

## Markets & Reliability Committee

Webex Only

April 27, 2022

9:00 a.m. – 12:45 p.m. EPT

### Administration

Stu Bresler and David Anders welcomed stakeholders and provided the Anti-trust, Code of Conduct, and Meeting Participation announcements. David Anders provided an update on the voting protocols for Board elections at the May Members Committee meeting.

### Consent Agenda

Items A through E were **approved/endorsed** by acclamation with no objections and one abstention to items A, B and C:

- A. Minutes of the March 23, 2022 meeting of the Markets and Reliability Committee (MRC).
- B. Proposed revisions to Manual 01: Control Center and Data Exchange Requirements resulting from its periodic review.
- C. Proposed revisions to Manual 14F: Competitive Planning Process resulting from its periodic review.
- D. Operating Agreement (OA) revisions to appropriately document the underfrequency relay requirements applicable to EKPC.
- E. Revisions to the EPFSTF Charter.  
[Issue Tracking: Operating Reserve Demand Curve \(ORDC\) & Transmission Constraint Penalty Factors](#)

### Endorsements

#### 1. Deactivation Process Timing

Dave Egan reviewed a proposed solution and corresponding Tariff revisions to update the process timing for generation deactivations. Following discussion the committee **endorsed** the proposed Tariff revisions by acclamation with one objection and no abstentions.

[Issue Tracking: Deactivation Analysis Period](#)

#### 2. Interconnection Process Reform

- A. Ken Seiler, provided opening remarks. Jack Thomas reviewed proposed solutions and associated Tariff revisions to reform the interconnection process and address a transition to the new process.
- B. John Wieland, Leeward Renewable Energy, proposed an amendment on behalf of the PJM Interconnection Customers Coalition to adjust which projects may enter the “fast lane” process.

Greg Poulos, on behalf of the Delaware Division of the Consumer Advocate, objected to this proposed amendment and therefore it was not incorporated into the main motion.

- C. Jim Davis, Dominion Energy, and Alex Stern, PSEG, proposed an amendment addressing site control for federally controlled lands. Greg Poulos, on behalf of the Delaware Division of the Consumer Advocate, objected to this proposed amendment and therefore it was not incorporated into the main motion.
- D. Amber Thomas, Exelon, proposed an amendment regarding the Network Upgrade Cost Responsibility Agreement. Greg Poulos, on behalf of the Delaware Division of the Consumer Advocate, objected to this proposed amendment and therefore it was not incorporated into the main motion.
- E. Brian Kauffman, Enel North America, reviewed a proposed amendment addressing site control for tie lines. Greg Poulos, on behalf of the Delaware Division of the Consumer Advocate, objected to this proposed amendment and therefore it was not incorporated into the main motion.

Following discussion, the main motion was approved and the associated Tariff revisions were **endorsed** in a sector-weighted vote with 4.368 in favor.

[Issue Tracking: Interconnection Process Reform](#)

### 3. Resource Adequacy (10:30-10:50)

- A. David Anders and Walter Graf reviewed a proposed Issue Charge addressing the procurement of clean resource attributes.
- B. Denise Foster Cronin, EKPC, proposed an amendment to clarify Key Work Activity #8. Greg Poulos, on behalf of the Delaware Division of the Consumer Advocate, objected to this proposed amendment and therefore it was not incorporated into the main motion.

Following discussion, the Issue Charge was **approved** in a sector-weighted vote with 3.513 in favor.

- C. Chris Piong and Alex Scheirer provided an update on the Operating Committee's recommendation regarding Additional Reliability Products and Services.

[Issue Tracking: Capacity Market Reform](#)

## First Readings

### 4. Start-Up Cost Offer Development

Tom Hauske reviewed the revised PJM/IMM Proposal addressing Start-Up Cost Offer Development developed in the Cost Development Subcommittee. The committee will be asked to endorse the proposal at its next meeting.

[Issue Tracking: Start-up Cost Offer Development](#)

## 5. Dynamic Rating Issue

Chris Callaghan and Bilge Derin reviewed a proposed solution and corresponding revisions to Manual 01: Control Center and Data Exchange Requirements, Manual 03: Transmission Operations, and Manual 03A: Energy Management System (EMS) Model Update and Quality Assurance (QA) to address the Interim Measures to Facilitate the Integration of Dynamic Ratings into PJM Operations (Phase 1). The committee will be asked to endorse the proposed solution and corresponding Manual 01, Manual 03, and Manual 03A revisions proposed at its next meeting.

