

**Operating Committee**  
**WebEx Only**  
**February 10, 2022**  
**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 the draft minutes from the January 13<sup>th</sup> OC meeting. **The Committee approved the draft minutes from the January 13, 2021 Operating Committee meeting with 0 objections and 0 abstentions.**
  - b. Reviewed the OC work plan.
  - c. Browserless/API 2 Factor Authentication Public Key Infrastructure (PKI) Update  
Susan McGill, PJM, provided an update on the mandatory Browserless/API 2 Factor Authentication Public Key Infrastructure (PKI) implementation.
  - d. Weak Encryption Retirement  
Amanda Egan, PJM, provided an update on the retirement of Weak Encryption and its impact to the Voting Application.

## Review of Operations

2. Review of Operating Metrics  
Stephanie Schwarz, PJM, reviewed the January 2022 PJM operating metrics slides. Metrics included PJM's load forecast error, BAAL performance, and transmission / generation outage statistics.

## Endorsements/Approvals

3. Manual 40: Training and Certification Requirements  
Benjamin Miller, PJM, reviewed Manual 40 changes as a part of the periodic review.  
**The Operating Committee endorsed the changes to Manual 40 with 0 objections and 0 abstentions.**
4. TO/TOP Matrix Review  
Gizella Mali, PJM, reviewed Version 16 of the TO/TOP Matrix.  
**The Operating Committee approved the recommendation to the TOA-AC to approve Version 16 of the TO/TOP matrix.**

## First Reading

5. Manual 12: Balancing Operations  
Donnie Bielak, PJM, reviewed Manual 12 changes as a part of the periodic review.

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

6. Manual 13: Emergency Operations

Donnie Bielak, PJM, reviewed Manual 13 changes as a part of the periodic review.

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

7. Manual 37: Reliability Coordination

Donnie Bielak, PJM, reviewed Manual 37 changes as a part of the periodic review.

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

8. Dynamic Rating Issue

Chris Callaghan, PJM, provided a second first read of the Dynamic Rating Issue Charge and Problem Statement.

**The Operating Committee will be asked to approve the Issue Charge at its next meeting.**

## Additional Items

9. Managing Transmission Line Ratings Order No. 881 Compliance Filing (RM20-16-000)

Mark Stanisz, PJM, and David Hislop, PJM, provided an overview of [Order No. 881](#) and the Commission's new regulations and proposed *pro forma* Tariff attachment relating to managing transmission line ratings. PJM intends to provide additional updates and solicit stakeholder input at future Operating Committee meetings as it prepares its compliance filing, which is due July 12, 2022.

10. Illinois CEJA Reliability Guidance Update

Chris Pilog, PJM, provided an update on the Illinois CEJA Reliability Guidance.

11. System Operations Subcommittee (SOS) Report

Donnie Bielak, PJM, will provide a summary of the most recent SOS meeting.

**This item was moved to the Informational Only Postings section.**

12. Unit Specific Parameters 2022/2023 DY Update

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

**This item was moved to the Informational Only Postings section.**

13. Reliability Compliance Update

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

**This item was moved to the Informational Only Postings section.**

14. Coal Combustion Residuals EPA Rule Update

Gary Helm, PJM, provided an informational update about the [Environmental Protection Agency's rule on disposal of coal combustion residuals \(CCRs\)](#) and PJM's intent to file comments by February 23, 2022 in

the EPA dockets EPA-HQ-OLEM-2021-0587; (EPA-HQ-OLEM-2021-0590; and EPA-HQ-OLEM-2021-0595.

LUNCH (11:30 – 11:45)

## Working Items

### 15. IROL-CIP Cost Recovery

Darlene Phillips, PJM, facilitated a discussion to review and identify additional interests on the IROL-CIP Cost Recovery matrix as part of the Consensus Based Issue Resolution process.

[Issue Tracking: IROL-CIP Cost Recovery](#)

### 16. Reliability Products and Services Assessment

Chris Pilog, PJM, led a discussion to evaluate the essential reliability services and determine which services should be sent to the RASTF for potential inclusion as a capacity product attribute.

