

As of February 14, 2022

Market Implementation Committee Special Session: Quadrennial Review Webex February 11, 2022 9:00 a.m. - 12:00 p.m. EPT

Issues Tracking Page

Administration (9:00-9:05)

1. Rebecca Carroll, PJM, provided a welcome and announcements.

Rebecca explained that to allow Brattle to present all analyses for Gross & Net Cone, VRR Curve and E&AS Offset at the same time, the decision was made to shorten today's Quadrennial Review Meeting. An additional meeting on March 25, 2022 has been scheduled at which Brattle will present, for the final time, all of their analyses prior to their report publication. In addition, the May 4, 2022 meeting has been cancelled and PJM will present their position at the May MIC. Based on stakeholder feedback, PJM will also look for additional meeting time in June and July.

Nikki Militello, PJM reviewed the Antitrust, Code of Conduct, and Public Meetings/ Media Participation Guidelines. The committee approved the draft minutes from December 8, 2021 Special Session.

Education (9:05-11:55)

- 2. Joe Bowring, Monitoring Analytics, provided comments on the reference technology options, gross CONE values, net CONE values, detailed assumptions for all calculations and a broader conversation of guadrennial review issues related to net CONE. (9:05 – 10:00)
- 3. David Cherney and Mark Repsher, PA Consulting, provided comments on the E&AS offset and VRR curve methodologies. (10:00 - 10:55)
- 4. Tanya Bodell, Energyzt, provided comments on the reference technology and VRR curve. (10:55 -11:50)

Future Agenda Items (11:50-12:00)

CC/CT & Battery CONE Reports E & AS Offset Report VRR Curve Reports

Action Items

- 1. PJM to review stakeholder calendar and potentially add additional special session in the summer months
- 2. Monitoring Analytics to share more granular VOM used in analysis
- 3. Monitoring Analytics to provide Installed cost/KW (inclusive of IDC)
- 4. Monitoring Analytics to provide updated slide deck after Brattle presentation
- PA Consulting to provide date on which material they reviewed to feed comments in presentation



- a. The source of underlying PJM data used in PA Consulting's analysis (slide 4 & 5) is posted in 2022/23 BRA page. Please refer to this link: <u>https://www.pjm.com/-/media/marketsops/rpm/rpm-auction-info/2022-2023/2022-2023-supporting-files-for-new-forward-lookingnet-eas-offset-methodology.ashx</u>
- 6. PA Consulting to provide links to ERCOT Reports
- 7. P3/Energyzt to confirm if slide 4 is estimated UCAP or ICAP

Future Meeting Dates and Materials			Materials Due to Secretary	Materials Published
Date	Time	Location		
March 25, 2022	9:00 am – 2:00 pm	TBD	March 17, 2022	March 22, 2022
June 1, 2022	1:00 pm – 4:00 pm	TBD	May 23, 2022	May 26, 2022
June 10, 2022	1:00 pm – 4:00 pm	ТВО	June 3, 2022	June 8, 2022



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Author: Nikki Militello

Antitrust:

You may not discuss any topics that violate, or that might appear to violate, the antitrust laws including but not limited to agreements between or among competitors regarding prices, bid and offer practices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that might unreasonably restrain competition. If any of these items are discussed the chair will re-direct the conversation. If the conversation still persists, parties will be asked to leave the meeting or the meeting will be adjourned.

Code of Conduct:

As a mandatory condition of attendance at today's meeting, attendees agree to adhere to the PJM Code of Conduct as detailed in PJM Manual M-34 section 4.5, including, but not limited to, participants' responsibilities and rules regarding the dissemination of meeting discussion and materials.

Public Meetings/Media Participation:

Unless otherwise noted, PJM stakeholder meetings are open to the public and to members of the media. Members of the media are asked to announce their attendance at all PJM stakeholder meetings at the beginning of the meeting or at the point they join a meeting already in progress. Members of the Media are reminded that speakers at PJM meetings cannot be quoted without explicit permission from the speaker. PJM Members are reminded that "detailed transcriptional meeting notes" and white board notes from "brainstorming sessions" shall not be disseminated. Stakeholders are also not allowed to create audio, video or online recordings of stakeholder meetings for internal and training purposes, and your participation at such meetings indicates your consent to the same.

Participant Identification in Webex:

When logging into the Webex desktop client, please enter your real first and last name as well as a valid email address. Be sure to select the "call me" option. PJM support staff continuously monitors Webex connections during stakeholder meetings. Anonymous users or those using false usernames or emails will be dropped from the teleconference.