## 6. Application of Designated Entity Agreement

Augustine Caven reviewed a proposed solution to address the application of Designated Entity Agreement. The committee will be asked to endorse the proposed solution and corresponding Operating Agreement (OA) revisions at its next meeting.

## 7. Manuals

- A. Dean Manno reviewed proposed revisions to Manual 03: Transmission Operations resulting from its periodic review. The committee will be asked to endorse the proposed Manual 03 revisions at its next meeting.
- B. Damon Fereshetian, Mike Handlin, and Rebecca Stadelmeyer reviewed proposed revisions to Manual 11: Energy & Ancillary Services Market Operations, Manual 12: Balancing Operations, and Manual 28: Operating Agreement Accounting addressing changes for Intelligent Reserve Deployment (IRD). The committee will be asked to endorse the proposed Manual 11 and Manual 28 revisions at its next meeting.  
[Issue Tracking: Synchronized Reserve Event Actions and Expectations](#)
- C. Zhenyu Fan, Mike Handlin, and Rebecca Stadelmeyer reviewed proposed revisions to Manual 11: Energy & Ancillary Services Market Operations, Manual 12: Balancing Operations, and Manual 28: Operating Agreement Accounting addressing conforming changes for stability limits in markets and operations. The committee will be asked to endorse the proposed Manual 11, Manual 12, and Manual 28 revisions at its next meeting.  
[Issue Tracking: Stability Limits in Markets and Operations](#)
- D. Joshua Bruno reviewed proposed revisions to Manual 21A: Determination of Accredited UCAP Using Effective Load Carrying Capability Analysis addressing an ELCC model run timing update and changes to reflect the continuation of the current method to provide unit specific backcasts only as requested. The committee will be asked to endorse the proposed Manual 21A revisions at its next meeting.
- E. Rich Brown reviewed proposed revisions to Manual 36: System Restoration resulting from its periodic review. The committee will be asked to endorse the proposed Manual 36 revisions at its next meeting.

## Informational Report

### 8. Grid of the Future – PJM RTEP Perspective (12:30-12:45)

This item was deferred until the committee's 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		
May 25, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	May 13, 2022	May 18, 2022
June 29, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	June 17, 2022	June 22, 2022
July 27, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	July 15, 2022	July 20, 2022
August 24, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	August 12, 2022	August 17, 2022
September 21, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	September 9, 2022	September 14, 2022
* October 24, 2022 *tentative dates & time	* 1:00 p.m.	Off-site TBD	* October 12, 2022	* October 17, 2022
November 16, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	November 4, 2022	November 9, 2022
December 21, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	December 9, 2022	December 14, 2022

Author: D. Anders

## Meeting Attendance

### Chair/Secretary

LAST NAME	FIRST NAME	COMPANY NAME	SECTOR
Bresler	Stu	PJM Interconnection LLC	Not Applicable
Anders	Dave	PJM Interconnection LLC	Not Applicable

### Voting Attendees

LAST NAME	FIRST NAME	COMPANY NAME	SECTOR
Barker	Jason	Constellation Energy Generation, LLC	Generation Owner
Benckek	Jim	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Borgatti	Michael	Rep'g. Newark Energy Center, LLC	Generation Owner
Borgatti	Michael	Rep'g. York County Solid Waste and Refuse Authority	Generation Owner
Borgatti	Michael	Rep'g. Jersey Green Energy, LLC	Other Supplier
Borgatti	Michael	Rep'g. Energy Harbor LLC	Generation Owner
Borgatti	Michael	Rep'g. NextEra Energy Marketing, LLC	Other Supplier

