



Markets & Reliability Committees
PJM Conference and Training Center, Audubon, PA / WebEx
November 16, 2022
9:00 a.m. – 1:05 p.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 the proposers of the motions in agenda item 2 have decided not to make those motions at this meeting.

Consent Agenda

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

- A. Minutes of the October 24, 2022 meeting of the Markets and Reliability Committee
- B. Proposed revisions to Manual 3: Transmission Operations resulting from its periodic review.
- C. Proposed revisions to Manual 3A: Energy Management System (EMS) Model Updates and Quality Assurance (QA) resulting from its periodic review.

Endorsements

1. Transmission Constraint Penalty Factor

Susan Kenney provided an update regarding the Transmission Constraint Penalty Factor (TCPF) activities at the Energy Price Formation Senior Task Force (EPFSTF) and Vijay Shah reviewed a proposed TCPF solution endorsed by the EPFSTF. Following discussion, the proposal was **endorsed** by acclamation with one objection and no abstentions.

<u>Issue Tracking: Operating Reserve Demand Curve (ORDC) & Transmission Constraint Penalty Factors</u>

2. Energy and Reserve Market Circuit Breaker

This item was removed from this agenda by the proposers

<u>Issue Tracking: Operating Reserve Demand Curve (ORDC) & Transmission Constraint Penalty Factors</u>

- 3. Variable Operations & Maintenance Cost Development
 - A. Roger Cao reviewed the proposed Main Motion solution and corresponding OA Schedule 2 and Manual 15: Cost Development Guidelines revisions addressing the development of variable operations and maintenance costs. Adrien Ford, ODEC, offered a friendly amendment to Manual 15 section 2.6 to move the date for submission of default adder or operating costs from March 31 to June 15. There were no objections, and therefore the proposed amendment was incorporated into the main motion.





B. Jason Barker, Constellation, reviewed the proposed Alternative Motion solution.

Following discussion, the main motion was **endorsed/approved** in a sector-weighted vote with 4.484 in favor.

Issue Tracking: Variable Operating and Maintenance Cost

4. Maximum Emergency Changes for Resource Limitation Reporting

Chris Pilong reviewed a proposed solution and Manual 13: Emergency Operations revisions addressing the Max Emergency Changes for Resource Limitation Reporting. Following discussion, the proposal was **endorsed** by acclamation with no objections and 12 abstentions.

Issue Tracking: Max Emergency Changes for Resource Limitation Reporting

5. <u>Critical Natural Gas Infrastructure – Demand Resp</u>onse Participation

Pete Langbein reviewed a proposed solution and corresponding revisions to Manual 11: Energy & Ancillary Services Market Operations, Manual 18: PJM Capacity Market, the Tariff, OA, and Reliability Assurance Agreement (RAA) to prohibit Critical Natural Gas Infrastructure load as a demand response resource pursuant to recommendations included in the FERC/NERC report on the severe cold weather event in Texas and South Central US in February 2021. Following discussion, the proposal was **endorsed** by acclamation with no objections or abstentions.

<u>Issue Tracking: Critical Gas Infrastructure – Demand Response Participation</u>

6. FTR Bilateral Review and Reporting Requirements

James Waweru reviewed a proposed solution addressing the FTR Bilateral Review and Reporting issue. Following discussion, the proposal and associated Tariff and OA revisions were **endorsed** by acclamation with no objections or abstentions.

Issue Tracking: FTR Bilateral Review and Reporting Requirements

7. Replacement Resource Transactions

Michael Borgatti, Gabel Associates on behalf of Eagle Point Power Generation LLC, presented a proposed Issue Charge and revisions to Manual 18: PJM Capacity Market seeking to address replacement resource transactions. Erik Heinle proposed a friendly amendment to the Manual 18 revisions as follows (addition is italicized):

"[...] for *the 2023/24, 2024/25, 2025/26* Delivery Years where there is only one Incremental Auction."

There was no objection to the proposed amendment and therefore it was incorporated into the proposed Manual 18 revisions. The committee was asked to approve the Issue Charge and endorse the proposed Manual 18 revisions as part of the Quick Fix process and was asked to approve the Issue Charge and endorse the Manual revisions upon first read. There were no objections to using the Quick





Fix process or to voting on first read. Following discussion, the proposal was **endorsed** by acclamation with two objections and six abstentions.

