

## Markets & Reliability Committee

Webex Only

November 17, 2021

9:00 a.m. – 12:00 p.m. EPT

### Administration

Stu Bresler and Dave Anders welcomed stakeholders and provided the Anti-trust, Code of Conduct, and Meeting Participation announcements. Stu Bresler noted that agenda item 4, Transparency Forum, had been withdrawn by Greg Poulos, on behalf of the New Jersey Division of the Rate Counsel.

### Consent Agenda

Items A through G were **approved/endorsed** by acclamation with no objections or abstentions:

- A. Minutes of the October 20, 2021 meeting of the Markets and Reliability Committee (MRC).
- B. Proposed revisions to Manual 01 Attachment F: Control Center and Data Exchange Requirements (MOC Remote Operations) related to Exceptional Circumstances outside of COVID-19.
- C. Proposed revisions to Manual 03: Transmission Operations resulting from its periodic review.
- D. Proposed revisions to Manual 13: Emergency Operations resulting from its periodic review.
- E. Proposed revisions to Manual 14F: Competitive Planning Process addressing changes to the proposal fee structure to conform to the PJM Operating Agreement.
- F. Proposed revisions to Manual 19: Load Forecasting and Analysis resulting from its biennial review.
- G. Proposed changes to the 2022 Day Ahead Scheduling Reserve (DASR) requirement.

### Endorsements

1. Sunset of the Carbon Pricing Senior Task Force (CPSTF)

Eric Hsia reviewed a recommendation to sunset the CPSTF. Adrien Ford, ODEC, moved and David Scarpignato, Calpine, seconded sunsetting the CPSTF. Following discussion, the motion to sunset the CPSTF was **approved** by acclamation with no objections and one abstention.

2. Sunset of the High Voltage Direct Current Senior Task Force (HVDCSTF)

Carl Johnson, PJM Public Power Coalition on behalf of American Municipal Power, moved and Adrien Ford, ODEC, seconded sunsetting the HVDCSTF. Following discussion, the motion to sunset the HVDCSTF was **approved** by acclamation with no objections or abstentions.

## First Readings

### 3. Solar-Battery Hybrid Resources

Andrew Levitt and Thomas DeVita reviewed a proposed solution package to address various aspects of market participation by solar-battery hybrid resources. The committee may be asked to endorse the proposed solution and corresponding Tariff and Operating Agreement (OA) revisions at its next meeting.

[Issue Tracking: Solar-Battery Hybrid Resources](#)

### 4. Transparency Forum

This item was withdrawn.

### 5. Undefined Regulation Mileage Ratio Calculation

A. Adam Keech discussed next steps of the Undefined Regulation Mileage Ratio proposal in light of the failed vote at the October MRC.

B. Danielle Croop reviewed a Problem Statement and Issue Charge addressing broader Regulation Market redesign. The committee will be asked to approve the proposed Issue Charge at its next meeting.

[Issue Tracking: Undefined Regulation Mileage Ratio Calculation](#)

### 6. Synchronous Reserve Deployment Stakeholder Initiative

Mike Zhang reviewed a proposed solution package addressing synchronous reserve deployment. The committee will be asked to endorse the proposed solution and corresponding Tariff and OA revisions at its next meeting.

[Issue Tracking: Synchronized Reserve Event Actions and Expectations](#)

### 7. Tariff Attachment DD Revisions

Janell Fabiano and Chenchao Lu reviewed proposed revisions to Tariff Attachment DD as endorsed by the Governing Document Enhancement and Clarification Subcommittee (GDECS). The committee will be asked to endorse the proposed revisions at its next meeting.

### 8. PJM Manuals

A. Emmy Messina reviewed proposed revisions to Manual 06: Financial Transmission Rights conforming to the AFMTF PJM/Joint Stakeholder package endorsed at the October MRC. The committee will be asked to endorse the revisions at its next meeting.

[Issue Tracking: ARR/FTR Market Review](#)

B. Vince Stefanowicz reviewed proposed revisions to Manual 10: Pre-Scheduling Operations resulting from its periodic review. The committee will be asked to endorse the revisions at its next meeting.

