

## Markets and Reliability Committee

### Webex Only

April 30, 2020

9:00 a.m. – 2:00 p.m. EPT

#### Administration (9:00-9:05)

Mr. Stu Bresler and Mr. Dave Anders welcomed stakeholders and provided the Anti-trust and Code of Conduct, Meeting Participation and Safety and Housekeeping announcements. Mr. Anders reminded Members planning to vote at the May 4, 2020 Members Committee meeting to participate in the practice vote open in the voting application to verify their voting credentials.

#### Consent Agenda (9:05-9:10)

Items A and B were **approved/endorsed** by acclamation with one objection and no abstentions.

- A. Minutes of the March 26, 2020 meeting of the Markets and Reliability Committee (MRC).
- B. Proposed administrative revisions to the PJM Tariff, OA and Reliability Assurance Agreement (RAA) as considered within the Governing Document Enhancement & Clarification Subcommittee (GDECS).

#### Endorsements/Approvals (9:10-9:35)

##### 1. Hybrid Resources Issue Charge (9:10-9:35)

Mr. Scott Baker reviewed an Issue Charge to addressing Hybrid Resources. Stakeholders provided feedback regarding the scope of the issue charge, as well as the proposed assignment to a new senior task force. Following discussion, Mr. Baker noted that PJM would consider the feedback received, and bring the proposed issue charge for approval either by the appropriate standing committee or back to the MRC at a future meeting.

#### First Readings (9:35-1:20)

##### 2. Emerging Technologies Advisory Subcommittee (9:35-9:50)

Mr. Eric Hsia reviewed the charter for a new proposed subcommittee, Emerging Technologies Advisory Subcommittee (ETAS). The committee may be asked to endorse the charter at a future meeting.

##### 3. Credit Subcommittee Charter (9:50-10:05)

Mr. Dave Anders and Ms. Nigeria Bloczynski reviewed proposed revisions to the Credit Subcommittee Charter including an expansion to incorporate risk and a proposed change in parent reporting structure. A review by the Market Implementation Committee will be sought, and the committee may be asked to endorse the proposed charter revisions at a future meeting.

#### 4. Surety Bonds (10:05-10:30)

Ms. Kathleen McElwaine provided a review of the surety bonds proposals as deferred at the April 25, 2019 MRC meeting. Ms. Sharon Midgley, Exelon, offered a proposed friendly amendment to require the MRC to vote on updating the caps and applicability consistent with Package B after 12 months of implementation under Package A. Ms. Adrien Ford, ODEC, objected to this proposed friendly amendment, and therefore it was not incorporated into the main motion. The committee will be asked to endorse the proposal at its next meeting.

#### 5. PMA Credit Requirements (10:30-10:55)

Ms. Bridgid Cummings reviewed proposed Tariff revisions related to Peak Market Activity (PMA) credit requirements pertaining to state law transfer of charges or credits. The committee will be asked to endorse the proposed revisions at its next meeting.

#### 6. This item was intentionally left blank.

#### 7. Integration of HVDC Converter Problem Statement (10:55-11:20)

Mr. Steve Frenkel, SOO Green, reviewed a proposed Problem Statement and Issue Charge seeking an opportunity to integrate High Voltage Direct Current (HVDC) converters as a new type of capacity resource. A separate education session was requested prior to the MRC vote on this issue. The committee will be asked to endorse the proposed Issue Charge at its next meeting.

#### 8. Transparency and End Of Life Planning (11:20-12:20)

Mr. Jim Gluck reviewed the work completed at the MRC Special Sessions for Transparency and End of Life Planning including proposed solutions. The committee will be asked to endorse the proposed solutions at its next meeting.

A. Mr. Mark Ringhausen, Old Dominion Electric Cooperative, reviewed the joint stakeholder solution proposal and draft OA revisions posted.

B. Ms. Sharon Segner, LS Power, reviewed the LS Power proposal.

C. Mr. Dave Souder reviewed PJM's proposal.

#### 9. PJM Manuals (12:50-1:20)

A. Ms. Bilge Derin reviewed proposed revisions to PJM Manual 01: Control Center and Data Exchange including revisions to Attachment A: Data Specification and Collection Attachment B: Schedule of Data Submittals. The committee will be asked to endorse the revisions at its next meeting.

