

Markets & Reliability Committees
PJM Conference and Training Center, Audubon, PA / WebEx
March 20, 2024
9:00 a.m. – 1:55 p.m. EPT

Administration

Lisa Drauschak and David Anders welcomed stakeholders and provided the Anti-trust, Code of Conduct, and Meeting Participation announcements.

Chen Lu provided an overview of the recent decision issued by the US Court of Appeals for the Third Circuit which vacated a portion of FERC's acceptance of PJM's request to adjust the 2024-25 Base Residual Auction parameters for the DPL South zone.

Consent Agenda

Items A through D were **approved/endorsed** by acclamation with no objections and one abstention (to all items):

- A. Minutes of the February 22, 2024 meeting of the Markets and Reliability Committee.
- B. Proposed revisions to Manual 11: Energy & Ancillary Services Market Operations for interface pricing points reviews.
[Issue Tracking: Interface Pricing Points Review](#)
- C. Proposed revisions to Manual 12: Balancing Operations resulting from its periodic review.
- D. Proposed revisions to Manual 37: Reliability Coordination resulting from its periodic review and additional revisions addressing changes for FAC-011 and FAC-014.

Endorsements

1. Governing Document Clarifying Revisions

Michele Greening reviewed proposed clarifying Tariff, Reliability Assurance Agreement (RAA), and Operating Agreement (OA) revisions addressing interconnection process references as endorsed by the Governing Documents Enhancements and Clarifications Subcommittee (GDECS) in February. Following discussion, the proposed revisions were **endorsed** by acclamation with no objections and 20 abstentions.

2. Demand Response Availability Window

Bruce Campbell, on behalf of DR Providers, reviewed a proposed Problem Statement and Issue Charge addressing the alignment of demand response capacity availability hours with periods of reliability risk. The proposed Issue Charge Key Work Activity (KWA) 2 contained a solution (using the Quick Fix process outlined in Manual 34, Section 8.6.1) to adjust the DR availability hours for the 2024-25 winter, while other KWAs proposed investigating further solution opportunities.

Sponsors of the Issue Charge withdrew their request for a vote to approve it at this meeting, indicating they may request approval at a future meeting.

3. Manual 18B: Energy Efficiency Measurement & Verification

- A. Pete Langbein reviewed the Main Motion of proposed revisions to Manual 18B: Energy Efficiency Measurement & Verification addressing Energy Efficiency resources.
- B. Ken Schisler, CPower, moved, and Manuel Esquivel, Enel, seconded an Alternate Motion of proposed revisions to Manual 18B: Energy Efficiency Measurement & Verification.
- C. Luke Fishback, Affirmed Energy, moved and Doug Hurley, Ictec, seconded an Alternate Motion of proposed revisions to Manual 18B: Energy Efficiency Measurement & Verification.

Following discussion, the proposed revisions contained in the main motion were **failed** in a sector weighted vote with 2.539 in favor. The revisions proposed by CPower **failed** in a sector weighted vote with 1.909 in favor. The revisions proposed by Affirmed Energy **failed** in a sector weighted vote with 1.575 in favor.

Erik Heinle, Vistra moved, and Paul Sotkiewicz, JPower, seconded an alternate motion consisting of the main motion, altered to include a transition for Technical Resource Manual validity (TRM) implementation as follows (revised sections of Manual 18B):

7a.1 Option A (Default): State or Region Technical Reference Manual

The most current State or regional technical reference manual, issued within 5 years of the installation period for the start of the 25/26 DY, 4 years of the installation period for the start of the 26/27 DY, and 3 years of the installation period for the start of 27/28 DY and for any DY going forward, of the install period and applicable to the location where the Energy Efficiency measure was installed. If there is no applicable state or regional technical reference manual, then Option B shall be used. If there is no applicable state or regional technical reference manual to determine the baseline then Option B shall be used.

Following discussion, this alternative **failed** in a sector weighted vote with 3.325 in favor.

[Issue Tracking: Evaluation of Energy Efficiency Resources](#)

4. Capacity Obligations for Forecasted Large Load Adjustments Issue Charge

Michael Cocco, Old Dominion Electric Cooperative, moved and Rory Sweeney, Northern Virginia Electric Cooperative, seconded proposed amendments to the Capacity Obligations for Forecasted Large Load Adjustments Issue Charge currently being addressed at the Market Implementation Committee. Following discussion, the proposed Issue Charge was **approved** by acclamation with no objections and one abstention.

