



As of November 30, 2021

Operating Committee WebEx Only December 2, 2021 9:00 a.m. – 2:00 p.m. EST

Administration

- 1. Lauren Strella Wahba, PJM, provided announcements; reviewed the Antitrust, Code of Conduct, Public Meetings/Media Participation, and the WebEx Participant Identification Requirement.
 - a. Reviewed and approved draft minutes from the November 4th OC meeting. The Committee approved the draft minutes from the November 7, 2021 Operating Committee meeting with 0 objections and 0 abstentions.
 - b. Darlene Phillips, PJM, provided an announcement on the Reliability Products and Service Assessment initiative.
 - c. Reviewed the OC work plan.
 - d. Reviewed the proposed 2022 OC work plan.

Review of Operations

2. PJM COVID-19 Update

Paul McGlynn, PJM, provided an update on PJM's operations plan in response to COVID-19. https://pjm.com/committees-and-groups/pandemic-coordination.aspx

3. Review of Operating Metrics

Stephanie Monzon, PJM, reviewed the November 2021 PJM operating metrics slides. Metrics will include PJM's load forecast error, BAAL performance, and transmission / generation outage statistics.

Endorsements/Approvals

First Reading

4. Manual 38: Operations Planning

Liem Hoang, PJM, reviewed Manual 38 changes as a part of the periodic review.

The Operating Committee will be asked to endorse these changes at its next meeting.

5. Dynamic Rating Issue Charge and Problem Statement

Chris Callaghan, PJM, presented a first read of an Issue Charge and Problem Statement to add guidance and requirement language in Manual 01, Manual 03 and Manual 03A related to the implementation of a dynamic rating system in PJM. Following the discussion, PJM will review the PS/IC and bring it back for a second first read at the January Operating Committee.





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6. Renewable Dispatchability Issue Charge and Problem Statement

Darrell Frogg, PJM, will present a first read of an Issue Charge and Problem Statement that will address the improvement of the dispatching process of renewable resources and increase forward-looking visibility. Following the discussion, PJM will review the PS/IC and bring it back for a second first read at the January Operating Committee.

Additional Items

7. Fuel Security Update

Natalie Tacka, PJM, provided an update on the Fuel Security initiative.

8. Fuel Requirements for Black Start Resources Update

Dan Bennett, PJM, provided a status update on FRBSR hiatus work.

Issue Tracking: Fuel Requirements for Black Start Resources

9. System Operations Subcommittee (SOS) Report

Becky Carroll, PJM, provided a summary of the most recent SOS meeting.

10. Primary Frequency Response Update

Ilyana Dropkin, PJM, provided an update on PJM primary frequency response performance.

11. Regulation Performance Update

Ilyana Dropkin, PJM, provided an update on PJM regulation market performance.

12. Synchronized Reserve Performance Update

Dave Kimmel, PJM, provided a review of recent synchronized reserve performance.

13. Unit Specific Parameters 2022/2023 DY Update

Tom Hauske, PJM, provided an update on Unit Specific Parameters for the 2022/2023 DY.

14. Weekly Fuel Inventory Update

Ray Lee, PJM, reviewed a new weekly data posting of RTO aggregated coal and oil inventory levels. The data will be updated weekly on the Operating Committee web page under the Weekly Fuel Inventory Data section.

15. Reliability Compliance Update

Becky Davis, PJM, provided an update on NERC, SERC, RF, and NAESB standards, and other pertinent regulatory and compliance information, and solicited feedback from the members on Reliability Compliance efforts.

16. Update on Illinois Clean Energy Jobs Act

Stephen Bennett and Chris Pilong, PJM, provided an update on the Illinois Clean Energy Jobs Act.





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17. Winter Transmission Outages Review

Simon Tam, PJM, provided an overview of significant transmission outages for this winter season. It was requested for Simon to return with an update on the transmission outages at a future Operating Committee Meeting.

