

Markets and Reliability Committee Webex Only October 29, 2020 9:00 a.m. – 11:35 a.m.

Administration

Stu Bresler and Dave Anders welcomed stakeholders and provided the Anti-trust and Code of Conduct, and Meeting Participation announcements.

Consent Agenda

Item A was **<u>approved</u>** by acclamation with one objection and no abstentions:

A. Minutes of the September 17, 2020 meeting of the Markets and Reliability Committee (MRC).

Item B was **<u>endorsed</u>** by acclamation with no objections or abstentions:

B. Revisions to Manual 15: Cost Development Guidelines resulting from its biennial periodic review process.

Endorsements/Approvals

1. 2020 Installed Reserve Margin Study Results

Patricio Rocha Garrido reviewed the 2020 Reserve Requirement Study results including the Installed Reserve Margin (IRM) and Forecast Pool Requirement (FPR). Following discussion, the committee **<u>endorsed</u>** the 2020 IRM and FPR by acclamation with no objections and eight abstentions. Stu Bresler noted that this item will be placed on the Consent Agenda for the November 2020 meeting.

2. Liquidation Process

Nigeria Bloczynski reviewed proposed Tariff and Operating Agreement (OA) revisions addressing PJM's default management process. James Ramsey, Perast, proposed a friendly amendment as follows:

Replace:

"The Office of the Interconnection will provide reasonable advance notice to PJM Members of the approach or course of action it has determined to be appropriate prior to implementing that approach or course of action."

With:

"The Office of the Interconnection will provide reasonable advance notice--at least 24 hours prior to the close of an applicable Financial Transmission Rights auction or Special Auction bidding window--to PJM Members of the approach or course of action it has determined to be appropriate prior to implementing that approach or course of action."



Greg Poulos, CAPS on behalf of consumer advocate members, objected to the proposed amendment being friendly, and therefore it was not incorporated into the main motion. James Ramsey indicated intention to move the proposed amendment as an alternate proposal if the main motion were to fail.

Following discussion, the proposed Tariff and OA revision were <u>endorsed</u> in a sector-weighted vote with 4.59 in favor. Stu Bresler noted that endorsement/approval of the Members Committee will be requested on the same day (at its October 29, 2020 meeting).

Issue Tracking: Financial Risk Mitigation

First Readings

3. Day Ahead Schedule Reserve (DASR) Update

David Kimmel reviewed analysis resulting in the proposed 2021 Day Ahead Scheduling Reserve (DASR) requirement. The committee will be asked to endorse the 2021 requirement at its next meeting.

- 4. PJM Manuals
 - A. Lagy Mathew reviewed updates to Manual 3: Transmission Operations to incorporate clarifying changes resulting from its periodic review. The committee will be asked to endorse the revisions at its next meeting.
 - B. Maria Baptiste reviewed proposed revisions to Manual 3A: Energy Management System (EMS) Model Updates and Quality Assurance (QA) resulting from its periodic review. The committee will be asked to endorse the revisions at its next meeting.
 - C. Vince Stefanowicz reviewed proposed revisions to Manual 10: Pre-Scheduling Operations to incorporate clarifying changes resulting from its periodic review. The committee will be asked to endorse the revisions at its next meeting.
 - D. Vijay Shah and Kevin Hatch reviewed proposed revisions to Manual 11: Energy & Ancillary Services Market Operations and Manual 12: Balancing Operations to address changes related to the 5 minute dispatch and pricing MIC special sessions. The committee will be asked to endorse the revisions at its next meeting. <u>Issue Tracking: Five Minute Dispatch and Pricing</u>
 - E. This item was removed.
 - F. Darrell Frogg reviewed proposed revisions to Manual 14D: Generator Operational Requirements to incorporate changes resulting from its periodic review. The committee will be asked to endorse these changes at its next meeting.
 - G. Jeff Bastian reviewed a minor correction to Manual 18: PJM Capacity Market with regards to an effective date for notifying pseudo-tied resource owners of their assigned LDA prior to each delivery year. The committee will be asked to endorse the revisions at its next meeting.



Informational Reports

5. Minimum Offer Price Rule Order

Chen Lu provided an overview of the October 15 FERC order partially approving PJM's compliance filings in the Minimum Offer Price Rule (MOPR) (Docket Nos. EL16-49-003, EL18-178-003, and ER18-1314-006) and outlined the compliance directives provided therein.

WebEx

WebEx

Informational Posting Only

None

Future Agenda Items

No new future agenda items were identified.

Future Meeting Dates

November 19, 2020	
December 17, 2020	

Author: D. Anders

Secretary/Facilitator

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

9:00 a.m.

9:00 a.m.

