



Markets & Reliability Committees
PJM Conference and Training Center, Audubon, PA / WebEx
January 25, 2023
9:00 a.m. – 11:35 a.m. EPT

### Administration

Stu Bresler and David Anders welcomed stakeholders and provided the Anti-trust, Code of Conduct, and Meeting Participation announcements. Stu Bresler noted that agenda item five had been deferred to a future meeting at the request of the proposer. Paul Sotkiewicz, Elwood Energy, proposed a new agenda item be added to discuss the Market Seller Offer Cap. There were no objections and therefore it was added to the agenda for this meeting.

### **Consent Agenda**

Items A through F were **approved/endorsed** by acclamation with no objections and one abstention:

- A. Minutes of the December 21, 2022 meeting of the Markets and Reliability Committee.
- B. Proposed revisions to Manual 02: Transmission Service Request addressing clarifying changes related to the Internal Network Integration Transmission Service (NITS) Process issue, as well as administrative cleanup.
- C. Proposed revisions to Manual 14A: New Services Request Process and Manual 14B: PJM Regional Transmission Planning Process addressing the generator deliverability test.
- D. Proposed revisions to Manual 28: Operating Agreement Accounting addressing conforming clarifications and corrections to support the implementation of Reserve Price Formation.
- E. Proposed revisions to Manual 38: Operations Planning resulting from its periodic review.
- F. Proposed revisions to the Regional Transmission and Energy Scheduling Practices document. These changes are in support of the NAESB version 3.3 Business Practice Standards, as well as administrative cleanup.

### **Endorsements**

1. Capacity Interconnection Rights for ELCC Resources

Brian Chmielewski reviewed proposed solution package I addressing Capacity Interconnection Rights (CIR) for ELCC Resources. Following discussion, the main motion (package I) and associated Tariff, Reliability Assurance Agreement (RAA) and manual revisions were **endorsed** in a sector-weighted vote with 4.529 in favor. Stu Bresler noted that same day endorsement would be sought at Members Committee for the Tariff and RAA revisions.

Issue Tracking: Capacity Interconnection Rights (CIR) for ELCC Resources





### 2. Emerging Technology Forum (ETF) Charter (9:35-9:50)

Scott Baker reviewed proposed revisions to the Emerging Technologies Forum Charter. Following discussion, the proposed charter revisions were **approved** by acclamation with no objections or abstentions.

### 3. Hybrid Resources Phase II (9:50-10:10)

Danielle Croop reviewed the package detailing the Hybrid Resources Phase II solutions. Following discussion, the proposed solution and corresponding Tariff, RAA and Operating Agreement (OA) revisions were **endorsed** by acclamation with no objections or abstentions.

Issue Tracking: Solar-Battery Hybrid Resources

### 4. Day-ahead Zonal Load Bus Distribution Factors (10:10-10:30)

Amanda Martin reviewed a proposed solution package and associated revisions to Manual 11: Energy & Ancillary Services Market Operations, Manual 28: Operating Agreement Accounting, and Tariff Section 31.7 addressing the zonal load bus distribution factors. Following discussion, the proposed solution and corresponding Tariff and manual revisions were **endorsed** by acclamation with no objections or abstentions.

Issue Tracking: Day-ahead Zonal Load Bus Distribution Factors

### First Readings (10:30-11:35)

### 5. IROL/CIP Revised Issue Charge (10:30-11:00)

This item was removed from the agenda for this meeting.

<u>Issue Tracking: IROL Critical CIP Cost Recovery</u>

### 6. Manual 6 FTR Bid Limits (11:00-11:20)

Emmy Messina reviewed a proposed solution to update the FTR auction bid limit and corresponding revisions in Manual 6: Financial Transmission Rights. The committee will be asked to endorse the proposed solution at its next meeting.

### 7. Manuals (11:20-11:35)

- A. Sean Flamm reviewed conforming revisions to Manual 27: Open Access Transmission Tariff Accounting addressing the allocation methodology for Schedule 9: PJM Settlement charges to conform to the settlement agreement approved by the FERC in Docket No. ER22-26 in November 2022. The committee will be asked to endorse the proposed revisions at its next meeting.
- B. Ben Miller reviewed proposed revisions to Manual 40: Training and Certification Requirements resulting from its periodic review. The committee will be asked to endorse the proposed revisions at its next meeting.





