

Markets & Reliability Committee

Webex Only

May 25, 2022

9:00 a.m. – 11:15 a.m. EPT

Administration

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

Thomas DeVita provided an update regarding FERC's May 18, 2022 letter to PJM seeking additional information in relation to PJM's February 1, 2022 Order 2222 compliance filing.

Consent Agenda

Items A through E were **approved/endorsed** by acclamation with no objections or abstentions:

- A. Minutes of the April 27, 2022 meeting of the Markets and Reliability Committee (MRC).
- B. Proposed revisions to Manual 03: Transmission Operations resulting from its periodic review.
- C. Proposed revisions to Manual 11: Energy & Ancillary Services Market Operations, Manual 12: Balancing Operations, and Manual 28: Operating Agreement Accounting addressing conforming changes for stability limits in markets and operations.
[Issue Tracking: Stability Limits in Markets and Operations](#)
- D. Proposed revisions to Manual 21A: Determination of Accredited UCAP Using Effective Load Carrying Capability Analysis addressing an ELCC model run timing update and changes to reflect the continuation of the current method to provide unit specific backcasts only as requested.
[Issue Tracking: Extension of Voluntary Unit-Specific ELCC Data Submission and Updated ELCC Schedule](#)
- E. Proposed revisions to Manual 36: System Restoration resulting from its periodic review.

Endorsements

1. Start-Up Cost Offer Development

Tom Hauske reviewed the proposed solution and corresponding revisions to Manual 15: Cost Development Guidelines, the Tariff and the Operating Agreement (OA) addressing Start-Up Cost Offer Development. Adrien Ford, ODEC, offered the following amendments (*italicized* below):

- Manual 15, Section 1.7.2, include the *italicized* sentence:

It consist primarily of the cost of fuel, as determined by the unit's start heat input (adjusted by the performance factor) times the fuel cost. It also includes operating costs, maintenance adders, emissions allowances/adders, and station service power cost. Start Costs can vary with the unit offline time being categorized in three unit temperature conditions: hot, intermediate and cold. *Units*

with a soak process include nuclear, steam, and combined cycle units. Units without a soak process include, engines, combustion turbines, Intermittent, and Energy Storage resources.

- Tariff Definition for “Start-Up Costs, include the *italicized text*:

“Start-Up Costs” shall consist primarily of the cost of fuel, as determined by the unit’s start heat input (adjusted by the performance factor) times the fuel cost. It also includes operating costs, Maintenance Adders, emissions allowances/adders, and station service cost. Start-Up Costs can vary with the unit offline time being categorized in three unit temperature conditions: hot, intermediate and cold.

For units with soak process (*nuclear, steam, and combined cycle*), “Start Fuel” is fuel consumed from first fire of start process (initial reactor criticality for nuclear units): Start-Up Cost shall mean the net unit costs from PJM’s notification to the level at which the unit can follow PJM’s dispatch, and from last breaker open to shutdown.

For units without soak process (*engines, combustion turbines, Intermittent Resources, and Energy Storage Resources*): Start Cost shall mean the unit costs from PJM’s notification to first breaker close and from last breaker open to shutdown.

- OA Definition for “Start-Up Costs”, include the *italicized text*:

“Start-Up Costs” shall consist primarily of the cost of fuel, as determined by the unit’s start heat input (adjusted by the performance factor) times the fuel cost. It also includes operating costs, Maintenance Adders, emissions allowances/adders, and station service cost. Start-Up Costs can vary with the unit offline time being categorized in three unit temperature conditions: hot, intermediate and cold.

For units with soak process (*nuclear, steam, and combined cycle*), “Start Fuel” is fuel consumed from first fire of start process (initial reactor criticality for nuclear units): Start-Up Cost shall mean the net unit costs from PJM’s notification to the level at which the unit can follow PJM’s dispatch, and from last breaker open to shutdown.

For units without soak process (*engines, combustion turbines, Intermittent Resources, and Energy Storage Resources*): Start Cost shall mean the unit costs from PJM’s notification to first breaker close and from last breaker open to shutdown.

There were no objections to these proposed amendments, and therefore they were incorporated into the proposed Manual, Tariff, and OA revisions respectively.

