



Markets and Reliability Committee Webex Only December 17, 2020 9:00 a.m. – 12:45 p.m.

## Administration

Stu Bresler and Dave Anders welcomed stakeholders and provided the Anti-trust, Code of Conduct, and Meeting Participation announcements. Stu Bresler noted the addition of agenda item X regarding Black Start Unit Testing, CRF, Involuntary Termination, MTSL and Substitution Rules including Existing Resources. He noted that presentation materials from a stakeholder had been timely posted with the materials for agenda item 3, but the stakeholder subsequently requested that presentation be considered as a separate agenda item.

## **Consent Agenda**

Items A and C were <u>approved/endorsed</u> by acclamation with one objection (item A) and no abstentions. Greg Poulos, on behalf of the West Virginia Consumer Advocate Division, moved and David Scarpignato, Calpine, seconded deferring voting on Consent Agenda item B until the committee's next meeting. The motion to defer was <u>approved</u> in a sector-weighted vote with 3.67 in favor.

- A. Minutes of the November 19, 2020 meeting of the Markets and Reliability Committee (MRC).M
- B. Proposed revisions to Manual 14C: Generation and Transmission Interconnection Facility Construction as part of the biennial cover-to-cover review.
- C. Proposed revisions to Manual 28: Operating Agreement Accounting conforming with the changes to FERC Order EL-14-37-000 and addressing the allocation of real-time uplift and day-ahead uplift to UTCs.

# **Endorsements/Approvals**

None

# First Readings

## 1. Real Time Values Market Rules

Laura Walter reviewed a proposal addressing Real Time Values Market Rules as endorsed by the Market Implementation Committee. The committee will be asked to endorse the package at its next meeting.

Issue Tracking: Real Time Market Values





# 2. PRD Credits Disposition

Pete Langbein reviewed a proposal addressing the disposition of PRD credits. The committee will be asked to endorse the package at its next meeting.

Issue Tracking: Price Responsive Demand (PRD) Credits Disposition

# 3. <u>Black Start Unit Testing, CRF, Involuntary Termination, MTSL and Substitution Rules</u>

Mike Bryson discussed background on the issue, specifically addressing the Capital Recovery Factor.

Greg Poulos, on behalf of the Delaware Division of the Public Advocate, moved to amend the related Issue Charge to strike Key Work Activity 7: "Current Black Start Units receiving the capital cost recovery rate (Schedule 6A) and units already awarded in recent Black Start RFPs will continue with the commitment period and CRF rates as documented in the current Open Access Transmission Tariff, Schedule 6A, Black Start Service," asserting that the wording improperly incorporated a solution in the Issue Charge. Stu Bresler noted that the motion was not in order, as the agenda for the meeting did not include consideration of the Issue Charge. Greg Poulos withdrew the motion.

Becky Davis reviewed proposals addressing Black Start Unit Involuntary Termination, Substitution Rules, Capital Recovery Factor (CRF) and Minimum Tank Suction Level (MTSL) and corresponding revisions to the Tariff, Manual 12: Balancing Operations, and Manual 15: Cost Development Guidelines. The committee will be asked to endorse a proposed solution at its next meeting.

Black Start Unit Involuntary Termination & Substitution Rules

# X. <u>Black Start Unit Testing, CRF, Involuntary Termination, MTSL and Substitution Rules including Existing Resources</u>

Greg Poulos, on behalf of Delaware Division of the Public Advocate, reviewed a proposal addressing Black Start Unit Involuntary Termination, Substitution Rules, Capital Recovery Factor (CRF) and Minimum Tank Suction Level (MTSL) that includes existing resources.

## 4. Stability Limits in Markets and Operations

- A. Lisa Morelli provided an overview of the MIC's work activities and related procedural history for the Stability Limits in Markets and Operations issue.
- B. Joe Ciabattoni reviewed a Capacity Constraint solution proposal and corresponding Operating Agreement (OA) and Tariff revisions (the main motion).
- C. Paul Sotkiewicz, on behalf of JPower, reviewed an Opportunity Cost solution proposal (the first alternate motion).