- C. Michael Herman provided a review of Manual 14B revisions resulting from its biennial review. The committee will be asked to endorse the proposed revisions at its next meeting.
- D. Vince Stefanowicz reviewed proposed revisions to Manual 14D: Generator Operational Requirements resulting from its periodic review. The committee will be asked to endorse the revisions at its next meeting.

## Future Agenda Items

No new future agenda items were identified.

Future Meeting Dates and Materials			Materials Due to Secretary	Materials Published
Date	Time	Location		
<i>December 15, 2021</i>	9:00 a.m.	WebEx	December 3, 2021	December 8, 2021
<i>January 26, 2022</i>	9:00 a.m.	TBD	January 14, 2022	January 19, 2022
<i>February 24, 2022</i>	9:00 a.m.	TBD	February 14, 2022	February 17, 2022
<i>March 23, 2022</i>	9:00 a.m.	TBD	March 11, 2022	March 16, 2022
<i>April 27, 2022</i>	9:00 a.m.	TBD	April 15, 2022	April 20, 2022
<i>May 25, 2022</i>	9:00 a.m.	TBD	May 13, 2022	May 18, 2022
<i>June 29, 2022</i>	9:00 a.m.	TBD	June 17, 2022	June 22, 2022

Author: D. Anders

## Meeting Attendance

### Chair/Secretary

Last Name	First Name	Company	Sector
Bresler	Stu	PJM Interconnection, LLC	Not Applicable
Anders	David	PJM Interconnection, LLC	Not Applicable

### Voting Attendees

Last Name	First Name	Company	Sector
Barker	Jason	Exelon Business Services Company, LLC	Transmission Owner
Benчек	Jim	American Transmission Systems, Inc.	Transmission Owner
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Borgatti	Michael	Rep'g. Energy Harbor LLC	Generation Owner
Borgatti	Michael	Rep'g. Hazleton Generation LLC	Generation Owner
Borgatti	Michael	Rep'g. Jersey Green Energy, LLC	Other Supplier
Borgatti	Michael	Rep'g. Leeward Asset Management, LLC	Generation Owner
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	Other Supplier

Borgatti	Michael	Rep'g. Recurrent Energy, LLC	Other Supplier
Borgatti	Michael	Rep'g. York County Solid Waste and Refuse Authority	Generation 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. Cleveland-Cliffs Steel LLC	End-Use Customer
Bruce	Susan	Rep'g. Gerdau Ameristeel Energy, Inc.	End-Use Customer
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. Linde Inc.	End-Use Customer
Bruce	Susan	Rep'g. MeadWestvaco Corporation	End-Use Customer
Bruce	Susan	Rep'g. Messer LLC	End-Use Customer
Bruce	Susan	Rep'g. Procter & Gamble Paper Products Company (The)	End-Use Customer
Bruce	Susan	Rep'g. Trustees of the University of Pennsylvania	End-Use Customer
Bruce	Susan	Rep'g. Wellsboro Electric Company	Electric Distributor
Canter	David	Appalachian Power Company	Transmission Owner
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Cox	Jason	EDF Trading North America, LLC	Other Supplier
Davis	James	Virginia Electric & Power Company	Transmission Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Foladare	Kenneth	Geenex Solar LLC	Other Supplier
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Fuess	Christian	Rep'g. Diamond State Generation Partners, LLC	Generation Owner
Fuess	Christian	Rep'g. Icetec.com, Inc.	Other Supplier
Fuess	Christian	Rep'g. Kuehne Chemical Company, Inc.	End-Use Customer
Fuess	Christian	Rep'g. NextPower III US Holdco Inc.	Generation Owner
Fuess	Christian	Rep'g. PBF Power Marketing, LLC	End-Use Customer
Gibbs	Ike	Citadel FNGE Ltd.	Other Supplier
Gorman	Kevin	The Highlands Energy Group, LLC	Other Supplier
Hastings	David	Rep'g. Northstar Trading Ltd.	Other Supplier
Hastings	David	Rep'g. Saracen Energy East LP	Other Supplier
Hastings	David	Rep'g. SESCO Enterprises, LLC	Other Supplier
Hoatson	Tom	Riverside Generating Company, L.L.C.	Generation Owner
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Hurwich	Mark	Elliott Bay Energy Trading, LLC	Other Supplier
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
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier

Jardot	Gina	NRG Power Marketing LLC	Generation 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 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	Electric Distributor
Johnson	Carl	Rep'g. Michigan Public Power Agency	Electric Distributor
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	Electric Distributor
Johnson	Carl	Rep'g. Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson	Carl	Rep'g. Thurmont Municipal Light Company	Electric Distributor
Johnson	Carl	RTown of Williamsport (The)	Electric Distributor
Johnson	Carl	RWPPI 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
Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor
Litchfield	Matt	CPV Power Holdings, LP	Generation Owner
Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Patrylo	Bob	H-P Energy Resources, LLC	Other Supplier
Pelletier	Eveline	H.Q. Energy Services (U.S.), Inc.	Other Supplier
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
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
Rohrbach	John	Rep'g. Big Savage, LLC	Generation Owner
Rohrbach	John	Rep'g. Kentucky Municipal Energy Agency	Electric Distributor
Rohrbach	John	Rep'g. Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Rohrbach	John	Rep'g. Wabash Valley Power Association, Inc.	Electric Distributor
Rooney	Alexa	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Seireg	Bahaa	Rockland Electric Company	Transmission Owner
Sidhom	Noha	Rep'g. Strom Power, LLC	Other Supplier
Sidhom	Noha	Rep'g. Viribus Fund LP	Other Supplier
Skucas	Ruta	Rep'g. Alphataraxia Palladium LLC	Other Supplier
Skucas	Ruta	Rep'g. Ames Energy, LLC	Other Supplier
Skucas	Ruta	Rep'g. Big Bend Trading, LLC	Other Supplier
Skucas	Ruta	Rep'g. BJ Energy, LLC	Other Supplier
Skucas	Ruta	Rep'g. Boston Energy Group, Inc.	Other Supplier
Skucas	Ruta	Rep'g. Greene Energy NE LLC	Other Supplier
Skucas	Ruta	Rep'g. Hexis Energy Trading, LLC	Other Supplier
Skucas	Ruta	Rep'g. MAG Energy Solutions, Inc.	Other Supplier
Skucas	Ruta	Rep'g. Monterey MA LLC	Other Supplier
Skucas	Ruta	Rep'g. Precept Power LLC	Other Supplier
Skucas	Ruta	Rep'g. Pure Energy, Inc.	Other Supplier
Skucas	Ruta	Rep'g. Red Wolf TX2, LLC	Other Supplier
Skucas	Ruta	Rep'g. Taller Cube, LLC	Other Supplier
Skucas	Ruta	Rep'g. Velocity American Energy Master I, L.P.	Other Supplier
Skucas	Ruta	Rep'g. XO Energy MA, L.P.	Other Supplier
Stern	Alex	Public Service Electric & Gas Company	Transmission Owner
Sturgeon	John	Duke Energy Business Services LLC	Transmission Owner
Swalwell	Bradley	Tangent Energy Solutions, Inc.	Other Supplier
Vayda	Brian	Rep'g. Borough of Butler, Butler Electric Division	Electric Distributor
Vayda	Brian	Rep'g. Borough of Lavallette, New Jersey	Electric Distributor
Vayda	Brian	Rep'g. Borough of Madison, New Jersey	Electric Distributor
Vayda	Brian	Rep'g. Borough of Milltown, New Jersey	Electric Distributor
Vayda	Brian	Rep'g. Borough of Park Ridge, New Jersey	Electric Distributor
Vayda	Brian	Rep'g. Borough of Pemberton, New Jersey	Electric Distributor
Vayda	Brian	Rep'g. Borough of Seaside Heights, New Jersey	Electric Distributor
Vayda	Brian	Rep'g. Borough of South River, New Jersey	Electric Distributor
Vayda	Brian	Rep'g. Vineland Municipal Electric Utility	Electric Distributor
Wadsworth	Joe	Vitol Inc.	Generation Owner
Whitehead	Jeffrey	Rep'g. Eastern Generation, LLC	Generation Owner

Whitehead	Jeffrey	Rep'g. Essential Power Rock Springs, LLC	Generation Owner
Whitehead	Jeffrey	Rep'g. Neptune Regional Transmission System, LLC	Transmission Owner
Whitehead	Jeffrey	Rep'g. Wheelabrator Falls Inc.	Generation Owner

