



As of December 14, 2021

Market Implementation Committee Special Session: Quadrennial Review Webex
December 8, 2021
9:00 a.m. – 4:00 p.m. EPT

Issues Tracking Page

Administration (9:00-9:05)

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

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

Education (9:05-3:55)

2. Sam Newell, Mike Hagerty and Travis Carless presented preliminary results for the draft CONE results for each proposed reference technology. (9:05 – 12:05)

Lunch (12:05 – 12:55)

3. Kathleen Spees, Sam Newell, Andrew Thompson and Xander Bartone presented preliminary results for the VRR Curve analysis for each proposed reference technology. (12:55 – 3:55)

Future Agenda Items (3:55-4:00)

Review Near Final Results (Targeted for February) VRR Curve and CONE Reports (Targeted for May)

Action Items

- 1. Brattle to supply a more detailed breakdown of Gross Cone Estimates
- 2. Sargent & Lundy to share facility capacity factor by year & equipment degradation percentage used
- 3. Brattle to provide Variable O&M Costs for the Gas CT and Gas CC
- 4. ODEC & Calpine to provide Firm Gas Contract cost estimates to Brattle
- 5. Brattle to provide an additional line to Cost of Capital Recommendation for Regulating Utilities
- 6. Brattle to create a VRR Curve similar to the existing curve but just dropping from point B down vertically or otherwise stated, no "foot" after B
- 7. LS Power to send MRI Curve Analysis from ISO-NE to Brattle

Future Meeting Dates and Materials			Materials Due to Secretary	Materials Published
Date	Time	Location		
January 14, 2022	9:00 am – 12:00 pm	WebEx	January 6, 2022	January 11, 2022
February 11, 2022	9:00 am – 4:00 pm	WebEx	February 3, 2022	February 8, 2022





As of December 14, 2021

May 4, 2022	1:00 pm – 4:00 pm	TBD	May 5, 2022	May 10, 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	TBD	June 3, 2022	June 8, 2022





As of December 14, 2021

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 PJM meetings. PJM may 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



to Mute/Unmute

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 Meeting

- 1. Join meeting in the Webex desktop client
- 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
Anders	David	PJM Interconnection	N/A
Anderson	Jared	S&P Global Inc.	N/A
Baizman	Aaron	PJM Interconnection	N/A
Barker	Jason	Exelon Business Services	ТО
Bastian	Jeff	PJM Interconnection	N/A
Beban	Madalyn	PJM Interconnection	N/A
Benchek	Jim	American Transmission Systems, Inc.	TO





As of December 14, 2021

Bernabeu	Emanuel	PJM Interconnection	N/A
Bernstein	Matthew	PJM Interconnection	N/A
Boyle	Glen	PJM Interconnection	N/A
Bresler	Stu	PJM Interconnection	N/A
Brodbeck	John	EDP Renewables	GO
Bruno	Patrick	PJM Interconnection	N/A
Callen	Zachary	Illinois Commerce Commission	N/A
Campbell	Bruce	Enerwise Global Technologies, LLC	OS
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
Chmielewski	Brian	PJM Interconnection	N/A
Christopher	Mahila	Public Utilities Commission of Ohio	
Colaresi	Chandra	CPower Corp.	NA
Conklin	Tyler	Public Utility Commission of OH	NA
Croop	Danielle	PJM Interconnection	N/A
D'Alessandris	Lou	American Transmission Systems, Inc.	ТО
D'Antonio	Phil	PJM Interconnection	N/A
Daou	Patrick	Sargent & Lundy	N/A
Davis	Jim	Dominion Energy Generation Marketing, Inc.	GO
De LaMora	Luis	Strom Power, LLC	OS
DeLosa	Joe	NJ Board of Public Utilities	N/A
Dillon	Matt	UGI Energy Services, LLC	OS
Domian	Christin	Duquesne Light Company	ТО
Dorko	Keri	Monitoring Analytics	N/A
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	ТО
Dumitriu	Nick	PJM Interconnection	N/A
Elkins	Rachel	American Transmission Systems, Inc.	то
Fabiano	Janell	PJM Interconnection	N/A
Fan	Zhenyu	PJM Interconnection	N/A
Farhat	Michelle	PJM Interconnection	N/A
Filomena	Guy	Customized Energy Solutions	N/A
Fink	Sari	American Wind Energy Association	N/A
Fishback	Luke	Affirmed Energy LLC	os