The committee will be asked to endorse a proposed solution at its next meeting. Issue Tracking: Stability Limits in Markets and Operations





# 5. PJM Manuals

- A. Brian Chmielewski reviewed proposed revisions to Manual 6: Financial Transmission Rights addressing the enforcement of FTR Bid Limits at the corporate entity level. The committee will be asked to endorse the revisions at its next meeting.
- B. Natalie Tacka reviewed proposed revisions to Manual 11: Energy & Ancillary Services Market Operations, Manual 14D: Generator Operational Requirements and Manual 18: PJM Capacity Market addressing Public Distribution Microgrids. The committee will be asked to endorse the revisions at its next meeting.
- C. Kevin Hatch reviewed proposed revisions to Manual 12: Balancing Operations resulting from the periodic review. The committee will be asked to endorse the revisions at its next meeting.
- D. Kevin Hatch reviewed proposed revisions to Manual 13: Emergency Operations resulting from the periodic review. The committee will be asked to endorse the revisions at its next meeting.
- E. Jeff Bastian reviewed proposed revisions to Manual 18: PJM Capacity Market conforming to the FERC-ordered rule changes in the Minimum Offer Price Rule and Forward Energy & Ancillary Services Offset dockets (Docket Nos. EL16-49-003, EL18-178-003, ER18- 1314-006 and EL19-58). The committee will be asked to endorse these revisions at its next meeting.

  Issue Tracking: Capacity Market Minimum Offer Price Rule (MOPR) Order
- F. Liem Hoang reviewed proposed revisions to Manual 38: Operations Planning resulting from the periodic review. The committee will be asked to endorse these revisions at its next meeting.

# **Informational Reports**

## 6. Capital Recovery Factors Used In APIR

Jeff Bastian provided an informational update regarding the Capital Recovery Factor for Avoidable Project Investment Rate Determinations as issued in a PJM Statement on Monday, December 7, 2020. PJM Statement on the Capital Recovery Factor for Avoidable Project Investment Rate Determinations

# Y. Fast Start Pricing Implementation

Stu Bresler provided an update on the Fast Start Pricing proposal before the FERC. He indicated that its December 17, 2020 meeting the FERC approved an order accepting in part and rejecting in part PJM's fast-start pricing compliance filing. He observed that the order requires a further compliance filing 60 days, and that PJM would provide further update on plans for the compliance filing and implementation as soon as possible.

# Informational Posting Only (Not discussed at the meeting)

# 7. Informational Posting - Manual 01, Attachment F Changes

Revisions to Manual 01: Control Center and Data Exchange Requirements, Attachment F: Overview and Requirements for Remote Operations of Market Operations Centers during the COVID-19





Pandemic have been posted with the meeting materials. The change extends the expiration date to June 30, 2021 given the current state of the COVID-19 Pandemic.

# Future Agenda Items (12: 45)

No new future agenda items were identified.

# **Future Meeting Dates**

January 27, 2021	0.00 a m	\Mah⊏v
January 27, 2021	9:00 a.m.	WebEx
February 24, 2021	9:00 a.m.	WebEx
March 24, 2021	9:00 a.m.	WebEx
April 21, 2021	9:00 a.m.	WebEx
May 26, 2021	9:00 a.m.	WebEx
June 23, 2021	9:00 a.m.	WebEx
July 28, 2021	9:00 a.m.	TBD
August 25, 2021	9:00 a.m.	TBD
September 29, 2021	9:00 a.m.	TBD
October 20, 2021	9:00 a.m.	TBD
November 17, 2021	9:00 a.m.	TBD
December 15, 2021	9:00 a.m.	TBD