First Readings (11:45-1:05)

8. Rules Related to Market Suspension

Stefan Starkov reviewed a proposed solution addressing the treatment of market suspensions. The committee will be asked to endorse the proposed solution and corresponding OA revisions at its next meeting.

Issue Tracking: Rules Related to Market Suspension

9. Market Participant Default Flexibility

Colleen Hicks reviewed the proposed solution addressing the alignment of PJM's authority in event of a default. The committee will be asked to endorse the solution package and corresponding Tariff and OA revisions at its next meeting.

Issue Tracking: Market Participant Default Flexibility

10. Clarifying Tariff and OA Revisions

Janell Fabiano reviewed proposed clarifying Tariff and OA revisions as endorsed by the Governing Documents Enhancements and Clarifications Subcommittee (GDECS). The committee will be asked to endorse the proposed Tariff and OA revisions at its next meeting.

11. Manuals

- A. Darrell Frogg reviewed proposed revisions to Manual 10: Pre-Scheduling Operations resulting from its periodic review. The committee will be asked to endorse the proposed revisions at its next meeting.
- B. Darrell Frogg reviewed proposed revisions to Manual 14D: Generator Operational Requirements resulting from its periodic review. The committee will be asked to endorse the proposed revisions at its next meeting.
- C. Rebecca Stadelmeyer reviewed proposed revisions to Manual 27: Open Access Transmission Tariff Accounting resulting from its periodic review. The committee will be asked to endorse the proposed revisions at its next meeting.

Informational Posting Only

12. Automatic Sectionalizing Schemes





The PJM Manual 03 Attachment E: Automatic Sectionalizing Schemes Pending Approval and Recent Changes document was posted on the PJM website at: https://www.pjm.com/markets-and-operations/etools/oasis/system-information.aspx.

Future Agenda Items (1:05)

No new future agenda items were identified.

		Future Meeting Dates and Materials	Materials Due to Secretary	Materials Published
Date	Time	Location		
December 21, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	December 9, 2022	December 14, 2022

Author: D. Anders

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 Name	Sector
Barker	Jason	Constellation Energy Generation, LLC	Generation Owner
Benchek	James	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Borgatti	Michael	Newark Energy Center, LLC	Generation Owner
Borgatti	Michael	Recurrent Energy, LLC	Other Supplier
Borgatti	Michael	Jersey Green Energy, LLC	Other Supplier
Borgatti	Michael	Energy Harbor LLC	Generation Owner
Borgatti	Michael	York County Solid Waste and Refuse Authority	Generation Owner
Borgatti	Michael	NextEra Energy Marketing, LLC	Other Supplier
Borgatti	Michael	Moxie Freedom LLC	Generation Owner
Borgatti	Michael	Hazleton Generation LLC	Generation Owner
Borgatti	Michael	Longview Power, LLC	Generation Owner
Bruce	Susan	Trustees of the University of Pennsylvania	End-Use Customer
Bruce	Susan	Linde Inc.	End-Use Customer
Bruce	Susan	Gerdau Ameristeel Energy, Inc.	End-Use Customer
Bruce	Susan	MeadWestvaco Corporation	End-Use Customer
Bruce	Susan	Wellsboro Electric Company	Electric Distributor
Bruce	Susan	Air Products & Chemicals, Inc.	End-Use Customer
Bruce	Susan	Messer LLC	End-Use Customer
Bruce	Susan	Lehigh Portland Cement Company	End-Use Customer
Bruce	Susan	Letterkenny Industrial Development Authority - PA	Electric Distributor
Bruce	Susan	Kimberly-Clark Corporation	Generation Owner
Bruce	Susan	Cleveland-Cliffs Steel LLC	End-Use Customer
Bruce	Susan	Procter & Gamble Paper Products Company (The)	End-Use Customer
Canter	David	Appalachian Power Company	Transmission Owner
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Domian	Christin	Duquesne Light Company	Transmission Owner
Dorner	Amber	Rockland Electric Company	Transmission Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner





Evrard	David	Pennsylvania Office of Consumer Advocate	End-Use Customer
Fink	Regan	Pine Gate Mid-Atlantic, LLC	Other Supplier
Foladare	Kenneth	Geenex Solar LLC	Other Supplier
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Fuess	Christian	Icetec.com, Inc.	Other Supplier
Fuess	Christian	PBF Power Marketing, LLC	End-Use Customer
Fuess	Christian	Kuehne Chemical Company, Inc.	End-Use Customer
Fuess	Christian	NextPower III US Holdco Inc.	Generation Owner
Fuess	Christian	Diamond State Generation Partners, LLC	Generation Owner
Garnett	Bryan	Duke Energy Business Services LLC	Transmission Owner
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
Horning	Lynn	American Municipal Power, Inc.	Electric Distributor
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Hyzinski	Thomas	Dynegy Marketing and Trade, LLC	Generation Owner
Hyzinski	Thomas	Carroll County Energy LLC	Generation Owner
Hyzinski	Thomas	GenOn Energy Management, LLC	Generation Owner
Jardot	Gina	NRG Power Marketing LLC	Generation Owner
Johnson	Carl	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson	Carl	Energy Cooperative Association of Pennsylvania (The)	Other Supplier
Johnson	Carl	Borough of Chambersburg	Electric Distributor
Johnson	Carl	Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson	Carl	WPPI Energy	Other Supplier
Johnson	Carl	Town of Williamsport (The)	Electric Distributor
Johnson	Carl	Thurmont Municipal Light Company	Electric Distributor
Johnson	Carl	Borough of Mont Alto, Pennsylvania	Electric Distributor
Johnson	Carl	Delaware Municipal Electric Corporation, Inc.	Electric Distributor
Johnson	Carl	Michigan Public Power Agency	Electric Distributor
Johnson	Carl	North Carolina Electric Membership Corporation	Electric Distributor
Johnson	Carl	Indiana Municipal Power Agency	Electric Distributor
Johnson	Carl	Hagerstown Light Department	Electric Distributor
Johnson	Carl	Illinois Municipal Electric Agency	Electric Distributor
Johnson	Carl	City of Dover, Delaware	Electric Distributor
Johnson	Carl	Central Virginia Electric Cooperative	Electric Distributor
Johnson	Carl	Easton Utilities Commission	Electric Distributor
Johnson	Carl	Buckeye Power, Inc.	Electric Distributor
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
Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
Lowe	Connie	Virginia Electric & Power Company	Transmission Owner
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Poulos	Greg	Delaware Division of the Public Advocate	End-Use Customer
Poulos	Greg	Illinois Citizen Utility Board	End-Use Customer
Poulos	Greg	New Jersey Division of Rate Counsel	End-Use Customer
Poulos	Greg	Ohio Consumers' Counsel	End-Use Customer
Poulos	Greg	West Virginia Consumer Advocate Division	End-Use Customer
Poulos	Greg	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Poulos		Public Staff - North Carolina Utilities Commission	End-Use Customer
	Greg		
Rohrbach	John	Big Savage, LLC	Generation Owner
Rohrbach	John	Wabash Valley Power Association, Inc.	Electric Distributor
Rohrbach	John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Rohrbach	John	Kentucky Municipal Energy Agency	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
Whitehead	Jeffrey	Eastern Generation, LLC	Generation Owner
Whitehead	Jeffrey	Wheelabrator Falls Inc.	Generation Owner
Whitehead	Jeffrey	Essential Power Rock Springs, LLC	Generation Owner
Yovanovich	Laura	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner

Non-Voting Attendees

Last Name	First Name	Company Name	Sector
Agile	Eric	Bc Counsel	Not Applicable
Banks	Carla	Rockland Capital, LP	Not Applicable
Barrow	Kim	Pensylvania Public Utility Commission	Not Applicable
Bowering	Joe	Monitoring Analyrics, LLC	Not Applicable
Bradley	Greg	EDF Trading North America, LLC	Other Supplier
Branch	John	Enel Trading North America, LLC	Other Supplier
Callen	Zac	Illinois Commerce Commission	Not Applicable
Campbell	Bruce	Campbell Energy Advisors	Not Applicable
Carmean	Gregory	OPSI	Not Applicable
Carrier	Ronald	Big Lake Consulting	Not Applicable
Chambers	Ericka	Exelon Business Services Company, LLC	Transmission Owner
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
Concina	Wendell	Commonwealth Edison Company	Transmission Owner
Corash	Richard	PSEG Energy Resources & Trade LLC	Other Supplier
Cox	Jason	EQ Energy advisors	Not Applicable
Cyler	Catherine	Monitoring Analyrics, LLC	Not Applicable
Dillon	Matt	UGI Development Company	Generation Owner
Dunsing	Alison	Saracen Power LP	Other Supplier
Edmonds	Brian	District of Columbia Public Service Commission	Not Applicable
Elkins	Rachel	American Transmission Systems, Inc.	Transmission Owner
Everngam	Scott	Blue Horse Shoe Energy	Not Applicable
Filomena	Guy	Customized Energy Solutions, Ltd.	Not Applicable
Flown	Benjamin	OPSI	Not Applicable
Foster	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner
Garces	Eloisse	Alphataraxia Palladium LLC	Other Supplier
Gates	Terry	Appalachian Power Company	Transmission Owner
Gebolys	Gabbie	Public Utilities Commission of Ohio	Not Applicable
Gilani	Rehan	Consolidated Edison Energy, Inc.	Other Supplier
Glazener	Patrick	Energy Authority, Inc. (The)	Other Supplier
Gordon	Jon	Advanced Energy Economy	Not Applicable
Gorman	Brad	American Transmission Systems, Inc.	Transmission Owner
Greene	Ben	Appalachian Power Company	Transmission Owner
Greiner	Gary	Public Service Electric and Gas Company	Transmission Owner
Guy	Gary	Exelon Business Services Company, LLC	Transmission Owner
Hamshield	Jake	Buckeye Power, Inc.	Electric Distributor
Hastings	David	MICS	Not Applicable
Hehir	Flamnan	Appian Way Energy Partners MidAtlantic, LLC	Other Supplier
Hounshell	Jacob	Buckeye Power, Inc.	Electric Distributor
Hudis	Gabriella	Gable Associates	Not Applicable
Hugee	Jacqulynn	Virginia Electric & Power Company	Transmission Owner
Hurwich	Mark	Elliot Bay Energy Trading, LLC	Other Supplier
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Jett	William	Duke Energy Business Services LLC	Transmission Owner
Johnston	David	Indiana Utility Regulatory Commission	Not Applicable
Jones	Scott	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
Keenan	Matthew	Elwood Energy LLC	Generation Owner
Kent	Janessa	Duquesne Light Company	Transmission Owner





Kilgallgen	Kevin	Avangrid Renewables, LLC	Generation Owner
Kogut	Geroge	New York Power Authority	Other Supplier
Kotts	Camila	Delaware Public Service Commission	Not Applicable
Larsen	Patrick	VPM	Not Applicable
Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor
Louwahi	Soufiane	EPE Consulting	Not Applicable
Mabry	David	MWN	Not Applicable
Mahila	Christopher	Public Utilities Commission of Ohio	Not Applicable
Mahoor	Mohsen	Virginia Electric & Power Company	Transmission Owner
Martin	Valerie	FERC	Not Applicable
Mason	Gary	American Transmission Systems, Inc.	Transmission Owner
Matheson	Eric	Delaware Public Service Commission	Not Applicable
Matuszak	Alex	UGI Development Company	Generation Owner
McDewell	Christian	Pensylvania Public Utility Commission	Not Applicable
McLelland	Maura	TUCO	Not Applicable
Miller	John	Commonwealth Edison Company	Transmission Owner
Monney	Jeff	American Transmission Systems, Inc.	Transmission Owner
Moye	Bob	Tyr Energy, LLC	Other Supplier
	Edwin	Charles river associates inter	Not Applicable
Moyo Nader	-	Public Staff - North Carolina Utilities Commission	End-Use Customer
	Jordan		
Newbrander	Karry	DC Energy, LLC	Not Applicable
Okenfuss	James	Savion	Not Applicable
Ondayko	Brock	Appalachian Power Company	Transmission Owner
Parrot	Sarah	Public Utilities Commission of Ohio	Not Applicable
Patel	Kumal	Scout Clean Energy	Not Applicable
Peoples	John	Duquesne Light Company	Transmission Owner
Pubriby	Meg	Brooklin Electric	Not Applicable
Redwine	Arlo	FERC	Not Applicable
Rutledge	Craig	Appalachian Power Company	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.	Not Applicable
Sauni	Alexandra	Monitoring Analyrics, LLC	Not Applicable
Scheidecker	Paul	Monitoring Analyrics, LLC	Not Applicable
Schroeder	Connie	Virginia Electric & Power Company	Transmission Owner
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Singer	Chad	Raven Volt	Not Applicable
Sink	Megan	Pine Gate Renewables, LLC	Generation Owner
Sloan	Ben	OPSI	Not Applicable
Soriels	James	Appalachian Power Company	Transmission Owner
Sotkiewcz	Paul	E-CUBED Policy Associates	Not Applicable
Sparks	Brigit	Appalachian Power Company	Transmission Owner
Stone	Andy	Gable associates	Not Applicable
Stuthell	Jeff	American Transmission Systems, Inc.	Transmission Owner
Tubridy	Meg	Rockland Electric Company	Transmission Owner
Vanblargan	Bryna	Audubon Grand Development	Not Applicable
Vanderlon	Bill	Illinois Commerce Commission	Not Applicable
Vargo	Daniel	Allegheny Electric Cooperative, Inc.	Electric Distributor
Walkavich	Colin	National Grid Renewables	Not Applicable
Walker	Jenifer	Exelon Business Services Company, LLC	Transmission Owner
Walker	Preston	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Webb	Becky	Exelon Business Services Company, LLC	Transmission Owner
Wehnes	Kathleen	Maryland Department of the Environment	Not Applicable
	Ericka		
Wiley Wilson		Exelon Business Services Company, LLC	Transmission Owner Not Applicable
	James	Wilson Energy Economics	
Wylie-Chambers	Ericka	Exelon Business Services Company, LLC	Transmission Owner