## Non-Voting Attendees

Last name	First Name	Company	Sector
Anderson	Jared	Platts	Not Applicable
Batta	Mike	Virginia Electric & Power Company	Transmission Owner
Berton	Tyler	Appalachian Power Company	Transmission Owner
Bowring	Joe	Monitoring Analytics, LLC	Not Applicable
Bunch	Kevin	EDF Energy Services, LLC	Other Supplier
Callen	Zac	Illinois Commerce Commission	Not Applicable
Campbell	Bruce	Enerwise Global Technologies, LLC	Other Supplier
Carmean	Gregory	OPSI	Not Applicable
Carrier	Ronald	Big Lake Consulting Group	Not Applicable
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
Cox	Jason	EDF Energy Services, LLC	Other Supplier
Dean	Evan	American Transmission Systems, Inc.	Transmission Owner
Dossin	Sophia	Invenergy, LLC	Generation Owner
Duensing	Allison	Saracen Power LP	Other Supplier
Elkins	Rachel	American Transmission Systems, Inc.	Transmission Owner
Ellis	David	West Virginia Consumer Advocate Division	End-Use Customer
Eyocko	Stephanie	Federal Energy Regulatory Commission	Not Applicable
Fazio	Danielle	Engelhart CTP (US) LLC	Other Supplier
Filomena	Guy	Customized Energy Solutions, Ltd.	Not Applicable
Fishvack	Luke	Affirmed Energy LLC	Other Supplier
Foster	Denise	East Kentucky Power Cooperative	Transmission Owner
Fuess	Christian	PBF Power And Marketing, LLC	End-Use Customer
Gates	Terry	Appalachian Power Company	Transmission Owner
Gilani	Rehan	Consolidated Edison Energy, Inc	Other Supplier
Good	Megan	Pennsylvania Public Utility Commission	Not Applicable
Gorman	Brad	American Transmission Systems, Inc.	Transmission Owner
Greiner	Gary	Public Services Electric & Gas	Transmission Owner
Guntle	Vince	American PowerNet Management, L.P.	End-Use Customer
Hagaman	Derek	Gabel Associates	Not Applicable
Hagman	Garrett	Gabel Associates	Not Applicable
Hanser	Erik	Maryland Public Service Commission	Not Applicable
Heinle	Erik	Office of the People's Counsel for the District of Columbia	End-Use Customer
Heisey	Bradley	Tenaska Pennsylvania Partners, LLC	Generation Owner
Heitmeyer	Chad	Appalachian Power Company	Transmission Owner
Herbert	Sebastian	DC Energy, LLC	Other Supplier
Horning	Lynn	Customized Energy Solutions, Ltd.	Not Applicable

Hudis	Gabriella	Gabel Associates	Not Applicable
Iler	Art	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Jett	William	Duke Energy Business Services LLC	Transmission Owner
Johnston	David	Indiana Utility Regulatory Commission	Not Applicable
Kilgallen	Kevin	Avangrid Renewables, LLC	Generation Owner
Klein	Abram	Appian Way Energy Partners MidAtlantic, LLC	Other Supplier
Kothakapu	Rakesh	Illinois Municipal Electric Agency	Electric Distributor
Laos	Takis	Appalachian Power Company	Transmission Owner
Lauterbach	Victoria	Wright & Talisman	Not Applicable
Lawson	Ryen	Virginia Electric & Power Company	Transmission Owner
Liang-Nicol	Cecilia	American Transmission Systems, Inc.	Transmission Owner
Mabry	David	McNees, Wallace & Nurick, LLC	Not Applicable
Mahila	Christopher	Public Utilities Commission Of Ohio	Not Applicable
Mahoor	Mohsen	Virginia Electric & Power Company	Transmission Owner
Mariam	Yohannes	Office of the People's Counsel for the District of Columbia	End-Use Customer
Markiewicz	Cynthia	American Transmission Systems, Inc.	Transmission Owner
Martin	Valerie	Federal Energy Regulatory Commission	Not Applicable
Martin	Valerie	Federal Energy Regulatory Commission	Not Applicable
Mcneil	Justin	Kentucky Public Service Commission	Not Applicable
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Miller	John	Commonwealth Edison Company	Transmission Owner
Mooney	Jeff	American Transmission Systems, Inc.	Transmission Owner
Nadel	Steven	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Nix	Emma	Gabel Associates	Not Applicable
Noewer	Sharon	American Transmission Systems, Inc.	Transmission Owner
Ondayko	Brock	Appalachian Power Company	Transmission Owner
Peoples	John	Duquesne Light Company	Transmission Owner
Price	Mark	DC Energy, LLC	Other Supplier
Redwine	Arlo	Federal Energy Regulatory Commission	Not Applicable
Roberts	Jackie	West Virginia Consumer Advocate Division	End-Use Customer
Robinson	Becky	Vistra	Not Applicable
Robson	Matt	Sesco Enterprises, LLC	Other Supplier
Rodriguez	Tomas	OPSI	Not Applicable
Rohrbach	John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Rumsey	Amanda	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.	Not Applicable
Schreim	Morris	Maryland Public Service Commission	Not Applicable
Schrim	Morris	Maryland Public Service Commission	Not Applicable
Segner	Sharon	Silver Run Electric, LLC	Transmission Owner
Shah	Pulin	Exelon Business Services Company, LLC	Transmission Owner
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Skumanich	Bill	RTR Energy Solutions LLC	Not Applicable