Author: D. Anders

#### Facilitator/Secretary

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

#### **Voting Attendees**

Last Name	First Name	Company Name	Sector
Barker	Jason	Exelon Business Services Company, LLC	Transmission Owner
Benchek	Jim	American Transmission Systems, Inc.	Transmission Owner
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Borgatti	Michael	Rep'g. Carolina Solar Energy III, LLC	Other Supplier
Borgatti	Michael	Rep'g. Covanta Energy Group, LLC	Generation Owner
Borgatti	Michael	Rep'g. Hazleton Generation LLC	Generation Owner
Borgatti	Michael	Rep'g. Jersey Green Energy, LLC	Other Supplier
Borgatti	Michael	Rep'g. Longview Power, LLC	Generation Owner
Borgatti	Michael	Rep'g. Moxie Freedom LLC	Generation Owner
Borgatti	Michael	Rep'g. Newark Energy Center, LLC	Generation Owner
Borgatti	Michael	Rep'g. NextEra Energy Marketing, LLC	Other Supplier
Borgatti	Michael	Rep'g. Recurrent Energy, LLC	Generation Owner
Borgatti	Michael	Rep'g. York County Solid Waste and Refuse Authority	Generation Owner
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
Bruce	Susan	Rep'g. Air Products & Chemicals, Inc.	End-Use Customer
Bruce	Susan	Rep'g. ArcelorMittal USA LLC	End-Use Customer
Bruce	Susan	Rep'g. Gerdau Ameristeel Energy, Inc.	End-Use Customer





Bruce	Susan	Rep'g. Industrial Energy Users-Ohio	Other Supplier
Bruce	Susan	Rep'g. Kimberly-Clark Corporation	Generation Owner
Bruce	Susan	Rep'g. Lehigh Portland Cement Company	End-Use Customer
Bruce	Susan	Rep'g. Letterkenny Industrial Development Authority - PA	Electric Distributor
Bruce	Susan	Rep'g. MeadWestvaco Corporation	End-Use Customer
Bruce	Susan	Rep'g. Messer LLC	End-Use Customer
Bruce	Susan	Rep'g. Praxair, Inc.	End-Use Customer
Bruce	Susan	Rep'g. Procter & Gamble Paper Products Company (The)	End-Use Customer
Bruce	Susan	Rep'g. Trustees of the University of Pennsylvania	End-Use Customer
Bruce	Susan	Rep'g. Wellsboro Electric Company	Electric Distributor
Campbell	Bruce	MidAtlantic Power Partners, LLC	Other Supplier
Carrier	Ron	Direct Energy Business, LLC	Other Supplier
Davis	James	Virginia Electric & Power Company	Transmission Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Fitch	Neal	NRG Power Marketing, LLC	Generation Owner
Foladare	Kenneth	Geenex Solar LLC	Generation Owner
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Fuess	Christian	Rep'g. Diamond State Generation Partners, LLC	Generation Owner
Fuess	Christian	Rep'g. Icetec.com, Inc.	Other Supplier
Fuess	Christian	Rep'g. Kuehne Chemical Company, Inc.	End-Use Customer
Fuess	Christian	Rep'g. NextPower III US Holdco Inc.	Generation Owner
Fuess	Christian	Rep'g. PBF Power Marketing, LLC	Generation Owner
Garnett	Bryan	Duke Energy Business Services LLC	Transmission Owner
Greiner	Gary	Public Service Electric & Gas Company	Transmission Owner
	David	Rep'g. Northstar Trading Ltd.	Other Supplier
Hastings	David	Rep'g. Saracen Energy East LP	Other Supplier Other Supplier
Hastings	David	Rep'g. SESCO Enterprises, LLC	Other Supplier Other Supplier
Hastings			Other Supplier Other Supplier
Hastings	David	Rep'g. Solios Power Mid-Atlantic Trading, LLC  Office of the People's Counsel for the District of Columbia	· ·
Heinle	Frederick		End-Use Customer
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
Horton	Dana	Appalachian Power Company	Transmission Owner
Hyzinski	Thomas	Rep'g. Carroll County Energy LLC	Generation Owner
Hyzinski	Thomas	Rep'g. Dynegy Marketing and Trade, LLC	Generation Owner
Hyzinski	Thomas	Rep'g. GenOn Energy Management, LLC	Generation Owner
Islam	Lubaba	Rockland Electric Company	Transmission Owner
Johnson	Carl	Rep'g. Allegheny Electric Cooperative, Inc.	Electric Distributor
Johnson	Carl	Rep'g. Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson	Carl	Rep'g. Borough of Chambersburg	Electric Distributor