Borgatti	Michael	Rep'g. Hazleton Generation LLC	Generation Owner
Borgatti	Michael	Rep'g. Longview Power, LLC	Generation Owner
Borgatti	Michael	Rep'g. Moxie Freedom LLC	Generation Owner
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
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. Air Products & Chemicals, Inc.	End-Use Customer
Bruce	Susan	Rep'g. Lehigh Portland Cement Company	End-Use Customer
Bruce	Susan	Rep'g. Linde Inc.	End-Use Customer
Bruce	Susan	Rep'g. Kimberly-Clark Corporation	Generation Owner
Bruce	Susan	Rep'g. Letterkenny Industrial Development Authority - PA	Electric Distributor
Bruce	Susan	Rep'g. Trustees of the University of Pennsylvania	End-Use Customer
Bruce	Susan	Rep'g. Gerdau Ameristeel Energy, Inc.	End-Use Customer
Bruce	Susan	Rep'g. Wellsboro Electric Company	Electric Distributor
Bruce	Susan	Rep'g. Industrial Energy Users-Ohio	Other Supplier
Bruce	Susan	Rep'g. Cleveland-Cliffs Steel LLC	End-Use Customer
Bruce	Susan	Rep'g. MeadWestvaco Corporation	End-Use Customer
Canter	David	Appalachian Power Company	Transmission Owner
Chocarro	Iker	RWE Renewables Americas, LLC	Generation Owner
Crosby	Matthew	Cypress Creek Renewables, LLC	Generation Owner
Davis	James	Virginia Electric & Power Company	Transmission Owner
Dixit	Anuj	Recurrent Energy, LLC	Other Supplier
Domian	Christin	Duquesne Light Company	Transmission Owner
Dorner	Amber	Rockland Electric 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	Other Supplier
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Fuess	Christian	Rep'g. Ictec.com, Inc.	Other Supplier
Fuess	Christian	Rep'g. Diamond State Generation Partners, LLC	Generation Owner
Fuess	Christian	Rep'g. PBF Power Marketing, LLC	End-Use Customer
Fuess	Christian	Rep'g. NextPower III US Holdco Inc.	Generation Owner
Fuess	Christian	Rep'g. Kuehne Chemical Company, Inc.	End-Use Customer
Garnett	Bryan	Duke Energy Business Services LLC	Transmission Owner
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
Hyzinski	Thomas	Rep'g. Dynegy Marketing and Trade, LLC	Generation Owner
Hyzinski	Thomas	Rep'g. Carroll County Energy LLC	Generation Owner
Hyzinski	Thomas	Rep'g. GenOn Energy Management, LLC	Generation Owner
Janapareddy	Anupama	Green River Holdings, LLC	Generation Owner
Jardot	Gina	NRG Power Marketing LLC	Generation Owner
Johnson	Carl	Rep'g. Easton Utilities Commission	Electric Distributor
Johnson	Carl	Rep'g. Old Dominion Electric Cooperative	Electric Distributor
Johnson	Carl	Rep'g. Indiana Municipal Power Agency	Electric Distributor
Johnson	Carl	Rep'g. North Carolina Electric Membership Corporation	Electric Distributor
Johnson	Carl	Rep'g. Michigan Public Power Agency	Electric Distributor
Johnson	Carl	Rep'g. Delaware Municipal Electric Corporation, Inc.	Electric Distributor
Johnson	Carl	Rep'g. Borough of Mont Alto, Pennsylvania	Electric Distributor
Johnson	Carl	Rep'g. Thurmont Municipal Light Company	Electric Distributor
Johnson	Carl	Rep'g. Town of Williamsport (The)	Electric Distributor
Johnson	Carl	Rep'g. WPPI Energy	Other Supplier
Johnson	Carl	Rep'g. Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson	Carl	Rep'g. Borough of Chambersburg	Electric Distributor
Johnson	Carl	Rep'g. Galt Power, Inc.	Other Supplier