Additionally, the Operating Committee was asked to evaluate the remaining reliability services to identify any gaps that may need to be addressed in other Stakeholder venues.

## Informational Only Postings

### 11. System Operations Subcommittee (SOS) Report

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### 12. Unit Specific Parameters 2022/2023 DY Update

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

### 13. Reliability Compliance Update

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

## Attendance

Last Name	First Name	Company	Sector
Phillips (Chair)	Darlene	PJM Interconnection	Not Applicable
Strella Wahba (Secretary)	Lauren	PJM Interconnection	Not Applicable
Abramowitz	Jeremy	PJM Interconnection	Not Applicable
Aguilar	Fabiano	Strom Power, LLC	Other Supplier
Anastasio	Elizabeth	PJM Interconnection	Not Applicable
Anders	Dave	PJM Interconnection	Not Applicable
Bailey	Paul		
Baizman	Aaron	PJM Interconnection	Not Applicable

Baker	Jeff	Duke Energy Ohio, Inc.	Transmission Owner
Barker	Jason	Exelon Business Services Company, LLC	Transmission Owner
Barmer	Mike	Dominion Virginia Power	None
Beblo	Olivia		
Benchek	Jim	American Transmission Systems, Inc.	Transmission Owner
Bennett	Dan	PJM Interconnection	Not Applicable
Bennett	Stephen	PJM Interconnection	Not Applicable
Berton	Tyler	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Bielak	Donnie	PJM Interconnection	Not Applicable
Blair	Tom	Monitoring Analytics, LLC	None
Bleiweis	Bruce	DC Energy LLC	Other Supplier
Bloodworth	Michelle	ACCCE	None
Bowring	Joe	Monitoring Analytics, LLC	None
Boyd	Chris		
Boyle	Glen	PJM Interconnection	Not Applicable
Braerman	Ken	BGE	None
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
Bruno	Patrick	PJM Interconnection	Not Applicable
Bryson	Mike	PJM Interconnection	Not Applicable
Callaghan	Christopher	PJM Interconnection	Not Applicable
Capra	Carlo	ITC Interconnection LLC	Transmission Owner
Carmean	Greg	OPSI	None
Chen	Hong	PJM Interconnection	Not Applicable
Chmielewski	Brian	PJM Interconnection	Not Applicable
Christopher	Mahila	Public Utilities Commission of Ohio	None
Chu	George	PJM Interconnection	Not Applicable
Circelli	Roseanne	Public Service Electric & Gas Company	Transmission Owner
Corash	Rich	PSEG Energy Resources & Trade LLC	Other Supplier
Dadourian	John	Monitoring Analytics, LLC	None
Dajewski	Paul	PJM Interconnection	Not Applicable
D'Antonio	Philip	PJM Interconnection	Not Applicable
Daugherty	Danielle		
Davis	Elizabeth	PJM Interconnection	Not Applicable
Davis	Jim	Dominion Energy Generation Marketing, Inc.	Generation Owner
De La Mora	Luis	Strom Power, LLC	Other Supplier
DeGiusto	Vince	UGI Development Company	Generation Owner
Derin	Bilge	PJM Interconnection	Not Applicable

