

## **Operating Committee**

PJM Conference and Training Center March 12, 2020 9:00 a.m. – 10:30 a.m. EPT

## Administration (9:00-9:10)

- 1. Ms. Danielle Croop, PJM, provided announcements; reviewed the Antitrust, Code of Conduct, Public Meetings/Media Participation, and the WebEx Participant Identification Requirement.
  - a. The Operating Committee (OC) agenda for this meeting was approved.

b. The draft minutes of the February 6 OC meeting were approved by acclamation with 0 objections and 0 abstentions.

- c. The OC work plan was reviewed.
- 2. Administration Updates

a. Mr. Scott Heffentrager, PJM, provided a brief security update on PJM's security plan around the Coronavirus.

b. Mr. Paul McGlynn, PJM, provided a review of the recent NERC Announcement -- NERC Takes Steps to Prevent Coronavirus Impacts

NERC Announcement

NERC Level 2 Alert

c. Mr. Steve Pincus, PJM, provided an informational update regarding *IMPA and City of Lawrenceburg, Indiana v. PJM, AEP, and Lawrenceburg Power*, Station Power Complaint.

Review of Operations (9:10- 9:20)

3. Review of Operating Metrics

Ms. Stephanie Monzon, PJM, reviewed the February 2020 PJM operating metrics slides. Metrics will include PJM's load forecast error, BAAL performance, transmission / generation outage statistics, and Perfect Dispatch historical performance.

Endorsements/Approvals (9:20- 9:35)

- 4. PJM Manuals
  - a. Manual 37 Changes

Mr. Jordan Shenk, PJM, reviewed the proposed changes to PJM Manual 37: Reliability Coordination. The Operating Committee <u>endorsed</u> the proposed changes by acclamation with 0 objections and 0 abstentions.



# b. Manual 13 Changes

Ms. Rebecca Carroll, PJM, reviewed the proposed changes to PJM Manual 13: Emergency Operations. The Operating Committee <u>endorsed</u> the proposed changes by acclamation with 0 objections and 0 abstentions.

## c. Manual 12 Changes

Ms. Rebecca Carroll, PJM, reviewed the proposed changes to PJM Manual 12: Balancing Operations. The Operating Committee <u>endorsed</u> the proposed changes by acclamation with 0 objections and 0 abstentions.

## First Reading

# Tool and Informational Updates (9:35 – 10:30)

- 5. <u>System Operations Subcommittee (SOS) Report</u> Ms. Rebecca Carroll, PJM, provided a summary of the most recent SOS meeting.
- Primary Frequency Response Update Ms. Elizabeth Davis, PJM, provided an update on PJM primary frequency response performance.
- 7. <u>Synchronized Reserve Update</u> Mr. David Kimmel, PJM, provided a review of recent synchronized reserve performance.
- 8. Manual 03 Update

Mr. Lagy Mathew, PJM, provided a review of Manual 03 updates and a proposal to move Section 5 to a new Manual 03B. This agenda item will be brought back to the April meeting for more discussion.

9. Applications of Synchro-Phasor Data

Mr. Shaun Murphy, PJM, reviewed the recent activities around PMUs at PJM. The OC will ask the PC to review PJM's voluntary PMU Placement Plan and consider formalizing the plan into the RTEP planning process. This could include a requirement for new substations and major construction projects to include PMU installation for bus voltage and line flow monitoring to improve PMU observability.

- Load Forecast Model Performance Education on the performance of PJM's Neural Network load forecast model was postponed and will be reviewed at the April meeting.
- <u>Reliability Compliance Update</u> Mr. Preston Walker, PJM, provided an update on NERC, SERC and RFC standards, and other pertinent regulatory and compliance information.
- 12. Special OC/MIC Fuel Requirements for Black Start Resources Update



Ms. Janell Fabiano, PJM, provided an update on the status of the Special OC/MIC Fuel Requirements for Black Start Resources. A recommendation will be going to the March 26 MRC to take a 4-8 month hiatus to perform additional analysis around restoration.