Johnson	Carl	Rep'g. Energy Cooperative Association of Pennsylvania (The)	Other Supplier
Johnson	Carl	Rep'g. Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson	Carl	Rep'g. Northern Illinois Municipal Power Agency	Electric Distributor
Johnson	Carl	Rep'g. Allegheny Electric Cooperative, Inc.	Electric Distributor
Johnson	Carl	Rep'g. Buckeye Power, Inc.	Electric Distributor
Johnson	Carl	Rep'g. American Municipal 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. Hagerstown Light Department	Electric Distributor
Johnson	Carl	Rep'g. Illinois Municipal Electric Agency	Electric Distributor
Johnson	Carl	Rep'g. North Carolina Municipal Power Agency Number 1	Other Supplier
Kauffman	Brian	Enel X North America, Inc.	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
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Pelletier	Eveline	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Poulos	Greg	Rep'g. Office of the People's Counsel for the District of Columbia	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
Poulos	Greg	Rep'g. Illinois Citizen Utility Board	End-Use Customer
Poulos	Greg	Rep'g. Delaware Division of the Public Advocate	End-Use Customer
Poulos	Greg	Rep'g. Consumer Protection and Advocate Division of the Tennessee Attorney General	End-Use Customer
Poulos	Greg	Rep'g. Public Staff - North Carolina Utilities Commission	End-Use Customer
Poulos	Greg	Rep'g. Michigan Department of Attorney General, Environment, Natural Resources, & Agriculture Division	End-Use Customer
Poulos	Greg	Rep'g. Office of the Attorney General, Kentucky	End-Use Customer
Poulos	Greg	Rep'g. New Jersey Division of Rate Counsel	End-Use Customer
Poulos	Greg	Rep'g. Maryland Office of People's Counsel	End-Use Customer
Poulos	Greg	Rep'g. Pennsylvania Office of Consumer Advocate	End-Use Customer
Poulos	Greg	Rep'g. Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Poulos	Greg	Rep'g. Ohio Consumers' Counsel	End-Use Customer
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
Rohrbach	John	Rep'g. Big Savage, LLC	Generation Owner
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Sharp	Ian	Leeward Asset Management, LLC	Generation Owner
Stern	Alex	Public Service Electric and Gas Company	Transmission Owner
Stupar	Rob	Invenergy, LLC	Generation Owner
Swalwell	Bradley	Tangent Energy Solutions, Inc.	Other Supplier
Tashakkori	Cyrus	Open Road Renewables, LLC	Other Supplier
White	Brett	Pine Gate Mid-Atlantic, LLC	Other Supplier
Whitehead	Jeffrey	Rep'g. Neptune Regional Transmission System, LLC	Transmission 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. Shell Energy North America (US), L.P.	Other Supplier
Whitehead	Jeffrey	Rep'g. Wheelabrator Falls Inc.	Generation Owner
Wieland	John	Leeward Asset Management, LLC	Generation Owner
Wilkinson	Eric	Orsted Onshore North America, LLC	Generation Owner

Yovanovich	Laura	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
------------	-------	--	--------------------

## Non-Voting Attendees

LAST NAME	FIRST NAME	COMPANY NAME	SECTOR
Adams	Darren	East Kentucky Power Cooperative, Inc.	Transmission Owner
Bailey	Mike	NOVEC	None
Barrow	Kim	Commonwealth of PA	None
Berman	Dave	Wright & Talisman, P.C.	None
Berton	Tyler	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Bigelow	Christina	Pine Gate Renewables, LLC	None
Blackwell	Mike	Husch Blackwell	None
Bowring	Joe	Monitoring Analytics, LLC	None
Brady	George	Ohio Valley Electric Corp	Transmission Owner
Brouillette	Kyle	Indiana Municipal Power Agency	Electric Distributor
Bunch	Kevin	EDF Trading North America, LLC	Other Supplier
Burbure	Stacy	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Burnham	Kat	Advanced Energy Economy (AEE)	None
Callen	Zachary (Zac)	Illinois Commerce Commission	None
Carmean	Gregory	OPSI	None
Carrier	Ronald (Ron)	Big Lake Consulting	None
Castellano	Meghan	EnBW North America	None
Christopher	Mahila	Public Utilities Commission of Ohio (The)	None
Chu	Michael	Forest Investment Group, LLC	Other Supplier
Circelli	Roseanne	Public Service Electric & Gas Company	Transmission Owner
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
Corash	Richard	PSEG Energy Resources & Trade LLC	Other Supplier
Dadourian	John	Monitoring Analytics, LLC	None
Davis	David	Strata Solar	None
Denby	Brett	NOVEC	None
Dennis	Jeff	Advanced Energy Economy, Inc.	None
Dillon	Matthew	UGI Development Company	Generation Owner
Esquivel	Manuel	Enel Trading North America, LLC	Other Supplier
Eyocko	Stephanie	The Federal Energy Regulatory Commission	None
Fall	Maguette	EDF Renewable Energy	None
Fazio	Danielle	Noble Americas Gas & Power Corp.	Other Supplier
Filomena	Guy	Customized Energy Solutions, Ltd.*	None
Fink	Regan	Pine Gate Mid-Atlantic, LLC	Other Supplier
Fink	Sari	American Clean Power Association	None
Fishback	Luke	Affirmed Energy LLC	Other Supplier
Foster Cronin	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner
Fuerst	Gary	American Transmission Systems, Inc.	Transmission Owner
Janicki	Diane	Boston Energy Trading & Marketing, LLC	Other Supplier
Gates	Terry	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Gebolys	Debbie	Public Utilities Commission of Ohio (The)	None
Ghayas	Awais	PJM Interconnection, LLC	None
Ghodsian	Arash	American Transmission Company, LLC	None
Gorman	Brad	Energy Harbor LLC	Generation Owner
Green	Chris	Tri Global Energy, LLC	None
Greene	Ben	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Greiner	Gary	PSEG Energy Resources & Trade LLC	Other Supplier
Grieve	Andrew	Pine Gate Mid-Atlantic, LLC	Other Supplier
Guntle	Vince	American PowerNet Management	End-Use Customer
Guy	Gary	Baltimore Gas and Electric Company	Transmission Owner
Han	Minnie	Enel Trading North America, LLC	Other Supplier
Hanser	Erik	Michigan Public Service Commission	None