Johnson	Carl	Rep'g. Borough of Mont Alto, Pennsylvania	Electric Distributor
Johnson	Carl	Rep'g. Buckeye Power, Inc.	Electric Distributor
Johnson	Carl	Rep'g. Central Virginia Electric Cooperative	Electric Distributor
Johnson	Carl	Rep'g. City of Dover, Delaware	Electric Distributor
Johnson	Carl	Rep'g. Delaware Municipal Electric Corporation, Inc.	Electric Distributor
Johnson	Carl	Rep'g. Easton Utilities Commission	Electric Distributor
Johnson	Carl	Rep'g. Energy Cooperative Association of Pennsylvania (The)	Other Supplier
Johnson	Carl	Rep'g. Galt Power, Inc.	Other Supplier
Johnson	Carl	Rep'g. Hagerstown Light Department	Electric Distributor
Johnson	Carl	Rep'g. Indiana Municipal Power Agency	Electric Distributor
Johnson	Carl	Rep'g. Madison Gas & Electric Co.	Other Supplier
Johnson	Carl	Rep'g. Michigan Public Power Agency	Generation Owner
Johnson	Carl	Rep'g. North Carolina Electric Membership Corporation	Electric Distributor
Johnson	Carl	Rep'g. North Carolina Municipal Power Agency Number 1	Other Supplier
Johnson	Carl	Rep'g. Northern Illinois Municipal Power Agency	Electric Distributor
Johnson	Carl	Rep'g. Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson	Carl	Rep'g. Thurmont Municipal Light Company	Electric Distributor
Johnson	Carl	Rep'g. Town of Williamsport (The)	Electric Distributor
Johnson	Carl	Rep'g. WPPI Energy	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
Kogut	George	New York Power Authority	Other Supplier
Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor
Poulos	Greg	Rep'g. Consumer Protection and Advocate Division of the Tennessee Attorney General	End-Use Customer
Poulos	Greg	Rep'g. Delaware Division of the Public Advocate	End-Use Customer
Poulos	Greg	Rep'g. Illinois Citizen Utility Board	End-Use Customer
Poulos	Greg	Rep'g. Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Poulos	Greg	Rep'g. Maryland Office of People's Counsel	End-Use Customer
Poulos	Greg	Rep'g. Michigan Department of Attorney General, Environment, Natural Resources, & Agriculture Division	End-Use Customer
Poulos	Greg	Rep'g. New Jersey Division of Rate Counsel	End-Use Customer
Poulos	Greg	Rep'g. Office of the Attorney General, Kentucky	End-Use Customer
Poulos	Greg	Rep'g. Ohio Consumers' Counsel	End-Use Customer
Poulos	Greg	Rep'g. Pennsylvania Office of Consumer Advocate	End-Use Customer
Poulos	Greg	Rep'g. Public Staff - North Carolina Utilities Commission	End-Use Customer
Poulos	Greg	Rep'g. Virginia Division of Consumer Counsel	End-Use Customer
Poulos	Greg	Rep'g. West Virginia Consumer Advocate Division	End-Use Customer
Rohrbach	John	Rep'g. Big Savage, LLC	Generation Owner