PJM Attendees





Last Name	First Name	Member Company	Sector
Anders	Dave	PJM Interconnection, LLC	Not Applicable
Asthana	Manu	PJM Interconnection, LLC	Not Applicable
Bennett	Daniel	PJM Interconnection, LLC	Not Applicable
Bowker	Shannon	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Bresler	Stu	PJM Interconnection, LLC	Not Applicable
Carrasco	Eliseo	PJM Interconnection, LLC	Not Applicable
Chemielewski	Brian	PJM Interconnection, LLC	Not Applicable
Coscia	Carl	PJM Interconnection, LLC	Not Applicable
D'Antonio	Phil	PJM Interconnection, LLC	Not Applicable
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Fabiano	Janell	PJM Interconnection, LLC	Not Applicable
Fitzpatrick	Brian	PJM Interconnection, LLC	Not Applicable
Franks	Chris	PJM Interconnection, LLC	Not Applicable
Frogg	Darrell	PJM Interconnection, LLC	Not Applicable
Greening	Michele	PJM Interconnection, LLC	Not Applicable
Herrera	Maria	PJM Interconnection, LLC	Not Applicable
Holter	Natasha	PJM Interconnection, LLC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Kelly	Gwen	PJM Interconnection, LLC	Not Applicable
Lai	Erin	PJM Interconnection, LLC	Not Applicable
Lockwood	Dan	PJM Interconnection, LLC	Not Applicable
Manno	Dean	PJM Interconnection, LLC	Not Applicable
Marcino	Angelo	PJM Interconnection, LLC	Not Applicable
Mcanamy	James	PJM Interconnection, LLC	Not Applicable
McElwaine	Kathey	PJM Interconnection, LLC	Not Applicable
McGlynn	Paul	PJM Interconnection, LLC	Not Applicable
McLaughlin	Jeff	PJM Interconnection, LLC	Not Applicable
McLaverty	Megan	PJM Interconnection, LLC	Not Applicable
Mohler	Tina	PJM Interconnection, LLC	Not Applicable
Muhl	Nancy	PJM Interconnection, LLC	Not Applicable
Nestel	Stacey	PJM Interconnection, LLC	Not Applicable
O'Neil	Jack	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
Scherling	Eric	PJM Interconnection, LLC	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Souder	Rich	PJM Interconnection, LLC	Not Applicable
Souder	Michelle	PJM Interconnection, LLC	Not Applicable
Staniscz	Mark	PJM Interconnection, LLC	Not Applicable
Swimm	Nora	PJM Interconnection, LLC	Not Applicable
Tribulski	Jen	PJM Interconnection, LLC	Not Applicable
Waweru	James	PJM Interconnection, LLC	Not Applicable