[Issue Tracking: Capacity Obligations for Forecasted Large Load Adjustments](#)

5. Forecast Pool Requirement & Installed Reserve Margin

Patricio Rocha Garrido reviewed updated Forecast Pool Requirement (FPR) and Installed Reserve Margin (IRM) figures for the 2025/2026 Delivery Year. Following discussion, the proposed revisions were **endorsed** in a sector weighted vote with 4.394 in favor.

First Readings

6. Governing Document Clarifying Revisions

Michele Greening reviewed proposed clarifying Tariff, Reliability Assurance Agreement (RAA), and Operating Agreement (OA) revisions addressing market related references as endorsed by the Governing Documents Enhancements and Clarifications Subcommittee (GDECS) in March. The committee will be asked to endorse/approve the proposed Tariff, RAA, and OA revisions at its next meeting.

7. Long Term Regional Transmission Planning (LTRTP) Manual Revisions

Michael Herman reviewed proposed revisions to Manual 14B and Manual 14F addressing long-term regional transmission planning. The committee will be asked to endorse the proposed Manual revisions at its next meeting.

[Issue Tracking: Long Term Regional Transmission Planning](#)

8. Synchronous Condensing Costs

David Hauske reviewed a proposed solution addressing synchronous condensing costs and corresponding revisions to the Operating Agreement (OA), Tariff, Manual 11: Energy & Ancillary Services Market Operations, Manual 15: Cost Development Guidelines and Manual 28: Operating Agreement Accounting. The committee will be asked to approve/endorse the proposed solution and OA, Tariff and Manual revisions at its next meeting.

[Issue Tracking: Synchronous Condensing Costs](#)

9. Dual Fuel Attestation for ELCC

David Scarpignato, Calpine, reviewed a proposed Issue Charge and solution addressing dual fuel attestation for Effective Load Carrying Capability (ELCC) resources. The committee will be asked to approve the Issue Charge and endorse the proposed solution using the Quick Fix process outlined in Manual 34, Section 8.6.1 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		

			5:00 p.m. EPT deadline*	
April 25, 2024	9:00 a.m.	PJM Conference & Training Center and WebEx	April 15, 2024	April 18, 2024
May 22, 2024	9:00 a.m.	PJM Conference & Training Center and WebEx	May 10, 2024	May 15, 2024
June 27, 2024	9:00 a.m.	PJM Conference & Training Center and WebEx	June 17, 2024	June 20, 2024
July 24, 2024	9:00 a.m.	PJM Conference & Training Center and WebEx	July 12, 2024	July 17, 2024
August 21, 2024	9:00 a.m.	PJM Conference & Training Center and WebEx	August 9, 2024	August 14, 2024
September 25, 2024	9:00 a.m.	PJM Conference & Training Center and WebEx	September 13, 2024	September 18, 2024
October 30, 2024	9:00 a.m.	PJM Conference & Training Center and WebEx	October 18, 2024	October 23, 2024
November 20, 2024	9:00 a.m.	PJM Conference & Training Center and WebEx	November 8, 2024	November 13, 2024
December 18, 2024	9:00 a.m.	PJM Conference & Training Center and WebEx	December 6, 2024	December 11, 2024

*Materials received after 12:00 p.m. EPT are not guaranteed timely posting by 5:00 p.m. EPT on the same day.

Author: D. Anders

Meeting Attendance

Chair/Secretary

Last Name	First Name	Company	Sector
Drauschak	Lisa	PJM Interconnection	Not Applicable
Anders	Dave	PJM Interconnection	Not Applicable

