



Operating Committee

PJM Conference and Training Center April 16, 2020 9:00 a.m. – 12:00 p.m. EPT

Administration

- 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 by acclamation with 0 objections and 0 abstentions.
 - b. Minutes of the March 12 OC meeting were approved by acclamation with 0 objections and 0 abstentions.
 - c. The OC work plan was reviewed.
 - d. The OC Charter was reviewed, no updates were proposed for the annual review.

Review of Operations

2. PJM COVID-19 Update

- a. Mr. 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
- b. Mr. Christopher Moran, PJM, reviewed the remote operations for Market Operations Centers (MOCs) during the COVID-19 Pandemic. PJM will be publishing a temporary Manual attachment to PJM Manual 1 on Friday 4/24/2020. The intent of this temporary attachment is to provide requirements should the MOC's need to implement remote operations due to an imminent threat of COVID-19 infection. This will alleviate the MOC's need to file a waiver should they be unable to comply with the normal PJM control center requirements.

3. COVID-19 Load Analysis Update

Ms. Elizabeth Anastasio and Mr. Joseph Mulhern, PJM, reviewed the COVID-19 short term load analysis impacts.

4. Review of Operating Metrics

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

First Reading

5. Black Start Problem Statement and Issue Charge





Mr. David Kimmel, PJM, reviewed a problem statement and issue charge around the substitution and termination of black start resources. The Operating Committee will be asked to endorse the Issue Charge at the next meeting. Darlene Phillips informed the Committee that this issue is intended to be worked in the monthly Operating Committee meetings.

6. PJM Manuals

a. Manual 01 Changes

Ms. Bilge Derin, PJM, reviewed the proposed changes to PJM Manual 01: Control Center and Data Exchange. The Operating Committee will be asked to endorse these changes at the next meeting.

b. Manual 03 CEII Changes

Mr. Lagy Mathew, PJM, reviewed the proposed changes to Manual 03: Transmission Operations and a proposed Manual 03B. The Operating Committee will be asked to endorse these changes at the next meeting.

c. Manual 03 Changes

Mr. Lagy Mathew, PJM, reviewed the proposed changes to PJM Manual 03: Transmission Operations. The Operating Committee will be asked to endorse these changes at the next meeting.

d. Manual 36 Changes

Mr. Liem Hoang, PJM, reviewed the proposed changes to PJM Manual 36: System Restoration. The Operating Committee will be asked to endorse these changes at the next meeting.

Tool and Informational Updates

7. System Operations Subcommittee (SOS) Report

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

8. Winter Operations Review

Mr. Paul McGlynn, PJM, reviewed the 2019-2020 Winter Operations Summary.

9. Load Forecast Model Performance

Ms. Elizabeth Anastasio, PJM, provided education on the performance of PJM's Neural Network load forecast model.

10. System Resilience Update

Mr. Jonathon Monken, PJM, provided an update on Industry and PJM strategies in the rapidly changing operational environment of the COVID-19 pandemic.

11. Reliability Compliance Update

Mr. Preston Walker, PJM, provided an update on NERC, SERC and RFC standards.





Information Only Postings

12. The PJM Manual 03 Attachment E Automatic Sectionalizing Schemes Pending Approval and Recent Changes document has been posted as an Information Only item to the April 16 OC meeting website.

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

Attendance (Conference Call)

Last Name	First Name	Company Name	Sector
Phillips (Chair)	Darlene	PJM Interconnection	Not Applicable
Croop (Secretary)	Danielle	PJM Interconnection	Not Applicable
Abdur-Rahman	Muhsin	ABB	None
Abramowitz	Jeremy	Monitoring Analytics	Not Applicable
Anastasio	Elizabeth	PJM Interconnection	Not Applicable
Anders	David	PJM Interconnection	Not Applicable
Balascak	Andrew	PPL Electric Utilities Corp. dba PPL Utilities (TO)	Transmission Owner
Barker	Jason	Exelon Business Services Company, LLC	Transmission Owner
Barmer	Mike	Dominion Virginia Power (EDC)	Transmission Owner
Belley	Guillaume	Lantar Energy LLC (LANTRE_SAT4)	Other Supplier
Benchek	Jim	First Energy Solutions Corp	Transmission Owner
Bennett	Daniel	PJM Interconnection	Not Applicable
Bernstein	Matthew	PJM Interconnection	Not Applicable
Bielak	Donnie	PJM Interconnection	Not Applicable