B. Mr. Lagy Mathew reviewed proposed revisions to Manual 03: Transmission Operations and a proposed Manual 03B related to CEII. The committee will be asked to endorse these revisions at its next meeting.

- C. Mr. Lagy Mathew reviewed proposed revisions to PJM Manual 03: Transmission Operations resulting from the bi-annual review to update operating procedures. The committee will be asked to endorse the revisions changes at its next meeting.
- D. Ms. Terri Esterly reviewed conforming revisions to Manual 18: PJM Capacity Market related to Price Responsive Demand. The committee will be asked to endorse the revisions at its next meeting.
- E. Mr. Liem Hoang reviewed proposed revisions to PJM Manual 36: System Restoration including revisions to Attachment B: Restoration Forms and Attachment G: Coordination of Restoration Plan with PJM Internal and External Neighboring Entities - PJM Approval Process for Transmission Owner Restoration Plans. The committee will be asked to endorse the revisions at its next meeting.

## Informational Reports (1:20-1:45)

### 10. Determination of Capacity Values (1:20-1:35)

Mr. Thomas DeVita provided an informational update regarding the paper hearing procedures established by FERC to examine the rules pertaining to the determination of capacity values for all resources (Docket EL19-100-000).

### 11. Manual 01, MOC Attachment (1:35-1:45)

Mr. Chris Moran reviewed a new Market Operations Center Temporary Attachment to Manual 01: COVID-19 MOC Remote Control Center Operations.

### 12. Minimum Offer Price Rule Rehearing Update (1:45-2:00)

Ms. Lisa Morelli provided an update regarding the Minimum Offer Price Rule (MOPR) Rehearing Order.

## Informational Postings Only

### 13. PJM Manual 03: Transmission Operations, Attachment E: Automatic Sectionalizing Schemes

Automatic Sectionalizing Schemes Pending Approval and Recent Changes were posted with this meeting materials.

## Future Agenda Items (2:00)

## Future Meeting Dates

May 28, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx
June 18, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx
July 23, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx
August 20, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx
September 17, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx
October 29, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx

November 19, 2020  
December 17, 2020

9:00 a.m.  
9:00 a.m.

PJM Conference & Training Center/ WebEx  
PJM Conference & Training Center/ WebEx

## Attendance

### Secretary/Facilitator

Last Name	First Name	Company	Sector
Anders	David	PJM Interconnection, LLC	None
Bresler	Stu	PJM Interconnection, LLC	None

### Voting Attendees

Last Name	First Name	Company	Sector
Barker	Jason	Exelon Business Services Company, LLC	Transmission Owner
Benchek	Jim	American Transmission Systems, Inc.	Transmission Owner
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
Bruce	Susan	Rep.'g Air Products & Chemicals, Inc.	End-Use Customer
Bruce	Susan	Rep.'g ArcelorMittal USA LLC	End-Use 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-Use Customer
Bruce	Susan	Rep.'g Letterkenny Industrial Development Authority - PA	Electric Distributor
Bruce	Susan	Rep.'g MeadWestvaco Corporation	End-Use Customer
Bruce	Susan	Rep.'g Messer LLC	End-Use Customer
Bruce	Susan	Rep.'g Praxair, Inc.	End-Use Customer
Bruce	Susan	Rep.'g Procter & Gamble Paper Products Company (The)	Generation Owner
Bruce	Susan	Rep.'g Trustees of the University of Pennsylvania	End-Use Customer
Bruce	Susan	Rep.'g Wellsboro Electric Company	Electric Distributor
Carrier	Ron	Direct Energy Business, LLC	Other Supplier
Davis	James	Virginia Electric & Power Company	Transmission Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Fitch	Neal	NRG Power Marketing, LLC	Generation Owner
Foladare	Kenneth	Geenex Solar LLC	Generation Owner
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Greiner	Gary	Public Service Electric & Gas Company	Transmission Owner
Hastings	David	Rep.'g Northstar Trading Ltd.	Other Supplier
Hastings	David	Rep.'g Saracen Energy East, L.P.	Other Supplier
Hastings	David	Rep.'g SESCO Enterprises, LLC	Other Supplier
Hastings	David	Rep.'g Solios Power Mid-Atlantic Trading, LLC	Other Supplier
Hoatson	Tom	Riverside Generating, LLC	Generation Owner
Hoatson	Tom	West Deptford Energy, LLC	Generation Owner
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner

Last Name	First Name	Company	Sector
Huang	Jame	Rockland Electric Company	Transmission Owner
Hyzinski	Thomas	Rep.'g Carroll County Energy LLC	Generation Owner
Hyzinski	Thomas	Rep.'g Dynegy Marketing and Trade, LLC	Generation Owner
Hyzinski	Thomas	Rep.'g GenOn Energy Management, LLC	Generation Owner
Johnson	Carl	Rep.'g Allegheny Electric Cooperative, Inc.	Electric Distributor
Johnson	Carl	Rep.'g American Municipal Power, Inc.	Electric Distributor
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 Pennsylvania (The)	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 Electric Membership Corporation	Electric Distributor
Johnson	Carl	Rep.'g North Carolina Municipal Power Agency Number 1	Other Supplier
Johnson	Carl	Rep.'g Northern Illinois Municipal Power Agency	Generation Owner
Johnson	Carl	Rep.'g Northern Virginia Electric Cooperative (NOVEC)	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
Keenan	Matthew	Elwood Energy, LLC	Generation Owner
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP	Other Supplier
Kilgallen	Kevin	Avangrid Renewables, LLC	Generation Owner
Meadors	Amanda	Duke Energy Business Services LLC	Transmission Owner
Poulos	Greg	Rep.'g Consumer Protection and Advocate Division of the Tennessee Attorney General	End-Use Customer
Poulos	Greg	Rep.'g Delaware Division of the Public Advocate	End-Use Customer
Poulos	Greg	Rep.'g Illinois Citizen Utility Board	End-Use Customer
Poulos	Greg	Rep.'g Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Poulos	Greg	Rep.'g Maryland Office of People's Counsel	End-Use Customer
Poulos	Greg	Rep.'g Michigan Department of Attorney General, Environment, Natural Resources, & Agriculture Division	End-Use Customer
Poulos	Greg	Rep.'g New Jersey Division of Rate Counsel	End-Use Customer



Last Name	First Name	Company	Sector
Poulos	Greg	Rep.'g Office of the Attorney General, Kentucky	End-Use Customer
Poulos	Greg	Rep.'g Office of the People's Counsel for the District of Columbia	End-Use Customer
Poulos	Greg	Rep.'g Ohio Consumers' Counsel	End-Use Customer
Poulos	Greg	Rep.'g Pennsylvania Office of Consumer Advocate	End-Use Customer
Poulos	Greg	Rep.'g Public Staff - North Carolina Utilities Commission	End-Use Customer
Poulos	Greg	Rep.'g Virginia Division of Consumer Counsel	End-Use Customer
Poulos	Greg	Rep.'g West Virginia Consumer Advocate Division	End-Use Customer
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Swalwell	Bradley	Tangent Energy Solutions, Inc.	Other Supplier
Toomey	Megan	Talen Energy Marketing, LLC	Generation Owner
Wadsworth	Joe	Vitol Inc.	Other Supplier
Whitehead	Jeffrey	Rep.'g Eastern Generation, LLC	Generation Owner
Whitehead	Jeffrey	Rep.'g Essential Power Rock Springs, LLC	Generation Owner
Whitehead	Jeffrey	Rep.'g Wheelabrator Frackville Energy Co., Inc.	Generation Owner
Wicks	Tonja	Duquesne Light Company	Transmission Owner