Rohrbach	John	Rep'g. Kentucky Municipal Energy Agency	Electric Distributor
Rohrbach	John	Rep'g. Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Rohrbach	John	Rep'g. Wabash Valley Power Association, Inc.	Electric Distributor
Rumsey	Amanda	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Skucas	Ruta	Rep'g. Alphataraxia Palladium LLC	Other Supplier
Skucas	Ruta	Rep'g. Ames Energy, LLC	Other Supplier
Skucas	Ruta	Rep'g. Big Bend Trading, LLC	Other Supplier
Skucas	Ruta	Rep'g. BJ Energy, LLC	Other Supplier
Skucas	Ruta	Rep'g. Boston Energy Group, Inc.	Other Supplier
Skucas	Ruta	Rep'g. Dufossat Capital I, LLC	Other Supplier
Skucas	Ruta	Rep'g. Greene Energy NE LLC	Other Supplier
Skucas	Ruta	Rep'g. Hexis Energy Trading, LLC	Other Supplier
Skucas	Ruta	Rep'g. MAG Energy Solutions, Inc.	Other Supplier
Skucas	Ruta	Rep'g. Monterey MA LLC	Other Supplier
Skucas	Ruta	Rep'g. Precept Power LLC	Other Supplier
Skucas	Ruta	Rep'g. Pure Energy, Inc.	Other Supplier
Skucas	Ruta	Rep'g. Red Wolf PT, LLC	Other Supplier
Skucas	Ruta	Rep'g. Taller Cube, LLC	Other Supplier
Skucas	Ruta	Rep'g. Velocity American Energy Master I, L.P.	Other Supplier
Skucas	Ruta	Rep'g. XO Energy MA, L.P.	Other Supplier
Stewart	Travis	Energy Harbor LLC	Generation Owner
Swalwell	Bradley	Tangent Energy Solutions, Inc.	Other Supplier
Whitehead	Jeffrey	Rep'g. Eastern Generation, LLC	Generation Owner
Whitehead	Jeffrey	Rep'g. Essential Power Rock Springs, LLC	Generation Owner
Whitehead	Jeffrey	Rep'g. Neptune Regional Transmission System, LLC	Transmission Owner
Whitehead	Jeffrey	Rep'g. Wheelabrator Falls Inc.	Generation Owner
Wicks	Tonja	Duquesne Light Company	Transmission Owner

Non-Voting Attendees

Last Name	First Name	Company	Sector
Abdur-Rahman	Muhsin	Vistra Corporation	Not Applicable
Abend	Erik	EA Consulting	Not Applicable
Berton	Tyler	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Bloom	David	Baltimore Gas and Electric Company	Transmission Owner
Bowring	Joe	Monitoring Analytics	Not Applicable
Branch	John	St. Joseph Energy Center, LLC	Generation Owner
Burbure	Stacey	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Campbell	Bruce	Enerwise Global Technologies, LLC	Other Supplier
Canter	David	Appalachian Power Company	Transmission Owner