Bleiweis	Bruce	DC Energy, LLC	Other Supplier
Bowring	Joseph	Monitoring Analytics	Not Applicable
Boyle	Glen	PJM Interconnection	Not Applicable
Braerman	Ken	BGE	
Branch	John	Birdsboro Power LLC	Generation Owner
Briggs	Mark	Brandywine Power	
Brown	Rich	PJM Interconnection	Not Applicable
Bryson	Michael	PJM Interconnection	Not Applicable
Buhler	Tom	ORU	
Burlew	James	PJM Interconnection	Not Applicable
Callaghan	Christopher	PJM Interconnection	Not Applicable
Campbell	Bruce	Enerwise Global Technologies, LLC (EnergyConnect)	Other Supplier
Canter	David	Appalachian Power Company (AEP Generation)	Transmission Owner
Capra	Carlo	ITC Interconnection LLC	Transmission Owner
Carmean	Gregory	OPSI	
Carroll	Rebecca	PJM Interconnection	Not Applicable
Caven	Augustine	PJM Interconnection	Not Applicable
Cerchio	Jerry	Monitoring Analytics	Not Applicable
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Chen	Hong	PJM Interconnection	Not Applicable
Christopher	Mahila	Public Utilities Commission of Ohio	None
Соссо	Michael	Old Dominion Electric Cooperative	Electric Distributor
Dajewski	Paul	PJM Interconnection	Not Applicable
D'Alessandris	Lou	First Energy Solutions Corp	Transmission Owner
Dantonio	Phil	PJM Interconnection	Not Applicable
Davis	Jim	Dominion Energy	
Davis	Elizabeth	PJM Interconnection	Not Applicable
Del Viscio	Michael	PJM Interconnection	Not Applicable
Derin	Zehra Bilge	PJM Interconnection	Not Applicable
Downs	Jere	PJM Connect	None
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Ejebe	Gabriel	OATI	None





Fabiano	Janell	PJM Interconnection	Not Applicable
fan	zhenyu	PJM Interconnection	Not Applicable
Ferguson	Michael	Indeck Energy	
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
Frogg	Darrell	PJM Interconnection	Not Applicable
Gagen ES	Rod	Dominion Virginia Power	Transmission Owner
Garnett	Bryan	Duke Energy	
Gates	Terry	AEP	
Gebele	Don	PJM Connect	None
Genuario	Gabrielle	PJM Interconnection	Not Applicable
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Glazer	Craig	PJM Interconnection	Not Applicable
Gledhill	Andrew	PJM Interconnection	Not Applicable
Grear	Mark	Exelon Generation Co., LLC	Generation Owner
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
Hamm	Greg	STRTS	None
Hammack	Matt	PPL	
Hanser	Erik	Michigan Public Service Commission	None
Harcourt	Wayne	Duke Energy Ohio, Inc.	Transmission Owner
Hastings	David	PJM Committee Voting Generic Account	None
Hatch	Kevin	PJM Interconnection	Not Applicable
Hauske	Thomas	PJM Interconnection	Not Applicable
Heidorn	Richard	RTO Insider	None
Heisey	Bradley	Tenaska Pennsylvania Partners, LLC	Generation Owner
Hoang	Liem	PJM Interconnection	Not Applicable
Hoatson	Tom	West Deptford Energy, LLC	Generation Owner
Horning	Lynn Marie	Customized Energy Solutions, Ltd.	None
Hsia	Eric	PJM Interconnection	Not Applicable





