



Operating Committee Webex Only November 6, 2020 9:00 a.m. – 4:00 p.m. EPT

Administration

- 1. Danielle Croop, PJM, will provided announcements; and reviewed the Antitrust, Code of Conduct, and Public Meetings/Media Participation.
 - a. The draft minutes of the October 8, 2020 OC meeting and October 21, 2020 OC Special Session meeting were reviewed and approved.
 - b. The OC work plan was reviewed.

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://pim.com/committees-and-groups/pandemic-coordination.aspx

3. Review of Operating Metrics

Mike Zhang, PJM, reviewed the October 2020 PJM operating metrics slides. Metrics included PJM's load forecast error, BAAL performance, and transmission / generation outage statistics.

Endorsements (9:30-11:00)

- 4. Black Start Unit Testing, CRF, Involuntary Termination, MTSL and Substitution Rules
 - a. Dr. Paul Sotkiewicz, Elwood Energy, reviewed the proposed amendments to the Issue Charge and made a motion for the OC to adopt the proposed amendments; Sharon Midgley, Exelon, seconded the motion.

Dave Mabry, PJM Customer Coalition, made a motion to defer the vote on the proposed amended issue charge to December and not vote on the issue charge upon its first read; Erik Heinle, Office of the Peoples Counsel, seconded the motion. This passed a simple majority vote with 58% in favor or deferring the vote until the December OC meeting.

b. Becky Davis, PJM, reviewed the solution packages (PJM solution package and IMM solution package) for Black Start Unit Testing, CRF, Involuntary Termination, MTSL and Substitution Rules. The Operating Committee was not asked to endorse a proposed solution package at the meeting due to the pending vote on the proposed amended Issue Charge. The vote on the solution packages will take place during the December OC meeting.





5. Manual 3A: EMS Model Updates & Quality Assurance Changes

Maria Baptiste, PJM, reviewed updates to Manual 3A: EMS Model Updates & QA. The Operating Committee endorse these changes with 0 objections and 0 abstentions.

6. Manual 3: Transmission Operations Changes

Lagy Mathew, PJM, reviewed updates to Manual 3: Transmission Operations. The Operating Committee endorse these changes with 0 objections and 0 abstentions.

7. Manual 12: Balancing Operations Change

Kevin Hatch, PJM, reviewed updates to Manual 12: Balancing Operations to address changes from the 5 minute pricing and dispatch MIC special sessions. The Operating Committee endorse these changes with 0 objections and 0 abstentions.

8. <u>Day Ahead Schedule Reserve (DASR) Update</u>

David Kimmel, PJM, reviewed the proposed changes to the 2021 Day Ahead Scheduling Reserve (DASR) requirement. The Operating Committee endorse these changes with 0 objections and 0 abstentions.

9. Winter Weekly Reserve Target Update

Patricio Rocha Garrido, PJM, reviewed the results of the 2020/21 Winter Weekly Reserve Target (WWRT) analysis. The Operating Committee endorse these changes with 0 objections and 0 abstentions.

First Reading (11:00-11:15)

10. Manual 14D: Generation Changes

Natalie Tacka, PJM, reviewed Manual 14D changes associated with updates for the Public Distribution Microgrids as discussed in the DIRS. The Operating Committee will be asked to endorse these changes at the next OC meeting.

11. Manual 3: Transmission Operation Changes

Joseph Ciabattoni, PJM, reviewed Manual 3 and Manual 28 changes associated with updates for stability limits as discussed in the MIC. The Operating Committee will be asked to endorse these changes at the next OC meeting.

Informational Update (11:15-16:00)

12. Intelligent Reserve Deployment (IRD) Rollout Education

- a. Mike Zhang, PJM, provided education on the Intelligent Reserve Deployment.
- b. Siva Josyula, Monitoring Analytics, provided additional information regarding Intelligent Reserve Deployment.

13. Operations Assessment Task Force Review





Todd Bickel, PJM, provided a review the OATF winter 2020/21 study.

14. Primary Frequency Response Update

Becky Davis, PJM, provided a review of PJM's primary frequency response performance.

15. Regulation Performance Update

Gabrielle Genuario, PJM, provided an update on Regulation performance.

16. Applications of Synchro-Phasor Data

Shaun Murphy, PJM, provided an update on PMU activities in RTEP and Manual 01 and 14B updates recently approved at the MRC.

17. Fuel Security

Patricio Rocha Garrido, PJM, provided a fuel security update. This item was presented in the meeting after item #9 in the agenda, to avoid scheduling conflicts.

18. Load Management Event Review

Jack O'Neill, PJM, provided the annual load management event review.

19. System Operations Subcommittee (SOS) Report

A summary of the most recent SOS meeting is posted for review. A presentation was not provided due to scheduling conflicts.

