



Markets & Reliability Committee
PJM Conference and Training Center / WebEx
July 27, 2022
9:00 a.m. – 11:40 a.m. EPT

Administration

Stu Bresler and David Anders welcomed stakeholders and provided the Anti-trust, Code of Conduct, and Meeting Participation announcements. Stu Bresler noted that the sponsors of the proposed issue charges for item 2 had withdrawn their proposals. Therefore agenda items 1 and 2 were removed. The subject matter associated with agenda item 1 was also included in an Agenda item for the July 27, 2022 Members Committee meeting, and will be discussed at that time.

Consent Agenda

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

- A. Minutes of the June 29, 2022 meeting of the Markets and Reliability Committee (MRC).
- B. Conforming changes to Manual 01: Control Center and Data Exchange Requirements, Manual 18: PJM Capacity Market, and Manual 28: Operating Agreement Accounting to support the implementation of new testing requirements which were approved in Docket No. ER20-1590 and will become effective with the 2023/2024 Delivery Year.

 Issue Tracking: Load Management Testing Requirements
- C. Proposed revisions to Manual 14D: Generator Operational Requirements to support the process timing changes for generation deactivations.
 Issue Tracking: Deactivation Analysis Period
- D. Proposed revisions to Manual 28: Operating Agreement Accounting to support the Startup Cost
 Offer Development proposal the committee endorsed at the April 2022 meeting.
 <u>Issue Tracking: Start-Up Cost Offer Development</u>

Informational Notice

1. <u>Discussion of Anticipated Section 206 Filing Regarding Operating Agreement (OA) Language on Designated Entity Agreements and Notice of Consultation Related to a Possible Section 205 Filing</u>

This item was removed from the agenda.

Endorsements

2. Application of Designated Entity Agreement

This item was removed from the agenda.

Issue Tracking: Application of Designated Entity Agreement

3. Market Seller Offer Cap





David Anders and Pat Bruno reviewed proposed revisions to the Market Seller Offer Cap (MSOC) as endorsed by the Resource Adequacy Senior Task Force (RASTF). Following discussion, the proposal **failed** in a sector-weighted vote with 3.02 in favor.

Issue Tracking: Capacity Market Reform

First Readings

4. Variable Environmental Costs and Credits

Melissa Pilong reviewed a proposed solution including corresponding Operating Agreement Schedule 2 revisions to provide detailed guidance and updates to rules related to variable environmental charges and/or credits and their inclusion in cost-based energy offers. The committee will be asked to endorse the proposal and corresponding OA revisions at its next meeting.

Issue Tracking: Variable Environmental Costs and Credits

5. 2022 Quadrennial Review

Rebecca Carroll and Melissa Pilong reviewed proposed solutions addressing the Quadrennial Review. The committee will be asked to provide advisory votes on the proposals at its next meeting. Same day advisory voting may be sought at the August 24, 2022 MRC and Special MC – Quadrennial Review meetings.

Issue Tracking: 2022 Quadrennial Review

6. Manuals

A. Eric Hsia reviewed proposed revisions to Manual 6: Financial Transmission Rights as part of the periodic review and ARR FTR Market Task Force-based conforming changes (Docket No. ER22-797-000). The committee will be asked to endorse the proposed Manual 6 revisions at its next meeting.

Future Agenda Items

No new future agenda items were identified.

	F	uture Meeting Dates and Materials	Materials Due to Secretary	Materials Published
Date	Time	Location		
August 24, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	August 12, 2022	August 17, 2022
September 21, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	September 9, 2022	September 14, 2022
October 24, 2022	1:00 p.m.	Hyatt Regency Chesapeake Bay Golf Resort, Spa and Marina in Cambridge, MD	October 12, 2022	October 17, 2022
November 16, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	November 4, 2022	November 9, 2022
December 21, 2022	9:00 a.m.	PJM Conference & Training Center and WebEx	December 9, 2022	December 14, 2022