Voting Attendees

Last Name	First Name	Company	Sector
Anderson	Juliet	Constellation Energy Generation, LLC	Generation Owner
Barker	Jason	Vitol Inc.	Generation Owner
Borgatti	Michael	Moxie Freedom LLC	Generation Owner
Borgatti	Michael	Hill Top Energy Center, LLC	Generation Owner
Borgatti	Michael	Lincoln Generating Facility, LLC	Generation Owner
Borgatti	Michael	York County Solid Waste and Refuse Authority	Generation Owner
Borgatti	Michael	Energy Harbor LLC	Generation Owner
Borgatti	Michael	Recurrent Energy, LLC	Other Supplier
Borgatti	Michael	Hazleton Generation LLC	Generation Owner
Borgatti	Michael	Jersey Green Energy, LLC	Other Supplier
Borgatti	Michael	NextEra Energy Marketing, LLC	Other Supplier
Borgatti	Michael	Longview Power, LLC	Generation Owner
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
Bruce	Susan	Messer LLC	End-Use Customer
Bruce	Susan	Cleveland-Cliffs Steel LLC	End-Use Customer
Bruce	Susan	Linde Inc.	End-Use Customer
Bruce	Susan	Lehigh Portland Cement Company	End-Use Customer
Bruce	Susan	Air Products & Chemicals, Inc.	End-Use Customer
Bruce	Susan	Letterkenny Industrial Development Authority - PA	Electric Distributor
Bruce	Susan	Procter & Gamble Paper Products Company (The)	End-Use Customer
Bruce	Susan	Kimberly-Clark Corporation	Generation Owner
Bruce	Susan	Trustees of the University of Pennsylvania	End-Use Customer
Bruce	Susan	Gerdau Ameristeel Energy, Inc.	End-Use Customer
Campbell	Bruce	MidAtlantic Power Partners, LLC	Other Supplier
Canter	David	Appalachian Power Company	Transmission Owner
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Davis	James	Virginia Electric & Power Company	Transmission Owner

Domian	Christin	Duquesne Light Company	Transmission Owner
Dossin	Sophia	Big Sandy Peaker Plant, LLC	Generation Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Esquivel	Manuel	Enel X North America, Inc.	Other Supplier
Farnsworth	Byron	Wellsboro Electric Company	Electric Distributor
Fishback	Luke	Affirmed Energy LLC	Other Supplier
Foladare	Kenneth	Geenex Solar LLC	Other Supplier
Fuess	Christian	NextPower III US Holdco Inc.	Generation Owner
Fuess	Christian	Diamond State Generation Partners, LLC	Generation Owner
Fuess	Christian	Icetec.com, Inc.	Other Supplier
Fuess	Christian	Kuehne Chemical Company, Inc.	End-Use Customer
Fuess	Christian	PBF Power Marketing, LLC	End-Use Customer
Hoatson	Tom	Rolling Hills Generating, LLC	Generation Owner
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Horning	Lynn	American Municipal Power, Inc.	Electric Distributor
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Hyzinski	Thomas	Carroll County Energy LLC	Generation Owner
Hyzinski	Thomas	Dynegy Marketing and Trade, LLC	Generation Owner
Hyzinski	Thomas	GenOn Energy Management, LLC	Generation Owner
Jardot	Gina	NRG Business Marketing LLC	Other Supplier
Johnson	Carl	Easton Utilities Commission	Electric Distributor
Johnson	Carl	Old Dominion Electric Cooperative	Electric Distributor
Johnson	Carl	Indiana Municipal Power Agency	Electric Distributor
Johnson	Carl	North Carolina Electric Membership Corporation	Electric Distributor
Johnson	Carl	Michigan Public Power Agency	Electric Distributor
Johnson	Carl	Delaware Municipal Electric Corporation, Inc.	Electric Distributor
Johnson	Carl	Borough of Mont Alto, Pennsylvania	Electric Distributor
Johnson	Carl	Thurmont Municipal Light Company	Electric Distributor
Johnson	Carl	Town of Williamsport (The)	Electric Distributor
Johnson	Carl	WPPI Energy	Other Supplier
Johnson	Carl	Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson	Carl	Borough of Chambersburg	Electric Distributor
Johnson	Carl	Energy Cooperative Association of Pennsylvania (The)	Other Supplier
Johnson	Carl	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson	Carl	Buckeye Power, Inc.	Electric Distributor
Johnson	Carl	Central Virginia Electric Cooperative	Electric Distributor
Johnson	Carl	City of Dover, Delaware	Electric Distributor
Johnson	Carl	Hagerstown Light Department	Electric Distributor
Johnson	Carl	Illinois Municipal Electric Agency	Electric Distributor
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP	Other Supplier
Kilgallen	Kevin	Avangrid Renewables, LLC	Generation Owner
Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Mason	Gary	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Matheson	Douglas	YSO Inc.	Other Supplier
Poulos	Greg	Illinois Citizen Utility Board	End-Use Customer
Poulos	Greg	Delaware Division of the Public Advocate	End-Use Customer
Poulos	Greg	Maryland Office of People's Counsel	End-Use Customer
Poulos	Greg	Office of the Attorney General, Kentucky	End-Use Customer
Poulos	Greg	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Poulos	Greg	West Virginia Consumer Advocate Division	End-Use Customer
Poulos	Greg	New Jersey Division of Rate Counsel	End-Use Customer
Poulos	Greg	Public Staff - North Carolina Utilities Commission	End-Use Customer
Poulos	Greg	Pennsylvania Office of Consumer Advocate	End-Use Customer
Rohrbach	John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Rohrbach	John	Kentucky Municipal Energy Agency	Electric Distributor
Rohrbach	John	Wabash Valley Power Association, Inc.	Electric Distributor

Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Stern	Alexander	Exelon Business Services Company, LLC	Transmission Owner
Sturgeon	John	Duke Energy Business Services LLC	Transmission Owner
Svenson	Heather	Public Service Electric and Gas Company	Transmission Owner
Swalwell	Bradley	Tangent Energy Solutions, Inc.	Other Supplier
Tubridy	Meg	Rockland Electric Company	Transmission Owner
Ushijima	Hiroaki	Elwood Energy, LLC	Generation Owner
Whitehead	Jeffrey	Essential Power Rock Springs, LLC	Generation Owner
Whitehead	Jeffrey	Parkway Generation Operating LLC	Generation Owner
Whitehead	Jeffrey	Wheelabrator Falls Inc.	Generation Owner
Yovanovich	Laura	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner

Non-Voting Attendees

Last Name	First Name	Company	Sector
Abd	Alwyiah	First Energy	Transmission Owner
Ahuja	Manan	RiverCrest Power-South, LLC	Other Supplier
Ament	Todd	Cube Hydro Partners, LLC	Generation Owner
Anderson	Jared	S&P Global Inc	None
Bainbridge	Tom	Energy Harbor LLC	Generation Owner
Barmack	Matt	Calpine Energy Services, L.P.	Generation Owner
Batta	Mike	Old Dominion Electric Cooperative	Electric Distributor
Bautista	Alejandro	Exelon Business Services Company, LLC	Transmission Owner
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Boehnlein	Andrew	Virginia State Corporation Commission	None
Bolibruck	Steve	Encentive Energy	None
Bond	Danielle	Enerwise Global Technologies, LLC	Other Supplier
Breidenbaugh	Aaron	Stones DR, LLC	Other Supplier
Briscar	Joseph	Stone, Mattheis, Xenopoulos, & Brew, PC	None
Burkholder	Joshua	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Canchi	Devendra	Monitoring Analytics	None
Carmean	Gregory	Organization of PJM States, Inc.	None
Carrier	Ronald	Big Lake Consulting Group, LLC	None
Christopher	Mahila	Public Utilities Commission of Ohio	None
Clingan	Kristin	Public Utilities Commission of Ohio	None
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
Concina	Wendell	Commonwealth Edison Company	Transmission Owner
Corash	Richard	PSEG Energy Resources and Trade LLC	Other Supplier
Cox	Jason	EQ Energy Advisors	None
Coyle	Billy	Old Dominion Electric Cooperative	Electric Distributor
Crim	Jake	NextEra Energy Transmission	Other Supplier
Curtis	Kenneth	Enverus Inc.	None
Dada	Noorgul	Lightsource BP	Other Supplier
Daugherty-Bell	Derrik	Non-member	None
Davis	David	Apex Clean Energy Holdings, LLC	None
Davis	Jim	Old Dominion Electric Cooperative	Electric Distributor
Donohue	Erin	Enel Trading North America, LLC	Other Supplier
Dorko	Keri	Monitoring Analytics	None
Douglass	Robert	Constellation Energy Generation, LLC	Generation Owner
Douglass	Kathryn	Crowell	None
Drom	Rick	Non-member	None
Edmonds	Brian	DC Public Service Commission	None
Evergam	Scott	Blue Horseshoe Energy LLC	None
Fabiano	Janell	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Farnsworth	Barney	Wellsboro Electric Company	Electric Distributor
Filomena	Guy	CES	None
Fink	Sari	MAREC Action	None