Following discussion, the proposed solution including corresponding revisions (as amended) to the Tariff, Operating Agreement (OA), and Manual 15: Cost Development Guidelines were **endorsed** by acclamation with no objections or abstentions.

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

2. Dynamic Rating Issue

Chris Callaghan and Bilge Derin reviewed a proposed solution and corresponding revisions to Manual 01: Control Center and Data Exchange Requirements, Manual 03: Transmission Operations, and Manual 03A: Energy Management System (EMS) Model Update and Quality Assurance (QA) to

address the Interim Measures to Facilitate the Integration of Dynamic Ratings into PJM Operations (Phase 1). Following discussion, the proposed solution and corresponding manual revisions were **endorsed** by acclamation with no objections or abstentions.

[Issue Tracking: Interim Measures to Facilitate the Integration of Dynamic Ratings into PJM Operations](#)

3. Application of Designated Entity Agreement

Augustine Caven reviewed a proposed solution and corresponding OA revisions to address the application of Designated Entity Agreement.

A. Greg Poulos, on behalf of the Delaware Division of the Public Advocate, and Denise Foster Cronin, EKPC on behalf of joint sponsors, reviewed additional alternatives as posted.

Following discussion, the main motion **failed** in a sector-weighted vote with 2.514 in favor. John Horstmann, Dayton Power & Light Company, moved and Jason Barker, Constellation Energy Generation, LLC, seconded a motion to treat the alternatives as a first read and defer endorsement to the next MRC meeting. The motion **passed** in a sector-weighted vote with 3.959 in favor.

[Issue Tracking: Application of Designated Entity Agreement](#)

First Readings

4. Service on PJM for Rate and Waiver Filings under Governing Agreements

Steve Pincus reviewed a proposed Problem Statement and Issue Charge addressing service to PJM of Members' Tariff rate and waiver filings under PJM Governing Agreements. The committee will be asked to approve the Issue Charge at its next meeting.

5. Operating Committee Charter

Darlene Phillips reviewed proposed revisions to the Operating Committee Charter. The committee will be asked to approve the revised Charter at its next meeting.

6. Manuals

Natasha Holter reviewed proposed revisions to Manual 29: Billing resulting from its periodic review. The committee will be asked to endorse the proposed Manual 29 revisions at its next meeting.

Future Agenda Items

Future Meeting Dates and Materials			Materials Due to Secretary	Materials Published
Date	Time	Location		
June 29, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	June 17, 2022	June 22, 2022
July 27, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	July 15, 2022	July 20, 2022

<i>August 24, 2022</i>	9:00 a.m.	PJM Conference & Training Center and WebEx	August 12, 2022	August 17, 2022
<i>September 21, 2022</i>	9:00 a.m.	PJM Conference & Training Center and WebEx	September 9, 2022	September 14, 2022
<i>* October 24, 2022 *tentative dates & time</i>	<i>* 1:00 p.m.</i>	Hyatt Regency Chesapeake Bay Golf Resort, Spa and Marina in Cambridge, MD	<i>* October 12, 2022</i>	<i>* October 17, 2022</i>
<i>November 16, 2022</i>	9:00 a.m.	PJM Conference & Training Center and WebEx	November 4, 2022	November 9, 2022
<i>December 21, 2022</i>	9:00 a.m.	PJM Conference & Training Center and WebEx	December 9, 2022	December 14, 2022

Author: M. Greening

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
Benchek	Jim	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
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	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	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
Davis	James	Virginia Electric & Power Company	Transmission Owner
Dillon	Matthew	UGI Development Company	Generation Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Dorner	Amber	Rockland Electric Company	Transmission Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner

Evrard	David	Pennsylvania Office of Consumer Advocate	End-Use Customer
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	lctec.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
Heinle	Frederick	Office of the People's Counsel for the District of Columbia	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
Hyzinski	Thomas	Carroll County Energy LLC	Generation Owner
Hyzinski	Thomas	Dynegy Marketing and Trade, LLC	Generation Owner
Hyzinski	Thomas	GenOn Energy Management, LLC	Generation Owner
Jardot	Gina	NRG Power Marketing LLC	Generation Owner
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	Michigan Public Power Agency	Electric Distributor
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
Keenan	Matthew	Elwood Energy, LLC	Generation Owner
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP	Other Supplier
Kilgallen	Kevin	Avangrid Renewables, LLC	Generation Owner
Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor

Litchfield	Matt	CPV Power Holdings, LP	Generation Owner
Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
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	Ohio Consumers' Counsel	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
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
Sturgeon	John	Duke Energy Business Services LLC	Transmission Owner
Svenson	Heather	Public Service Electric and Gas Company	Transmission Owner
Swalwell	Bradley	Tangent Energy Solutions, Inc.	Other Supplier
Swigonski	Frank	Pine Gate Mid-Atlantic, LLC	Other Supplier
Tashakkori	Cyrus	Open Road Renewables, LLC	Other Supplier
Vayda	Brian	Borough of Butler, Butler Electric Division	Electric Distributor
Vayda	Brian	Borough of Lavallette, New Jersey	Electric Distributor
Vayda	Brian	Borough of Madison, New Jersey	Electric Distributor
Vayda	Brian	Borough of Milltown, New Jersey	Electric Distributor
Vayda	Brian	Borough of Park Ridge, New Jersey	Electric Distributor
Vayda	Brian	Borough of Pemberton, New Jersey	Electric Distributor
Vayda	Brian	Borough of Seaside Heights, New Jersey	Electric Distributor
Vayda	Brian	Borough of South River, New Jersey	Electric Distributor
Vayda	Brian	Vineland Municipal Electric Utility	Electric Distributor
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
Yovanovich	Laura	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner

Non-Voting Attendees

Last Name	First Name	Company	Sector
Adams	Darrin	East Kentucky Power Cooperative, Inc.	Transmission Owner
Anderson	Jared	S&P Global	Not Applicable
Bautista	Alejandro	Exelon Business Services Company, LLC	Transmission Owner
Berton	Tyler	Appalachian Power Company	Transmission Owner
Bigelow	Christina	Pine Gate Renewables, LLC	Generation Owner
Blackwell	Michael	Husch Blackwell LLP	Not Applicable
Bowring	Joe	Monitoring Analytics	Not Applicable
Bracy	Phil	Independent	Not Applicable
Brady	George	Ohio Valley Electric Corporation	Transmission Owner
Brahman	Azade	Orsted Onshore North America, LLC	Generation Owner
Campbell	Bruce	Campbell Energy Advisors	Not Applicable
Carmean	Gregory	Organization of PJM States, Inc. (OPSI)	Not Applicable
Carrier	Ron	Big Lake Consulting Group	Not Applicable
Christopher	Mahila	Public Utilities Commission Of Ohio	Not Applicable
Circelli	Roseanne	Public Service Electric and Gas Company	Transmission Owner
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
Colaresi	Chandra	Cpower	Not Applicable
Conklin	Tyler	Public Utilities Commission Of Ohio	Not Applicable
Corash	Richard	Public Service Electric and Gas Company	Transmission Owner
Curtis	Kenneth	Enverus	Not Applicable
Davis	David	Apex Clean Energy	Not Applicable
Dorner	Amber	Rockland Electric Company	Transmission Owner
Ericson	Christine	Illinois Commerce Commission	Not Applicable
Evrard	David	Pennsylvania Office Of Consumer Advocate	End-Use Customer
Eyocko	Stephanie	FERC	Not Applicable
Filomena	Guy	Customized Energy Solutions Ltd.	Not Applicable
Fishback	Luke	Affirmed Energy, LLC	Other Supplier
Fuerst	Gary	Energy Harbor LLC	Generation Owner
Fuess	Christian	PBF Power Marketing, LLC	End-Use Customer
Gates	Terry	Appalachian Power Company	Transmission Owner
Gilani	Rehan	Consolidated Edison Energy, Inc.	Other Supplier
Greene	Ben	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Greiner	Gary	Public Service Electric and Gas Company	Transmission Owner
Hari	Sriharsha	Tenaska Power Services Co.	Generation Owner
Hehir	Flannan	Appian Way Energy Partners MidAtlantic, LLC	Other Supplier
Heinle	Erik	Office of the People's Counsel for the District of Columbia	End-Use Customer
Helms	Joe	Tyr Energy, LLC	Other Supplier
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Horning	Lynn	Customized Energy Solutions Ltd.	Not Applicable
Hull	Gerit	Appalachian Power Company	Transmission Owner