20. Unit Specific Parameter 2021/2022 DY Update

Tom Hauske, PJM, provided an update on Unit Specific Parameters for the 2021/2022 DY.

21. NERC Lessons Learned

Donnie Bielak, PJM, reviewed new NERC Lessons Learned.

22. Reliability Compliance Update

Mark Kuras, PJM, provided an update on NERC, SERC and RFC standards, and other pertinent regulatory and compliance information.

23. PJM Response to Show Cause Order

Jim Burlew, PJM, reviewed tariff language associated with FERC Show Cause Order in EL20-30 & EL20-56 pertaining to PJM's station power tariff provisions and reviewed PJM's plan for compliance filing.

Informational Posting

24. PJM Summer Operations

An informational presentation is available with the meeting material on PJM Summer Operations performance.





Attendance

Last Name	First Name	Company Name	Sector
Phillips (Chair)	Darlene	PJM Interconnection	Not Applicable
Croop (Secretary)	Danielle	PJM Interconnection	Not Applicable
Anders	David	PJM Interconnection	Not Applicable
Anderson	Jared	S&P Global Inc.	None
Balascak	Andrew	PPL Electric Utilities Corp. dba PPL Utilities (TO)	Transmission Owner
Baptiste	Maria	PJM Interconnection	Not Applicable
Benchek	Jim	First Energy Solutions Corp	Transmission Owner
Bennett	Daniel	PJM Interconnection	Not Applicable
Bennett	Stephen	PJM Interconnection	Not Applicable
Berton	Tyler	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Bhana	Rajesh	Exelon Business Services Company, LLC	Transmission Owner
Bickel	Todd	PJM Interconnection	Not Applicable
Bielak	Donnie	PJM Interconnection	Not Applicable
Borgatti	Michael	PJM Committee Voting Generic Account	Generation Owner
Bowring	Joe	Monitoring Analytics	None
Boyd	Chris	Dynegy Marketing & Trade, LLC (DECAM)	Generation Owner
Boyle	Glen	PJM Interconnection	Not Applicable
Braerman	Kenneth	Baltimore Gas and Electric Company (TO)	Transmission Owner
Briggs	Mark	Tenaska Power Services Co. (TPS 4)	Generation Owner
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
Bryson	Michael	PJM Interconnection	Not Applicable
Burlew	Jim	PJM Interconnection	Not Applicable
Cao	Roger	PJM Interconnection	Not Applicable
Capra	Carlo	ITC Interconnection LLC	Transmission Owner





Carmean	Gregory	OPSI	None
Carroll	Rebecca	PJM Interconnection	Not Applicable
Cerchio	Gerard	Monitoring Analytics	None
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Chen	Hong	PJM Interconnection	Not Applicable
Chu	George	PJM Interconnection	Not Applicable
Ciabattoni	Joseph	PJM Interconnection	Not Applicable
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
D'Alessandris	Louis	American Transmission Systems, Inc.	Transmission Owner
Dantonio	Phil	PJM Interconnection	Not Applicable
Davis	Elizabeth	PJM Interconnection	Not Applicable
Davis	James	Dominion Energy Generation Marketing, Inc.	Generation Owner
Derin	Bilge	PJM Interconnection	Not Applicable
Domian	Christin	Duquesne Light Company	Transmission Owner
Downs	Jere	PJM Connect	None
Dropkin	Ilyana	PJM Interconnection	Not Applicable
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Eedupuganti	Subbarao	PJM Interconnection	Not Applicable
Elkins	Rachel	American Transmission Systems, Inc.	Transmission Owner
Fabiano	Janell	PJM Interconnection	Not Applicable
fan	zhenyu	PJM Interconnection	Not Applicable
Feller	John	PPL Electric Utilities Corp. dba PPL Utilities (TO)	Transmission Owner
Fereshetian	Damon	PJM Interconnection	Not Applicable
Fernandez	Ray	PJM Interconnection	Not Applicable
Filomena	Guy	Customized Energy Solutions, Ltd.	None
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
Freeman	Jennifer	PJM Interconnection	Not Applicable
Frogg	Darrell	PJM Interconnection	Not Applicable
Gates	Terry	Appalachian Power Company (AEP Generation)	Transmission Owner
Gebele	Don	PJM Connect	None
Genuario	Gabrielle	PJM Interconnection	Not Applicable
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Glazer	Craig	PJM Interconnection	Not Applicable
Greening	Michele	PJM Interconnection	Not Applicable
Greiner	Gary	PSEG Energy Resources and Trade LLC	Other Supplier
Guntle	Vince	American PowerNet Management, L.P.	End-Use Customer
Hastings	David	None	None
Hatch	Kevin	PJM Interconnection	Not Applicable
Hauske	Thomas	PJM Interconnection	Not Applicable
Heinle	Frederick	Office of the Peoples Counsel	None
Herel	Suzanne	PJM Interconnection	Not Applicable
Hoang	Liem	PJM Interconnection	Not Applicable
Hoatson	Tom	West Deptford Energy, LLC	Generation Owner
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Horger	Tim	PJM Interconnection	Not Applicable
Horning	Lynn Marie	Customized Energy Solutions, Ltd.	None
Hudis	Gabriella	Gabel Associates	None
Hyzinski	Tom	GT Power Group, LLC	None
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Jens	Thomas	Black Oak Capital, LLC	Other Supplier
Johnson	Carl	Customized Energy Solutions, Ltd.	None





