not Applicable
Janicki	Diane	Boston Energy Trading & Marketing, LLC	Generation Owner
Jardot	Gina	Essential Power Rock Springs, LLC	Transmission Owner
Jett	William	Duke Energy Business Services LLC	Transmission Owner
Kaczanowski	Marek	Baltimore Gas and ElectricCompany	Transmission Owner
Karrasch	Kim	Interstate Gas Suply, Inc.	Not Applicable
Katayama	Tommy	Osaka Gas USA Corporation	Not Applicable
Kauffman	Brian	NRG Curtailment Solutions, Inc.	Other Supplier
Kingston	Amber	ACES	Not Applicable
Kormos	Mike	Exelon Business Services Company, LLC	Transmission Owner
Kuehnle	Leanne	Federal Energy Regulatory Commission	Not Applicable
Lange	Nathan	VECO Power Trading, LLC	Other Supplier
Leopold	Chris	American Electric Power Inc.	Not Applicable
Lewis	Cara	Public Service Electric & Gas Company	Transmission Owner
Liang-Nicol	Cecilia	FirstEnergy Solutions Corp.	Transmission Owner



Libbos	Robin	FirstEnergy Solutions Corp.	Transmission Owner
Lowe	Ben	Alevo USA, Inc.	Not Applicable
Luthin	Tim	Morgan Stanley Captial Group, Inc.	Other Supplier
Mariam	Yohannes	Office of the People's Counsel for the District of Columbia	End Use Customer
Marinelli	Richard	Public Service Electric & Gas Company	Transmission Owner
Martin	Valerie	Federal Energy Regulatory Commission	Not Applicable
Marton	Dave	FirstEnergy Solutions Corp.	Transmission Owner
Matheson	Douglas	EnerNOC, Inc.	Other Supplier
Mcadams	Julius	Red Wolf Energy Trading, LLC	Other Supplier
Mcalister	Lisa	American Municipal Power, Inc.	Electric Distributor
Mccormick	Alan	Capital Alpha Partners	Not Applicable
Mcdaniel	John	Baltimore Gas and Electric Company	Transmission Owner
Mcdonald	Steve	Customized Energy Solutions, Ltd.	Not Applicable
Meldon	Jasmin	Platts	Not Applicable
Merola	Becky	Calpine Energy Solutions, LLC	Other Supplier
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Miller	John	Commonwealth Edison Company	Transmission Owner
Nadel	Steven	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Nowell	Cynthia	Pepco Holdings Inc.	Not Applicable
Olenick	Cory	Inertia Power I, LLC	Other Supplier
Ondayko	Brock	Appalachian Power Company	Transmission Owner
Patten	Kevin	American Electric Power Inc.	Not Applicable
Quinlan	Pamela	Federal Energy Regulatory Commission	Not Applicable
Rajan	Abhijit	Dominion Virginia Power	Not Applicable
Rayhorn	Carolyn	Dominion Energy Marketing, Inc.	Transmission Owner
Reid	Ryan	ACES	Not Applicable
Riehl	John	Federal Energy Regulatory Commission	Not Applicable
Saini	Ishwar	Macquarie Energy, LLC	Other Supplier
Sasser	Jonathan	Customized Energy Solutions, Ltd.	Not Applicable
Schneider	Jonathan	FirstEnergy Solutions Corp.	Transmission Owner
Schreim	Morris	Maryland Public Service Commission	Not Applicable
Shanker	Roy	H.Q. Energy Services (U.S), Inc.	Other Supplier
Shelton	Chris	Millennium	Not Applicable
Sillin	John	Federal Energy Regulatory Commission	Not Applicable
Skucas	Ruta	Pierce Atwood	Not Applicable