Hastings	David	Market Interconnection Consulting Services (MICS)	None
Heinle	Frederick (Erik)	Office of the Peoples Counsel for the District of Columbia	End-Use Customer
Hepplewhite	Peter	Wrigley Capital LLC	Other Supplier
Horning	Lynn Marie	Customized Energy Solutions, Ltd.*	None
Hudis	Gabriella	Jersey Green Energy LLC	Other Supplier
Hudson	Jeff	Urban Grid Solar Projects, LLC	Other Supplier
Hugee	Jacquelyn (Jacqui)	Dominion Energy Generation Marketing, Inc.	Generation Owner
Huntoon	Stephen	Chesapeake Transmission LLC	Other Supplier
Hurwich	Mark	Elliott Bay Energy Trading, LLC	Other Supplier
Iler	Arthur (Art)	Indiana Office of Utility Consumer Counsel	End-Use Customer
Jett	William (Bill)	Duke Energy Business Services LLC	Transmission Owner
Johnston	David	Indiana Utility Regulatory Commission	None
Jones	Peter	Energy Endeavors, LLC	Other Supplier
Kaplan	Donald (Don)	K&L Gates LLP	None
Kayne	Samuel	State of Delaware	None
Kent	Janessa	Duquesne Light Company	Transmission Owner
Kogut	George	New York Power Authority	Other Supplier
Kurthakoti	Divya	Orsted US Trading LLC	Other Supplier
Laios	Takis	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Lawson	Ryen	Dominion Virginia Power	None
Lichtin	Steven	Go Electric Inc.	None
Lin	Dave	Citadel FNGE Ltd.	Other Supplier
Lopez-Lopez	Anthony	Bryndan Associates, Inc.	None
Luftig	Lisa	Exelon Business Services Company, LLC	Transmission Owner
Mabry	David	McNees Wallace & Nurick LLC	None
MacLearnsberry	Kirk	Teichos Energy	None
Marinelli	Richard	Public Service Electric & Gas Company	Transmission Owner
Martin	Valerie	The Federal Energy Regulatory Commission	None
Matheson	Eric	Pennsylvania Public Utility Commission	None
Matuszak	Alex	UGI Energy Services, LLC	Other Supplier
McDewell	Christian	The Public Utilities Commission Of Pennsylvania	None
Miller	John	Commonwealth Edison Company	Transmission Owner
Morias	Matt	National Grid Renewables, LLC	None
Muhl	Nancy	PJM Interconnection, LLC	None
Nadel	Steven	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Nedwick	Peter	Virginia Electric & Power Company	Transmission Owner
Noel Jeune	Reynaldo	Acciona Energy North America Corporation	Generation Owner
O'Hara	Bernard (Bernie)	Sargent & Lundy	None
Okenfuss	James	Savion, LLC	None
Olinger	Robert	Gen Ops, LLC	Other Supplier
Ondayko	Brock	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Panegal	Ash	Apex Clean Energy	None
Peoples	John	Duquesne Light Company	Transmission Owner
Porter	Randall (Randy)	National Grid Renewables, LLC	None
Pratt	Nicholas (Nick)	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Price	Rob	Sun Energy 1	None
Price	Ruth	Division of the Public Advocate of the State of Delaware	End-Use Customer
Procnuar	Jason	Buckeye Power, Inc.	Electric Distributor
Ptak	Anton	EDF Renewable Energy	None
Pungaliya	Rajat	Pine Gate Mid-Atlantic, LLC	Other Supplier
Quivel	Manuel	Enel X North America, Inc.	Other Supplier
Rainey	Frank	PEI Power Corporation	Generation Owner
Robichaud	Donna	Geenex Solar LLC	Other Supplier
Robinson	Becky	Vista Energy Marketing, L.P.	Other Supplier