Fink	Regan	Pine Gate Mid-Atlantic, LLC	Generation Owner
Fitch	Neal	NRG Business Marketing LLC (NRGPM)	Other Supplier
Ford	Adrien	Constellation Energy Generation, LLC	Generation Owner
Foster Cronin	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner
Fox	Angela	Affirmed Energy LLC	Other Supplier
Frank	Kimberly	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Fultz	McClain	PPL Electric Utilities Corp. dba PPL Utilities (TO)	Transmission Owner
Gaddes	Caleb	Lightsource BP	Other Supplier
Gannon	Tricia	Delaware Public Service Commission	None
Garnett	Bryan	Duke Energy Ohio, Inc.	Transmission Owner
Gates	Terry	AEP	Transmission Owner
Gilani	Rehan	RWE CLEAN ENERGY WHOLESALE SERVICES, INC.	Other Supplier
Glazer	Grant	MN8 Energy Operating Company LLC	None
Gordon	Jon	Advanced Energy United	None
Gorman	Brad	First Energy	Transmission Owner
Granstrand	Luke	Old Dominion Electric Cooperative	Electric Distributor
Greene	Ben	AEP	Transmission Owner
Grey	Bruce	Samsung C&T American, Inc.	Other Supplier
Guntle	Vince	American PowerNet Management, L.P.	End-Use Customer
Hastings	David	PSEG Energy Resources and Trade LLC	Other Supplier
Heinle	Erik	Vistra	None
Helms	Joe	Tyr Energy, LLC	Other Supplier
Hudis	Gabriella	Gabel	Other Supplier
Hugee	Jacquelynn	Dominion	Transmission Owner
Hull	Gerit	American Municipal Power, Inc.	Electric Distributor
Hurd	Shawn	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Hurley	Doug	Icetec Energy Services, Inc.	Other Supplier
Hyatt	Earl	Monitoring Analytics	None
Hyatt	John	Monitoring Analytics	None
Ingraham	Deborah	Acciona Energy North America Corporation	Generation Owner
Jacobs	Mike	Union of Concerned Scientists	None
Janas	Kim	Office of Illinois Attorney General	End-Use Customer
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Jones	Scott	Indiana Office of Utility Consumer Counselor	End-Use Customer
Kahme	Lauren	Voltus, Inc.	Other Supplier
Kalaskar	Rahul	AES Laurel Mountain, LLC	Generation Owner
Kaplan	Don	K&L Gates	None
Kayne	Samantha	Delaware Public Service Commission	None
Kays	Andrew	Northeast Maryland Waste Disposal Authority	Generation Owner
Kent	Janessa	Duquesne Light Company	Transmission Owner
Keyser	Will	Non-member	None
Kirk	Steven	NextEra	Other Supplier
Klingensmith	Laurel	American Transmission Systems, Inc.	Transmission Owner
Koeplinger	Allie	Michigan Public Service Commission	None
Kogut	George	New York Power Authority	Other Supplier
Kosner	Bob	Illinois Municipal Electric Agency	Electric Distributor
Kozlowski	Brian	Alphataraxia Palladium LLC	Other Supplier
Laos	Takis	Appalachian Power Company (AEP Transmission)	Transmission Owner
Lee	Aristotle	Grays Ferry Cogeneration Partnership	Generation Owner
Lee	Tina	Parkway Generation Operating LLC	Generation Owner
Leith Yessian	Devin	RTO Insider	None
Lescano	Amanda	New Jersey Board of Public Utilities	None
Lifson	Matt	Non-member	None
Livingston	Matthew	Energy Authority, Inc. (The)	Other Supplier
Ludrosky	Cristy	Ohio Edison Company (ATSI CSP)	Electric Distributor
Ma	Yaming	Calpine Energy Services, L.P.	Generation Owner