Working Items

Informational Only Postings

Attendance

Last Name	First Name	Company	Sector
Phillips (Chair)	Darlene	PJM Interconnection	Not Applicable
Strella Wahba (Secretary)	Lauren	PJM Interconnection	Not Applicable
Aguilar	Fabiano	Strom Power, LLC	Other Supplier
Anastasio	Elizabeth	PJM Interconnection	Not Applicable
Anders	David	PJM Interconnection	Not Applicable
Baizman	Aaron	PJM Interconnection	Not Applicable
Baker	Jeff	Duke Energy Ohio, Inc.	Transmission Owner
Barmer	Mike	Dominion Virginia Power	Transmission Owner
Benchek	Jim	American Transmission Systems, Inc.	Transmission Owner
Bennett	Dan	PJM Interconnection	Not Applicable
Bennett	Stephen	PJM Interconnection	Not Applicable
Bernabeu	Emanuel	PJM Interconnection	Not Applicable
Berton	Tyler	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Bielak	Donnie	PJM Interconnection	Not Applicable
Bleiweis	Bruce	DC Energy LLC	Other Supplier
Boling	Andrew	Saracen Energy East LP	Other Supplier
Boyd	Chris	Dynegy Marketing & Trade LLC	Generation Owner
Boyle	Glen	PJM Interconnection	Not Applicable
Brady	George	Ohio Valley Electric Corp	Transmission Owner
Braerman	Ken	BGE	None
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
Broussard	Emilie	PJM Interconnection	Not Applicable
Bryson	Mike	PJM Interconnection	Not Applicable
Callaghan	Christopher	PJM Interconnection	Not Applicable
Callen	Zachary	Illinois Commerce Commission	None
Capra	Carlo	ITC Interconnection LLC	Transmission Owner
Carmean	Gregory	Organization of PJM States, Inc. (OPSI)	Not Applicable





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Carroll	Rebecca	PJM Interconnection	Not Applicable	
Chang	Sean	Shell Energy North America (US), Other Supplier L.P.		
Chen	Hong	PJM Interconnection	Not Applicable	
Christopher	Mahila	Public Utilities Commission of Ohio	None	
Chu	George	PJM Interconnection Not Applicat		
Croop	Danielle	PJM Interconnection	Not Applicable	
Dajewski	Paul	PJM Interconnection	Not Applicable	
D'Alessandris	Lou	FirstEnergy Corporation	Transmission Owner	
D'Antonio	Philip	PJM Interconnection	Not Applicable	
Davis	Elizabeth	PJM Interconnection	Not Applicable	
De La Mora	Lou	Strom Power LLC	Other Supplier	
Derin	Bilge	PJM Interconnection	Not Applicable	
Dolan	James	PJM Interconnection	Not Applicable	
Downs	Gere	PJM Interconnection	Not Applicable	
Dropkin	llyana	PJM Interconnection	Not Applicable	
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner	
Dumitriu	Nick	PJM Interconnection	Not Applicable	
Fabiano	Janell	PJM Interconnection	Not Applicable	
Fan	Zhenyu	PJM Interconnection	Not Applicable	
Farhat	Michelle	PJM Interconnection	Not Applicable	
Fazio	Danielle	Noble Americas Gas & Power Corp.	Other Supplier	
Fereshetian	Damon	PJM Interconnection	Not Applicable	
Filomena	Guy	Customized Energy Solutions, Ltd.	None	
Fitzpatrick	Brian	PJM Interconnection	Not Applicable	
Foladare	Kenneth	Geenex Solar LLC	Generation Owner	
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor	
Foster Cronin	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner	
Frogg	Darrell	PJM Interconnection	Not Applicable	
Gates	Terry	Appalachian Power Company (AEP Generation)	Transmission Owner	
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier	
Grear	Mark	Exelon Generation Co., LLC	Generation Owner	
Greiner	Gary	PSEG Energy Resources & Trade LLC	Other Supplier	
Grimes	Jordan	Morningstar Commodity Data	None	
Guntle	Vince	American PowerNet Management, End Use Custom L.P.		
Hammack	Matthew	PPL Electric Utilities Corporation	Transmission Owner	
Haque	Asim	PJM Interconnection	Not Applicable	





