

Operating Committee PJM Conference & Training Center, Audubon, PA March 6, 2018 9:00 a.m. – 12:00 p.m. EPT

Administration

- 1. The March 6 Operating Committee (OC) Agenda was <u>approved</u> as drafted.
- 2. The Draft Minutes of the February 6, 2018 Operating Committee meeting were approved as drafted.
- 2a. The Draft Minutes of the February 6, 2018 Operating Committee Special Session PJM RTO Wide Black Start RFP Informational Webinar were <u>approved</u> as drafted.
- 3. The Operating Committee Work Plan was reviewed.

Review of Operations

- 4. **Review of Operational Events** Mr. Chris Pilong, PJM, reviewed PJM operations since the last OC meeting.
- 5. Review of Operating Metrics

Mr. Joe Ciabattoni, PJM, reviewed the PJM February 2018 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 01 Changes

Ms. Bilge Derin, PJM, reviewed the proposed changes to Manual 01: Control Center and Data Exchange Requirements. Following discussion, the Operating Committee <u>endorsed</u> these changes by acclamation with no objections or abstentions.

7. Manual 03A Changes

Mr. Andy Ford, PJM, reviewed the proposed changes to Manual 3A: Energy Management System (EMS) Model Updates and Quality Assurance (QA). Following discussion, the Operating Committee <u>endorsed</u> these changes by acclamation with no objections or abstentions.

8. Manual 37 Changes

Mr. Donnie Bielak, PJM, reviewed the proposed changes to Manual 37: Reliability Coordination. Following discussion, the Operating Committee <u>endorsed</u> these changes by acclamation with no objections or abstentions.

First Readings

There were no first readings scheduled for this OC meeting.



OC Subcommittee / Task Force Updates

- System Operations Subcommittee (SOS) Mr. Chris Pilong, PJM, provided a summary of the most recent SOS meeting.
- 10. Data Management Subcommittee (DMS) Ms. Susie Fahr, PJM, provided a summary from the most recent DMS subcommittee meeting.
- 11. System Restoration Coordinators Subcommittee (SRCS) Ms. Alpa Jani, PJM, provided an update on the 2018 Spring Restoration Drill Invitation process.
- Primary Frequency Response Sr. Task Force (PFRSTF) Mr. Glen Boyle, PJM, provided an update on the Primary Frequency Response Sr. Task Force (PFRSTF).

Capacity Performance

13. Unit Specific Parameter Updates

Ms. Alpa Jani, PJM, provided an update on Unit Specific Parameters.

14. Performance Assessment Interval Communications Over ICCP Project

Ms. Alpa Jani, PJM, provided an informational update on the Performance Assessment Interval Communications Over ICCP project. A discussion was held in regards to PAI notifications and the expected generator response. It was explained that PAI notifications are secondary sources of information and that during system events the primary sources of information are the PJM All Call and the Emergency Procedures Posting applications.

Tool and Informational Updates

15. Winter Weather Report Review

PJM responded to questions regarding the PJM 2017/2018 Winter Weather Report. PJM requested that stakeholders reach out to PJM should there be any additional questions regarding information provided in the report.

16. System Resilience Update

Mr. Dean Manno, PJM, provided an update on the next phase of PJM's system resilience efforts regarding evaluating the impact of extreme events. PJM and stakeholders reviewed gas pipeline contingencies the later part of 2017. The PJM Operating Committee agreed that the PJM System Operations Subcommittee shall review and revise extreme events and operator actions identified in the PJM Emergency Procedures Manual.

17. Synchronous Reserve Updates

Mr. David Kimmel, PJM, provided an update on PJM's Synchronous Reserve performance.



18. Synchronous Reserve Tier 1 Performance Improvement Recommendation Review

Mr. Joe Ciabattoni, PJM, provided a review of recommendations to improve PJM's Synchronous Reserve Tier 1 performance. Stakeholders requested more data regarding this issue. PJM will provide more data at future OC meetings.

