

Operating Committee
PJM Conference & Training Center, Audubon, PA
February 5, 2019
9:00 a.m. – 12:00 p.m. EPT

Administration

1. The Operating Committee (OC) Agenda for this meeting was **approved**.
2. Draft Minutes of the January 8, 2019 OC meeting were **approved** as drafted by acclamation.
3. Mr. Don Wallin, PJM, reviewed the OC Work Plan. Mr. Wallin provided an informational update regarding the action item requesting a 2-3 year look ahead for PJM committee activities, informing the committee that this activity doesn't fall under the auspices of the OC. This request has been referred to PJM Stakeholder Affairs for resolution.
- 3a. Mr. Don Wallin, PJM, notified the OC that agenda item 18a was added for Mr. David Schweizer, PJM, to provide the OC with an update on the Black Start RFP process.

Review of Operations

4. **Review of Operational Events**
Mr. Donnie Bielak, PJM, reviewed PJM operations since the last OC meeting. Mr. Bielak also reviewed operational information for the cold weather period of January 28 through Jan 31. This information is contained in the Cold Weather Summary for January 28 – 31 document that PJM posted on the February OC meeting website. PJM will update the posted document as more information becomes available. PJM will also review the accuracy of the PCLLRW information in the AEP zone for the period Jan 28 through Jan 31 and will report back at the next OC meeting.
5. **Review of Operating Metrics**
Ms. Stephanie Monzon, PJM, reviewed the January 2019 PJM operating metrics slides. Metrics included PJM's load forecast error, BAAL performance, transmission / generation outage statistics, and Perfect Dispatch historical performance.

Endorsements / Approvals

6. **Manual 14D Changes**
Mr. Vince Stefanowicz, PJM, reviewed the proposed changes to Manual 14D: Generator Operational Requirements. The Operating Committee **endorsed** these changes by acclamation with 0 objections and 0 abstentions.
7. **Manual 12 Changes**
Ms. Danielle Croop, PJM, reviewed the proposed changes to Manual 12: Balancing Operations. The Operating Committee **endorsed** these changes by acclamation with 24 objections and 20 abstentions.

8. TO/TOP Matrix Changes

Mr. Chris Moran, PJM, reviewed the proposed changes to the TO/TOP matrix. The Operating Committee **recommended** approval of these changes to the TOA-AC by acclamation with 0 objections and 0 abstentions.

First Readings

9. Manual 13 Changes

Mr. Preston Walker, PJM, reviewed the proposed changes to Manual 13: Emergency Operations. **The Operating Committee will be asked to endorse these changes at the next OC meeting.**

10. Manual 37 Changes

Mr. Donnie Bielak, PJM, reviewed the proposed changes to Manual 37: Reliability Coordination. **The Operating Committee will be asked to endorse these changes at the next OC meeting.**

11. Non-Retail BTMG Performance Requirement Gaps Problem Statement and Issue Charge

Ms. Terri Esterly, PJM, reviewed the Non-Retail BTMG Performance Requirement Gaps Problem Statement and Issue Charge. **The Operating Committee will be asked to endorse the Problem Statement and Issue Charge at the next OC meeting.**

OC Subcommittee / Task Force Updates

12. System Operations Subcommittee (SOS)

Mr. Donnie Bielak, PJM, provided a summary of the most recent SOS meeting.

13. Data Management Subcommittee (DMS)

Ms. Diane Lake, PJM, provided summary of the most recent DMS meeting. Ms. Lake thanked PJM members for their efforts in helping PJM ensure better system model accuracy.

14. Distributed Energy Resources Subcommittee (DERS)

There were no DERS updates for this month's meeting.

15. System Restoration Coordinators Subcommittee (SRCS)

There were no SRCS updates for this month's meeting.

16. Primary Frequency Response Sr. Task Force (PFRSTF)

There were no PFRSTF updates for this month's meeting.

Unit Specific Parameter Adjustment Updates

17. Unit Specific Parameter Updates

Ms. Lauren Strella, PJM, provided an update on Unit Specific Parameters.