#### Non-Voting Attendees

Last Name	First Name	Company	Sector
Abend	Erik	TransAlta Energy Marketing (U.S.) Inc.	Other Supplier
Adams	Darrin	East Kentucky Power Cooperative, Inc.	Transmission Owner
Adams	Sean	Public Service Electric & Gas Company	Transmission Owner
Ament	Todd	Cube Hydro Partners, LLC	Generation Owner
Anderson	Jared	Platts	Not Applicable
Bagot	Nancy	Electric Power Supply Association	Not Applicable
Bainbridge	Thomas	Energy Harbor LLC	Generation Owner
Barrett	Fran	DHB Solutions	Not Applicable
Batta	Michael	Virginia Electric & Power Company	Transmission Owner
Baur	Sean	GlidePath Power Operations LLC	Generation Owner
Berg	Bill	Exelon Business Services Company, LLC	Transmission Owner
Berton	Tyler	AEP Energy Partners, Inc.	Transmission Owner
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Bockhorn	Tim	AES Energy Storage, LLC	Generation Owner
Bowring	Joe	Monitoring Analytics	Not Applicable
Burbure	Stacey	AEP Energy Partners, Inc.	Transmission Owner
Campbell	Bruce	Enerwise Global Technologies, LLC	Other Supplier
Canter	David	Appalachian Power Company	Transmission Owner
Carmean	Gregory	OPSI	Not Applicable
Carrado	Regina	Exelon Business Services Company, LLC	Transmission Owner
Carrier	Ron	Direct Energy Business Marketing, LLC	Other Supplier

Last Name	First Name	Company	Sector
Chandler	Kent	Kentucky Public Service Commission	Not Applicable
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Chocarro	Iker	RWE Renewables Americas, LLC	Generation Owner
Clair	Adrienne	Thompson Coburn	Not Applicable
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
Colbert	Cathleen	NRG Power Marketing, LLC	Generation Owner
Coultas	Ann	Invenergy, LLC	Generation Owner
Crystle	Gil	UGI Energy Services, LLC	Other Supplier
Dailey	Michael	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
D'Alessandris	Lou	Energy Harbor LLC	Generation Owner
Dasher	Brett	Energy Authority, Inc. (The)	Other Supplier
DeLosa	Joseph	New Jersey Board of Public Utilities	Not Applicable
Dillon	Matthew	UGI Energy Services, LLC	Other Supplier
DiNicola	Laura	Energy Harbor LLC	Generation Owner
Dolan	Ryan	American Municipal Power, Inc.	Electric Distributor
Domian	Christin	Duquesne Light Company	Transmission Owner
Drom	Richard	Eckert Seamans	Not Applicable
Duensing	Allison	Saracen Energy East, L.P.	Other Supplier
Ernst	Andrew	Archer Energy	Not Applicable
Everngam	Scott	Blue Horseshoe Energy	Not Applicable
Evrard	David	Pennsylvania Office of Consumer Advocate	End-Use Customer
Fazio	Danielle	Engelhart CTP (US) LLC	Other Supplier
Filomena	Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Fleisher	Madeline	Dickinson Wright	Not Applicable
Foley	Imelda	Environmental Defense Fund	Not Applicable
Fort	Jim	Energy Authority, Inc. (The)	Other Supplier
Foster	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner
Fuerst	Gary	Energy Harbor LLC	Generation Owner
Fuess	Christian	PBF Power Marketing, LLC	Generation Owner
Garnett	Bryan	Duke Energy Business Services LLC	Transmission Owner
Gates	Terry	AEP Energy Partners, Inc.	Transmission Owner
Gilani	Rehan	Consolidated Edison Company of New York, Inc.	Transmission Owner
Grau	Patrick	Apogee Energy Trading LLC	Other Supplier
Grimes	Jordan	Morgan Stanley Capital Group Inc.	Other Supplier
Guntle	Vince	American PowerNet Management, L.P.	End-Use Customer
Guy	Gary	Exelon Business Services Company, LLC	Transmission Owner
Hannah	Kyle	Dominion Energy Generation Marketing, Inc.	Generation Owner
Hanser	Erik	Michigan Public Service Commission	Not Applicable
Heidorn	Richard	RTO Insider	Not Applicable