### Informational Items

### 8. Market Seller Offer Cap

Paul Sotkiewicz and Jeff Whitehead, GT Power Group, requested discussion of the incorporation of the Winter Storm Elliott events into application of the MSOC for the 2025/2026 Base Residual Auction to be run in June, 2023. They also requested discussion of potential modifications to the MSOC rules currently included in the Tariff. The schedule for the 2025/2026 auction preparation activities was reviewed, including determination of resource specific MSOC values.

The Independent Market Monitor and PJM were requested to provide education on incorporation of Elliott into MSOC calculations at the January 31, 2023 Resource Adequacy Sr. Task Force (RASTF) meeting. Paths forward for consideration of potential modifications to the MSOC rules currently included in the Tariff were also discussed. Additional discussion will occur at the January 31 and February 14, 2023 RASTF meetings and the February 8, 2023 Market Implementation Committee Meeting.

### Future Agenda Items (11:35)

No new future agenda items were identified.

		Future Meeting Dates and Materials	Materials Due to Secretary	Materials Published
Date	Time	Location		
February 23, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	February 13, 2023	February 16, 2023
March 22, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	March 10, 2023	March 15, 2023
April 26, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	April 14, 2023	April 19, 2023
May 31, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	May 19, 2023	May 24, 2023
June 22, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	June 12, 2023	June 15, 2023
July 26, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	July 14, 2023	July 19, 2023
August 23, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	August 11, 2023	August 16, 2023
September 20, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	September 8, 2023	September 13, 2023
October 25, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	October 13, 2023	October 18, 2023
November 15, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	November 3, 2023	November 8, 2023
December 20, 2023	9:00 a.m.	PJM Conference & Training Center and WebEx	December 8, 2023	December 13, 2023





Author: D. Anders

### **Meeting Attendance**

### **Chair/Secretary**

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

### **Voting Attendees**

Last Name	First Name	Company	Sector
Barker	Jason	Constellation Energy Generation, LLC	Generation Owner
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
Bruce	Susan	Air Products & Chemicals, Inc.	End-Use Customer
Bruce	Susan	Cleveland-Cliffs Steel LLC	End-Use Customer
Bruce	Susan	Gerdau Ameristeel Energy, Inc.	End-Use Customer
Bruce	Susan	Kimberly-Clark Corporation	Generation Owner
Bruce	Susan	Lehigh Portland Cement Company	End-Use Customer
Bruce	Susan	Letterkenny Industrial Development Authority - PA	Electric Distributor
Bruce	Susan	Linde Inc.	End-Use Customer
Bruce	Susan	MeadWestvaco Corporation	End-Use Customer
Bruce	Susan	Messer LLC	End-Use Customer
Bruce	Susan	Procter & Gamble Paper Products Company (The)	End-Use Customer
Bruce	Susan	Trustees of the University of Pennsylvania	End-Use Customer
Bruce	Susan	Wellsboro Electric Company	Electric Distributor
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
DiNicola	Laura	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Domian	Christin	Duguesne Light Company	Transmission Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Esquivel	Manuel	Enel X North America, Inc.	Other Supplier
Fink	Regan	Pine Gate Mid-Atlantic, LLC	Other Supplier
Fishback	Luke	Affirmed Energy LLC	Other Supplier
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	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	NextPower III US Holdco Inc.	Generation Owner
Fuess	Christian	PBF Power Marketing, LLC	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
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
Johnson	Carl	Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson	Carl	Blue Ridge Power Agency, Inc.  Borough of Chambersburg	Electric Distributor
	Carl		
Johnson		Borough of Mont Alto, Pennsylvania	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	Delaware Municipal Electric Corporation, Inc.	Electric Distributor
Johnson	Carl	Easton Utilities Commission	Electric Distributor
Johnson	Carl	Energy Cooperative Association of Pennsylvania (The)	Other Supplier
Johnson	Carl	Hagerstown Light Department	Electric Distributor
Johnson	Carl	Illinois Municipal Electric Agency	Electric Distributor
Johnson	Carl	Indiana Municipal Power Agency	Electric Distributor
Johnson	Carl	Michigan Public Power Agency	Electric Distributor
Johnson	Carl	North Carolina Electric Membership Corporation	Electric Distributor
Johnson	Carl	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson	Carl	Thurmont Municipal Light Company	Electric Distributor
Johnson	Carl	Town of Williamsport (The)	Electric Distributor
Johnson	Carl	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
Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Nix	Emma	Leeward Asset Management, LLC	Generation Owner
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Poulos	Greg	Delaware Division of the Public Advocate	End-Use Customer
Poulos	Greg	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Poulos	Greg	Maryland Office of People's Counsel	End-Use Customer
Poulos	Greg	New Jersey Division of Rate Counsel	End-Use Customer
Poulos	Greg	Office of the Attorney General, Kentucky	End-Use Customer
Poulos	Greg	Office of the People's Counsel for the District of Columbia	End-Use Customer
Poulos	Greg	Pennsylvania Office of Consumer Advocate	End-Use Customer
Poulos	Greg	Public Staff - North Carolina Utilities Commission	End-Use Customer
Rohrbach	John	Kentucky Municipal Energy Agency	Electric Distributor
Rohrbach	John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Rohrbach	John	Wabash Valley Power Association, Inc.	Electric Distributor
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Stern	Alex	Public Service Electric and Gas Company	Transmission Owner
Swalwell	Bradley	Tangent Energy Solutions, Inc.	Other Supplier
Tashakkori	Cyrus	Open Road Renewables, LLC	Other Supplier
Tubridy	Meg	Rockland Electric Company	Transmission Owner
Whitehead	Jeffrey	Eastern Generation, LLC	Generation Owner
Whitehead	Jeffrey	Essential Power Rock Springs, LLC	Generation Owner
Whitehead	Jeffrey	Wheelabrator Falls Inc.	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	Sector
abdur-rahman	muhsin	ABB Enterprise Software Inc.	None
Ament	Todd	Mahoning Creek Hydroelectric Company, LLC	Generation Owner
Anderson	Bob	Tenaska Power Services Co.	Generation Owner
Anderson	Juliet	Constellation Energy Generation, LLC	Generation Owner
Bainbridge	Tom	American Transmission Systems, Inc.	Transmission Owner
Baker	Hayden	Troutman Pepper	None
Baker	Jeff	Duke Energy Ohio, Inc.	Transmission Owner
Barker	Jason	Constellation Energy Generation, LLC	Generation Owner
Barrow	Kim	Commonwealth of PA	None
Bleiweis	Bruce	DC Energy LLC	Other Supplier
Boyle	Sean	Constellation Energy Generation, LLC	Generation Owner