PJM Initiatives/Education Updates

18. Fuel Requirements for Black Start Resources Update

There are no Fuel Requirements for Black Start resources updates for this month's meeting. Mr. Don Wallin, PJM, reminded the OC that more information on this initiative can be found at PJM's Issues Tracking page. <https://www.pjm.com/committees-and-groups/issue-tracking/issue-tracking-details.aspx?Issue={B7F726E1-9F06-414E-8516-4D69B5050AF4}>

18a. Black Start RFP Update

Mr. David Schweizer, PJM provided an update regarding PJM's Black Start RFP process.

19. PMU Analysis Updates

Mr. Shaun Murphy, PJM, provided an update of PJM's analysis of recent system events using PMU data.

20. System Resilience

There were no System Resilience updates for this month's meeting.

21. Network Model Alignment Initiative

Ms. Nicole Scott, Mr. Jason Sexauer and Mr. Kyle Clifford, PJM, presented accomplishments of the Network Model Alignment Initiative outlining the work performed and its relevance to the PJM model accuracy.

Tool and Informational Updates

22. Resource Tracker Update

Ms. Rebecca Stadelmeyer, PJM, provided an update on the Resource Tracker application.

23. Regulation Performance Update

Ms. Danielle Croop, PJM, provided an update on PJM's regulation performance.

24. ComEd Lisle RAS/SPS Retirement

Mr. Alan Engelmann and Mr. Minh Nguyen, ComEd, presented the retirement of the Lisle RAS/SPS.

25. Reliability Compliance Update

There were no Reliability Compliance updates for this month's meeting.

26. NERC Lessons Learned

There were no NERC lessons learned for this month's meeting.

27. Pricing Interface Update

There were no newly created pricing interfaces.

Action Items

1. PJM will provide educational sessions regarding the DER collection, modelling and forecasting.
2. PJM will update posted materials for Agenda Items 04 and 05 as data collection is complete.
3. PJM will review the PCLLRW data for accuracy in the AEP zone for 1/28-1/31/19.
4. PJM will reach out to the Modeling Generation Senior Task Force (MGSTF) and will provide more information regarding unit soak time in regards to Unit Specific Parameters.
5. PJM will provide more data as it becomes available such as NERC lessons learned regarding the FRCC oscillation event.

Future Meeting Dates

March 5, 2019	9:00 a.m.	PJM Interconnection - Conference and Training Center
April 9, 2019	9:00 a.m.	PJM Interconnection - Conference and Training Center
May 14, 2019	9:00 a.m.	PJM Interconnection - Conference and Training Center
June 11, 2019	9:00 a.m.	PJM Interconnection - Conference and Training Center

Author: Don Wallin

In Attendance (In Person)

Last Name	First Name	Company	Sector
Souder (Chair)	Dave	PJM Interconnection, LLC	Not Applicable
Wallin (Secretary)	Don	PJM Interconnection, LLC	Not Applicable
Benchek	Jim	First Energy Solutions	Transmission Owner
D'Alessandris	Lou	First Energy Solutions	Transmission Owner
Foldare	Ken	Tangibl	Not Applicable
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Greiner	Gary	PSEG Energy Resources and Trade, LLC.	Other Supplier
Heidorn	Rich	RTO Insider	Not Applicable
Hyzinski	Tom	GT Power Group	Not Applicable
Johnson	Carl	Customized Energy Solutions, Ltd.	Not Applicable
Kogut	George	New York Power	Other Supplier

Lieberman	Steven	American Municipal Power, Inc.	Electric Distributor
Lowe	Connie	Dominion Virginia Power	Not Applicable
O'Connell	Robert	PPGI Fund A/B Development, LLC.	Generation Owner
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Smith	Christen	RTO Insider	Not Applicable
Stewart	Travis	Gabel and Associates	Not Applicable
Sweeney	Rory	GT Power Group	Not Applicable
Trayers	Barry	Citigroup Energy Inc.	Other Supplier
Wilson	Bert	Castlebridge Energy Group, LLC.	Other Supplier

In Attendance (Via Conference Call)