Carmean	Gregory	Organization of PJM States, Inc. (OPSI)	Not Applicable
Cerchio	Jerry	Monitoring Analytics, LLC	Not Applicable
Chandler	Kent	Kentucky Public Service Commission	Not Applicable
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
Dalessandris	Lou	American Transmission Systems, Inc.	Transmission Owner
Dasher	Brett	Energy Authority, Inc. (The)	Other Supplier
Depillo	Ray	Public Service Electric And Gas	Transmission Owner
Dinicola	Laura	Energy Harbor LLC	Generation Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Duensing	Allison	Saracen Power LP	Other Supplier
Elkins	Rachel	Energy Harbor LLC	Generation Owner
Everngam	Scott	Blue Horseshoe Energy	Not Applicable
Fazio	Danielle	Engelhart CTP (US) LLC	Other Supplier
Filomena	Guy	Customized Energy Solutions, Ltd.	Not Applicable
Fishback	Luke	Affirmed Energy LLC	Other Supplier
Gahimer	Mike	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Garnett	Bryan	Duke Energy Business Services LLC	Transmission Owner
Gates	Terry	Appalachian Power Company	Transmission Owner
Gebolys	Debbie	Public Utilities Commission of Ohio	Not Applicable
Gibbons	Jaret	Arippa	Not Applicable
Gilani	Rehan	Consolidated Edison Energy, Inc.	Other Supplier
Halaw	Alina	Federal Energy Regulatory Commission	Not Applicable
Hanser	Erik	Michigan Public Service Commission	Not Applicable
Horning	Lynn	Customized Energy Solutions, Ltd.	Not Applicable
Hull	Gerit	American Municipal Power, Inc.	Electric Distributor
ller	Art	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Jardot	Gina	NRG Power Marketing, LLC	Generation Owner
Jett	William	Duke Energy Business Services LLC	Transmission Owner
Johnston	David	Indiana Utility Regulatory Commission	Not Applicable
Josyula	Siva	Monitoring Analytics, LLC	Not Applicable
Kappagantula	Srinivas	Maryland Solar LLC	Generation Owner
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP	Other Supplier
Kozhuharov	Dimitar	Delaware Public Service Commission	Not Applicable
Liang-Nicol	Cecilia	FirstEnergy Corp.	Not Applicable
Lowe	Connie	Virginia Electric & Power Company	Transmission Owner
Martin	Valerie	Federal Energy Regulatory Commission	Not Applicable
Matuszak	Alex	UGI Utilities, Inc.	Transmission Owner
Mcclelland	Maura	Public Utilties Commission Of Ohio	Not Applicable
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Nadel	Steven	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner





Nix	Emma	Gabel Associates	Not Applicable
Okenfuss	James	Savion, LLC	Not Applicable
Ondayko	Brock	Appalachian Power Company	Transmission Owner
Peoples	John	Duquesne Light Company	Transmission Owner
Pizzutelli	Ashley	FirstEnergy Corp.	Not Applicable
Price	Ruth	Delaware Division of the Public Advocate	End-Use Customer
Procuniar	Jason	Buckeye Power, Inc.	Electric Distributor
Redwine	Arlo	Federal Energy Regulatory Commission	Not Applicable
Robinson	Jackey	Vistra Corporation	Not Applicable
Robinson	Paul	Federal Energy Regulatory Commission	Not Applicable
Rodriguez	Tomas	Organization of PJM States, Inc. (OPSI)	Not Applicable
Sasser	Jonathan	Customized Energy Solutions, Ltd.	Not Applicable
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Shegarfi	Roozbeh	Exelon Business Services Company, LLC	Transmission Owner
Sillin	John	Federal Energy Regulatory Commission	Not Applicable
Singh	Harsimran	Eastern Generation LLC	Generation Owner
Skumanich	Bill	RTR Energy Solutions LLC	Not Applicable
Sotkiewicz	*Paul	E-Cubed Policy Associates, LLC	Not Applicable
Squibb	Bill	Ohio Valley Electric Cooperative	Transmission Owner
Stern	Alex	Public Service Electric And Gas	Transmission Owner
Stewart	Travis	Gabel Assoicates	Not Applicable
Stone	Andy	Gabel Associates	Not Applicable
Stuchell	Jeff	Energy Harbor LLC	Generation Owner
Sweeney	Rory	GT Power Group, LLC	Not Applicable
Taylor	Robert	Exelon Business Services Company, LLC	Transmission Owner
Thomas	Amber	Exelon Business Services Company, LLC	Transmission Owner
Tibbetts	Maeve	Pierce Atwood	Not Applicable
Tyler	Catherine	Monitoring Analytics, LLC	Not Applicable
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Wehnes	Kathleen	Maryland Department of the Environment	Not Applicable
Wilson	James	Wilson Energy Economics	Not Applicable
Wisersky	Megan	Madison Gas & Electric Co.	Other Supplier
Yoder	Michael	RTO Insider	Not Applicable
Zemanek	Kevin	Buckeye Power, Inc.	Electric Distributor