Boyle	Stephen	Merion Energy Solutions	None
Brady	George	Ohio Valley Electric Corp	Transmission Owner
Brodbeck	John	EDP Renewables North America, LLC	Generation Owner
Burnham	Kat	Advanced Energy Economy (AEE)	None
Callen	Zachary	Illinios Commerce Commission	None
Canter	David	AEP Appalachian Transmission Company, Inc.	Transmission Owner
carmean	Gregory	OPSI	None
Carrier	Ronald	Big Lake Consulting Group, LLC	None
Carson	Donna	East Kentucky Power Cooperative, Inc.	Transmission Owner
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Chapman	Taylor	Charles River Associates	None
Christopher	Mahila	Public Utilities Commission of Ohio (The)	None
Concina	Wendell	Commonwealth Edison Company	Transmission Owner
Corash	Rich	Public Service Electric and Gas Company	Transmission Owner
Corder	Nick	Commonwealth Chesapeake Company, LLC	Generation Owner
Cosby	Sarah	Dominion Virginia Power	None
	Gil	UGI Development Company	Generation Owner
Crystle Curtis	Kenneth		None
dadourian	john	Drilling Info, Inc.	None
	Jonn Michael	Monitoring Analytics, LLC	None Electric Distributor
dailey		Northern Virginia Electric Cooperative	
Davis	David	Strata Solar	None
Denby	Brett	NOVEC	None
Diiorio	Michelle	Public Service Electric and Gas Company	Transmission Owner
Dillon	Matthew	UGI Development Company	Generation Owner
DiNicola	Laura	FirstEnergy Corporation	Transmission Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Dorner	Amber	Consolidated Edison Company of New York, Inc	Transmission Owner
Drom	Rick	Rick Drom	None
Duensing	Allison	Saracen Energy East LP	Other Supplier
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Eaker	Katie	Tenaska Power Services Co.	Generation Owner
Edmonds	Brian	DC Public Service Commission	None
Ericson	Christine	Illinois Commerce Commission	None
Esquivel	Manuel	Enel X North America, Inc.	Other Supplier
Everngam	Scott	The Federal Energy Regulatory Commission	None
Eyocko	Jacky	The Federal Energy Regulatory Commission	None
Fazio	Danielle	Noble Americas Gas & Power Corp.	Other Supplier
Ferguson	Mike	Indeck Energy Services, Inc.	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
Fitch	Neal	NRG Power Marketing LLC	Generation Owner
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Foster	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner
Fuerst	Gary	American Transmission Systems, Inc.	Transmission Owner
Fuess	Christian	PBF Power Marketing, LLC	Generation Owner
Garnett	Bryan	Duke Energy Ohio, Inc.	Transmission Owner
Garth	William	Indeck Niles, LLC	Generation Owner
Gates	Terry	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Glazener	Pat	Energy Authority, Inc. (The)	Other Supplier
Gordon	Jon	Shipley Choice, LLC	Other Supplier
Gorman	Brad	FirstEnergy Corporation	Transmission Owner
Greene	Ben	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Guntle	Vince	American PowerNet Management	End-Use Customer
Hanser	Erik	Michigan Public Service Commission	None