Rutledge	Craig	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Sajja	Pavan	Aura Power	None
Samarasekera	Kasun	Electric Power Engineers, Inc.	None
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	None
Schmitt	David	New Jersey Board of Public Utilities	None
Segner	Sharon	LS Power Development, LLC	None
Seide	Richard	Apex Clean Energy	None
Sells	Scott	East Kentucky Power Cooperative, Inc.	Transmission Owner
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Skumarich	William (Bill)	RTR Energy Solutions	None
Solomon	Jeff	Savion, LLC	None
Sotkiewicz	Paul	E-Cubed Policy Associates	None
Stanfill	Susan	Pine Gate Mid-Atlantic, LLC	Other Supplier
Stone	Andy	Gabel Associates	None
Stuchell	Jeff	Energy Harbor LLC	Generation Owner
Stupar	Rob	Invenergy, LLC	Generation Owner
Sturgeon	John	Duke Energy Carolinas, LLC	Other Supplier
Sunderman	Derek	Savion, LLC	None
Sussler	Philip	Maryland Office Of Peoples Council	
Svenson	Heather	Public Service Electric & Gas Company	Transmission Owner
Sweeney	Rory	NOVEC	None
Swigonski	Frank	Pine Gate Renewables, LLC	None
Szot	Lisa	Strata Clean Energy	None
Tanenhauf	Stefanie	Citadel FNGE Ltd.	Other Supplier
Taylor	Robert	Exelon Business Services Company, LLC	Transmission Owner
Tekle	Zelalem	REV Renewables	None
Thomas	Amber	Exelon Business Services Company, LLC	Transmission Owner
Tibbetts	Maeve	K & L Gates	None
Tyler	Catherine	Monitoring Analytics, LLC	None
VanBlargan	Bryna	Audubon Land Development	None
VanderLaan	D. William	Illinois Commerce Commission	None
Vander Vorst	Aaron	Tradewind Energy, Inc.	None
Vayda	Brian	Borough of Park Ridge, NJ	Electric Distributor
Velumylyum	Ganesh	BrightNight Holdings, LLC	None
Von Plagenhoef	Rowen	Charles River Associates (CRA) International	None
Evrard	David	Pennsylvania Office of Consumer Advocate	End-Use Customer
Walcavich	Colin	National Grid Renewables, LLC	None
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Warren	Wendy	Wright & Talisman, P.C.	None
Wehnes	Kathleen	Maryland Department of the Environment	None
Weigel	Shannon	Edison Energy, LLC	None
Wilson	James	Wilson Energy Economics	None
Yoder	Michael	RTO Insider	None

## PJM Attendees

LAST NAME	FIRST NAME	COMPANY NAME	SECTOR
Asthana	Manu	PJM Interconnection LLC	None
Baizman	Aaron	PJM Interconnection LLC	None
Bautista	Alejandro	PJM Interconnection LLC	None
Bernstein	Matthew	PJM Interconnection LLC	None
Bowker	Shannon	PJM Interconnection LLC	None
Boyle	Glen	PJM Interconnection LLC	None
Bresler	Stu	PJM Interconnection LLC	None
Brown	Rich	PJM Interconnection LLC	None
Bruno	Joshua	PJM Interconnection LLC	None