Sotkiewicz	Paul	E-Cubed Policy Associates	Not Applicable
Squibb	Bill	Ohio Valley Electric Corporation	Transmission Owner
Steele	Robert	Hyllgarth Energy	Not Applicable
Stewart	Travis	Gabel Associates	Not Applicable
Stone	Andy	Gabel Associates	Not Applicable
Stuchell	Jeff	American Transmission Systems, Inc.	Transmission Owner
Stupar	Rob	Invenergy, LLC	Generation Owner
Svenson	Heather	PSEG Energy Resources & Trade LLC	Other Supplier
Sweeney	Rory	GT Power Group, LLC	Not Applicable
Tangirala	Subha	ABB Enterprise Software Inc.	Not Applicable
Tatum	Ed	American Municipal Power, Inc.	Electric Distributor
Taylor	Robert	Exelon Business Services Company, LLC	Transmission Owner
Thomas	Amber	Exelon Business Services Company, LLC	Transmission Owner
Tibbetts	Maeve	K&L Gates	Not Applicable
Tyler	Catherine	Monitoring Analytics, LLC	Not Applicable
Vargo	Daniel	Allegheny Electric Cooperative, Inc.	Electric Distributor
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Wehnes	Kathleen	Maryland Department Of The Environment	Not Applicable
Yoder	Michael	RTO Insider	Not Applicable
Yoo	Jin	Monitoring Analytics, LLC	Not Applicable
Zemanek	Kevin	Buckeye Power, Inc.	Electric Distributor

## PJM Attendees

Last Name	First Name	Company	Sector
Anders	David	PJM Interconnection, LLC	Not Applicable
Asthana	Manu	PJM Interconnection, LLC	Not Applicable
Baizman	Aaron	PJM Interconnection, LLC	Not Applicable
Baker	Scott	PJM Interconnection, LLC	Not Applicable
Berner	Aaron	PJM Interconnection, LLC	Not Applicable
Bernstein	Matthew	PJM Interconnection, LLC	Not Applicable
Bloczynski	Nigeria	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Bresler	Stu	PJM Interconnection, LLC	Not Applicable
Bruno	Patrick	PJM Interconnection, LLC	Not Applicable
Bryson	Michael	PJM Interconnection, LLC	Not Applicable
Burdis	Tim	PJM Interconnection, LLC	Not Applicable
Caven	Augustine	PJM Interconnection, LLC	Not Applicable
Chmielewski	Brian	PJM Interconnection, LLC	Not Applicable
Conboy	Paula	PJM Interconnection, LLC	Not Applicable
Croop	Danielle	PJM Interconnection, LLC	Not Applicable
Dantonio	Phil	PJM Interconnection, LLC	Not Applicable
DeVita	Thomas	PJM Interconnection, LLC	Not Applicable