## 13. Generation Cold Weather Survey Update

Mr. Vince Stefanowicz, PJM, provided an update on the current 2019 Cold Weather Operating Limits Survey, reminding stakeholder the survey closes on April 1, 2020.

| Attendance (Conference Call) |            |  |                      |  |  |
|------------------------------|------------|--|----------------------|--|--|
| Last Name                    | First Name | Company Name                             | Sector               |  |  |
| Phillips (Chair)             | Darlene    | PJM Interconnection                      | Not Applicable       |  |  |
| Croop (Secretary)            | Danielle   | PJM Interconnection                      | Not Applicable       |  |  |
| Ament                        | Todd       | Cube Hydro Partners, LLC                 | Generation Owner     |  |  |
| Benchek                      | Jim        | FirstEnergy Solutions Corp               | Transmission Owner   |  |  |
| Bielak                       | Donnie     | PJM Interconnection                      | Not Applicable       |  |  |
| Boyle                        | Glen       | PJM Interconnection                      | Not Applicable       |  |  |
| Brady                        | George     | Ohio Valley Electric Corporation         | Transmission Owner   |  |  |
| Brodbeck                     | John       | EDP Renewables North America<br>LLC      | Generation Owner     |  |  |
| Bryson                       | Michael    | PJM Interconnection                      | Not Applicable       |  |  |
| Capra                        | Carlo      | ITC Interconnection LLC                  | Transmission Owner   |  |  |
| Carroll                      | Rebecca    | PJM Interconnection                      | Not Applicable       |  |  |
| Chang                        | Sean       | Shell Energy North America (US),<br>L.P. | Other Supplier       |  |  |
| Chintapalli                  | Raj        | BP                                       | None                 |  |  |
| Christopher                  | Mahila     | Public Utilities Commission of<br>Ohio   | None                 |  |  |
| Chu                          | George     | PJM Interconnection                      | Not Applicable       |  |  |
| Соссо                        | Michael    | Old Dominion Electric<br>Cooperative     | Electric Distributor |  |  |
| Crystle                      | Gil        | UGI Development Company                  | Generation Owner     |  |  |
| Dajewski                     | Paul       | PJM Interconnection                      | Not Applicable       |  |  |
| Davis                        | Elizabeth  | PJM Interconnection                      | Not Applicable       |  |  |
| DeGiusto                     | Vince      | UGI Utilities, Inc.                      | Transmission Owner   |  |  |
| DeLosa                       | Joseph     | New Jersey Board of Public<br>Utilities  | None                 |  |  |
| Domian                       | Christin   | Duquesne Light Company                   | None                 |  |  |
| Downs                        | Jere       | PJM Interconnection                      | Not Applicable       |  |  |
| Dugan                        | Chuck      | East Kentucky Power<br>Cooperative, Inc. | Transmission Owner   |  |  |
| Fabiano                      | Janell     | PJM Interconnection                      | Not Applicable       |  |  |