Voting Attendees

Last Name	First Name	Company	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	Carolina Solar Energy III, LLC	Other Supplier
Borgatti	Michael	Hazleton Generation LLC	Generation Owner
Borgatti	Michael	Moxie Freedom LLC	Generation Owner
Borgatti	Michael	Newark Energy Center, LLC	Generation Owner
Borgatti	Michael	NextEra Energy Marketing, LLC	Other Supplier
Borgatti	Michael	Recurrent Energy, LLC	Generation Owner
Breidenbaugh	Aaron	COI Energy Services, Inc.	Other Supplier
Breidenbaugh	Aaron	Rodan Energy Solutions (USA) Inc.	Other Supplier
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
Bruce	Susan	Air Products & Chemicals, Inc.	End-Use Customer
Bruce	Susan	ArcelorMittal USA LLC	End-Use Customer
Bruce	Susan	Gerdau Ameristeel Energy, Inc.	End-Use Customer
Bruce	Susan	Industrial Energy Users-Ohio	Other Supplier



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	MeadWestvaco Corporation	End-Use Customer
Bruce	Susan	Messer LLC	End-Use Customer
Bruce	Susan	Praxair, Inc.	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
Chang	Sean	Shell Energy North America (US), L.P.	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
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	Generation Owner
Garnett	Bryan	Duke Energy Business Services LLC	Transmission Owner
Gibbs	lke	Citadel FNGE Ltd.	Other Supplier
Greiner	Gary	Public Service Electric & Gas Company	Transmission Owner
Hastings	David	Northstar Trading Ltd.	Other Supplier
Hastings	David	Saracen Energy East LP	Other Supplier
Hastings	David	SESCO Enterprises, LLC	Other Supplier
Hastings	David	Solios Power Mid-Atlantic Trading, LLC	Other Supplier
Hoatson	Tom	Riverside Generating Company, L.L.C.	Generation Owner
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Horton	Dana	Appalachian Power Company	Transmission Owner
Huang	Jame	Rockland Electric Company	Transmission Owner
Hurwich	Mark	Elliott Bay Energy Trading, LLC	Other Supplier
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
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Johnson	Carl	Allegheny Electric Cooperative, Inc.	Electric Distributor
Johnson	Carl	Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson	Carl	Borough of Chambersburg	Electric Distributor



Johnson	Carl	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	Galt Power, Inc.	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	Madison Gas & Electric Co.	Other Supplier
Johnson	Carl	Michigan Public Power Agency	Generation Owner
Johnson	Carl	North Carolina Electric Membership Corporation	Electric Distributor
Johnson	Carl	North Carolina Municipal Power Agency Number 1	Other Supplier
Johnson	Carl	Northern Illinois Municipal Power Agency	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
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
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Pelletier	Eveline	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Poulos	Greg	Consumer Protection and Advocate Division of the Tennessee Attorney General	End-Use Customer
Poulos	Greg	Delaware Division of the Public Advocate	End-Use Customer
Poulos	Greg	Illinois Citizen Utility Board	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	Michigan Department of Attorney General, Environment, Natural Resources, & Agriculture Division	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	Ohio Consumers' Counsel	End-Use Customer
Poulos	Greg	Pennsylvania Office of Consumer Advocate	End-Use Customer
Poulos	Greg	Public Staff - North Carolina Utilities Commission	End-Use Customer
Poulos	Greg	Virginia Division of Consumer Counsel	End-Use Customer
Poulos	Greg	West Virginia Consumer Advocate Division	End-Use Customer
Ramsey	James	Perast Fund LP	Other Supplier
Rohrbach	John	Big Savage, LLC	Generation Owner
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
Rumsey	Amanda	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Silveira	Fabiano	Strom Power, LLC	Other Supplier
Skucas	Ruta	Alphataraxia Palladium LLC	Other Supplier
Skucas	Ruta	Ames Energy, LLC	Other Supplier
Skucas	Ruta	Big Bend Trading, LLC	Other Supplier
Skucas	Ruta	BJ Energy, LLC	Other Supplier
Skucas	Ruta	Boston Energy Group, Inc.	Other Supplier
Skucas	Ruta	Dufossat Capital I, LLC	Other Supplier
Skucas	Ruta	Greene Energy NE LLC	Other Supplier
Skucas	Ruta	Hexis Energy Trading, LLC	Other Supplier
Skucas	Ruta	MAG Energy Solutions, Inc.	Other Supplier
Skucas	Ruta	Monterey MA LLC	Other Supplier
Skucas	Ruta	Precept Power LLC	Other Supplier
Skucas	Ruta	Pure Energy, Inc.	Other Supplier
Skucas	Ruta	Red Wolf PT, LLC	Other Supplier
Skucas	Ruta	Taller Cube, LLC	Other Supplier
Skucas	Ruta	Velocity American Energy Master I, L.P.	Other Supplier
Skucas	Ruta	XO Energy MA, L.P.	Other Supplier
Stewart	Travis	Covanta Energy Group, LLC	Generation Owner
Stewart	Travis	Energy Harbor LLC	Generation Owner
Stewart	Travis	Jersey Green Energy, LLC	Other Supplier
Stewart	Travis	Longview Power, LLC	Generation Owner
Stewart	Travis	York County Solid Waste and Refuse Authority	Generation Owner
Swalwell	Bradley	Tangent Energy Solutions, Inc.	Other Supplier
Wadsworth	Joe	Vitol Inc.	Other Supplier
Whitehead	Jeffrey	Direct Energy Business, LLC	Other Supplier
Whitehead	Jeffrey	Eastern Generation, LLC	Generation Owner