Author: D. Anders

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 Name	Sector
Barker	Jason	Constellation Energy Generation, LLC	Generation Owner
Benchek	James	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Breidenbaugh	Aaron	Voltus, Inc.	Other Supplier
Breidenbaugh	Aaron	Centrica Business Solutions Optimize, LLC	Other Supplier
Bruce	Susan	Cleveland-Cliffs Steel LLC	End-Use Customer
Bruce	Susan	Wellsboro Electric Company	Electric Distributor
Bruce	Susan	Kimberly-Clark Corporation	Generation Owner
Bruce	Susan	Industrial Energy Users-Ohio	Other Supplier
Bruce	Susan	Trustees of the University of Pennsylvania	End-Use Customer
Bruce	Susan	MeadWestvaco Corporation	End-Use Customer
Bruce	Susan	Procter & Gamble Paper Products Company (The)	End-Use Customer
Bruce	Susan	Gerdau Ameristeel Energy, Inc.	End-Use Customer
Bruce	Susan	Air Products & Chemicals, Inc.	End-Use Customer
Bruce	Susan	Linde Inc.	End-Use Customer
Bruce	Susan	Lehigh Portland Cement Company	End-Use Customer
Bruce	Susan	Messer LLC	End-Use Customer
Bruce	Susan	Letterkenny Industrial Development Authority - PA	Electric Distributor
Campbell	Bruce	MidAtlantic Power Partners, LLC	Other Supplier
Canter	David	Appalachian Power Company	Transmission Owner
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Damaskos	Deno	GridBeyond, LLC	Other Supplier
Davis	James	Virginia Electric & Power Company	Transmission Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Esquivel	Manuel	Enel X North America, Inc.	Other Supplier
Fishback	Luke	Affirmed Energy LLC	Other Supplier Other Supplier
Fitch	Neal	NRG Power Marketing LLC	Generation Owner
Foladare	Kenneth	Geenex Solar LLC	Other Supplier
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
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
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
Islam	Lubaba	Rockland Electric Company	Transmission Owner
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Johnson	Carl	Borough of Mont Alto, Pennsylvania	Electric Distributor
Johnson	Carl	Buckeye Power, Inc.	Electric Distributor
	Carl	Central Virginia Electric Cooperative	Electric Distributor
Johnson Johnson	Carl	City of Dover, Delaware	
Johnson	Carl	Delaware Municipal Electric Corporation, Inc.	Electric Distributor Electric Distributor
Johnson	Carl	Easton Utilities Commission	Electric Distributor





Johnson	Carl	Energy Cooperative Association of Pennsylvania (The)	Other Supplier
Johnson	Carl	Hagerstown Light Department	Electric Distributor
Johnson	Carl	Illinois Municipal Electric Agency	Electric Distributor
Johnson	Carl	Indiana Municipal Power Agency	Electric Distributor
Johnson	Carl	Michigan Public Power Agency	Electric Distributor
Johnson	Carl	North Carolina Electric Membership Corporation	Electric Distributor
Johnson	Carl	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson	Carl	Thurmont Municipal Light Company	Electric Distributor
Johnson	Carl	Town of Williamsport (The)	Electric Distributor
Johnson	Carl	WPPI Energy	Other Supplier
Johnson	Carl	Borough of Chambersburg	Electric Distributor
Johnson	Carl	Blue Ridge Power Agency, Inc.	Electric Distributor
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
Lieberman	Steven	Diamond State Generation Partners, LLC	Generation Owner
Lieberman	Steven	PBF Power Marketing, LLC	End-Use Customer
Lieberman	Steven	Kuehne Chemical Company, Inc.	End-Use Customer
	Steven		Generation Owner
Lieberman	Steven	NextPower III US Holdco Inc.	Other Supplier
Lieberman		Icetec.com, Inc.	
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Midgley	Sharon	Vitol Inc.	Generation Owner
Midgley	Sharon	Viribus Fund LP	Other Supplier
Nix	Emma	Leeward Asset Management, LLC	Generation Owner
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Pelletier	Eveline	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Poulos	Greg	New Jersey Division of Rate Counsel	End-Use Customer
Poulos	Greg	Ohio Consumers' Counsel	End-Use Customer
Poulos	Greg	Indiana Office of Utility Consumer Counselor (IN OUCC)	End-Use Customer
		Michigan Department of Attorney General, Environment, Natural	
Poulos	Greg	Resources, & Agriculture Division	End-Use Customer
Poulos	Greg	Public Staff - North Carolina Utilities Commission	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	West Virginia Consumer Advocate Division	End-Use Customer
Poulos	Greg	Maryland Office of People's Counsel	End-Use Customer
Poulos	Greg	Pennsylvania Office of Consumer Advocate	End-Use Customer
Poulos	Greg	Office of the Attorney General, Kentucky	End-Use Customer
Rohrbach	John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Rohrbach	John	Kentucky Municipal Energy Agency	Electric Distributor
Rohrbach	John	Wabash Valley Power Association, Inc.	Electric Distributor
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Stupar	Rob	Invenergy Energy Management LLC	Generation 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
Whitehead	Jeffrey	Wheelabrator Falls Inc.	Generation Owner
Whitehead	Jeffrey	Essential Power Rock Springs, LLC	Generation Owner
Whitehead	Jeffrey	Eastern Generation, 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	<u>Sector</u>
Baker	Jeff	Duke Energy Business Services LLC	Transmission Owner
Bautista	Alejandro	Exelon Business Services Company, LLC	Transmission Owner