Slagel	Ron	MICS	Not Applicable
Stern	Alex	Public Service Electric & Gas Company	Transmission Owner
Stewart	Travis	Gable & Associates	Not Applicable
Sweeney	James	New York Independent System Operator	Not Applicable
Sweeney	Rory	RTO Insider	Not Applicable
Tangirala	Subha	ABB	Not Applicable
Tatum	Ed	American Municipal Power, Inc.	Electric Distributor
Thomas	Glen	GT Power Group	Not Applicable
Thomas	Heather	Mid-Atlantic Renewable Energy Coalition	Not Applicable
Tibbetts	Maeve	Pierce Atwood	Not Applicable
Urbin	Greg	Baltimore Gas and Electric Company	Transmission Owner
Vargo	Daniel	Allegheny Electric Cooperative, Inc.	Electric Distributor
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Waskiewicz	Michael	Hartree Partners, LP	Other Supplier
Watson	Mark	Platts	Not Applicable
Wellborn	Samuel	Federal Energy Regulatory Commission	Not Applicable
Wilhite	Chad	FirstEnergy Solutions Corp.	Transmission Owner
Williams	Amber	New York State Electric & Gas Corporation	Other Supplier
Williams	Carl	FuelCell Energy	Not Applicable
Wilson	James	Wilson Energy Economics	Not Applicable
Wiltse	Alexandra	Baltimore Gas and Electric Company	Transmission Owner
Yang	Dan	Oncett	Not Applicable
York	Katherine	Tennessee Valley Authority (The)	Other Supplier

# PJM PARTICIPANTS

Last Name	First Name	Company	Sector
Bastian	Jeff	PJM Interconnection, LLC	Not Applicable
Benner	Scott	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Bricklin	Brian	PJM Interconnection, LLC	Not Applicable
Brown	Rich	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
Chao	Hungpo	PJM Interconnection, LLC	Not Applicable



Coyne	Suzanne	PJM Interconnection, LLC	Not Applicable
Croop	Danielle	PJM Interconnection, LLC	Not Applicable
D'Antonio	Phil	PJM Interconnection, LLC	Not Applicable
Dirani	Rami	PJM Interconnection, LLC	Not Applicable
Drauschak	Lisa	PJM Interconnection, LLC	Not Applicable
Driscoll	Maryellen	PJM Interconnection, LLC	Not Applicable
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Endress	Eric	PJM Interconnection, LLC	Not Applicable
Fan	Zhenyu	PJM Interconnection, LLC	Not Applicable
Fereshetian	Damon	PJM Interconnection, LLC	Not Applicable
Foster	Neel	PJM Board of Managers	Not Applicable
Franks	Chris	PJM Interconnection, LLC	Not Applicable
Glatz	Suzanne	PJM Interconnection, LLC	Not Applicable
Glazer	Craig	PJM Interconnection, LLC	Not Applicable
Hauske	Thomas	PJM Interconnection, LLC	Not Applicable
Herman	Mike	PJM Interconnection, LLC	Not Applicable
Kelley	Michael	PJM Interconnection, LLC	Not Applicable
Kimmel	David	PJM Interconnection, LLC	Not Applicable
Koza	Frank	PJM Interconnection, LLC	Not Applicable
Larocque	Matthew	PJM Interconnection, LLC	Not Applicable
Manion	Evelyn	PJM Interconnection, LLC	Not Applicable
McGill	Susan	PJM Interconnection, LLC	Not Applicable
McLaverty	Megan	PJM Interconnection, LLC	Not Applicable
Meihlke	Tracy	PJM Interconnection, LLC	Not Applicable
Olaleye	Michael	PJM Interconnection, LLC	Not Applicable
Patel	Keyur	PJM Interconnection, LLC	Not Applicable
Perea	Asanga	PJM Interconnection, LLC	Not Applicable
Perera	Sanga	PJM Interconnection, LLC	Not Applicable
Picarelli	David	PJM Interconnection, LLC	Not Applicable
Pilong	Chris	PJM Interconnection, LLC	Not Applicable
Pincus	Steven	PJM Interconnection, LLC	Not Applicable
Quintavalla	Ginger	PJM Interconnection, LLC	Not Applicable
Schuyler	Ken	PJM Interconnection, LLC	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Seiler	Ken	PJM Interconnection, LLC	Not Applicable



Spatafore	Julia	PJM Interconnection, LLC	Not Applicable
Stadelmeyer	Rebecca	PJM Interconnection, LLC	Not Applicable
Stotesbury	Christina	PJM Interconnection, LLC	Not Applicable
Strella	Lauren	PJM Interconnection, LLC	Not Applicable
Takahashi	Mark	PJM Board of Managers	Not Applicable
Velasaco	Cheryl	PJM Interconnection, LLC	Not Applicable
Ward	Michael	PJM Interconnection, LLC	Not Applicable
Watkin	Eric	PJM Interconnection, LLC	Not Applicable
Weiss	Glenn	PJM Interconnection, LLC	Not Applicable