Whitehead	Jeffrey	Essential Power Rock Springs, LLC	Generation Owner
Whitehead	Jeffrey	Neptune Regional Transmission System, LLC	Transmission Owner
Whitehead	Jeffrey	Wheelabrator Falls Inc.	Generation Owner
Wicks	Tonja	Duquesne Light Company	Transmission Owner
Ion-Voting Attendees	S		
Last Name	First Name	Company	Sector
Hasan	Prusha	Advanced Energy Economy	Not Applicable
Jonathan	Ryan	Appalachian Power Company	Transmission Owner
Berton	Tyler	Appalachian Power Company	Transmission Owner
Ondayko	Brock	Appalachian Power Company	Transmission Owner
Bockhorn	Tim	AES Ohio Generation, LLC	Generation Owner
Fischback	Luke	Affirmed Energy LLC	Other Supplier
Laios	Takis	Appalachian Power Company	Transmission Owner
Hull	Gerit	American Municipal Power, Inc.	Electric Distributor
Guntle	Vince	American PowerNet Management, L.P.	End-Use Customer
Dalessandris	Lou	American Transmission Systems, Inc.	Transmission Owner
Grau	Patrick	Apogee Energy Trading LLC	Other Supplier
Gates	Terry	Appalachian Power Company	Transmission Owner
Kilgallen	Kevin	Avangrid Renewables, LLC	Generation Owner
Jens	Thomas	Black Oak Capital, LLC	Other Supplier
Chintapalli	Raj	BP Energy Company	Other Supplier
Stephen	Kelly	Brookfield Renewable Trading and Marketing LP	Other Supplier
Schmidt	Tom	Buckeye Power, Inc.	Electric Distributor
Zemanek	Kevin	Buckeye Power, Inc.	Electric Distributor
Huntoon	Steve	Chesapeake Transmission, LLC	Other Supplier
Gilani	Rehan	Consolidated Edison Energy, Inc.	Other Supplier
Litchfield	Matthew	CPV Power Holdins, LP	Generation Owner
Ament	Todd	Cube Hydro Partners	Generation Owner
Horning	Lynn	Customized Energy Solutions Ltd.	Not Applicable
Sasser	Jonathan	Customized Energy Solutions Ltd.	Not Applicable
Filimano	Guy	Customized Energy Solutions Ltd.	Not Applicable
Herbert	Sebastian	DC Energy, LLC	Other Supplier
Kuo	David	DC Energy, LLC	Other Supplier
Price	Mark	DC Energy, LLC	Other Supplier
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Price	Ruth	Delaware Division of the Public Advocate	End-Use Customer
Kozhuharov	Vimitar	Delaware Public Service Commission	Not Applicable



Lawson	Ryen	Dominion Energy Generation Marketing, Inc.	Generation Owner
Jett	William	Duke Energy Business Services LLC	Transmission Owner
Johnson	Rhonda	Duke Energy Business Services LLC	Transmission Owner
Mok	Alan	Duke Energy Business Services LLC	Transmission Owner
Garnett	Bryan	Duke Energy Business Services LLC	Transmission Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Peoples	John	Duquesne Light Company	Transmission Owner
Skibell	Arianna	E&E News	Not Applicable
Abend	Erik	EA Consultants	Not Applicable
Foster	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner
Sotkiewicz	Paul	E-Cubed Policy Associates	Not Applicable
Weigel	Shannon	Edison Energy	Not Applicable
Bagot	Nancy	Electric Power Supply Association	Not Applicable
Theodore	Sharon	Electric Power Supply Association	Not Applicable
Doremus	Steve	Enel X North America, Inc.	Other Supplier
Dasher	Brett	Energy Authority, Inc. (The)	Other Supplier
Martin	Valerie	Energy Commission	Not Applicable
Bainbridge	Tom	Energy Harbor LLC	Generation Owner
Burbure	Stacey	Energy Harbor LLC	Generation Owner
Elkins	Rachel	Energy Harbor LLC	Generation Owner
Fuerst	Gary	Energy Harbor LLC	Generation Owner
Thomas	Sharon	Energy Storage Association	Not Applicable
Campbell	Bruce	Enerwise Global Technologies, LLC	Other Supplier
Fazio	Danielle	Engelhart CTP (US) LLC	Other Supplier
Curtis	Kenneth	Enverus	Not Applicable
Goley	Robert	Exelon Business Services Company, LLC	Transmission Owner
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Shegarfi	Roozbeh	Exelon Business Services Company, LLC	Transmission Owner
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
Thomas	Amber	Exelon Business Services Company, LLC	Transmission Owner
Martin	Valerie	Federal Energy Regulatory Commission	Not Applicable
Liang-Nicol	Cecilia	FirstEnergy Corp.	Not Applicable
Markiewicz	Cindy	American Transmission Systems, Inc.	Transmission Owner
Pizzutelli	Ashley	FirstEnergy Corp.	Not Applicable
Stuchell	Jeff	Energy Harbor LLC	Generation Owner
Stewart	Travis	Gabel Associates	Not Applicable
Borgatti	Michael	Gabel Associates	Not Applicable
Hudis	Gabriella	Gabel Associates	Not Applicable