Last Name	First Name	Company	Sector
Heinle	Frederick	Office of the People's Counsel for the District of Columbia	End-Use Customer
Heisey	Bradley	Tenaska Power Services Co.	Generation Owner
Heitmeyer	Chad	AEP Energy Partners, Inc.	Transmission Owner
Helms	Joseph	Tyr Energy	Not Applicable
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Holdbrook	Ruth	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Hollis	Gabriel	NextEra Energy Marketing, LLC	Other Supplier
Holstein	Matthew	Duke Energy Business Services LLC	Transmission Owner
Horton	Dana	Appalachian Power Company	Transmission Owner
Hull	Gerit	American Municipal Power, Inc.	Electric Distributor
Hurwich	Mark	Elliott Bay Energy Trading, LLC	Other Supplier
Iler	Arthur	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Islam	Lubaba	Rockland Electric Company	Transmission Owner
Jacobs	Mike	Union of Concerned Scientists	Not Applicable
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Jens	Tom	Black Oak Capital, LLC	Other Supplier
Jett	William	Duke Energy Business Services LLC	Transmission Owner
Johnston	David	Indiana Utilities Regulatory Commission	Not Applicable
Kaplan	Donald	K&L Gates	Not Applicable
Kogut	George	New York Power Authority	Other Supplier
Kopinski	John	ITC Interconnection LLC	Transmission Owner
Kozhuharov	Dimitar	Delaware Public Service Commission	Not Applicable
Laos	Takis	AEP Energy Partners, Inc.	Transmission Owner
Lawson	Ryen	Dominion Energy Generation Marketing, Inc.	Generation Owner
Liang-Nicol	Cecilia	Energy Harbor LLC	Generation Owner
Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor
Logan	Sharon	The Federal Energy Regulatory Commission	Not Applicable
Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Mancuso	Melanie	Energy Harbor LLC	Generation Owner
Marinelli	Rich	Public Service Electric & Gas Company	Transmission Owner
Martin	Valerie	The Federal Energy Regulatory Commission	Not Applicable
McAlister	Lisa	American Municipal Power, Inc.	Electric Distributor
Michael	Matthew	Ontario Power Generation Inc.	Other Supplier
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Miller	John	Commonwealth Edison Company	Transmission Owner
Mitrey	Andy	Archer Energy	Not Applicable
Nadel	Steven	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Nallan	Dwarakesh	Daymark Energy Advisors	Not Applicable
Nix	Emma	Gabel Associates	Not Applicable



Last Name	First Name	Company	Sector
Noewer	Sharon	Energy Harbor LLC	Generation Owner
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
Ondayko	Brock A.	AEP Energy Partners, Inc.	Transmission Owner
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Pelletier	Eveline	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Peoples	John	Duquesne Light Company	Transmission Owner
Philips	Marji	LS Power	Not Applicable
Pieniazek	Marie	NRG Power Marketing, LLC	Generation Owner
Pizzutelli	Ashley	Energy Harbor LLC	Generation Owner
Price	Mark	DC Energy, LLC	Other Supplier
Price	Ruth	Delaware Division of the Public Advocate	End-Use Customer
Rainey	Frank	PEI Power LLC	Generation Owner
Rainey	John	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Ramsey	Jeff	Sanitas Power, LLC	Other Supplier
Reams	William	Allegheny Electric Cooperative, Inc.	Electric Distributor
Redwine	Arlo	The Federal Energy Regulatory Commission	Not Applicable
Robinson	Becky	Dynegy Power Marketing, LLC	Generation Owner
Rohrbach	John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Russ	Michael	Dayton Power & Light Company (The)	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
Schmidt	Thomas	Buckeye Power, Inc.	Electric Distributor
Schum	Alice	Indiana Municipal Power Agency	Generation Owner
Shah	Pulin	Exelon Business Services Company, LLC	Transmission Owner
Sidhom	Noha	Prime Trading, LLC	Other Supplier
Singer	Chad	Trane Grid Services LLC	Other Supplier
Sotkiewicz	Paul	E-Cubed Policy Advisors	Not Applicable
Squibb	William	Ohio Valley Electric Corporation	Transmission Owner
Steele	Robert	Hyllgarth Energy	Not Applicable
Stern	Alex	Public Service Electric & Gas Company	Transmission Owner
Stewart	Travis	Gabel Associates	Not Applicable
Stone	Andy	Gabel Associates	Not Applicable
Stuchell	Jeff	Energy Harbor LLC	Generation Owner
Sturgeon	John	Duke Energy Business Services LLC	Transmission Owner
Sweeney	Rory	GT Power Group, LLC	Not Applicable
Tatum	Ed	American Municipal Power, Inc.	Electric Distributor
Taylor	Robert	Exelon Business Services Company, LLC	Transmission Owner
Theodore	Sharon	Electric Power Supply Association	Not Applicable
Thomas	Amber	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Thomas	Glen	GT Power Group, LLC	Not Applicable