## PJM Attendees

Last Name	First Name	Company	Sector
Asim	Haque	PJM Interconnection LLC	Not Applicable
Asthana	Manu	PJM Interconnection LLC	Not Applicable
Baker	Scott	PJM Interconnection LLC	Not Applicable
Bastian	Jeff	PJM Interconnection LLC	Not Applicable





Boyle	Glen	PJM Interconnection LLC	Not Applicable
Bryson	Michael	PJM Interconnection LLC	Not Applicable
Buehler	Susan	PJM Interconnection LLC	Not Applicable
Chmielewski	Brian	PJM Interconnection LLC	Not Applicable
Ciabattoni	Joseph	PJM Interconnection LLC	Not Applicable
Davis	Elizabeth	PJM Interconnection LLC	Not Applicable
Devita	Thomas	PJM Interconnection LLC	Not Applicable
Drauschak	Lisa	PJM Interconnection LLC	Not Applicable
Fabiano	Janell	PJM Interconnection LLC	Not Applicable
Fernandez	Ray	PJM Interconnection LLC	Not Applicable
Foley	Pauline	PJM Interconnection LLC	Not Applicable
Foley	Sheila	PJM Interconnection LLC	Not Applicable
Foster	Neil	PJM Interconnection LLC	Not Applicable
Glatz	Sue	PJM Interconnection LLC	Not Applicable
Glazer	Craig	PJM Interconnection LLC	Not Applicable
Greening	Michele	PJM Interconnection LLC	Not Applicable
Hatch	Kevin	PJM Interconnection LLC	Not Applicable
Hauske	Thomas	PJM Interconnection LLC	Not Applicable
Helm	Gary	PJM Interconnection LLC	Not Applicable
Hoang	Liem	PJM Interconnection LLC	Not Applicable
Horger	Tim	PJM Interconnection LLC	Not Applicable
Hsia	Eric	PJM Interconnection LLC	Not Applicable
Keech	Adam	PJM Interconnection LLC	Not Applicable
Langbein	Pete	PJM Interconnection LLC	Not Applicable
Lu	Chen	PJM Interconnection LLC	Not Applicable
McLaverty	Megan	PJM Interconnection LLC	Not Applicable
Morelli	Lisa	PJM Interconnection LLC	Not Applicable
Muhl	Nancy	PJM Interconnection LLC	Not Applicable
Murphy	Shaun	PJM Interconnection LLC	Not Applicable
O'Hara	Chris	PJM Interconnection LLC	Not Applicable
Patel	Kuyur	PJM Interconnection LLC	Not Applicable
Phillips	Darlene	PJM Interconnection LLC	Not Applicable
Pincus	Steven	PJM Interconnection LLC	Not Applicable
Salmon	Lisa	PJM Interconnection LLC	Not Applicable
Schweizer	David	PJM Interconnection LLC	Not Applicable
Seiler	Ken	PJM Interconnection LLC	Not Applicable
Sims	Mark	PJM Interconnection LLC	Not Applicable
Slusser	Jeff	PJM Interconnection LLC	Not Applicable
Souder	Dave	PJM Interconnection LLC	Not Applicable
Souder	Michelle	PJM Interconnection LLC	Not Applicable





Stanisz	Mark	PJM Interconnection LLC	Not Applicable
Swimm	Nora	PJM Interconnection LLC	Not Applicable
Tacka	Natalie	PJM Interconnection LLC	Not Applicable
Takahashi	Mark	PJM Interconnection LLC	Not Applicable
Tribulski	Jennifer	PJM Interconnection LLC	Not Applicable
Walter	Laura	PJM Interconnection LLC	Not Applicable
Yeaton	Andrea	PJM Interconnection LLC	Not Applicable