Dillon	Matt	UGI Development Company	Generation Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Dorko	Keri	Monitoring Analytics, LLC	None
Downs	Jere	PJM Interconnection	Not Applicable
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Dumitriu	Nick	PJM Interconnection	Not Applicable
Egan	Amanda	PJM Interconnection	Not Applicable
Eldredge	Peter	PJM Interconnection	Not Applicable
Esterly	Theresa	PJM Interconnection	Not Applicable
Fabiano	Janell	PJM Interconnection	Not Applicable
Fan	Zhenyu	PJM Interconnection	Not Applicable
Farhat	Michelle	PJM Interconnection	Not Applicable
Fereshetian	Damon	PJM Interconnection	Not Applicable
Fernandez	Ray	PJM Interconnection	Not Applicable
Filomena	Guy	Customized Energy Solutions, Ltd.	None
Fink	Regan	Pine Gate Mid-Atlantic, LLC	Other Supplier
Fitch	Neal	NRG Power Marketing LLC	Generation Owner
Fitzpatrick	Brian	PJM Interconnection	Not Applicable
Foladare	Kenneth	Geenex Solar LLC	Generation Owner
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Foster	Tom	PJM Interconnection	Not Applicable
Foster Cronin	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner
Franks	Christine	PJM Interconnection	Not Applicable
Frogg	Darrell	PJM Interconnection	Not Applicable
Gates	Terry	Appalachian Power Company (AEP Generation)	Transmission Owner
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Grimes	Jordan	Morningstar Commodity Data	None
Guignet	Douglas	PJM Interconnection	Not Applicable
Guntle	Vince	American PowerNet Management	End-Use Customer
Hammack	Matthew	PPL Electric Utilities Corporation	Transmission Owner
Haque	Asim	PJM Interconnection	Not Applicable
Hastings	David	Market Interconnection Consulting Services (MICS)	None
Hatch	Kevin	PJM Interconnection	Not Applicable
Hauske	Tom	PJM Interconnection	Not Applicable
Heisey	Brad	Wolf Hills Energy, LLC	Generation Owner
Heitmeyer	Chad	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Helm	Gary	PJM Interconnection	Not Applicable

Hepplewhite	Peter	Wrigley Capital LLC	Other Supplier
Hillinger	Mark	NRG Power Marketing LLC	Generation Owner
Hislop	Dave	PJM Interconnection	Not Applicable
Holland	Risa	PJM Interconnection	Not Applicable
Horning	Lynn	Customized Energy Solutions, Ltd.	None
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
Idzior	John	ReliabilityFirst	None
Iler	Art	Indiana Office of Utility Consumer Counsel	End-Use Customer
Janicki	Diane	Boston Energy Trading & Marketing, LLC	Other Supplier
Jardot	Gina	NRG Power Marketing, LLC	Generation Owner
Jarrah	Danny		
Jett	Bill	Duke Energy Business Services LLC	Transmission Owner
Johnson	Carl	Customized Energy Solutions, Ltd.	None
Johnston	Dave	Indiana Utility Regulatory Commission	None
Keenan	Matthew	Jpower USA	None
Kelly	Stephen	Brookfield Energy Marketing LP	Other Supplier
Kenney	Susan	PJM Interconnection	Not Applicable
Kent	Janessa	Duquesne Light Company	Transmission Owner
Kimmel	David	PJM Interconnection	Not Applicable
Kogut	George	New York Power Authority	Other Supplier
Kothakapu	Rakesh	Fellon McCord	None
Lake	David	FirstEnergy Corporation	Transmission Owner
LaRocque	Matt	PJM Interconnection	Not Applicable
Li	Kanning	PJM Interconnection	Not Applicable
Libbos	Robin	FirstEnergy Corporation	Transmission Owner
Lynn	Brian	PJM Interconnection	Not Applicable
Mabry	David	McNees Wallace & Nurick LLC	None
Mali	Gizella	PJM Interconnection	Not Applicable
Markiewicz	Cindy	FirstEnergy Corporation	Transmission Owner
Mathew	Lagy	PJM Interconnection	Not Applicable
Matuszak	Alex	UGI Energy Services, LLC	Other Supplier
McGill	Susan	PJM Interconnection	Not Applicable
McGlynn	Paul	PJM Interconnection	Not Applicable
McLaverty	Megan	PJM Interconnection	Not Applicable