On the Phone, Dial	Linking Teleconference Connection to Webex When logging in to the meeting, access Webex first and select the "call me" feature to receive a direct call to your phone. Using this feature will connect your name to your Webex presence.

Join a	1. Join meeting in the Webex desktop client
Meeting	2. Enter name (First and Last*) and corporate email
	3. Under "Select Audio Option" select "Call Me" option from the dropdown menu

*Note: Anonymous users or those using false usernames or emails will be dropped from the teleconference.

Attendance

Last Name	First Name	Company	Sector
Abdur- Rahman	Muhsin	Vistra Corporation	N/A
Anders	David	PJM Interconnection	N/A
Barker	Jason	Constellation Energy Generation, LLC	GO
Bastian	Jeff	PJM Interconnection	N/A
Beban	Madalyn	PJM Interconnection	N/A
Benchek	Jim	American Transmission Systems, Inc.	то
Bernabeu	Emanuel	PJM Interconnection	N/A



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Bodell	Tanya	EnergyZT	N/A
Bowring	Joe	Monitoring Analytics	N/A
Bresler	Stu	PJM Interconnection	N/A
Brodbeck	John	EDP Renewables	GO
Bruno	Patrick	PJM Interconnection	N/A
Bryson	Michael	PJM Interconnection	N/A
Canter	David	Appalachian Power Company (AEP Generation)	ТО
Carless	Travis	The Brattle Group	N/A
Carmean	Gregory	OPSI	N/A
Carroll	Rebecca	PJM Interconnection	N/A
Chang	Sean	Shell Energy North America	OS
Chen	Hong	PJM Interconnection	N/A
Cherney	David	PA Consulting	N/A
Chintapalli	Raj	BP Energy Company	OS
Christopher	Mahila	Public Utilities Commission of Ohio	
Colaresi	Chandra	CPower Corp.	NA
Corash	Rich	PSEG Energy Resources & Trade LLC	OS
Dailey	Mike	Northern Virginia Electric Cooperative	ED
D'Antonio	Phil	PJM Interconnection	N/A
Davis	Jim	Dominion Energy Generation Marketing, Inc.	GO
DeLosa	Joe	NJ Board of Public Utilities	N/A
Dillon	Matt	UGI Energy Services, LLC	OS
Dolan	James	PJM Interconnection	N/A
Dorko	Keri	Monitoring Analytics	N/A
Downs	Jere	PJM Interconnection	N/A
Drom	Rick	Affirmed Energy LLC	OS
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	то
Fabiano	Janell	PJM Interconnection	N/A
Fan	Zhenyu	PJM Interconnection	N/A
Farhat	Michelle	PJM Interconnection	N/A
Fee	George	Appalachian Power Company	то
Filomena	Guy	Customized Energy Solutions	N/A
Fink	Sari	American Wind Energy Association	N/A
Fitch	Neal	NRG Power Marketing, LLC	GO
Fitzpatrick	Brian	PJM Interconnection	N/A



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Foladare	Ken	Geenex Solar LLC	OS
Ford	Adrien	ODEC	ED
Fuess	Christian	White Pine Energy Consulting	N/A
Gates	Terry	Appalachian Power Company	TO
Gautam	Suman	PA Consulting	NA
Good	Megan	Pennsylvania Public Utility Commission	
Graf	Walter	PJM Interconnection	N/A
Graham	Sophie	Adapt2 Solutions	N/A
Guntle	Vince	American PowerNet Management, L.P.	EUC
Hagerty	Mike	The Brattle Group	N/A
Hanser	Erik	Michigan Public Service Commission	N/A
Hauske	Tom	PJM Interconnection	N/A
Heinle	Frederick	Office of the Peoples Counsel for DC	EUC
Helm	Gary	PJM Interconnection	N/A
Herel	Suzanne	PJM Interconnection	N/A
Hoatson	Thomas	West Deptford Energy, LLC	GO
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	GO
Horning	Lynn	Customized Energy Solutions	N/A
Horstmann	John	Dayton Power & Light Company (The)	то
Hull	Gerit	American Municipal Power	ED
Hyzinski	Tom	GT Power Group	N/A
ller	Art	Indiana Office of Utility Consumer Counselor	EUC
Janicki	Diane	Boston Energy Trading and Marketing LLC	OS
Jardot	Gina	NRG Curtailment Solutions, Inc.	OS
Johnson	Carl	Customized Energy Solutions	N/A
Johnston	Dave	Indiana Utility Regulatory Commission	N/A
Josyula	Siva	Monitoring Analytics	N/A
Kalaskar	Rahul	AES Ohio Generation, LLC	GO
Kayne	Samuel	DE PSC	N/A
Keech	Adam	PJM Interconnection	N/A
Keegan	Jack	PJM Interconnection	N/A
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP	OS
Kent	Janessa	Duquesne Light Company	TO
Knotts	Pam	DE PSC	N/A
Kogut	George	NYPA	OS