Berton	Tyler	Appalachian Power Company	Transmission Owner
Bigelow	Christina	Pine Gate Mid-Atlantic, LLC	Other Supplier
Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Bowring	Joe	Monitoring Analytics, LLC	Not Applicable
Burbure	Stacey	Appalachian Power Company	Transmission Owner
Burnham	Kat	Advanced Energy Economy	Not Applicable
Callen	Zac	Illinois Commerce Commission	Not Applicable
Carmean	Gregory	OPSI	Not Applicable
Carrier	Ron	Big Lake Consulting Group	Not Applicable
Christopher	Mahila	Public Utilies Commission Of Ohio	Not Applicable
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
Colaresi	Chandra	Enerwise Global Technologies, LLC	Other Supplier
Corash	Richard	Public Service Electric and Gas Company	Transmission Owner
Davis	David	Apex Clean Energy Management, LLC	Not Applicable
Davis	Matt	UGI Development Company	Generation Owner
Dolan		AES Ohio Generation, LLC	Generation Owner
	Ryan	·	
Dorko	Keri	Monitoring Analytics, LLC	Not Applicable
Drake	Cary	Viridity Energy Solutions Inc.	Generation Owner
Duensing	Allison	Saracen Energy East LP	Other Supplier
Esquivel	Manuel	Enel X North America, Inc.	Other Supplier
Fazio	Danielle	Engelhart CTP (US) LLC	Other Supplier
Filomena	Guy	Customized Energy Solutions, Ltd	Not Applicable
Fink	Regan	Pine Gate Mid-Atlantic, LLC	Other Supplier
Foster Cronin	Denise	East Kentucky Power Cooperative	Transmission Owner
Fuerst	Gary	Energy Harbor LLC	Generation Owner
Gates	Terry	Appalachian Power Company	Transmission Owner
Gebolys	Debbie	Public Utilies Commissons Of Ohio	Not Applicable
Gilani	Rehan	Consolidated Edison Energy, Inc.	Other Supplier
Gorman	Brad	Energy Harbor LLC	Generation Owner
Greene	Ben	Appalachian Power Company	Transmission Owner
Greiner	Gary	Public Service Electric and Gas Company	Transmission Owner
Gunn	Daran	Public Service Electric and Gas Company	Transmission Owner
Guntle	Vince	American PowerNet Management, L.P.	End-Use Customer
Guy	Gary	Exelon Business Services Company, LLC	Transmission Owner
Heidorn	Rich	RTO Insider	Not Applicable
Heisey	Bradley	Tenaska Power Services Co.	Generation Owner
Hepplewhite	Peter	Wrigley Capital LLC	Other Supplier
Hull	Gerit	American Municipal Power, Inc.	Electric Distributor
Jardot	Gina	NRG Power Marketing LLC	Generation Owner
Jett	William	Duke Energy Business Services LLC	Transmission Owner
Jones	Scott	Indiano Oucc	Not Applicable
Kaplan	Donald	K & L Gates	Not Applicable Not Applicable
	Sam	Delaware Public Service Commission	
Kayne		Duquesne Light Company	Not Applicable Transmission Owner
Kent	Janessa		
Kerecman	Joe	Calpine Energy Services, L.P.	Generation Owner
Knotts	Pamela	Delaware Public Service Commission	Not Applicable
Laios	Takis	Appalachian Power Company	Transmission Owner
Lawson	Ryen	Virginia Electric & Power Company	Transmission Owner
Leich	Devin	RTO Insider	Not Applicable
Liang-Nicol	Cecilia	Energy Harbor LLC	Generation Owner
Louwahi	Soufiane	Epe Consulting	Not Applicable
Luftig	Lisa	Exelon Business Services Company, LLC	Transmission Owner
Luna	Joel	Monitoring Analytics, LLC	Not Applicable
Mabry	David	Mwn	Not Applicable
Martin	Valerie	FERC	Not Applicable
Matheson	Eric	Delaware Public Service Commission	Not Applicable