Nix	Emma	Gabel Associates	Not Applicable
Stewart	Travis	Gabel Associates	Not Applicable
Stone	Andy	Gabel Associates	Not Applicable
Robichaud	Donna	Geenex Solar LLC	Generation Owner
Sweeney	Rory	Gt Power Group	Not Applicable
Tangirala	Subha	Hitachi Power Grid	Not Applicable
Dangirala	Subha	Hitachi Power Grids	Not Applicable
Shanker	Roy	Hydro Quebec	Not Applicable
Steele	Robert	Hyllgarth Energy	Not Applicable
Rismiller	Randy	Illinois Commerce Commission	Not Applicable
Schaum	Alice	Illinois Municipal Electric Agency	Electric Distributor
Gahimer	Mike	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
ller	Art	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Johnston	David	Indiana Utility Regulatory Commission	Not Applicable
Burke	Jennifer	Lockheed Martin	Not Applicable
Philips	Marji	Riverside Generating Company, L.L.C.	Generation Owner
Wisersky	Megan	Madison Gas & Electric Co.	Other Supplier
Wehnes	Kathleen	Maryland Department Of The Environment	Not Applicable
Schreim	Morris	Maryland Public Service Commissions	Not Applicable
Hanser	Erik	Michican Public Service Commission	Not Applicable
Bowring	Joseph	Monitoring Analytics	Not Applicable
Haas	Howard	Monitoring Analytics	Not Applicable
Salaneck	Alexandra	Monitoring Analytics	Not Applicable
Mabry	David	McNees, Wallace & Nurick, LLC	Not Applicable
Delosa	Joe	New Jersey Board Of Public Utilities	Not Applicable
Hollis	Gabriel	Nexera Energy Resources LLC	Not Applicable
Hollis	Gabriel	Nexera Energy Resources LLC	Not Applicable
Rutigliano	Tom	Natural Resources Defense Council	Not Applicable
Ainspan	Malcolm	NRG Curtailment Solutions, Inc.	Other Supplier
Nole	Anthony	NuEnergen, LLC	Other Supplier
Klose	Dan	Old Dominion Electric Cooperative	Electric Distributor
Squibb	Bill	Ohio Valley Electric Corporation	Transmission Owner
Соссо	Michael	Old Dominion Electric Cooperative	Electric Distributor
Williamson	Whit	Old Dominion Electric Cooperative	Electric Distributor
Williamson	Whit	Old Dominion Electric Cooperative	Electric Distributor
Mariam	Yohannes	OPSI	Not Applicable
Carmean	Gregory	OPSI	Not Applicable
Rodriguez	Tomas	OPSI	Not Applicable