Last Name	First Name	Company	Sector
Thompson	Matt	XO Energy MA, L.P.	Other Supplier
Tibbetts	Maeve	Pierce Atwood	Not Applicable
VanderLaan	William	Illinois Commerce Commission	Not Applicable
Vargo	Daniel	Allegheny Electric Cooperative, Inc.	Electric Distributor
Vayda	Brian	Borough of Park Ridge, New Jersey	Electric Distributor
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Wehnes	Kathleen	Maryland Department of the Environment	Not Applicable
Wehr	Chris	Energy Harbor LLC	Generation Owner
Wilson	James	Wilson Energy Economics	Not Applicable
Wisersky	Megan	Madison Gas & Electric Co.	Other Supplier
Yochelson	Cheri	Dominion Energy Generation Marketing, Inc.	Generation Owner

## PJM Attendees

Last Name	First Name	Company	Sector
Advena	Christopher	PJM Interconnection, LLC	Not Applicable
Asthana	Manu	PJM Interconnection, LLC	Not Applicable
Baker	Scott	PJM Interconnection, LLC	Not Applicable
Beban	Madalyn	PJM Interconnection, LLC	Not Applicable
Bennett	Stephen	PJM Interconnection, LLC	Not Applicable
Berner	Aaron	PJM Interconnection, LLC	Not Applicable
Bernstein	Matt	PJM Interconnection, LLC	Not Applicable
Bloczynski	Nigeria	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Bruno	Patrick	PJM Interconnection, LLC	Not Applicable
Bruno	Joshua	PJM Interconnection, LLC	Not Applicable
Bryson	Mike	PJM Interconnection, LLC	Not Applicable
Buehler	Susan	PJM Interconnection, LLC	Not Applicable
Burdis	Tim	PJM Interconnection, LLC	Not Applicable
Carroll	Rebecca	PJM Interconnection, LLC	Not Applicable
Chmielewski	Brian	PJM Interconnection, LLC	Not Applicable
Ciabattoni	Joe	PJM Interconnection, LLC	Not Applicable
Coyne	Suzanne	PJM Interconnection, LLC	Not Applicable
Croop	Danielle	PJM Interconnection, LLC	Not Applicable
Cummings	Bridgid	PJM Interconnection, LLC	Not Applicable
Davis	Elizabeth	PJM Interconnection, LLC	Not Applicable
DeVita	Thomas	PJM Interconnection, LLC	Not Applicable
Derin	Bilge	PJM Interconnection, LLC	Not Applicable
Dirani	Rami	PJM Interconnection, LLC	Not Applicable
Downs	Jere	PJM Interconnection, LLC	Not Applicable