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Hauske	Tom	PJM Interconnection	Not Applicable	
Hepplewhite	Peter	Wrigley Capital LLC Other Supplier		
Hislop	Dave	PJM Interconnection Not Applicable		
Hoang	Liem	PJM Interconnection Not Applicable		
Hoatson	Tom	West Deptford Energy, LLC Generation Owne		
Hohenshilt	Jennifer	Talen Energy Marketing, LLC Generation Owner		
Horning	Lynn	Customized Energy Solutions, Ltd.	None	
Horstmann	John	Dayton Power & Light Company	Transmission Owner	
Hsia	Eric	PJM Interconnection	Not Applicable	
Hull	Gerit	American Municipal Power, Inc.	Electric Distributor	
Hurwich	Mark	Elliott Bay Energy Trading, LLC	Other Supplier	
Hyatt	Earl	Monitoring Analytics	None	
Hyzinski	Tom	GT Power Group, LLC	None	
ller	Art	Indiana Office of Utility Consumer Counsel	End Use Customer	
James	Solon	DC Energy	Other Supplier	
Janicki	Diane	Boston Energy Trading & Marketing, LLC	Other Supplier	
Jardot	Gina	NRG Power Marketing, LLC	Generation Owner	
Jeong	Hyo	DC Energy	Other Supplier	
Johnson	Carl	Customized Energy Solutions, Ltd.	None	
Johnston	Dave	Indiana Utility Regulatory Commission	None	
Kazerooni	Hamid	PJM Interconnection	Not Applicable	
Keegan	Jack	PJM Interconnection	Not Applicable	
Kelley	Ryan	Duke Energy Ohio, Inc	Transmission Owner	
Kelly	Stephen	Brookfield Renewable Trading and Marketing L.P.	Other Supplier	
Kenney	Susan	PJM Interconnection	Not Applicable	
Kent	Janessa	Duquesne Light Company	Transmission Owner	
Kilgallen	Kevin	Avangrid Renewables, LLC	Generation Owner	
Kimmel	David	PJM Interconnection	Not Applicable	
Kogut	George	New York Power Authority	Other Supplier	
Krawczyk	Leslie	ReliabilityFirst	None	
Kuo	Dave	DC Energy LLC	Other Supplier	
Lai	Erin	PJM Interconnection	Not Applicable	
Lake	David	American Transmission Systems, Inc.	Transmission Owner	
LaRocque	Matt	PJM Interconnection	Not Applicable	
Lee	Ray	PJM Interconnection	Not Applicable	
Lowe	Connie	Dominion Virginia Power	None	
Mabry	David	McNees Wallace & Nurick LLC	None	
Mali	Gizella	PJM Interconnection	Not Applicable	





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Mathew	Lagy	PJM Interconnection	Not Applicable	
Matuszak	Alex	UGI Energy Services, LLC	Other Supplier	
McGlynn	Paul	PJM Interconnection	Not Applicable	
McGuire	Bobby	Dominion Virginia Power	Transmission Owner	
Midgley	Sharon	Exelon Business Services Company, LC	Transmission Owner	
Militello	Nikki	PJM Interconnection	Not Applicable	
Monzon	Stephanie	PJM Interconnection	Not Applicable	
Neubrander	Kerry	DC Energy Mid-Atlantic, LLC	Other Supplier	
Nice	Ryan	PJM Interconnection	Not Applicable	
Nix	Emma	Jersey Green Energy LLC	Other Supplier	
Okenfuss	James	Savion, LLC	None	
Olaleye	Michael	PJM Interconnection	Not Applicable	
Ondayko	Brock	AEP Energy Partners, Inc. (AEP Gen Resources)	Transmission Owner	
Pakela	Gregory	DTE Energy Trading, Inc.	Other Supplier	
Peebles	Andy	Saracen Energy East LP	Other Supplier	
Pilong	Christopher	PJM Interconnection	Not Applicable	
Pilong	Melissa	PJM Interconnection	Not Applicable	
Pincus	Steve	PJM Interconnection	Not Applicable	
Poulos	Greg	CAPS	None	
Price	Mark	DC Energy Mid-Atlantic, LLC	None	
Procuniar	Jason	Buckeye Power, Inc.	Electric Distributor	
Rainey	John	Northern Virginia Electric Cooperative Electric Dist		
Robinson	Becky	Vistra Energy Marketing, L.P.	Other Supplier	
Rocha-Garrido	Patricio	PJM Interconnection	Not Applicable	
Rodriguez	Tomas	OPSI	None	
Rohrbach	John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor	
Rosenthal	Peter	Energy Aspects	Other Supplier	
Sasser	Jonathan	Customized Energy Solutions, Ltd.	None	
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner	
Scheirer	Alex	PJM Interconnection	Not Applicable	
Schroeder	Connie	Dominion Virginia Power	Transmission Owner	
Schroeder	Connie	Dominion Virginia Power	None	
Schweizer	David	PJM Interconnection	Not Applicable	
Sells	Scott	East Kentucky Power Cooperative, Inc	Transmission Owner	
Shields	Jeffery	PJM Interconnection	Not Applicable	
Silveira	Fabiano	Strom Power LLC	Other Supplier	
Sock	Bryan	PSEG Energy Resources & Trade Other Supplier		