TibbettsMaevePierce AtwoodNot ApplicableWhiteBrettPine Gate RenewablesNot ApplicableWolffEricPoliticoNot ApplicableNadelStevenPPL Electric Utilities Corporation d/b/a PPL UtilitiesTransmission OwnerFellerJohnPPL Electric Utilities Corporation d/b/a PPL UtilitiesTransmission OwnerSternAlexPublic Service Electric & Gas CompanyTransmission OwnerDepilloRayPublic Service Electric & Gas CompanyTransmission OwnerSternAlexPublic Service Electric & Gas CompanyTransmission OwnerGebolysDebbiePublic Utilites Commission Of OhioNot ApplicableChristopherMahilaPublic Utilities Commission Of OhioNot ApplicableDromRickRad LlcNot ApplicableGambrelMeganReliability FirstNot ApplicableYoderMichaelRTO InsiderNot ApplicableSkumanichBillRTE Energy Solutions LLCNot ApplicableHaleZackS&P Global Inc.Not ApplicableOkenfussJamesSavion, LLCNot ApplicableDuensingAllisonSaracen Power LPOther SupplierRobertsCaseySierra ClubNot ApplicableRohrbachJohnSt. Joseph Energy Center, LLCGeneration Owner	Lawson	David	Osaka Gas USA Corporation	Not Applicable
Tibbetts Maeve Pierce Atwood Not Applicable White Brett Pine Gate Renewables Not Applicable Wolff Eric Politico Not Applicable Nadel Steven PPL Electric Utilities Corporation d/b/a PPL Utilities Transmission Owner Feller John PPL Electric Utilities Corporation d/b/a PPL Utilities Transmission Owner Stern Alex Public Service Electric & Gas Company Transmission Owner Depillo Ray Public Service Electric & Gas Company Transmission Owner Stern Alex Public Service Electric & Gas Company Transmission Owner Stern Alex Public Utilites Commission Of Ohio Not Applicable Christopher Mahila Public Utilities Commission Of Ohio Not Applicable Drom Rick Rad Llc Not Applicable Yoder Michael RTO Insider Not Applicable Yoder Michael RTE Energy Solutions LLC Not Applicable Duensing Allison Saracen Power LP Other Supplier	Fuess	Christian	PBF Power Marketing, LLC	Generation Owner
White Brett Pine Gate Renewables Not Applicable Wolff Eric Politico Not Applicable Nadel Steven PPL Electric Utilities Corporation d/b/a PPL Utilities Transmission Owner Feller John PPL Electric Utilities Corporation d/b/a PPL Utilities Transmission Owner Stern Alex Public Service Electric & Gas Company Transmission Owner Depillo Ray Public Service Electric & Gas Company Transmission Owner Stern Alex Public Service Electric & Gas Company Transmission Owner Gebolys Debbie Public Utilities Commission Of Ohio Not Applicable Christopher Mahila Public Utilities Commission Of Ohio Not Applicable Drom Rick Rad Llc Not Applicable Gambrel Megan Reliability First Not Applicable Yoder Michael RTO Insider Not Applicable Skumanich Bill RTE Energy Solutions LLC Not Applicable Okenfuss James Savion, LLC Not Applicable	Rainey	Frank	PEI Power LLC	Generation Owner
Wolff Eric Politico Not Applicable Nadel Steven PPL Electric Utilities Corporation d/b/a PPL Utilities Transmission Owner Feller John PPL Electric Utilities Corporation d/b/a PPL Utilities Transmission Owner Stern Alex Public Service Electric & Gas Company Transmission Owner Depillo Ray Public Service Electric & Gas Company Transmission Owner Stern Alex Public Service Electric & Gas Company Transmission Owner Gebolys Debbie Public Utilities Commission Of Ohio Not Applicable Christopher Mahila Public Utilities Commission Of Ohio Not Applicable Drom Rick Rad Llc Not Applicable Gambrel Megan Reliability First Not Applicable Yoder Michael RTO Insider Not Applicable Skumanich Bill RTE Energy Solutions LLC Not Applicable Duensing Allison Saracen Power LP Other Supplier Roberts Casey Sierra Club Not Applicable	Tibbetts	Maeve	Pierce Atwood	Not Applicable
Nadel Steven PPL Electric Utilities Corporation d/b/a PPL Utilities Transmission Owner Feller John PPL Electric Utilities Corporation d/b/a PPL Utilities Transmission Owner Stern Alex Public Service Electric & Gas Company Transmission Owner Depillo Ray Public Service Electric & Gas Company Transmission Owner Stern Alex Public Service Electric & Gas Company Transmission Owner Gebolys Debbie Public Utilities Commission Of Ohio Not Applicable Christopher Mahila Public Utilities Commission Of Ohio Not Applicable Drom Rick Rad Llc Not Applicable Gambrel Megan Reliability First Not Applicable Yoder Michael RTO Insider Not Applicable Skumanich Bill RTE Energy Solutions LLC Not Applicable Veners James Savion, LLC Not Applicable Duensing Allison Saracen Power LP Other Supplier Roberts Casey Sierra Club Not Applicable <t< td=""><td>White</td><td>Brett</td><td>Pine Gate Renewables</td><td>Not Applicable</td></t<>	White	Brett	Pine Gate Renewables	Not Applicable
FellerJohnPPL Electric Utilities Corporation d/b/a PPL UtilitiesTransmission OwnerSternAlexPublic Service Electric & Gas CompanyTransmission OwnerDepilloRayPublic Service Electric & Gas CompanyTransmission OwnerSternAlexPublic Service Electric & Gas CompanyTransmission OwnerGebolysDebbiePublic Utilities Commission Of OhioNot ApplicableChristopherMahilaPublic Utilities Commission Of OhioNot ApplicableDromRickRad LlcNot ApplicableGambrelMeganReliability FirstNot ApplicableYoderMichaelRTO InsiderNot ApplicableSkumanichBillRTE Energy Solutions LLCNot ApplicableDuensingAllisonSaracen Power LPOther SupplierRobertsCaseySierra ClubNot ApplicableBranchJohnSouthern Maryland Electric Cooperative, Inc.Electric DistributorBranchJohnSt. Joseph Energy Center, LLCGeneration OwnerHelmsJoeTyr EnergyNot ApplicableDillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Wolff	Eric	Politico	Not Applicable