Last Name	First Name	Company	Sector
Drauschak	Lisa	PJM Interconnection, LLC	Not Applicable
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Endress	Eric	PJM Interconnection, LLC	Not Applicable
Esterly	Theresa	PJM Interconnection, LLC	Not Applicable
Fabiano	Janell	PJM Interconnection, LLC	Not Applicable
Falin	Tom	PJM Interconnection, LLC	Not Applicable
Fan	Zhenyu	PJM Interconnection, LLC	Not Applicable
Fernandez	Ray	PJM Interconnection, LLC	Not Applicable
Fitzpatrick	Brian	PJM Interconnection, LLC	Not Applicable
Foley	Sheila	PJM Interconnection, LLC	Not Applicable
Foley	Pauline	PJM Interconnection, LLC	Not Applicable
Franks	Edmund	PJM Interconnection, LLC	Not Applicable
Glatz	Suzanne	PJM Interconnection, LLC	Not Applicable
Glazer	Craig	PJM Interconnection, LLC	Not Applicable
Gluck	Jim	PJM Interconnection, LLC	Not Applicable
Greening	Michele	PJM Interconnection, LLC	Not Applicable
Guistwhite	Jeff	PJM Interconnection, LLC	Not Applicable
Haque	Asim	PJM Interconnection, LLC	Not Applicable
Hauske	Tom	PJM Interconnection, LLC	Not Applicable
Herel	Suzanne	PJM Interconnection, LLC	Not Applicable
Herling	Steve	PJM Interconnection, LLC	Not Applicable
Herman	Michael	PJM Interconnection, LLC	Not Applicable
Hoang	Liem	PJM Interconnection, LLC	Not Applicable
Horger	Tim	PJM Interconnection, LLC	Not Applicable
Horning	Lynn	PJM Interconnection, LLC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Hugee	Jacquelyn	PJM Interconnection, LLC	Not Applicable
Keech	Adam	PJM Interconnection, LLC	Not Applicable
Keegan	John	PJM Interconnection, LLC	Not Applicable
Keshavamurthy	Bhavana	PJM Interconnection, LLC	Not Applicable
LaRocque	Matthew	PJM Interconnection, LLC	Not Applicable
Langbein	Pete	PJM Interconnection, LLC	Not Applicable
Levitt	Andrew	PJM Interconnection, LLC	Not Applicable
Lu	Chen	PJM Interconnection, LLC	Not Applicable
Mathew	Lagy	PJM Interconnection, LLC	Not Applicable
McGill	Susan	PJM Interconnection, LLC	Not Applicable
McGlynn	Paul	PJM Interconnection, LLC	Not Applicable
McLaughlin	Jeffrey	PJM Interconnection, LLC	Not Applicable
McLavery	Megan	PJM Interconnection, LLC	Not Applicable

Last Name	First Name	Company	Sector
Morelli	Lisa	PJM Interconnection, LLC	Not Applicable
Muhl	Nancy	PJM Interconnection, LLC	Not Applicable
Murphy	Shaun	PJM Interconnection, LLC	Not Applicable
Murphy Lee	Lori	PJM Interconnection, LLC	Not Applicable
O'Brien	Tom	PJM Interconnection, LLC	Not Applicable
O'Hara	Chris	PJM Interconnection, LLC	Not Applicable
O'Neill	Jack	PJM Interconnection, LLC	Not Applicable
Pacella	Christopher	PJM Interconnection, LLC	Not Applicable
Patel	Keyur	PJM Interconnection, LLC	Not Applicable
Patel	Anita	PJM Interconnection, LLC	Not Applicable
Phillips	Darlene	PJM Interconnection, LLC	Not Applicable
Pilong	Chris	PJM Interconnection, LLC	Not Applicable
Pilong	Melissa	PJM Interconnection, LLC	Not Applicable
Robinson	Evelyn	PJM Interconnection, LLC	Not Applicable
Salmon	Lisa	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
Shields	Jeffrey	PJM Interconnection, LLC	Not Applicable
Snyder	Susan	PJM Interconnection, LLC	Not Applicable
Souder	Michelle	PJM Interconnection, LLC	Not Applicable
Souder	Rich	PJM Interconnection, LLC	Not Applicable
Souder	Dave	PJM Interconnection, LLC	Not Applicable
Stanisz	Mark	PJM Interconnection, LLC	Not Applicable
Stotesbury	Christina	PJM Interconnection, LLC	Not Applicable
Swimm	Nora	PJM Interconnection, LLC	Not Applicable
Tacka	Natalie	PJM Interconnection, LLC	Not Applicable
Tribulski	Jen	PJM Interconnection, LLC	Not Applicable
Ward	Mike	PJM Interconnection, LLC	Not Applicable
Widom	Stuart	PJM Interconnection, LLC	Not Applicable
Wynder	Michael	PJM Interconnection, LLC	Not Applicable
Zamojcin	Ann	PJM Interconnection, LLC	Not Applicable