Bruno	Patrick	PJM Interconnection LLC	None
Bryson	Michael	PJM Interconnection LLC	None
Buehler	Susan	PJM Interconnection LLC	None
Burdis	Tim	PJM Interconnection LLC	None
Callaghan	Christopher	PJM Interconnection LLC	None
Carroll	Rebecca	PJM Interconnection LLC	None
Caven	Augustine	PJM Interconnection LLC	None
Caven	Onyinye	PJM Interconnection LLC	None
Chmielewski	Brian	PJM Interconnection LLC	None
Ciabattoni	Joseph	PJM Interconnection LLC	None
Conboy	Paula	PJM Interconnection LLC	None
D'Antonio	Phil	PJM Interconnection LLC	None
Del Viscio	Mike	PJM Interconnection LLC	None
Dent	Duane	PJM Interconnection LLC	None
Derin	Bilge	PJM Interconnection LLC	None
Devita	Thomas	PJM Interconnection LLC	None
Drake	Anna	PJM Interconnection LLC	None
Drauschak	Lisa	PJM Interconnection LLC	None
Edgar-Smith	Collin	PJM Interconnection LLC	None
Egan	Amanda	PJM Interconnection LLC	None
Egan	David	PJM Interconnection LLC	None
Fan	Zhenyu	PJM Interconnection LLC	None
Fitzpatrick	Brian	PJM Interconnection LLC	None
Foley	Sheila	PJM Interconnection LLC	None
Franks	Ed	PJM Interconnection LLC	None
Gates	Jill	PJM Interconnection LLC	None
Glatz	Suzanne	PJM Interconnection LLC	None
Glazer	Craig	PJM Interconnection LLC	None
Graf	Walter	PJM Interconnection LLC	None
Haque	Asim	PJM Interconnection LLC	None
Hauske	Thomas	PJM Interconnection LLC	None
Hay	Joseph	PJM Interconnection LLC	None
Hicks	Colleen	PJM Interconnection LLC	None
Hislop	David	PJM Interconnection LLC	None
Holter	Natasha	PJM Interconnection LLC	None
Horger	Tim	PJM Interconnection LLC	None
Hu	Yong	PJM Interconnection LLC	None
Jayachandran	Marilyn	PJM Interconnection LLC	None
Keech	Adam	PJM Interconnection LLC	None
Keegan	Jack	PJM Interconnection LLC	None
Kenney	Susan	PJM Interconnection LLC	None
Kim	Sung	PJM Interconnection LLC	None
Kovler	Ed	PJM Interconnection LLC	None
Kuras	Mark	PJM Interconnection LLC	None
Lai	Erin	PJM Interconnection LLC	None
Lu	Chen	PJM Interconnection LLC	None
Lynch	Jessica	PJM Interconnection LLC	None
Manno	Dean	PJM Interconnection LLC	None
McElwaine	Kathy	PJM Interconnection LLC	None
McGlynn	Paul	PJM Interconnection LLC	None
McLavery	Megan	PJM Interconnection LLC	None
Nestel	Stacey	PJM Interconnection LLC	None
O'Brien	Tom	PJM Interconnection LLC	None
O'Hara	Chris	PJM Interconnection LLC	None
Patel	Anita	PJM Interconnection LLC	None

Patel	Komal	PJM Interconnection LLC	None
Phillips	Darlene	PJM Interconnection LLC	None
Pilong	Chris	PJM Interconnection LLC	None
Pincus	Steven	PJM Interconnection LLC	None
Salmon	Lisa	PJM Interconnection LLC	None
Scheirer	Alex	PJM Interconnection LLC	None
Schweizer	David	PJM Interconnection LLC	None
Seiler	Ken	PJM Interconnection LLC	None
Singh	Harliv	PJM Interconnection LLC	None
Souder	David	PJM Interconnection LLC	None
Souder	Michelle	PJM Interconnection LLC	None
Souder	Rich	PJM Interconnection LLC	None
Stadmeyer	Rebecca	PJM Interconnection LLC	None
Stanisz	Mark	PJM Interconnection LLC	None
Stemetzki	Mike	PJM Interconnection LLC	None
Swim	Nora	PJM Interconnection LLC	None
Takahashi	Mark	PJM Interconnection LLC	None
Thomas	Jack	PJM Interconnection LLC	None
Waweru	James	PJM Interconnection LLC	None