Last Name	First Name	Company	Sector
Ainspan	Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Alfayyoumi	Mohammed	Dominion Virginia Power	Not Applicable
Bonner	Charles	Dominion Virginia Power	Not Applicable
Braerman	Ken	Baltimore Gas and Electric	Transmission Owner
Brodbeck	John	EDP Renewables	Other Supplier
Campbell	Bruce	Energy Connect, Inc.	Other Supplier
Capra	Carlo	ITC Inc.	Transmission Owner
Carmean	Greg	OPSI	Not Applicable
Cocco	Mike	Old Dominion Electric Cooperative	Electric Distributor
Cox	Edward	Appalachian Power Company	Transmission Owner
Crystle	Gil	UGI Development Company	Transmission Owner
Davis	James	Dominion Energy Marketing Inc.	Generation Owner

DeGiusto	Vince	UGI Development	Generation Owner
DeLosa	Joseph	DE Public Service Commission	Not Applicable
Di Iorio	Michelle	PSEG Energy Resources and Trade LLC.	Transmission Owner
Dolan	Ryan	American Municipal Power, Inc.	Electric Distributor
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Engelmann	Alan	Commonwealth Edison Company	Transmission Owner
Filomena	Guy	Customized Energy Solutions, Ltd.	Not Applicable
Fuess	James	PBF Power Marketing, LLC.	Generation Owner
Garnett	Bryan	Duke Energy Ohio, Inc.	Transmission Owner
Garza	Mark	Jersey Central Power & Light Company	Transmission Owner
Gebolys	Debbie	The Public Utilities Commission of Ohio	Not Applicable
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Gear	Mark	Constellation Energy	Generation Owner
Guntle	Vince	UGI Development	Generation Owner
Hammack	Matthew	PPL Utilities Corporation.	Transmission Owner
Hanebuth	Michele	Consolidated Edison Company of NY, Inc.	Transmission Owner
Hastings	David	Market Interconnection LLC.	Not Applicable
Heisey	Bradley	Wolf Hills Energy, LLC.	Generation Owner
Helms	Joe	Rainbow Energy Marketing Company	Other Supplier
Hoatson	Tom	Riverside Generating, LLC.	Other Supplier
Hohenshilt	Jennifer	Talen Energy Corporation	Generation Owner
Horning	Lynn Marie	Customized Energy Solutions, Ltd.	Not Applicable
Horstmann	John	Dayton Power & Light Company	Transmission Owner

Hunter	Andy	First Energy Solutions	Transmission Owner
Janicki	Diane	Boston Energy Trading and Marketing LLC	Generation Owner
Jha	Monica	PCI	Not Applicable
Jones	Ryan	CCS Energy	Not Applicable
Kelly	Stephen	Brookfield Energy Marketing LP	Other Supplier
Killgallen	Kevin	Avangrid Renewables LLC.	Generation Owner
Krawczyk	Leslie	Reliability First Corporation	Not Applicable
Libbos	Robin	First Energy Solutions	Transmission Owner
Mabry	Dave	McNees Wallace & Nurick LLC	Not Applicable
Markiewicz	Cindy	First Energy Solutions Corp	Transmission Owner
Matuszak	Alex	UGI Energy Services, LLC.	Other Supplier
Midgely	Sharon	Exelon Business Services Company, LLC.	Transmission Owner
Nguyen	Minh	Commonwealth Edison Company	Transmission Owner
O'Leary	Chris	PSEG Energy Resources and Trade, LLC.	Transmission Owner
Ondayko	Brock	Appalachian Power Company	Transmission Owner
Pakela	Gregory	DTE Energy Trading	Other Supplier
Pelletier	Eveline	Hydro Quebec	Not Applicable
Poulos	Greg	CAPS	Not Applicable
Rothey	Kristin	American Municipal Power, Inc.	Electric Distributor
Runowski	Brian	Commonwealth Edison	Transmission Owner
Rutigliano	Tom	Achieving Equilibrium, LLC.	Other Supplier
Sasser	Jonathan	Customized Energy Solutions, Ltd.	Not Applicable
Sauriol	Dennis	AEP Ohio Transmission Company, Inc.	Transmission Owner