Hastings	David	Market Interconnection Consulting Services (MICS)	None
Helms	Joseph	Rainbow Energy Marketing Corporation	Other Supplier
Herbert	Sebastian	DC Energy LLC	Other Supplier
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Holdbrook	Ruth	Northern Virginia Electric Cooperative	Electric Distributor
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Hudis	Gabriella	Jersey Green Energy LLC	Other Supplier
Hugee	Jacqui	Virginia Electric & Power Company	Transmission Owner
Hull	Gerit	American Municipal Power, Inc.	Electric Distributor
Hurwich	Mark	Elliott Bay Energy Trading, LLC	Other Supplier
Hyatt	Earl	Monitoring Analytics, LLC	None
Hyzinski	Tom	GT Power Group	None
ller	Arthur	Indiana Office of Utility Consumer Counselor	End-Use Customer
Jablonski	Ward	MEPPI	None None
Janapareddy	Anu	Green River Holdings, LLC	Generation Owner
Janiapareudy Janicki	Diane	Boston Energy Trading & Marketing, LLC	Other Supplier
Johnson	Carl		
		Customized Energy Solutions, Ltd.*	None
Johnston	David	Indiana Utility Regulatory Commission	None
Jones	Scott	Indiana Office of Utility Consumer Counsel	End-Use Customer
Josyula	Siva	Monitoring Analytics, LLC	None
Kalaskar	Rahul	AES Ohio Generation, LLC	Generation Owner
Keenan	Matthew	Jpower USA	None
Keenan	Matthew	Jpower USA	None
Kelly	Stephen	Brookfield Energy Marketing LP	Other Supplier
Kent	Janessa	Duquesne Light Company	Transmission Owner
Kilgallen	Kevin	Avangrid Renewables LLC	Generation Owner
Koepplinger	Alexandria	Michigan Public Service Commission	None
Kooistra	Russ	Troutman Pepper	None
Koz	Brian	Alphataraxia Palladium LLC	None
Kroh	Judson	Seward Generation, LLC	Generation Owner
Laios	Takis	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Lawson	Ryen	Dominion Virginia Power	None
Lawton	Nick	Earthjustice	None
Liang-Nicol	Cecilia	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
libbos	Robin	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor
Lin	Mike	SESCO Enterprises, LLC	Other Supplier
Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Louwahi	Soufiane	Electric Power Engineers Consulting	None
Mariam	Yohannes	Office of the Peoples Counsel for the District of Columbia	End-Use Customer
Mason	Gary	FirstEnergy Corporation	Transmission Owner
Matheson	Eric	Pennsylvania Public Utility Commission	None
Matuszak	Alex	UGI Energy Services, LLC	Other Supplier
McCormick	Katharine	Illinois Commerce Commission	None
McDewell	Christian	Commonwealth of PA	None
McNeil	Justin	Office of the Attorney General, Kentucky	End-Use Customer
McNicholas	Daniel	Cogentrix Virginia Financing Holding Company, LLC	Other Supplier
			Electric Distributor
Mefford	Mark	East Kentucky Power Cooperative, Inc.	
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Mohan	Charles	Seward Generation, LLC	Generation Owner
Mooney	Jeffrey	FirstEnergy Corporation	Transmission Owner
Moye	Bob	Rainbow Energy Marketing Corporation	Other Supplier
Nadel	Steven	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Nader	Jordan	RunnerStone, LLC	None
Nix	Emma	Gable and Associates	None
Okenfuss	James	Savion, LLC	None