Hurwich	Mark	Elliott Bay Energy Trading, LLC	Other Supplier
Iler	Art	Indiana Utility Regulatory Commission	Not Applicable
Islam	Lubaba	Rockland Electric Company	Transmission Owner
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Jett	William	Duke Energy Business Services LLC	Transmission Owner
Johnson	Carl	Customized Energy Solutions Ltd.	Not Applicable
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP	Other Supplier
Kent	Janessa	Duquesne Light Company	Transmission Owner
Laios	Takis	Appalachian Power Company	Transmission Owner
Lawson	Ryen	Dominion Energy	Not Applicable
Liang-Nicol	Cecilia	Energy Harbor LLC	Generation Owner
Lin	Dave	Citadel FNGE Ltd.	Other Supplier
Martin	Valerie	FERC	Not Applicable
Matheson	Eric	Delaware Public Service Commission	Not Applicable
Matuszak	Alex	UGI Development Company	Generation Owner
McClelland	Maura	Puco	Not Applicable
McNeil	Justin	Kentucky Public Service Commission	Not Applicable
Miller	John	Commonwealth Edison Company	Transmission Owner
Mooney	Jeff	Energy Harbor LLC	Generation Owner
Moye	Robert	Tyr Energy, LLC	Other Supplier
Nadel	Steven	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Nader	Jordan	Public Staff Of Nc Utilities Commission	Not Applicable
Neubrandner	Kerry	DC Energy, LLC	Other Supplier
Nix	Emma	Leeward Renewable Energy, LLC	Not Applicable
Ondayko	Brock	Appalachian Power Company	Transmission Owner
Pakela	Gregory	DTE Energy Trading, Inc.	Other Supplier
Pelletier	Eveline	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Peoples	John	Duquesne Light Company	Transmission Owner
Price	*Ruth	Speaker	Not Applicable
Procuniar	Jason	Buckeye Power, Inc.	Electric Distributor
Rutledge	Craig	Appalachian Power Company	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions Ltd.	Not Applicable
Schmitt	David	Monitoring Analytics	Not Applicable
Segner	Sharon	Ls Power	Not Applicable
Shah	Pulin	Exelon Business Services Company, LLC	Transmission Owner
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Not Applicable
Shegarfi	Roosbeh	Exelon Business Services Company, LLC	Transmission Owner
Sloan	Ben	Organization of PJM States, Inc. (OPSI)	Not Applicable
Smithman	Emily	New Jersey Board of Public Utilities	Not Applicable
Sparks	Bridget	Aes	Not Applicable
Squibb	Bill	Ohio Valley Electric Corporation	Transmission Owner

Stanfill	Susan	Pine Gate Renewables, LLC	Generation Owner
Stone	Andy	Gabel Associates	Not Applicable
Strom	Ryan	Buckeye Power, Inc.	Electric Distributor
Stuchell	Jeff	American Transmission Systems, Inc.	Transmission Owner
Sussler	Philip	Maryland Office Of People's Counsel	Not Applicable
Tashakkori	Cyrus	Open Road Renewables, LLC	Other Supplier
Taylor	Robert	Exelon Business Services Company, LLC	Transmission Owner
Thomas	Amber	Exelon Business Services Company, LLC	Transmission Owner
Tibbetts	Maeve	K&L Gates	Not Applicable
Tyler	Catherine	Monitoring Analytics	Not Applicable
Vargo	Daniel	Allegheny Electric Cooperative	Electric Distributor
Vayda	Brian	Borough Of Parkridge New Jersey	Electric Distributor
Vonplagenhoef	Rowen	Charles River Associates	Not Applicable
Walcavich	Colin	Monitoring Analytics	Not Applicable
Walker	Jennifer	Exelon Business Services Company, LLC	Transmission Owner
White	Brett	Pine Gate Renewables, LLC	Generation Owner
Wilches	Rafael	Public Service Electric and Gas Company	Transmission Owner
Yoder	Michael	Rto Insider	Not Applicable
Yovanovich	Laura	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner

PJM Attendees

Last Name	First Name	Company	Sector
Asthana	Manu	PJM Interconnection, LLC	Not Applicable
Bennett	Stephen	PJM Interconnection, LLC	Not Applicable
Bielak	Donnie	PJM Interconnection, LLC	Not Applicable
Bowker	Shannon	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Bresley	Stu	PJM Interconnection, LLC	Not Applicable
Brown	Rich	PJM Interconnection, LLC	Not Applicable
Bruno	Josh	PJM Interconnection, LLC	Not Applicable
Bryson	Michael	PJM Interconnection, LLC	Not Applicable
Buehler	Susan	PJM Interconnection, LLC	Not Applicable
Burdis	Tim	PJM Interconnection, LLC	Not Applicable
Callaghan	Chris	PJM Interconnection, LLC	Not Applicable
Carroll	Rebecca	PJM Interconnection, LLC	Not Applicable
Connell	Jason	PJM Interconnection, LLC	Not Applicable
Dantonio	Phil	PJM Interconnection, LLC	Not Applicable
Derin	Bilge	PJM Interconnection, LLC	Not Applicable
Devita	Thomas	PJM Interconnection, LLC	Not Applicable
Disciullo	Nick	PJM Interconnection, LLC	Not Applicable
Drake	Anna	PJM Interconnection, LLC	Not Applicable

Drauschak	Lisa	PJM Interconnection, LLC	Not Applicable
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Fabiano	Janell	PJM Interconnection, LLC	Not Applicable
Fan	Zhenyu	PJM Interconnection, LLC	Not Applicable
Fitzpatrick	Brian	PJM Interconnection, LLC	Not Applicable
Foley	Pauline	PJM Interconnection, LLC	Not Applicable
Franks	Ed	PJM Interconnection, LLC	Not Applicable
Gates	Jill	PJM Interconnection, LLC	Not Applicable
Glatz	Suzanne	PJM Interconnection, LLC	Not Applicable
Glazer	Craig	PJM Interconnection, LLC	Not Applicable
Greening	Michele	PJM Interconnection, LLC	Not Applicable
Handlin	Mike	PJM Interconnection, LLC	Not Applicable
Haque	Asim	PJM Interconnection, LLC	Not Applicable
Hauske	Thomas	PJM Interconnection, LLC	Not Applicable
Hicks	Colleen	PJM Interconnection, LLC	Not Applicable
Holter	Natasha	PJM Interconnection, LLC	Not Applicable
Horger	Timothy	PJM Interconnection, LLC	Not Applicable
Jayachandran	Marilyn	PJM Interconnection, LLC	Not Applicable
Keech	Adam	PJM Interconnection, LLC	Not Applicable
Kim	Sung	PJM Interconnection, LLC	Not Applicable
Levitt	Andrew	PJM Interconnection, LLC	Not Applicable
Manno	Dean	PJM Interconnection, LLC	Not Applicable
McGlynn	Paul	PJM Interconnection, LLC	Not Applicable
McLavery	Megan	PJM Interconnection, LLC	Not Applicable
Muhl	Nancy	PJM Interconnection, LLC	Not Applicable
O'Brien	Tom	PJM Interconnection, LLC	Not Applicable
O'Hara	Chris	PJM Interconnection, LLC	Not Applicable
Phillips	Darlene	PJM Interconnection, LLC	Not Applicable
Pincus	Steven	PJM Interconnection, LLC	Not Applicable
Poulos	Greg	PJM Interconnection, LLC	Not Applicable
Robinson	Evelyn	PJM Interconnection, LLC	Not Applicable
Seiler	Ken	PJM Interconnection, LLC	Not Applicable
Shah	Vijay	PJM Interconnection, LLC	Not Applicable
Souder	Dave	PJM Interconnection, LLC	Not Applicable
Souder	Michelle	PJM Interconnection, LLC	Not Applicable
Stadelmeyer	Rebecca	PJM Interconnection, LLC	Not Applicable
Stanisz	Mark	PJM Interconnection, LLC	Not Applicable
Stefanowicz	Vincent	PJM Interconnection, LLC	Not Applicable
Stemetzki	Mike	PJM Interconnection, LLC	Not Applicable
Swimm	Nora	PJM Interconnection, LLC	Not Applicable
Tribulski	Jennifer	PJM Interconnection, LLC	Not Applicable



Minutes

Waweru

James

PJM Interconnection, LLC

Not Applicable