Drauschak	Lisa	PJM Interconnection, LLC	Not Applicable
Dropkin	Ilyana	PJM Interconnection, LLC	Not Applicable
Dumitriu	Nick	PJM Interconnection, LLC	Not Applicable
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Esterly	Theresa	PJM Interconnection, LLC	Not Applicable
Fabiano	Janell	PJM Interconnection, LLC	Not Applicable
Farhat	Michelle	PJM Interconnection, LLC	Not Applicable
Fereshetian	Damon	PJM Interconnection, LLC	Not Applicable
Foley	Sheila	PJM Interconnection, LLC	Not Applicable
Frogg	Darrell	PJM Interconnection, LLC	Not Applicable
Glatz	Suzanne	PJM Interconnection, LLC	Not Applicable
Glazer	Craig	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
Hartung	Shanna	PJM Interconnection, LLC	Not Applicable
Hauske	Thomas	PJM Interconnection, LLC	Not Applicable
Herman	Michael	PJM Interconnection, LLC	Not Applicable
Hickey	Michael	PJM Interconnection, LLC	Not Applicable
Hicks	Colleen	PJM Interconnection, LLC	Not Applicable
Horger	Tim	PJM Interconnection, LLC	Not Applicable
Hough	Dennis	PJM Interconnection, LLC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Kazerooni	Hamid	PJM Interconnection, LLC	Not Applicable
Keech	Adam	PJM Interconnection, LLC	Not Applicable
Keegan	John	PJM Interconnection, LLC	Not Applicable
Kimmel	*David	PJM Interconnection, LLC	Not Applicable
Lai	Erin	PJM Interconnection, LLC	Not Applicable
Levitt	Andrew	PJM Interconnection, LLC	Not Applicable
Lu	Chen	PJM Interconnection, LLC	Not Applicable
Lynch	Jessica	PJM Interconnection, LLC	Not Applicable
McGlynn	Paul	PJM Interconnection, LLC	Not Applicable
McLavery	Megan	PJM Interconnection, LLC	Not Applicable
Messina	Emmy	PJM Interconnection, LLC	Not Applicable
Militello	Nicole	PJM Interconnection, LLC	Not Applicable
Moran	Christopher	PJM Interconnection, LLC	Not Applicable
Morelli	Lisa	PJM Interconnection, LLC	Not Applicable
Muhl	Nancy	PJM Interconnection, LLC	Not Applicable
Murphy	Lori	PJM Interconnection, LLC	Not Applicable
Oakes	Brian	PJM Interconnection, LLC	Not Applicable
O'Brien	Tom	PJM Interconnection, LLC	Not Applicable
O'Hara	Chris	PJM Interconnection, LLC	Not Applicable

Olaley	Michael	PJM Interconnection, LLC	Not Applicable
Patel	Keyur	PJM Interconnection, LLC	Not Applicable
Patrick	Brian	PJM Interconnection, LLC	Not Applicable
Perera	Asanga	PJM Interconnection, LLC	Not Applicable
Pilong	Chris	PJM Interconnection, LLC	Not Applicable
Pincus	Steven	PJM Interconnection, LLC	Not Applicable
Reynolds	John	PJM Interconnection, LLC	Not Applicable
Roberts	Jackie	PJM Interconnection, LLC	Not Applicable
Robinson	Becky	PJM Interconnection, LLC	Not Applicable
Robinson	Evelyn	PJM Interconnection, LLC	Not Applicable
Rocha	Patricio	PJM Interconnection, LLC	Not Applicable
Rodriguez	Tomas	PJM Interconnection, LLC	Not Applicable
Rogers	Sarah	PJM Interconnection, LLC	Not Applicable
Salmon	Lisa	PJM Interconnection, LLC	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Seiler	Ken	PJM Interconnection, LLC	Not Applicable
Shah	Vijay	PJM Interconnection, LLC	Not Applicable
Souder	Michelle	PJM Interconnection, LLC	Not Applicable
Stadelmeyer	Rebecca	PJM Interconnection, LLC	Not Applicable
Stefanowicz	Vincent	PJM Interconnection, LLC	Not Applicable
Stemetzki	Michael	PJM Interconnection, LLC	Not Applicable
Swimm	Nora	PJM Interconnection, LLC	Not Applicable
Tribulski	Jen	PJM Interconnection, LLC	Not Applicable
Waweru	James	PJM Interconnection, LLC	Not Applicable
Zhang	Michael	PJM Interconnection, LLC	Not Applicable