## Attendance (Conference Call)



# Agenda

| Filomena    | Guy        | Galt Power Inc.   | Other Supplier       |
|-------------|------------|---|----------------------|
| Fitzpatrick | Brian      | PJM Interconnection   | Not Applicable       |
| Foladare    | Kenneth    | Geenex Solar LLC  | Generation Owner     |
| Foley       | Imelda     | Environmental Defense Fund  | None                 |
| Ford        | Adrien     | Old Dominion Electric   | Electric Distributor |
|             |            | Cooperative   |                      |
| Frogg       | Darrell    | PJM Interconnection   | Not Applicable       |
| Garnett     | Bryan      | Duke Energy   | None                 |
| Gates       | Terry      | Appalachian Power Company<br>(AEP Generation)                     | Transmission Owner   |
| Genuario    | Gabrielle  | PJM Interconnection   | Not Applicable       |
| Gilani      | Rehan      | ConEdison Energy, Inc.  | Other Supplier       |
| Grear       | Mark       | Exelon Generation Co., LLC  | Generation Owner     |
| Greiner     | Gary       | PSEG Energy Resources and Trade<br>LLC                            | Other Supplier       |
| Guntle      | Vince      | American PowerNet<br>Management, L.P.                             | End-Use Customer     |
| Hammack     | Matthew    | PPL Electric Utilities Corp. dba<br>PPL Utilities (NYPA)          | Transmission Owner   |
| Hanebuth    | Michele    | Consolidated Edison Company of<br>New York, Inc. (CE to PS Wheel) | Transmission Owner   |
| Hanser      | Erik       | Michigan Public Service<br>Commission                             | None                 |
| Hastings    | David      | Other   | None                 |
| Hauske      | Thomas     | PJM Interconnection   | Not Applicable       |
| Heidorn     | Richard    | RTO Insider   | None                 |
| Hoang       | Liem       | PJM Interconnection   | Not Applicable       |
| Hoatson     | Tom        | West Deptford Energy, LLC   | Generation Owner     |
| Hohenshilt  | Jennifer   | Talen Energy Marketing, LLC                                       | Generation Owner     |
| Horning     | Lynn Marie | Customized Energy Solutions, Ltd.                                 | None                 |
| Horstmann   | John       | Dayton Power & Light Company<br>(The)                             | Transmission Owner   |
| Hsia        | Eric       | PJM Interconnection   | Not Applicable       |
| Hull        | Gerit      | American Municipal Power, Inc.                                    | Electric Distributor |
| Hyzinski    | Tom        | GT Power Group  | None                 |
| Janicki     | Diane      | Boston Energy Trading and<br>Marketing LLC                        | Other Supplier       |
| Johnson     | Carl       | Customized Energy Solutions, Ltd.                                 | None                 |
| Johnston    | David      | Indiana Utility Regulatory<br>Commission                          | None                 |
| Kimmel      | David      | PJM Interconnection   | Not Applicable       |
| Kirk        | Ryan       | Appalachian Power Company<br>(AEP Generation)                     | Transmission Owner   |
| Kogut       | George     | New York Power Authority  | Other Supplier       |
| LOWE        | CONNIE     | Dominion Virginia Power   | None                 |
| Mabry       | David      | McNees Wallace & Nurick LLC                                       | None                 |
| Matuszak    | Alex       | UGI Energy Services, LLC  | None                 |
| McGlynn     | Paul       | PJM Interconnection   | Not Applicable       |