Johnson	Rhonda	Duke Energy Business Services LLC	Transmission Owner
Johnston	David	Other	None
Josyula	Siva	Monitoring Analytics	None
Keegan	Jack	None	None
Keenan	Matthew	Elwood Energy, LLC	Generation Owner
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP (BSMH)	Other Supplier
Kilgallen	Kevin	Avangrid Renewables, LLC	Generation Owner
Kimmel	David	PJM Interconnection	Not Applicable
Kogut	George	New York Power Authority	Other Supplier
Krawczyk	Leslie	Other	None
Kuras	Mark	PJM Interconnection	Not Applicable
Lee	Ray	PJM Interconnection	Not Applicable
Libbos	Robin	Allegheny Power (MonPwr Gen)	Transmission Owner
LOWE	CONNIE	Dominion Virginia Power	Transmission Owner
Luna	Joel	Monitoring Analytics	None
Mabry	David	McNees Wallace & Nurick LLC	None
Marcino	Angelo	PJM Interconnection	Not Applicable
Mathew	Lagy	PJM Interconnection	Not Applicable
Matuszak	Alex	UGI Energy Services, LLC	Other Supplier
McCombIII	John	PJM Interconnection	Not Applicable
McGlynn	Paul	PJM Interconnection	Not Applicable
McLaverty	Megan	PJM Interconnection	Not Applicable
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Monzon	Stephanie	PJM Interconnection	Not Applicable
Mulhern	Joseph	PJM Interconnection	Not Applicable
Murphy	Shaun	PJM Interconnection	Not Applicable
Nice	Ryan	PJM Interconnection	Not Applicable
Nix	Emma	Jersey Green Energy LLC	Other Supplier





O'Leary	Christopher	PSEG Energy Resources and Trade LLC	Other Supplier
Ondayko	Brock	AEP Energy Partners, Inc. (AEP Gen Resources)	Transmission Owner
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Pilong	Christopher	PJM Interconnection	Not Applicable
Poulos	Greg	PJM Committee Voting Generic Account	None
Procuniar	Jason	Ohio Valley Electric Corporation	None
Robinson	Becky	vistra energy	None
Rocha-Garrido	Patricio	PJM Interconnection	Not Applicable
Rodriguez	Tomas	Organization of PJM States, Inc.	None
Rohrbach	John	Wabash Valley Power Association, Inc.	Electric Distributor
Sasser	Jonathan	Customized Energy Solutions, Ltd.	None
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Scheirer	Alexandra	PJM Interconnection	Not Applicable
Schweizer	David	PJM Interconnection	Not Applicable
Sells	Scott	East Kentucky Power Cooperative, Inc.	Transmission Owner
Singer	Chad	Trane Grid Services LLC	Other Supplier
Sotkiewicz	Paul	E-Cubed Policy Associates	None
Souder	Michelle	PJM Interconnection	Not Applicable
Squibb	Bill	Ohio Valley Electric Corporation	Transmission Owner
Stack	James	Duquesne Light Company	None
Stefanowicz	Vincent	PJM Interconnection	Not Applicable
Stern	Alexander	Public Service Electric & Gas Company	Transmission Owner
Stewart	Travis	Gabel Associates	None
Stone	Andy	Other	None





Sturgeon	John	Duke Energy Business Services LLC	Transmission Owner
Sullivan	James	Hudson Transmission Partners, 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, LLC	None
Tacka	Natalie	PJM Interconnection	Not Applicable
Tam	Simon	PJM Interconnection	Not Applicable
Taylor	William	Elwood Energy, LLC	Generation Owner
Thomas	Henry	PJM Interconnection	Not Applicable
Tribulski	Jennifer	PJM Interconnection	Not Applicable
Tyler	Catherine	Monitoring Analytics	None
Warshel	Kim	PJM Interconnection	Not Applicable
Whitehead	Jeffrey	GT Power Group, LLC	None
Wisersky	Megan	Madison Gas & Electric Co.	Other Supplier
Yoder	Michael	RTO Insider	None
Zhang	Mike	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

System Restoration Coordinators Subcommittee (SRCS): SRCS Website

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

Future Meeting Dates

December 3, 2020 9:00 a.m.

PJM Conference & Training Center/ WebEx

Author: D. Croop

Antitrust:





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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.

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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.

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