Mabry	David	McNees Wallace & Nurick LLC	None
Mar	Schisler	Enerwise Global Technologies, LLC	Other Supplier
Mariam	Yohannes	Office of the People's Counsel for the District of Columbia	End-Use Customer
Matheson	Eric	Non-member	None
Matuszak	Alex	UGI Energy Services, LLC	Other Supplier
Maucher	Andrea	Delaware Division of the Public Advocate	End-Use Customer
Mayes	Jeff	Monitoring Analytics	None
McClelland	Maura	Public Utilities Commission of Ohio	None
McCorry	Hannah	Illinois Commerce Commission	None
McDaniel	John	Baltimore Gas and Electric Company	Transmission Owner
McDowell	Christian	Pennsylvania Public Utility Commission	None
McNeil	Justin	Kentucky Public Service Commission	None
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Miller	John	Calico Energy	None
Mok	Alan	Duke Energy Kentucky, Inc.	Transmission Owner
Mooney	Jeff	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Murteira	Ana	PSEG Energy Resources and Trade LLC	Other Supplier
Nadel	Steven	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Nader	Jordan	North Carolina Utilities Commission	End-Use Customer
Newbill	Brandon	Old Dominion Electric Cooperative	Electric Distributor
Newbold	Russ	Enerwise Global Technologies, LLC	Other Supplier
Novosel	Sarah	Calpine Energy Services, L.P.	Generation Owner
Olinger	Robert	Keystone-Conemaugh Projects, LLC (Conemaugh)	Other Supplier
Ondayko	Brock	AEP Energy Partners, Inc. (AEP Gen Resources)	Transmission Owner
Osborn	Eric	EDF Trading North America, LLC	Other Supplier
Pakela	Gregory	DTE Energy Trading Inc.	Other Supplier
Parrot	Sarah	Public Utilities Commission of Ohio	None
Patel	Anjali	CPV Maryland LLC	Generation Owner
Peoples	John	Duquesne Light Company	Transmission Owner
Peskoe	Ari	Harvard Law School	None
Pezalla	William	Old Dominion Electric Cooperative	Electric Distributor
Pierpont	Dan	Riverside Generating Company, L.L.C.	Generation Owner
Pohlod	Michael	Voltus, Inc.	Other Supplier
Powers	Sean	Messer LLC	End-Use Customer
Price	Ruth	Delaware Public Service Commission	None
Pungaliya	Rajat	NedPower Mount Storm, LLC	Generation Owner
Quinlan	Pamela	GQ New Energy Strategies	None
Reagan	Ryann	New Jersey Board of Public Utilities	None
Redwine	Arlo	FERC	None
Rettig	Kacie	Rockland Electric Company	Transmission Owner
Richards	Wade	Apex Clean Energy Holdings, LLC	None
Ritch	John	Trafigura Trading LLC	Other Supplier
Ritterbeck	John	Public Utilities Commission of Ohio	None
Rode	Advait	Michigan Public Service Commission	None
Romero Luna	Joel	Monitoring Analytics	None
Rosenthal	Peter	CCI US Power Trading LLC	Other Supplier
Rumsey	Amanda	PPL Electric Utilities Corp. dba PPL Utilities (TO)	Transmission Owner
Salaneck	Alexandra	Monitoring Analytics	None
Sammartino	Michael	Maryland Office of People's Counsel	End-Use Customer
Samuel	Allison	Virginia State Corporation Commission	None
Sasser	Jonathan	Customized Energy Solutions, Ltd.	None
Schavrien	Nick	LS Power	None
Scheidecker	Paul	Monitoring Analytics	None
Schreim	Morris	Maryland Office of People's Counsel	End-Use Customer
Seelaus	Andy	Enerwise Global Technologies, LLC	Other Supplier
Segner	Sharon	Silver Run Electric, LLC	Transmission Owner