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Ladin	Sarah		N/A
Lai	Erin	PJM Interconnection	N/A
LaRocque	Matt	PJM Interconnection	N/A
Levitt	Andrew	PJM Interconnection	N/A
Lu	Chen	PJM Interconnection	N/A
Mabry	David	McNees Wallace & Nurick LLC	N/A
Markiewicz	Cindy	American Transmission Systems, Inc.	TO
Marzewski	Skyler	PJM Interconnection	N/A
Mascarenhas	Sandeep	Brookfield Renewable Energy Marketing US LLC	OS
Matheson	Eric	N/A	N/A
McClelland	Maura	Public Utilities Commission of Ohio	N/A
McNeil	Justin	Office of the Attorney General - Kentucky	EUC
Midgley	Sharon	Exelon Business Services Company, LLC	TO
Militello	Nikki	PJM Interconnection	N/A
Mooney	Jeff	American Transmission Systems, Inc.	TO
Моуе	Bob	Tyr Energy, LLC	OS
Newell	Sam	The Brattle Group	N/A
Nix	Emma	Jersey Green Energy, LLC	OS
Okenfuss	James	Savion, LLC	N/A
Ondayko	Brock	AEP Energy Partners, Inc.	ТО
Pakela	Gregory	DTE Energy Trading, Inc.	OS
Pasteris	Ray	Monitoring Analytics	N/A
Patel	Anjali	Office of the People's Counsel for DC	EUC
Peacey	Denelle	TransAlta Energy Marketing (U.S.) Inc.	OS
Perera	Asanga	PJM Interconnection	N/A
Piehler	John	American Efficient, Inc.	N/A
Pilong	Melissa	PJM Interconnection	N/A
Poulos	Greg	OPSI	N/A
Procuniar	Jason	Buckeye Power, Inc.	ED
Pungaliya	Rajat	Pine Gate Mid-Atlantic, LLC	OS
Repsher	Mark	PA Consulting	N/A
Roberts	Casey	Sierra Club	N/A
Robinson	Becky	Dynegy Marketing and Trade, LLC	GO
Rodriguez	Tomas	OPSI	N/A
Rogers	Aaron	East Kentucky Power Cooperative, Inc.	ТО



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Rohrbach	John	Wabash Valley Power Association, Inc.	ED
Salaneck	Alexandra	Monitoring Analytics	N/A
Sasser	Jonathan	Customized Energy Solutions	N/A
Scarpignato	David	Calpine Energy Services, L.P.	GO
Schmitt	David	NJ Board of Public Utilities	N/A
Schreim	Morris	MD PSC	N/A
Schuyler	Ken	PJM Interconnection	N/A
Sotkiewicz	Paul	E-Cubed Policy Associates	N/A
Spees	Kathleen	The Brattle Group	N/A
Spencer	Mark	LS Power	N/A
Squibb	Bill	Ohio Valley Electric Corporation	TO
Stern	Alexander	Public Service Electric & Gas Company	TO
Stines	Zachary	Borrego Solar Systems, Inc.	OS
Sussler	Philip	Maryland Public Service Commission	N/A
Svenson	Heather	Public Service Electric & Gas Company	TO
Sweeney	Rory	GT Power Group, LLC	N/A
Tacka	Natalie	PJM Interconnection	N/A
Thomas	Glen	GT Power Group	NA
Thompson	Andrew	The Brattle Group	N/A
Walcavich	Colin	National Grid Renewables, LLC	N/A
Whitehead	Jeffrey	GT Power Group	N/A
Willey	Amy	DE PSC	N/A
Wilson	James	Wilson Energy Economics	N/A
Wisersky	Megan	Madison Gas & Electric Co.	N/A
Yoder	Michael	RTO Insider	N/A

Provide feedback on the progress of this group: *Facilitator Feedback Form* Visit *learn.pjm.com*, an easy-to-understand resource about the power industry and PJM's role.