Olinger	Robert	Gen Ops, LLC	Other Supplier
Ondayko	Brock	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Opsal	Ryan	Maryland Energy Administration	None
Panahi	Jennifer	Troutman Pepper	None
Panegal	Ash	Apex Clean Energy	None
Parker	Amanda	Pennsylvania Electric Company	Electric Distributor
Parrot	Sarah	Public Utilities Commission of Ohio	None
Peoples	John	Duquesne Light Company	Transmission Owner
Phillips	Amanda	Wabash Valley Power Association, Inc.	Electric Distributor
Price	Ruth	Division of the Public Advocate of the State of Delaware	End-Use Customer
Procuniar	Jason	Buckeye Power, Inc.	Electric Distributor
Raghavan	Vijay	BioUrga Trading LLC	Other Supplier
Rasmussen	Jay	Duke Energy Business Services LLC	Transmission Owner
Reagan	Ryann	New Jersey Board of Public Utilities	None
Reeping	Bob	Ohio Edison Company	Transmission Owner
Rogers	Aaron	East Kentucky Power Cooperative, Inc.	Transmission Owner
Rohrbach	John	Aces Power Marketing	None
Rutigliano	Tom	Achieving Equilibrium LLC	None
Rutledge	Craig	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Sammartino	Mike	Maryland Office of People's Counsel	None
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	None
Scheidecker	Paul	Monitoring Analytics, LLC	None
Schmitt	David	New Jersey Board of Public Utilities	None
Schultheis	Daniel	Constellation Energy Services, Inc.	Other Supplier
Schum	Alice	Illinois Municipal Electric Agency	Electric Distributor
Selick	Sam	Customized Energy Solutions, Ltd.*	None
Shah	Pulin	PECO Energy Company	Transmission Owner
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Shegarfi	Roozbeh	Exelon Business Services Company, LLC	Transmission Owner
Singh	Harliv	Northern States Power Company	Other Supplier
Skucas	Ruta	K & L Gates	None
Skumanich	William	RTR Energy Solutions LLC	None
Sloan	Ben	Organization of PJM States, Inc. (OPSI)	None Statis Distributes
Smith	Kara	Buckeye Power, Inc.	Electric Distributor
Sotkiewicz	Paul	E-Cubed Policy Associates	None
Sparks	Bridget	Dayton Power & Light Company (The)	Transmission Owner
Spencer	Doug	Southeastern Power Administration	Other Supplier
Stadelmeyer	Rebecca	Gable and Associates	None
Stein	Michael	Indeck Niles, LLC	Other Supplier
Stern	Alexander	Public Service Electric and Gas Company	Transmission Owner
Stines	Zachary	Borrego Solar Systems, Inc.	None
Strom	Ryan	Buckeye Power, Inc.	Electric Distributor
Stupar	Rob	Invenergy, LLC	Generation Owner
Sturgeon	John	Duke Energy Carolinas, LLC	Other Supplier
Sun	Haibin	Constellation Energy Services, Inc.	Other Supplier
Sussler	Philip	State of Maryland	None
Sweeney	Rory	GT Power Group	None
Swenson	Nils	Commonwealth Chesapeake Company, LLC	Generation Owner
Swigonski	Frank	Advanced Energy Economy, Inc.	None
Szeto	Connie	PBF Power Marketing, LLC	Generation Owner
Tashakkori	Cyrus	Open Road Renewables, LLC	None
Theodore	Sharon	Electric Power Supply Association	None
Traynor	Daniel	St. Joseph Energy Center, LLC	Generation Owner
Tubridy	Meg	Rockland Electric Company	Transmission Owner
VanBlargan	Bryna	Resource Investments	None
VanderLaan	William	Illinois Commerce Commission	None