Stern Alex Public Service Electric & Gas Company Transmission Owner Depillo Ray Public Service Electric & Gas Company Transmission Owner Stern Alex Public Service Electric & Gas Company Transmission Owner Gebolys Debbie Public Utilities Commission Of Ohio Not Applicable Christopher Mahila Public Utilities Commission Of Ohio Not Applicable Drom Rick Rad Llc Not Applicable Gambrel Megan Reliability First Not Applicable Yoder Michael RTO Insider Not Applicable Skumanich Bill RTE Energy Solutions LLC Not Applicable Veder Michael Savion, LLC Not Applicable Duensing Allison Saracen Power LP Other Supplier Roberts Casey Sierra Club Not Applicable Rohrbach John St. Joseph Energy Center, LLC Generation Owner Helms Joe Tryr Energy Not Applicable Dillon Matt UGI Developme	Nadel	Steven	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Depillo Ray Public Service Electric & Gas Company Transmission Owner Stern Alex Public Service Electric & Gas Company Transmission Owner Gebolys Debbie Public Utilites Commission Of Ohio Not Applicable Christopher Mahila Public Utilities Commission Of Ohio Not Applicable Drom Rick Rad Llc Not Applicable Gambrel Megan Reliability First Not Applicable Yoder Michael RTO Insider Not Applicable Skumanich Bill RTE Energy Solutions LLC Not Applicable Valer James Savion, LLC Not Applicable Duensing Allison Saracen Power LP Other Supplier Roberts Casey Sierra Club Not Applicable Rohrbach John St. Joseph Energy Center, LLC Generation Owner Helms Joe Tyr Energy Not Applicable Dillon Matt UGI Development Company Generation Owner Helms Joe Tyr Energy Not Ap	Feller	John	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
SternAlexPublic Service Electric & Gas CompanyTransmission OwnerGebolysDebbiePublic Utilites Commission Of OhioNot ApplicableChristopherMahilaPublic Utilities Commission Of OhioNot ApplicableDromRickRad LlcNot ApplicableGambrelMeganReliability FirstNot ApplicableYoderMichaelRTO InsiderNot ApplicableSkumanichBillRTE Energy Solutions LLCNot ApplicableHaleZackS&P Global Inc.Not ApplicableOkenfussJamesSavion, LLCNot ApplicableDuensingAllisonSaracen Power LPOther SupplierRobertsCaseySierra ClubNot ApplicableBranchJohnSuthern Maryland Electric Cooperative, Inc.Electric DistributorBranchJoeTyr EnergyNot ApplicableDillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Stern	Alex	Public Service Electric & Gas Company	Transmission Owner
Gebolys Debbie Public Utilites Commission Of Ohio Not Applicable Christopher Mahila Public Utilities Commission Of Ohio Not Applicable Drom Rick Rad Llc Not Applicable Gambrel Megan Reliability First Not Applicable Yoder Michael RTO Insider Not Applicable Skumanich Bill RTE Energy Solutions LLC Not Applicable Ventry Zack S&P Global Inc. Not Applicable Okenfuss James Savion, LLC Not Applicable Duensing Allison Saracen Power LP Other Supplier Roberts Casey Sierra Club Not Applicable Branch John St. Joseph Energy Center, LLC Generation Owner Helms Joe Tyr Energy Not Applicable Dillon Matt UGI Energy Services, LLC Other Supplier Crystle Gil UGI Energy Services, LLC Other Supplier Robinson Becky Vistra Corporation Not Applicable <td>Depillo</td> <td>Ray</td> <td>Public Service Electric & Gas Company</td> <td>Transmission Owner</td>	Depillo	Ray	Public Service Electric & Gas Company	Transmission Owner
ChristopherMahilaPublic Utilities Commission Of OhioNot ApplicableDromRickRad LlcNot ApplicableGambrelMeganReliability FirstNot ApplicableYoderMichaelRTO InsiderNot ApplicableSkumanichBillRTE Energy Solutions LLCNot ApplicableHaleZackS&P Global Inc.Not ApplicableOkenfussJamesSavion, LLCNot ApplicableDuensingAllisonSaracen Power LPOther SupplierRobertsCaseySierra ClubNot ApplicableBranchJohnSoutherm Maryland Electric Cooperative, Inc.Electric DistributorBranchJohnSt. Joseph Energy Center, LLCGeneration OwnerHelmsJoeTyr EnergyNot ApplicableDillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Stern	Alex	Public Service Electric & Gas Company	Transmission Owner
DromRickRad LlcNot ApplicableGambrelMeganReliability FirstNot ApplicableYoderMichaelRTO InsiderNot ApplicableSkumanichBillRTE Energy Solutions LLCNot ApplicableHaleZackS&P Global Inc.Not ApplicableOkenfussJamesSavion, LLCNot ApplicableDuensingAllisonSaracen Power LPOther SupplierRobertsCaseySierra ClubNot ApplicableBranchJohnSouthern Maryland Electric Cooperative, Inc.Electric DistributorBranchJohnSt. Joseph Energy Center, LLCGeneration OwnerHelmsJoeTyr EnergyNot ApplicableDillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Gebolys	Debbie	Public Utilites Commission Of Ohio	Not Applicable