Senevirathne	Indrajith	NextEra	Other Supplier
Shah	Pulin	PECO Energy Company	Transmission Owner
Slifer	Diane	GT Power Group, LLC	None
Sloan	Ben	Organization of PJM States, Inc.	None
Smith	Kara	Buckeye Power, Inc.	Electric Distributor
Sotkiewicz	Paul	E-Cubed Policy Associates	None
Spinner	Howard	NOVEC	Electric Distributor
Sprinkle	Dan	Louisville Gas and Electric Company/Kentucky Utilities Company	Transmission Owner
Stadelmeyer	Rebecca	Jersey Green Energy LLC	Other Supplier
Steichen	Renae	Bath County Energy, LLC	Generation Owner
Stinner	Doug	RWE Clean Energy, LLC	Generation Owner
Stone	Andy	Non-member	None
Storino	Laura	New Jersey Board of Public Utilities	None
Stuchell	Jeff	First Energy	Transmission Owner
Stupar	Rob	Invenergy Energy Management LLC	Generation Owner
Suh	Jung	Calpine Energy Solutions, LLC	Other Supplier
Sussler	Philip	Maryland Office of People's counsel	End-Use Customer
Sweeney	Rory	NOVEC	Electric Distributor
Talebi	Tessa	FERC	None
Tell	Shawn	Non-member	None
Theaker	Brian	Big Sandy Peaker Plant, LLC	Generation Owner
Thomas	Amber	Exelon Business Services Company, LLC	Transmission Owner
Thomas	Glen	GT Power Group, LLC	None
Thomas	Gil	NOVEC	Electric Distributor
Unger	Matthew	State Corporation Commission (Commonwealth of Virginia)	None
VanderLaan	William	Illinois Commerce Commission	None
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
Webb	Becky	Exelon Business Services Company, LLC	Transmission Owner
Werntges	Bernadette	Cpower Energy	None
Williamson	Whit	Old Dominion Electric Cooperative	Electric Distributor
Wilson	James	Non-member	None
Wright	Shawn	Old Dominion Electric Cooperative	None
Wylie-Chambers	Ericka	Exelon Business Services Company, LLC	Transmission Owner
Wynder	Michael	Altrock	Other Supplier
Yasutake	Sarah	Jersey Green Energy LLC	Other Supplier
Yu	Haibin	Calpine Energy Services, L.P.	Generation Owner
Zack	Marty	Non-member	None
Zephyr	Frantz	PSEG Energy Resources and Trade LLC	Other Supplier
Zhou	Ming	DXT Commodities North America Inc.	Other Supplier

PJM Attendees

Last Name	First Name	Company	Sector
Abdulsalam	Sami	PJM Interconnection	None
Afelumo	Foluso	PJM Interconnection	None
Anders	David	PJM Interconnection	None
Arkatin	Tyler	PJM Interconnection	None
Asthana	Manu	PJM Interconnection	None
Baker	Scott	PJM Interconnection	None
Barrett	Emily	PJM Interconnection	None

Base	James	PJM Interconnection	None
Belenky	Maria	PJM Interconnection	None
Bennett	Daniel	PJM Interconnection	None
Bernabeu	Emanuel	PJM Interconnection	None
Berner	Aaron	PJM Interconnection	None
Bernstein	Matthew	PJM Interconnection	None
Bobbio	Emmanuele	PJM Interconnection	None
Bowker	Shannon	PJM Interconnection	None
Boyle	Glen	PJM Interconnection	None
Bresler	Stu	PJM Interconnection	None
Bruno	Pat	PJM Interconnection	None
Bryson	Mike	PJM Interconnection	None
Buehler	Susan	PJM Interconnection	None
Burdis	Tim	PJM Interconnection	None
Cabezas	Angela	PJM Interconnection	None
Carroll	Rebecca	PJM Interconnection	None
Chmielewski	Brian	PJM Interconnection	None
Ciabattoni	Joe	PJM Interconnection	None
Cobb	Patrick	PJM Interconnection	None
Connell	Jason	PJM Interconnection	None
Connolly	Matthew	PJM Interconnection	None
Coscia	Carl	PJM Interconnection	None
Coyne	Suzanne	PJM Interconnection	None
Croop	Danielle	PJM Interconnection	None
Curley	Maureen	PJM Interconnection	None
D'Antonio	Phil	PJM Interconnection	None
Del Olmo	Rizki	PJM Interconnection	None
DeVita	Thomas	PJM Interconnection	None
DiMartino	Denise	PJM Interconnection	None
Dirani	Rami	PJM Interconnection	None
Downs	Jere	PJM Interconnection	None
Drauschak	Lisa	PJM Interconnection	None
Eedupuganti	Subbarao	PJM Interconnection	None
Egan	Amanda	PJM Interconnection	None
Esterly	Terri	PJM Interconnection	None
Fan	Zhenyu	PJM Interconnection	None
Feng	Julan	PJM Interconnection	None
Fitzpatrick	Brian	PJM Interconnection	None
Foley	Pauline	PJM Interconnection	None
Foster	Tom	PJM Interconnection	None