Matuszak	Alex	UGI Energy Services, LLC	Other Supplier
McAlister	Lisa	American Municipal Power, Inc.	Electric Distributor
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	Bob	Tyr Energy, LLC	Other Supplier
Moyo	Edwin	Charles River Associates	Not Applicable
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
O'Connor	Siobhan	Energy Authority, Inc. (The)	Other Supplier
Okenfuss	James	Savion, LLC	Not Applicable
Olinger	Robert	Gen Ops, LLC	Other Supplier
Ondayko	Brock	Appalachian Power Company	Transmission Owner
Peoples	John	Duquesne Light Company	Transmission Owner
Procuniar	Jason	Buckeye Power, Inc.	Electric Distributor
Rainey	Frank	PEI Power LLC	Generation Owner
Reagan	Ryann	Njbpu	Not Applicable
Robinson	Becky	Vistra	Not Applicable
Rumsey	Amanda	PPL Electric Utilities Corporation d/b/a PPL Utilities	Transmission Owner
Salaneck	Alexandra	Monitoring Analytics, LLC	Not Applicable
Schreim	Morris	Maryland Public Service Commission	Not Applicable
Schum	Alice	Illinois Municipal Electric Agency	Electric Distributor
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Shields	Stephanie	Invenergy, LLC	Generation Owner
Sloan	Ben	OPSI	Not Applicable
Sorrells	James	Appalachian Power Company	Transmission Owner
Sorrels	James	Appalachian Power Company	Transmission Owner
Sparks	Bridget	AES Ohio Generation, LLC	Generation Owner
Stern	Alex	Public Service Electric and Gas Company	Transmission Owner
Stone	Andy	Gabel Associates	Not Applicable
Sussler	Philip	State Of Maryland Office Of People Counc	Not Applicable
Sweeney	Rory	Power Prose	Not Applicable
Szeto	Connie	Orsted Onshore North America, LLC	Generation Owner
Taylor	Robert	Invenergy, LLC	Generation Owner
Tibbetts	Maeve	K&L Gates	Not Applicable
Vander Laan	Bill	Illinois Commerce Commission	Not Applicable
Vanderlaan	Bill	Illinois Commerce Commission	Not Applicable
Weiser	Spencer	Cra	Not Applicable
Wilson	James	Wilson Energy Economics	Not Applicable
Wisersky	Megan	Albion Road Group	Not Applicable
Yochelson	Cheri	Virginia Electric & Power Company	Transmission Owner
Zemanek	Kevin	Buckeye Power, Inc.	Electric Distributor
Zhang	Sean	Shell Energy North America (US), L.P.	Other Supplier

PJM Attendees

Last Name	First Name	Company Name	Sector
Anders	Dave	PJM Interconnection, LLC	Not Applicable
Bressler	Stu	PJM Interconnection, LLC	Not Applicable
Bernstein	Matthew	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
Caven	Augustine	PJM Interconnection, LLC	Not Applicable
Collins	Ryan	PJM Interconnection, LLC	Not Applicable
Connell	Jason	PJM Interconnection, LLC	Not Applicable
Dettrey	Mark	PJM Interconnection, LLC	Not Applicable





Devita	Thomas	PJM Interconnection, LLC	Not Applicable
Fitzpatrick	Brian	PJM Interconnection, LLC	Not Applicable
Franks	Chris	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
Graf	Walter	PJM Interconnection, LLC	Not Applicable
Greening	Michele	PJM Interconnection, LLC	Not Applicable
Hauske	Tom	PJM Interconnection, LLC	Not Applicable
Hicks	Colleen	PJM Interconnection, LLC	Not Applicable
Horger	Timothy	PJM Interconnection, LLC	Not Applicable
Hough	Dennis	PJM Interconnection, LLC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Jacobe	Jesse	PJM Interconnection, LLC	Not Applicable
John	Keagan	PJM Interconnection, LLC	Not Applicable
Lai	Erin	PJM Interconnection, LLC	Not Applicable
Langbein	Pete	PJM Interconnection, LLC	Not Applicable
Lu	Chen	PJM Interconnection, LLC	Not Applicable
Lynch	Jessica	PJM Interconnection, LLC	Not Applicable
Lynch	Jessica	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
Moretti	Andrea	PJM Interconnection, LLC	Not Applicable
Muhl	Nancy	PJM Interconnection, LLC	Not Applicable
O'Brien	Tom	PJM Interconnection, LLC	Not Applicable
O'Hara	Christ	PJM Interconnection, LLC	Not Applicable
O'Neill	Jack	PJM Interconnection, LLC	Not Applicable
Oskvig	Dean	PJM Interconnection, LLC	Not Applicable
Pincus	Steven	PJM Interconnection, LLC	Not Applicable
Robinson	Evelyn	PJM Interconnection, LLC	Not Applicable
Rogers	Sarah	PJM Interconnection, LLC	Not Applicable
Salmon	Lisa	PJM Interconnection, LLC	Not Applicable
Scherling	Eric	PJM Interconnection, LLC	Not Applicable
Souder	Michelle	PJM Interconnection, LLC	Not Applicable
Stemetzki	Mike	PJM Interconnection, LLC	Not Applicable
Swimm	Nora	PJM Interconnection, LLC	Not Applicable
Waweru	James	PJM Interconnection, LLC	Not Applicable
Yum	Phil	PJM Interconnection, LLC	Not Applicable