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Souder	Michelle	PJM Interconnection	Not Applicable	
Squibb	Bill	Ohio Valley Electric Corp	Transmission Owner	
Stack	James	Duquesne Light Company	Transmission Owner	
Stanisz	Mark	PJM Interconnection	Not Applicable	
Stefanowicz	Vince	PJM Interconnection	Not Applicable	
Stemetzki	Mike	PJM Interconnection	Not Applicable	
Stern	Alex	Public Service Electric & Gas Company	Transmission Owner	
Stone	Andy	PJM Interconnection	Not Applicable	
Sturgeon	John	Duke Energy Business Services LLC	Transmission Owner	
Svenson	Heather	Public Service Electric & Gas Company	Transmission Owner	
Swalwell	Brad	Tangent Energy Solutions, Inc.	Other Supplier	
Sweeney	Rory	GT Power Group	None	
Tacka	Natalie	PJM Interconnection	Not Applicable	
Tam	Simon	PJM Interconnection	Not Applicable	
Terranova	Christopher	PJM Interconnection	Not Applicable	
Trost	Jason	Macquarie Energy LLC	Other Supplier	
Ward	Mike	PJM Interconnection	Not Applicable	
Whited	Mike	DC Energy	None	
Whitehead	Jeff	GT Power Group	None	
Widom	Stuart	PJM Interconnection	Not Applicable	
Wolfe	Lauren	Cogentrix		
Wilder	Shane	PJM Interconnection	Not Applicable	
Yoder	Michael	RTO Insider	None	
Zheng	Yu	Saracen Energy East LP	Other Supplier	
Zimbardo	Paul	Merrill Lynch Commodities	Other Supplier	

OC Subcommittee/ Task Force Informational Section

System Operations Subcommittee (SOS): <u>SOS Website</u>
Data Management Subcommittee (DMS): <u>DMS Website</u>

DER & Inverter-Based Resources Subcommittee (DIRS): DIRS Website

Fuel Requirements for Black Start Resources: Fuel Reqt. for Black Start Resources Issue Tracker

Synchronous Reserve Deployment Task Force: <u>SRDTF Website</u> IROL – CIP Cost Recovery: <u>IROL – CIP Cost Recovery Issue Tracker</u>





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Future Meeting Dates and Materials		Materials Due to Secretary	Materials Published	
Date	Time	Location	5 p.m.	4 p.m.
January 13, 2022	9 a.m.	WebEx	January 3, 2022	January 6, 2022
February 10, 2022	9 a.m.	WebEx	January 31, 2022	February 3, 2022
March 10, 2022	9 a.m.	WebEx	February 28, 2022	March 3, 2022
April 14, 2022	9 a.m.	WebEx	April 4, 2022	April 7, 2022
May 12, 2022	9 a.m.	WebEx	May 2, 2022	May 5, 2022
June 9, 2022	9 a.m.	WebEx	May 30, 2022	June 2, 2022

Author: L. Strella Wahba

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.





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During a Meeting



To enter the question queue (does not work during a vote)



To be removed from the question queue



To signal for PJM support staff assistance

During an Acclamation Vote

Please log in to the voting application at **voting.pjm.com**, so that you can be registered as the active voter prior to the start of the meeting.







To signal for PJM support staff assistance

Asking A Question

- Dialing *1 enters you into the question queue; the three dial tones are an auditory indication that you have successfully been placed in the queue.
- Questions are taken during the meeting when natural breaks occur and are asked in the order they are received.

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. Call in to the operator-assisted number

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