Frogg	Darrell	PJM Interconnection	None
Glazer	Craig	PJM Interconnection	None
Gledhill	Andrew	PJM Interconnection	None
Graf	Walter	PJM Interconnection	None
Greening	Michele	PJM Interconnection	None
Haque	Asim	PJM Interconnection	None
Hauske	David	PJM Interconnection	None
Hauske	Tom	PJM Interconnection	None
Hayik	Seth	PJM Interconnection	None
Herel	Suzanne	PJM Interconnection	None
Herman	Mike	PJM Interconnection	None
Hicks	Colleen	PJM Interconnection	None
Hislop	David	PJM Interconnection	None
hoang	liem	PJM Interconnection	None
Holter	Natasha	PJM Interconnection	None
Horger	Tim	PJM Interconnection	None
Hsia	Eric	PJM Interconnection	None
Hu	Yong	PJM Interconnection	None
Jones	Ryan	PJM Interconnection	None
Karandrikas	Vicki	PJM Interconnection	None
Keech	Adam	PJM Interconnection	None
Kelly	Gwen	PJM Interconnection	None
Kern	Jonathan	PJM Interconnection	None
Keshavamurthy	Bhavana	PJM Interconnection	None
Khan	Aftab	PJM Interconnection	None
Kim	Sung	PJM Interconnection	None
Kimmel	David	PJM Interconnection	None
Konowal	Richard	PJM Interconnection	None
Lacek	Mollie	PJM Interconnection	None
Langbein	Pete	PJM Interconnection	None
Lee	Ray	PJM Interconnection	None
Lockwood	Dan	PJM Interconnection	None
Lu	Chen	PJM Interconnection	None
Lynch	Jessica	PJM Interconnection	None
Mali	Gizella	PJM Interconnection	None
Martin	Amanda	PJM Interconnection	None
Marzewski	Skyler	PJM Interconnection	None
McAnany	James	PJM Interconnection	None
McElwaine	Kathy	PJM Interconnection	None
McGill	Susan	PJM Interconnection	None

McGlynn	Paul	PJM Interconnection	None
McGovern	Jason	PJM Interconnection	None
McLavery	Megan	PJM Interconnection	None
Mills	David	PJM Board	None
Morelli	Lisa	PJM Interconnection	None
Moscovitz	Daniel	PJM Interconnection	None
Mroz	David	PJM Interconnection	None
Muhl	Nancy	PJM Interconnection	None
Murphy Lee	Lori	PJM Interconnection	None
Noonan	Casey	PJM Interconnection	None
O'Brien	Thomas	PJM Interconnection	None
O'Hara	Christopher	PJM Interconnection	None
Oskvig	Dean	PJM Board	None
Panchal	Hitesh	PJM Interconnection	None
Patel	Anita	PJM Interconnection	None
Patel	Harshil	PJM Interconnection	None
Patel	Keyur	PJM Interconnection	None
Perera	Asanga	PJM Interconnection	None
Phillips	Darlene	PJM Interconnection	None
Pilong	Christopher	PJM Interconnection	None
Pilong	Melissa	PJM Interconnection	None
Pincus	Steven	PJM Interconnection	None
Quevada	Jason	PJM Interconnection	None
Robinson	Evelyn	PJM Interconnection	None
Rocha Garrido	Patricio	PJM Interconnection	None
Salmon	Lisa	PJM Interconnection	None
Scheirer	Alex	PJM Interconnection	None
Scherling	Eric	PJM Interconnection	None
Schuyler	Ken	PJM Interconnection	None
Seiler	Ken	PJM Interconnection	None
Shah	Vijay	PJM Interconnection	None
Shields	Jeffrey	PJM Interconnection	None
Sliwa	Stanley	PJM Interconnection	None
Souder	Michelle	PJM Interconnection	None
Staevska	Asya	PJM Interconnection	None
Stanek	Jason	PJM Interconnection	None
Stanisz	Mark	PJM Interconnection	None
Stefanowicz	Vince	PJM Interconnection	None
Stemetzki	Mike	PJM Interconnection	None
Swimm	Nora	PJM Interconnection	None

Takahashi	Mark	PJM Board	None
Taylor	Daniel	PJM Interconnection	None
Tribulski	Jennifer	PJM Interconnection	None
VanZandt	Vickie	PJM Board	None
Vinnik	Daniel	PJM Interconnection	None
Waweru	James	PJM Interconnection	None
Wharton	Matthew	PJM Interconnection	None
Widom	Stu	PJM Interconnection	None
Zamojcin	Ann	PJM Interconnection	None
Zhang	Michael	PJM Interconnection	None