Hull	Gerit	American Municipal Power, Inc.	Electric Distributor
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
Jha	Monica	Big Level Wind LLC	Generation Owner
Johnson	Carl	Customized Energy Solutions, Ltd.	None
Johnston	David	Other	None
Kazerooni	Hamid	Invenergy, LLC	Generation Owner
Keegan	Jack	PJM Interconnection	Not Applicable
Keilholtz	Kenneth	NRG Power Marketing, LLC	Generation Owner
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP (BSMH)	Other Supplier
Kimmel	David	PJM Interconnection	Not Applicable
Kogut	George	New York Power Authority	Other Supplier
Kozhuharov	Dimitar	State Commissions	None
Krawczyk	Leslie	Reliablity First	None
Lee	Ray	PJM Interconnection	Not Applicable
Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor
LOWE	CONNIE	Dominion Virginia Power	Transmission Owner
Mabry	David	McNees Wallace & Nurick LLC	None
Mancuso	Melanie	Allegheny Power (MonPwr Load)	Transmission Owner
Markiewicz	Cindy	Allegheny Power (MonPwr Gen)	Transmission Owner
Mathew	Lagy	PJM Interconnection	Not Applicable
McGlynn	Paul	PJM Interconnection	Not Applicable
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Miller	John	Commonwealth Edison Company	Transmission Owner
Monken	Jonathon	PJM Interconnection	Not Applicable
Monzon	Stephanie	PJM Interconnection	Not Applicable
Moran	Christopher	PJM Interconnection	Not Applicable
Mulhern	Joseph	PJM Interconnection	Not Applicable
Murphy	Shaun	PJM Interconnection	Not Applicable
Nix	Emma	Gabel Associates	None
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
OBrien	Kevin	Leidos	None





O'Leary	Christopher	PSEG Energy Resources and Trade LLC	Other Supplier
Ondayko	Brock	AEP Energy Partners, Inc. (AEP Gen Resources)	Transmission Owner
O'Neil	Jack	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
Poulos	Greg	CAPS	None
Rainey	J	OVEC	None
Sasser	Jonathan	Customized Energy Solutions, Ltd.	None
Schloendorn	Ronald	PECO Energy Company	Transmission Owner
Schmitt	Jeffrey	PJM Interconnection	Not Applicable
Schuyler	Ken	PJM Interconnection	Not Applicable
Schweizer	David	PJM Interconnection	Not Applicable
Sells	Scott	East Kentucky Power Cooperative, Inc.	Transmission Owner
Sillin	John	Federal Energy Regulatory Commission	None
Souder	Michelle	PJM Interconnection	Not Applicable
Squibb	Bill	OVEC	None
Stefanowicz	Vincent	PJM Interconnection	Not Applicable
Stern	Alexander	Public Service Electric & Gas Company	Transmission Owner
Stone	Andy	Other	None
Strella	Lauren	PJM Interconnection	Not Applicable
Sturgeon	John	Duke Energy Business Services LLC	Transmission Owner
Sullivan	James	Power Bridge	None
Swalwell	Brad	Tangent Energy Solutions, Inc.	Other Supplier
Sweeney	Rory	GT Power Group, LLC	None
Thomas	Henry	PJM Interconnection	Not Applicable
Tribulski	Jennifer	PJM Interconnection	Not Applicable
Vitiello	Jacki	Dominion Energy	
Walker	Preston	PJM Interconnection	Not Applicable
Wangdi	Tsering	TransAlta Energy Marketing (U.S.) Inc. (Full Requirements Load)	Other Supplier
Warner-Freeman	Jennifer	PJM Interconnection	Not Applicable





Wei	Jane	Monitoring Analytics	None
Whitehead	Jeffrey	GT Power Group, LLC	None
Wisersky	Megan	Madison Gas & Electric Co.	Other Supplier
Wolfe	Art	PJM Interconnection	Not Applicable
Yoder	Michael	RTO Insider	None
Zemanek	Kevin	Ohio EC	None

Future Meeting Dates				
May 14, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx		
June 4, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx		
July 9, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx		
August 6, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx		
September 3, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx		
October 8, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx		
November 6, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx		
December 3, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx		

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:

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