GambrelMeganReliability FirstNot ApplicableYoderMichaelRTO InsiderNot ApplicableSkumanichBillRTE Energy Solutions LLCNot ApplicableHaleZackS&P Global Inc.Not ApplicableOkenfussJamesSavion, LLCNot ApplicableDuensingAllisonSaracen Power LPOther SupplierRobertsCaseySierra ClubNot ApplicableBranchJohnSouthern Maryland Electric Cooperative, Inc.Electric DistributorBranchJohnSt. Joseph Energy Center, LLCGeneration OwnerHelmsJoeTyr EnergyNot ApplicableDillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Christopher	Mahila	Public Utilities Commission Of Ohio	Not Applicable
YoderMichaelRTO InsiderNot ApplicableSkumanichBillRTE Energy Solutions LLCNot ApplicableHaleZackS&P Global Inc.Not ApplicableOkenfussJamesSavion, LLCNot ApplicableDuensingAllisonSaracen Power LPOther SupplierRobertsCaseySierra ClubNot ApplicableBranchJohnSouthern Maryland Electric Cooperative, Inc.Electric DistributorBranchJoeTyr EnergyNot ApplicableDillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Drom	Rick	Rad Llc	Not Applicable
Skumanich Bill RTE Energy Solutions LLC Not Applicable Hale Zack S&P Global Inc. Not Applicable Okenfuss James Savion, LLC Not Applicable Duensing Allison Saracen Power LP Other Supplier Roberts Casey Sierra Club Not Applicable Rohrbach John Southern Maryland Electric Cooperative, Inc. Electric Distributor Branch John St. Joseph Energy Center, LLC Generation Owner Helms Joe Tyr Energy Not Applicable Dillon Matt UGI Development Company Generation Owner Matuszak Alex UGI Energy Services, LLC Other Supplier Crystle Gil UGI Energy Services, LLC Other Supplier Robinson Becky Vistra Corporation Not Applicable	Gambrel	Megan	Reliability First	Not Applicable
HaleZackS&P Global Inc.Not ApplicableOkenfussJamesSavion, LLCNot ApplicableDuensingAllisonSaracen Power LPOther SupplierRobertsCaseySierra ClubNot ApplicableRohrbachJohnSouthern Maryland Electric Cooperative, Inc.Electric DistributorBranchJohnSt. Joseph Energy Center, LLCGeneration OwnerHelmsJoeTyr EnergyNot ApplicableDillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Yoder	Michael	RTO Insider	Not Applicable
OkenfussJamesSavion, LLCNot ApplicableDuensingAllisonSaracen Power LPOther SupplierRobertsCaseySierra ClubNot ApplicableRohrbachJohnSouthern Maryland Electric Cooperative, Inc.Electric DistributorBranchJohnSt. Joseph Energy Center, LLCGeneration OwnerHelmsJoeTyr EnergyNot ApplicableDillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierCrystleGilUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Skumanich	Bill	RTE Energy Solutions LLC	Not Applicable
DuensingAllisonSaracen Power LPOther SupplierRobertsCaseySierra ClubNot ApplicableRohrbachJohnSouthern Maryland Electric Cooperative, Inc.Electric DistributorBranchJohnSt. Joseph Energy Center, LLCGeneration OwnerHelmsJoeTyr EnergyNot ApplicableDillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierCrystleGilUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Hale	Zack	S&P Global Inc.	Not Applicable
RobertsCaseySierra ClubNot ApplicableRohrbachJohnSouthern Maryland Electric Cooperative, Inc.Electric DistributorBranchJohnSt. Joseph Energy Center, LLCGeneration OwnerHelmsJoeTyr EnergyNot ApplicableDillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierCrystleGilUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Okenfuss	James	Savion, LLC	Not Applicable
Rohrbach John Southern Maryland Electric Cooperative, Inc. Electric Distributor Branch John St. Joseph Energy Center, LLC Generation Owner Helms Joe Tyr Energy Not Applicable Dillon Matt UGI Development Company Generation Owner Matuszak Alex UGI Energy Services, LLC Other Supplier Crystle Gil UGI Energy Services, LLC Other Supplier Robinson Becky Vistra Corporation Not Applicable	Duensing	Allison	Saracen Power LP	Other Supplier
Branch John St. Joseph Energy Center, LLC Generation Owner Helms Joe Tyr Energy Not Applicable Dillon Matt UGI Development Company Generation Owner Matuszak Alex UGI Energy Services, LLC Other Supplier Crystle Gil UGI Energy Services, LLC Other Supplier Robinson Becky Vistra Corporation Not Applicable	Roberts	Casey	Sierra Club	Not Applicable
Helms Joe Tyr Energy Not Applicable Dillon Matt UGI Development Company Generation Owner Matuszak Alex UGI Energy Services, LLC Other Supplier Crystle Gil UGI Energy Services, LLC Other Supplier Robinson Becky Vistra Corporation Not Applicable	Rohrbach	John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
DillonMattUGI Development CompanyGeneration OwnerMatuszakAlexUGI Energy Services, LLCOther SupplierCrystleGilUGI Energy Services, LLCOther SupplierRobinsonBeckyVistra CorporationNot Applicable	Branch	John	St. Joseph Energy Center, LLC	Generation Owner
Matuszak Alex UGI Energy Services, LLC Other Supplier Crystle Gil UGI Energy Services, LLC Other Supplier Robinson Becky Vistra Corporation Not Applicable	Helms	Joe	Tyr Energy	Not Applicable
Crystle Gil UGI Energy Services, LLC Other Supplier Robinson Becky Vistra Corporation Not Applicable	Dillon	Matt	UGI Development Company	Generation Owner
Robinson Becky Vistra Corporation Not Applicable	Matuszak	Alex	UGI Energy Services, LLC	Other Supplier
	Crystle	Gil	UGI Energy Services, LLC	Other Supplier
Wilson James Wilson Energy Economist Not Applicable	Robinson	Becky	Vistra Corporation	
	Wilson	James	Wilson Energy Economist	Not Applicable