Midgley	Sharon	Exelon Business Services Company, LC	Transmission Owner
Militello	Nikki	PJM Interconnection	Not Applicable
Miller	Benjamin	PJM Interconnection	Not Applicable
Monzon	Stephanie	PJM Interconnection	Not Applicable
Mulhern	Joe	PJM Interconnection	Not Applicable
Nice	Ryan	PJM Interconnection	Not Applicable
Nix	Emma	Gable and Associates	None
Olaleye	Michael	PJM Interconnection	Not Applicable
Ondayko	Brock	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Orphanides	Lindsay		
Pakela	Gregory	DTE Energy Trading, Inc.	Other Supplier
Patel	Shodhan	Exelon Generation Co., LLC	None
Pearson	Hilary		
Peebles	Andy	Saracen Energy East LP	Other Supplier
Philips	Marjorie	Direct Energy Business Marketing, LLC	Other Supplier
Pilong	Christopher	PJM Interconnection	Not Applicable
Pincus	Steve	PJM Interconnection	Not Applicable
Poulos	Greg	CAPS	None
Procuriar	Jason	Dayton Power & Light Company	Transmission Owner
Rainey	John	Northern Virginia Electric Cooperative	Electric Distributor
Ramsey	James	Suffolk Fund LLC	None
Robinson	Becky	Vista Energy Marketing, L.P.	Other Supplier
Rodriguez	Tomas	OPSI	None
Rohrbach	John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Rosenberger	Eric		
Rutledge	Craig	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.	None
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Scheirer	Alex	PJM Interconnection	Not Applicable
Schmitt	Jeffrey	PJM Interconnection	Not Applicable
Schmitt	David	New Jersey Board of Public Utilities	None
Schroeder	Connie	Dominion Virginia Power	None
Schum	Alice	Illinois Municipal Electric Agency	Electric Distributor
Schuyler	Ken	PJM Interconnection	Not Applicable
Schweizer	David	PJM Interconnection	Not Applicable
Sells	Scott	East Kentucky Power Cooperative, Inc.	Transmission Owner

Souder	Michelle	PJM Interconnection	Not Applicable
Spencer	Mark		
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
Stephenson	Greg		
Stern	Alex	Public Service Electric & Gas Company	Transmission Owner
Stone	Andy	PJM Interconnection	Not Applicable
Stupar	Rob	Invenergy, LLC	Generation Owner
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
Thomas	Jack	PJM Interconnection	Not Applicable
Walcavich	Colin		
Warshel	Kim	PJM Interconnection	Not Applicable
Wehnes	Kathleen	Maryland Public Service Commission	None
Whitehead	Jeff	GT Power Group	None
Yoder	Michael	RTO Insider	None
Zemanek	Kevin	Buckeye Power, Inc.	Electric Distributor
Zhang	Michael	PJM Interconnection	Not Applicable

## OC Subcommittee/ Task Force Informational Section

System Operations Subcommittee (SOS): [SOS Website](#)

Data Management Subcommittee (DMS): [DMS Website](#)

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

Fuel Requirements for Black Start Resources: [Fuel Req't. for Black Start Resources Issue Tracker](#)

Synchronous Reserve Deployment Task Force: [SRDTF Website](#)

IROL – CIP Cost Recovery: [IROL – CIP Cost Recovery Issue Tracker](#)

Future Meeting Dates and Materials			Materials Due to Secretary 	Materials Published
Date	Time	Location	5 p.m.	4 p.m.
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



# Draft Meeting Minutes

As of February 10, 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. Stella 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:

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During a Meeting	During an Acclamation Vote
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p><b>*1</b></p> <p>To enter the question queue (does not work during a vote)</p> </div> <div style="text-align: center;"> <p><b>*2</b></p> <p>To be removed from the question queue</p> </div> </div> <div style="text-align: center; margin-top: 20px;"> <p><b>*0</b></p> <p>To signal for PJM support staff assistance</p> </div>	<p>Please log in to the voting application at <a href="http://voting.pjm.com">voting.pjm.com</a>, so that you can be registered as the active voter prior to the start of the meeting.</p> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <p><b>*7</b></p> <p>Yes</p> </div> <div style="text-align: center;"> <p><b>*8</b></p> <p>No</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <p><b>*9</b></p> <p>Abstain</p> </div> <div style="text-align: center;"> <p><b>*0</b></p> <p>To signal for PJM support staff assistance</p> </div> </div>
<p><b>Asking A Question</b></p> <ul style="list-style-type: none"> <li>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.</li> <li>Questions are taken during the meeting when natural breaks occur and are asked in the order they are received.</li> </ul>	
<p><b>Linking Teleconference Connection to Webex</b></p> <p>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.</p>	



# Draft Meeting Minutes

As of February 10, 2022

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Visit [learn.pjm.com](http://learn.pjm.com), an easy-to-understand resource about the power industry and PJM's role.