Vargo	Daniel	Allegheny Electric Cooperative, Inc.	Electric Distributor
Vayda	Brian	Borough of Park Ridge, NJ	Electric Distributor
Velazquez	Daveg	Exelon Business Services Company, LLC	Transmission Owner
Vos	Nico	Indeck Niles, LLC	Other Supplier
Walcavich	Colin	National Grid Renewables, LLC	None
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Webb	Becky	Commonwealth Edison Company	Transmission Owner
Wehnes	Kathleen	Maryland Public Service Commission	None
Weinant	Eric	Illinois Municipal Electric Agency	Electric Distributor
Wilkinson	Eric	Orsted US Trading LLC	Other Supplier
Wilson	James	Wilson Energy Economics	None
Yasutake	Sarah	Gabel and Associates	None
Zemanek	Kevin	Buckeye Power, Inc.	Electric Distributor

#### **PJM Attendees**

Last Name	First Name	Company	Sector
abdur-rahman	muhsin	ABB Enterprise Software Inc.	None
Ament	Todd	Mahoning Creek Hydroelectric Company, LLC	Generation Owner
Anderson	Bob	Tenaska Power Services Co.	Generation Owner
Anderson	Juliet	Constellation Energy Generation, LLC	Generation Owner
Bainbridge	Tom	American Transmission Systems, Inc.	Transmission Owner
Baker	Hayden	Troutman Pepper	None
Baker	Jeff	Duke Energy Ohio, Inc.	Transmission Owner
Barker	Jason	Constellation Energy Generation, LLC	Generation Owner
Barrow	Kim	Commonwealth of PA	None
Bleiweis	Bruce	DC Energy LLC	Other Supplier
Boyle	Sean	Constellation Energy Generation, LLC	Generation Owner
Boyle	Stephen	Merion Energy Solutions	None
Brady	George	Ohio Valley Electric Corp	Transmission Owner
Brodbeck	John	EDP Renewables North America, LLC	Generation Owner
Burnham	Kat	Advanced Energy Economy (AEE)	None
Callen	Zachary	Illinios Commerce Commission	None
Canter	David	AEP Appalachian Transmission Company, Inc.	Transmission Owner
carmean	Gregory	OPSI	None
Carrier	Ronald	Big Lake Consulting Group, LLC	None
Carson	Donna	East Kentucky Power Cooperative, Inc.	Transmission Owner
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Chapman	Taylor	Charles River Associates	None
Christopher	Mahila	Public Utilities Commission of Ohio (The)	None
Concina	Wendell	Commonwealth Edison Company	Transmission Owner
Corash	Rich	Public Service Electric and Gas Company	Transmission Owner
Corder	Nick	Commonwealth Chesapeake Company, LLC	Generation Owner
Cosby	Sarah	Dominion Virginia Power	None
Crystle	Gil	UGI Development Company	Generation Owner
Curtis	Kenneth	Drilling Info, Inc.	None
dadourian	john	Monitoring Analytics, LLC	None
dailey	Michael	Northern Virginia Electric Cooperative	Electric Distributor
Davis	David	Strata Solar	None
Denby	Brett	NOVEC	None
Diiorio	Michelle	Public Service Electric and Gas Company	Transmission Owner
Dillon	Matthew	UGI Development Company	Generation Owner
DiNicola	Laura	FirstEnergy Corporation	Transmission Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Dorner	Amber	Consolidated Edison Company of New York, Inc	Transmission Owner
Drom	Rick	Rick Drom	None
Duensing	Allison	Saracen Energy East LP	Other Supplier





Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Eaker	Katie	Tenaska Power Services Co.	Generation Owner
Edmonds	Brian	DC Public Service Commission	None
Ericson	Christine	Illinois Commerce Commission	None
Esquivel	Manuel	Enel X North America, Inc.	Other Supplier
Everngam	Scott	The Federal Energy Regulatory Commission	None
Eyocko	Jacky	The Federal Energy Regulatory Commission	None
Fazio	Danielle	Noble Americas Gas & Power Corp.	Other Supplier
Ferguson	Mike	Indeck Energy Services, Inc.	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
Fitch	Neal	NRG Power Marketing LLC	Generation Owner
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Foster	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner
Fuerst	Gary	American Transmission Systems, Inc.	Transmission Owner
Fuess	Christian	PBF Power Marketing, LLC	Generation Owner
Garnett	Bryan	Duke Energy Ohio, Inc.	Transmission Owner
Garth	William	Indeck Niles, LLC	Generation Owner
Gates	Terry	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Glazener	Pat	Energy Authority, Inc. (The)	Other Supplier
Gordon	Jon	Shipley Choice, LLC	Other Supplier
Gorman	Brad	FirstEnergy Corporation	Transmission Owner
Greene	Ben	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Guntle	Vince	American PowerNet Management	End-Use Customer
Hanser	Erik	Michigan Public Service Commission	None
Hastings	David	Market Interconnection Consulting Services (MICS)	None
Helms	Joseph	Rainbow Energy Marketing Corporation	Other Supplier
Herbert	Sebastian	DC Energy LLC	Other Supplier
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Holdbrook	Ruth	Northern Virginia Electric Cooperative	Electric Distributor
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Hudis	Gabriella	Jersey Green Energy LLC	Other Supplier
Hugee	Jacqui	Virginia Electric & Power Company	Transmission Owner
Hull	Gerit	American Municipal Power, Inc.	Electric Distributor
Hurwich	Mark	Elliott Bay Energy Trading, LLC	Other Supplier
Hyatt	Earl	Monitoring Analytics, LLC	None
Hyzinski	Tom	GT Power Group	None
ller	Arthur	Indiana Office of Utility Consumer Counselor	End-Use Customer
Jablonski	Ward	MEPPI	None
Janapareddy	Anu	Green River Holdings, LLC	Generation Owner
Janicki	Diane	Boston Energy Trading & Marketing, LLC	Other Supplier
Johnson	Carl	Customized Energy Solutions, Ltd.*	None
Johnston	David	Indiana Utility Regulatory Commission	None
Jones	Scott	Indiana Office of Utility Consumer Counsel	End-Use Customer
Josyula	Siva	Monitoring Analytics, LLC	None
Kalaskar	Rahul	AES Ohio Generation, LLC	Generation Owner
Keenan	Matthew	Jpower USA	None
Keenan	Matthew	Jpower USA	None
Kelly	Stephen	Brookfield Energy Marketing LP	Other Supplier
Kent	Janessa	Duquesne Light Company	Transmission Owner
Kilgallen	Kevin	Avangrid Renewables LLC	Generation Owner
Koepplinger	Alexandria	Michigan Public Service Commission	None
Kooistra	Russ	Troutman Pepper	None
Koz	Brian	Alphataraxia Palladium LLC	None





Kroh	Judson	Seward Generation, LLC	Generation Owner
Laios	Takis	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Lawson	Ryen	Dominion Virginia Power	None
Lawton	Nick	Earthjustice	None
Liang-Nicol	Cecilia	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
libbos	Robin	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor
Lin	Mike	SESCO Enterprises, LLC	Other Supplier
Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Louwahi	Soufiane	Electric Power Engineers Consulting	None
Mariam	Yohannes	Office of the Peoples Counsel for the District of Columbia	End-Use Customer
Mason	Gary	FirstEnergy Corporation	Transmission Owner
Matheson	Eric	Pennsylvania Public Utility Commission	None
Matuszak	Alex	UGI Energy Services, LLC	Other Supplier
McCormick	Katharine	Illinois Commerce Commission	None
McDewell	Christian	Commonwealth of PA	None
McNeil			End-Use Customer
	Justin	Office of the Attorney General, Kentucky	
McNicholas Mefford	Daniel Mark	Cogentrix Virginia Financing Holding Company, LLC	Other Supplier
Mefford	Sharon	East Kentucky Power Cooperative, Inc.	Electric Distributor
Midgley		Exelon Business Services Company, LLC	Transmission Owner
Mohan	Charles	Seward Generation, LLC	Generation Owner
Mooney	Jeffrey	FirstEnergy Corporation	Transmission Owner
Moye	Bob	Rainbow Energy Marketing Corporation	Other Supplier
Nadel	Steven	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Nader	Jordan	RunnerStone, LLC	None
Nix	Emma	Gable and Associates	None
Okenfuss	James	Savion, LLC	None
Olinger	Robert	Gen Ops, LLC	Other Supplier
Ondayko	Brock	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Opsal	Ryan	Maryland Energy Administration	None
Panahi	Jennifer	Troutman Pepper	None
Panegal	Ash	Apex Clean Energy	None
Parker	Amanda	Pennsylvania Electric Company	Electric Distributor
Parrot	Sarah	Public Utilities Commission of Ohio	None
Peoples	John	Duquesne Light Company	Transmission Owner
Phillips	Amanda	Wabash Valley Power Association, Inc.	Electric Distributor
Price	Ruth	Division of the Public Advocate of the State of Delaware	End-Use Customer
Procuniar	Jason	Buckeye Power, Inc.	Electric Distributor
Raghavan	Vijay	BioUrga Trading LLC	Other Supplier
Rasmussen	Jay	Duke Energy Business Services LLC	Transmission Owner
Reagan	Ryann	New Jersey Board of Public Utilities	None
Reeping	Bob	Ohio Edison Company	Transmission Owner
Rogers	Aaron	East Kentucky Power Cooperative, Inc.	Transmission Owner
Rohrbach	John	Aces Power Marketing	None
Rutigliano	Tom	Achieving Equilibrium LLC	None
Rutledge	Craig	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Sammartino	Mike	Maryland Office of People's Counsel	None
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	None
Scheidecker	Paul	Monitoring Analytics, LLC	None
Schmitt	David	New Jersey Board of Public Utilities	None
Schultheis	David	Constellation Energy Services, Inc.	Other Supplier
Schum	Alice	Illinois Municipal Electric Agency	Electric Distributor
Selick	Sam	Customized Energy Solutions, Ltd.*	None Transmission Owner
Shah	Pulin	PECO Energy Company	Transmission Owner
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Shegarfi	Roozbeh	Exelon Business Services Company, LLC	Transmission Owner