PJM Attendees

Last Name	First Name	Company	Sector
Almgren	Ake	PJM Board Member	Not Applicable
Asthana	Manu	PJM Interconnection, LLC	Not Applicable
Baptiste	Maria	PJM Interconnection, LLC	Not Applicable
Bestian	Jeffrey	PJM Interconnection, LLC	Not Applicable
Bloczynski	Nigeria	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Bruno	Patrick	PJM Interconnection, LLC	Not Applicable



Bryson	Michael	PJM Interconnection, LLC	Not Applicable
Buehler	Susan	PJM Interconnection, LLC	Not Applicable
Cao	Roger	PJM Interconnection, LLC	Not Applicable
Chmielewski	Brian	PJM Interconnection, LLC	Not Applicable
Cummings	Bridgid	PJM Interconnection, LLC	Not Applicable
Derin	Bilge	PJM Interconnection, LLC	Not Applicable
Drauschak	Lisa	PJM Interconnection, LLC	Not Applicable
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Endress	Eric	PJM Interconnection, LLC	Not Applicable
Esterly	Theresa	PJM Interconnection, LLC	Not Applicable
Fabiano	Janell	PJM Interconnection, LLC	Not Applicable
Falin	Thomas	PJM Interconnection, LLC	Not Applicable
Foley	Sheila	PJM Interconnection, LLC	Not Applicable
Frogg	Darrell	PJM Interconnection, LLC	Not Applicable
Genuario	Gabby	PJM Interconnection, LLC	Not Applicable
Gledhill	Andrew	PJM Interconnection, LLC	Not Applicable
Greening	Michele	PJM Interconnection, LLC	Not Applicable
Haque	Asim	PJM Interconnection, LLC	Not Applicable
Hatch	Kevin	PJM Interconnection, LLC	Not Applicable
Hauske	Thomas	PJM Interconnection, LLC	Not Applicable
Horger	Tim	PJM Interconnection, LLC	Not Applicable
Hugee	Jacqui	PJM Interconnection, LLC	Not Applicable
Keech	Adam	PJM Interconnection, LLC	Not Applicable
Keegan	John	PJM Interconnection, LLC	Not Applicable
Kimmel	David	PJM Interconnection, LLC	Not Applicable
Larocque	Matthew	PJM Interconnection, LLC	Not Applicable
Lauterbach	Victoria	PJM Interconnection, LLC	Not Applicable
Lu	Chen	PJM Interconnection, LLC	Not Applicable
Mathew	Lagy	PJM Interconnection, LLC	Not Applicable
McElwaine	Kathy	PJM Interconnection, LLC	Not Applicable
McGlynn	Paul	PJM Interconnection, LLC	Not Applicable
McLaverty	Megan	PJM Interconnection, LLC	Not Applicable
Messina	Emmy	PJM Interconnection, LLC	Not Applicable
Mooney	Molly	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
Nice	Ryan	PJM Interconnection, LLC	Not Applicable



O'Brien	Tom	PJM Interconnection, LLC	Not Applicable
O'Hara	Chris	PJM Interconnection, LLC	Not Applicable
Patel	Anita	PJM Interconnection, LLC	Not Applicable
Philips	Darlene	PJM Interconnection, LLC	Not Applicable
Pilong	Chris	PJM Interconnection, LLC	Not Applicable
Pincus	Steven	PJM Interconnection, LLC	Not Applicable
Rocha	Patricio	PJM Interconnection, LLC	Not Applicable
Rogers	Sarah	PJM Board Member	Not Applicable
Salmon	Lisa	PJM Interconnection, LLC	Not Applicable
Sarti	Dan	PJM Interconnection, LLC	Not Applicable
Seiler	Ken	PJM Interconnection, LLC	Not Applicable
Shah	Vijay	PJM Interconnection, LLC	Not Applicable
Sheilds	Jeffrey	PJM Interconnection, LLC	Not Applicable
Sims	Mark	PJM Interconnection, LLC	Not Applicable
Snow	Jim	PJM Interconnection, LLC	Not Applicable
Stefanowicz	Vincent	PJM Interconnection, LLC	Not Applicable
Swimm	Nora	PJM Interconnection, LLC	Not Applicable
Terranova	Chris	PJM Interconnection, LLC	Not Applicable
Tribulski	Jennifer	PJM Interconnection, LLC	Not Applicable
Widom	Stuart	PJM Interconnection, LLC	Not Applicable