As of December 14, 2021

Fitch	Neal	NRG Power Marketing, LLC	GO
Foladare	Ken	Geenex Solar LLC	OS
Ford	Adrien	ODEC	ED
Franks	Christine	PJM Interconnection	N/A
Gates	Terry	Appalachian Power Company	ТО
Gautam	Suman	PA Consulting	NA
Gilani	Rehan	Consolidated Edison Energy, Inc.	OS
Good	Megan	Pennsylvania Public Utility Commission	
Gorman	Brad	American Transmission Systems, Inc.	ТО
Graf	Walter	PJM Interconnection	N/A
Graham	Sophie	Adapt2 Solutions	N/A
Greiner	Gary	PSEG Energy Solutions, LLC	os
Hagaman	Derek	Gable Associates	NA
Hagerty	Mike	The Brattle Group	N/A
Hastings	David	DHAST Co.	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
Horger	Tim	PJM Interconnection	N/A
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
Josyula	Siva	Monitoring Analytics	N/A
Junge	Josh	Sargent & Lundy	N/A
Kazerooni	Hamid	PJM Interconnection	N/A
Keech	Adam	PJM Interconnection	N/A
Keegan	Jack	PJM Interconnection	N/A





As of December 14, 2021

Kerecman	Joseph	Calpine Energy Services, LP	GO
Knotts	Pam	DE PSC	N/A
Kogut	George	NYPA	OS
Kothakapu	Rakesh	IL Municipal Electric Agency	ED
Kozhuharov	Dimitar	DE State Commission	N/A
Ladin	Sarah		N/A
Lai	Erin	PJM Interconnection	N/A
LaRocque	Matt	PJM Interconnection	N/A
Levitt	Andrew	PJM Interconnection	N/A
libbos	robin	Monongahela Power Company d/b/a Allegheny Power	ТО
Litchfield	Matt	CPV Power Holdings, LP	GO
Lu	Chen	PJM Interconnection	N/A
Mabry	David	McNees Wallace & Nurick LLC	N/A
Mariam	Yohannes	Office of the People's Counsel for the District of Columbia	EUC
Marzewski	Skyler	PJM Interconnection	N/A
McCormick	Katharine	Illinois Commerce Commission	N/A
Midgley	Sharon	Exelon Business Services Company, LLC	ТО
Militello	Nikki	PJM Interconnection	N/A
Newell	Sam	The Brattle Group	N/A
Nix	Emma	Jersey Green Energy, LLC	OS
Ondayko	Brock	AEP Energy Partners, Inc.	ТО
Pakela	Gregory	DTE Energy Trading, Inc.	OS
Patel	Anjali	Office of the People's Counsel for DC	EUC
Pelletier	Eveline	H.Q. Energy Services (U.S.), Inc.	OS
Peoples	John	Duquesne Light Company	ТО
Perera	Asanga	PJM Interconnection	N/A
Phillips	Jennifer	C.P. Crane, LLC	GO
Pilong	Melissa	PJM Interconnection	N/A
Poulos	Greg	OPSI	N/A
Price	Ruth Ann	DE PSC	N/A
Pungaliya	Rajat	Pine Gate Mid-Atlantic, LLC	OS
Rahimi	Farrokh	Open Access Technology International, Inc.	N/A
Roberts	Casey	Sierra Club	N/A
Robinson	Becky	Dynegy Marketing and Trade, LLC	GO
Rodriguez	Tomas	OPSI	N/A





As of December 14, 2021

Rutigliano	Tom	NRDC	N/A
Scarpignato	David	Calpine Energy Services, L.P.	GO
Schisler	Ken	CPower Corp.	NA
Schmitt	David	NJ Board of Public Utilities	N/A
Schreim	Morris	MD PSC	N/A
Schuyler	Ken	PJM Interconnection	N/A
Servera	Max	Uncia Energy LP – Series B	OS
Shanker	Roy	HQ Energy Services	OS
Sillin	John	FERC	NA
Spees	Kathleen	The Brattle Group	N/A
Spencer	Mark	LS Power	N/A
Sturgeon	John	Duke Energy Progress, LLC	OS
Svenson	Heather	Public Service Electric & Gas Company	ТО
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
Tribulski	Jennifer	PJM Interconnection	N/A
Vargo	Daniel	Allegheny Electric Cooperative	ED
Walter	Laura	PJM Interconnection	N/A
Whitehead	Jeffrey	GT Power Group	N/A
Willey	Amy	DE PSC	N/A
Wilson	James	Wilson Energy Economics	N/A

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