Singh	Harliv	Northern States Power Company	Other Supplier
Skucas	Ruta	K & L Gates	None
Skumanich	William	RTR Energy Solutions LLC	None
Sloan	Ben	Organization of PJM States, Inc. (OPSI)	None
Smith	Kara	Buckeye Power, Inc.	Electric Distributor
Sotkiewicz	Paul	E-Cubed Policy Associates	None
Sparks	Bridget	Dayton Power & Light Company (The)	Transmission Owner
Spencer	Doug	Southeastern Power Administration	Other Supplier
Stadelmeyer	Rebecca	Gable and Associates	None
Stein	Michael	Indeck Niles, LLC	Other Supplier
Stern	Alexander	Public Service Electric and Gas Company	Transmission Owner
Stines	Zachary	Borrego Solar Systems, Inc.	None
Strom	Ryan	Buckeye Power, Inc.	Electric Distributor
Stupar	Rob	Invenergy, LLC	Generation Owner
Sturgeon	John	Duke Energy Carolinas, LLC	Other Supplier
Sun	Haibin	Constellation Energy Services, Inc.	Other Supplier
Sussler	Philip	State of Maryland	None
Sweeney	Rory	GT Power Group	None
Swenson	Nils	Commonwealth Chesapeake Company, LLC	Generation Owner
Swigonski	Frank	Advanced Energy Economy, Inc.	None
Szeto	Connie	PBF Power Marketing, LLC	Generation Owner
Tashakkori	Cyrus	Open Road Renewables, LLC	None
Theodore	Sharon	Electric Power Supply Association	None
Traynor	Daniel	St. Joseph Energy Center, LLC	Generation Owner
Tubridy	Meg	Rockland Electric Company	Transmission Owner
VanBlargan	Bryna	Resource Investments	None
VanderLaan	William	Illinois Commerce Commission	None
Vargo	Daniel	Allegheny Electric Cooperative, Inc.	Electric Distributor
Vayda	Brian	Borough of Park Ridge, NJ	Electric Distributor
Velazquez	Daveg	Exelon Business Services Company, LLC	Transmission Owner
Vos	Nico	Indeck Niles, LLC	Other Supplier
Walcavich	Colin	National Grid Renewables, LLC	None
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Webb	Becky	Commonwealth Edison Company	Transmission Owner
Wehnes	Kathleen	Maryland Public Service Commission	None
Weinant	Eric	Illinois Municipal Electric Agency	Electric Distributor
Wilkinson	Eric	Orsted US Trading LLC	Other Supplier
Wilson	James	Wilson Energy Economics	None None
Yasutake	Sarah	Gabel and Associates	None
Zemanek	Kevin	Buckeye Power, Inc.	Electric Distributor
<u> LUIIAIIUN</u>	IVEALL	Duckeye Fower, Inc.	FIGURIO DISHIDURO