Schloendorn	Ronald	PECO Energy Company	Transmission Owner
Sillin	John	The Federal Energy Regulatory Commission	Not Applicable
Singer	Chad	Fellon McCord	Not Applicable
Squibb	Bill	Ohio Valley Electric Cooperative	Generation Owner
Sturgeon	John	Duke Energy Carolinas LLC	Other Supplier
Sullivan	James	Neptune Regional Transmission System, LLC	Transmission Owner
Sun	Haibin	Constellation Energy Services, Inc.	Other Supplier
Tatum	Ed	American Municipal Power, Inc.	Electric Distributor
Thomas	Amber	PPL Utilities Corporation.	Transmission Owner
Whitehead	Jeff	GT Power Group	Not Applicable
Wilson	James	Wilson Energy Economics	Not Applicable

PJM Attendees

Last Name	First Name	Company	Sector
Anders	David	PJM Interconnection, LLC	Not Applicable
Bielak	Donnie	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Bresler	Stu	PJM Interconnection, LLC	Not Applicable
Bryson	Mike	PJM Interconnection, LLC	Not Applicable
Callaghan	Chris	PJM Interconnection, LLC	Not Applicable
Carroll	Rebecca	PJM Interconnection, LLC	Not Applicable
Caven	Augustine	PJM Interconnection, LLC	Not Applicable
Chen	Hong	PJM Interconnection, LLC	Not Applicable

Clifford	Kyle	PJM Interconnection, LLC	Not Applicable
Croop	Danielle	PJM Interconnection, LLC	Not Applicable
Daugherty	Suzanne	PJM Interconnection, LLC	Not Applicable
Davis	Becky	PJM Interconnection, LLC	Not Applicable
Esterly	Theresa	PJM Interconnection, LLC	Not Applicable
Fitzpatrick	Brian	PJM Interconnection, LLC	Not Applicable
Franks	Chris	PJM Interconnection, LLC	Not Applicable
Genuario	Gabrielle	PJM Interconnection, LLC	Not Applicable
Greening	Michele	PJM Interconnection, LLC	Not Applicable
Hendrzak	Chantal	PJM Interconnection, LLC	Not Applicable
Herel	Suzanne	PJM Interconnection, LLC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Jani	Alpa	PJM Interconnection, LLC	Not Applicable
Kappagantula	Srinivas	PJM Interconnection, LLC	Not Applicable
Kimmel	David	PJM Interconnection, LLC	Not Applicable
Lee	Ray	PJM Interconnection, LLC	Not Applicable
Lu	Chenchao	PJM Interconnection, LLC	Not Applicable
Olaleye	Michael	PJM Interconnection, LLC	Not Applicable
O'Neill	Jack	PJM Interconnection, LLC	Not Applicable
McGlynn	Paul	PJM Interconnection, LLC	Not Applicable
Mooney	Molly	PJM Interconnection, LLC	Not Applicable
Monzon	Stephanie	PJM Interconnection, LLC	Not Applicable
Moran	Chris	PJM Interconnection, LLC	Not Applicable

Mulhern	Joe	PJM Interconnection, LLC	Not Applicable
Murphy	Shaun	PJM Interconnection, LLC	Not Applicable
Phillips	Darlene	PJM Interconnection, LLC	Not Applicable
Pincus	Steven	PJM Interconnection, LLC	Not Applicable
Schmidt	Jeff	PJM Interconnection, LLC	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Schuyler	Ken	PJM Interconnection, LLC	Not Applicable
Sexauer	Jason	PJM Interconnection, LLC	Not Applicable
Stadlmeyer	Rebecca	PJM Interconnection, LLC	Not Applicable
Sitarchyk	Mike	PJM Interconnection, LLC	Not Applicable
Stefanowicz	Vince	PJM Interconnection, LLC	Not Applicable
Stone	Andy	PJM Interconnection, LLC	Not Applicable
Strella	Lauren	PJM Interconnection, LLC	Not Applicable
Tam	Simon	PJM Interconnection, LLC	Not Applicable
Walker	Preston	PJM Interconnection, LLC	Not Applicable
Williams	Stan	PJM Interconnection, LLC	Not Applicable