# Agenda

| Midgley     | Sharon      | Exelon Business Services<br>Company, LLC | Transmission Owner   |
|-------------|-------------|--|----------------------|
| Monzon      | Stephanie   | PJM Interconnection                      | Not Applicable       |
| Mulhern     | Joseph      | PJM Interconnection                      | Not Applicable       |
| Murphy      | Shaun       | PJM Interconnection                      | Not Applicable       |
| Norton      | Chris       | American Municipal Power, Inc.           | Electric Distributor |
| O'Hara      | Christopher | PJM Interconnection                      | Not Applicable       |
| Olaleye     | Michael     | PJM Interconnection                      | Not Applicable       |
| Pakela      | Greg        | DTE Energy Trading, Inc.                 | Other Supplier       |
| Patel       | Anita       | PJM Interconnection                      | Not Applicable       |
| Pilong      | Christopher | PJM Interconnection                      | Not Applicable       |
| Pincus      | Steven      | PJM Interconnection                      | Not Applicable       |
| Sasser      | Jonathan    | Customized Energy Solutions, Ltd.        | None                 |
| Sauriol     | Dennis      | AEP Ohio Transmission Company,<br>Inc.   | Transmission Owner   |
| Scarpignato | David       | Calpine Energy Services, L.P.            | Generation Owner     |
| Schweizer   | David       | PJM Interconnection                      | Not Applicable       |
| Sells       | Scott       | East Kentucky Power                      | Transmission Owner   |
|             |             | Cooperative, Inc.                        |                      |
| Shenk       | Jordan      | PJM Interconnection                      | Not Applicable       |
| Singer      | Chad        | Trane Grid Services LLC                  | Other Supplier       |
| Skumanich   | Bill        | RTR Energy Solutions LLC                 | None                 |
| Sotkiewicz  | Paul        | Other                                    | None                 |
| Squibb      | Bill        | Ohio Valley Electric Corporation         | Transmission Owner   |
| Stack       | James       | Duquesne Light Company                   | Transmission Owner   |
| Stefanowicz | Vincent     | PJM Interconnection                      | Not Applicable       |
| Stern       | Alexander   | Public Service Electric & Gas<br>Company | Transmission Owner   |
| Stone       | Andy        | Other                                    | None                 |
| Strella     | Lauren      | PJM Interconnection                      | Not Applicable       |
| Sturgeon    | John        | Duke Energy Business Services<br>LLC     | Transmission Owner   |
| Sweeney     | Rory        | GT Power Group                           | None                 |
| Tam         | Simon       | PJM Interconnection                      | Not Applicable       |
| Thomas      | Henry       | PJM Interconnection                      | Not Applicable       |
| Toomey      | Megan       | Talen Energy Marketing, LLC              | Generation Owner     |
| Tribulski   | Jennifer    | PJM Interconnection                      | Not Applicable       |
| Vitiello    | Jacki       | Dominion Virginia Power                  | None                 |
| Walker      | Preston     | PJM Interconnection                      | Not Applicable       |
| Whitehead   | Jeffrey     | GT Power Group                           | None                 |
| Wisersky    | Megan       | Madison Gas & Electric Co.               | None                 |
| Yoder       | Michael     | RTO Insider                              | None                 |



OC Subcommittee/ Task Force Informational Section

System Operations Subcommittee (SOS): SOS Website

Data Management Subcommittee (DMS): DMS Website

Distributed Energy Resources Subcommittee (DERS): DERS Website

System Restoration Coordinators Subcommittee (SRCS): SRCS Website

Primary Frequency Response Sr. Task Force (PFRSTF): PFRSTF Website

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

## **Future Meeting Dates**

| April 16, 2020    | 9:00 a.m. |
|-------------------|-----------|
| May 14, 2020      | 9:00 a.m. |
| June 4, 2020      | 9:00 a.m. |
| July 9, 2020      | 9:00 a.m. |
| August 6, 2020    | 9:00 a.m. |
| September 3, 2020 | 9:00 a.m. |
| October 8, 2020   | 9:00 a.m. |
| November 6, 2020  | 9:00 a.m. |
| December 3, 2020  | 9:00 a.m. |

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Author: Danielle Croop

#### 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:

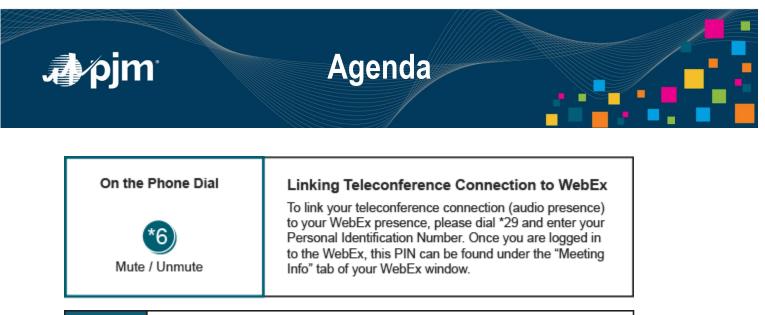
As a mandatory condition of attendance at today's meeting, attendees agree to adhere to the PJM Code of Conduct as detailed in PJM Manual M-34 section 4.5, including, but not limited to, participants' responsibilities and rules regarding the dissemination of meeting discussion and materials.

#### 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.



| Join a<br>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.

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