19. 30 Minute Reserve Review

Mr. Vince Stefanowicz, PJM, provided a review of the need for a 30 minute reserve requirement. A discussion was held regarding the formation of a problem statement/issue charge and the correct stakeholder forum in which to present. PJM will continue to collect data and will report out at future OC meetings.

20. Synchrophasor Project Update

Mr. Shaun Murphy, PJM, provided an update on the synchrophasor project.

21. Distributed Energy Resources (DER) Update

Mr. Andrew Levitt, PJM, provided an update on the DER Stakeholder Process. The potential impacts of changes to IEEE Standard 1547 on PJM resources were discussed.

22. NERC Lessons Learned

There were no NERC Lessons Learned reports presented at this month's meeting.

23. Reliability Compliance Update

Mr. Preston Walker, PJM, provided an update on NERC, SERC and RFC standards, and other pertinent regulatory and compliance information, and solicited feedback from the members on Reliability Compliance efforts.

24. Generation Transfer Update

Ms. Rebecca Stadelmeyer, PJM, provided an update on PJM's generation transfer efforts. PJM solicited input from any Generation Owners who wished to participate in the process.

25. ComEd RAS/SPS Retirements at Davis Creek

Mr. Mohit Singh, ComEd, presented the retirement of the Davis Creek RAS/SPS. Stakeholders requested that PJM provide updates regarding the status of the project prior to the December 2018 retirement date. PJM will provide updates as needed.

26. Pricing Interface Update

Mr. Joe Ciabattoni, PJM, reviewed the new CPL-DOM Reactive Interface.

Action Items

1. Provide updates on the ComEd Davis Creek RAS/SPS retirement if changes are made prior to the December 2018 retirement date



Future Meeting Dates

9:00 a.m.
9:00 a.m.
9:00 a.m.
9:00 a.m.

PJM Interconnection - Conference and Training Center PJM Interconnection - Conference and Training Center PJM Interconnection - Conference and Training Center PJM Interconnection - Conference and Training Center

Author: Don Wallin

April 3, 2018

May 1, 2018 June 5, 2018

July 10, 2018

In Attendance (In Person)

Last Name	First Name	Company	Sector
Souder	Dave	PJM Interconnection, LLC	Not Applicable
(Chair)			
Wallin	Don	PJM Interconnection, LLC	Not Applicable
(Secretary)			
Benchek	Jim	First Energy Solutions	Transmission Owner
Blair	Tom	Monitoring Analytics, LLC	Not Applicable
Borgatti	Mike	Gabel and Associates	Not Applicable
Brodbeck	John	EDP Renewables	Other Supplier
Foladare	Kenneth	Tangibl	Not Applicable
Ford	Adrien	Old Dominion Electric Cooperative	Not Applicable
Greiner	Gary	PSEG Energy Resources and Trade LLC	Other Supplier
Horstmann	John	Dayton Power & Light	Transmission Owner
Johnson	Carl	Customized Energy Solutions, Ltd.	Not Applicable
Kogut	George	New York Power	Other Supplier
Lowe	Connie	Dominion Virginia Power	Not Applicable
Midgley	Sharon	Exelon Business Services	Transmission Owner
Pratzon	Dave	GT Power Group	Not Applicable
Scarpignato	David	Calpine Energy Services LP	Generation Owner
Stewart	Travis	Gable and Associates	Not Applicable





Sweeney	Rory	RTO Insider	Not Applicable
Trayers	Barry	Citigroup Energy Inc.	Other Supplier
In Attendance	(Via Conference Ca	all)	
Last Name	First Name	Company	Sector
Ainspan	Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Barker	Jason	Exelon Business Services	Transmission Owner
Barmer	Mike	Dominion Virginia Power	Not Applicable
Bolan	Martin	First Energy Solutions	Transmission Owner
Bonner	Charles	Dominion Virginia Power	Not Applicable
Brodbeck	John	EDP Renewables	Other Supplier
Campbell	Bruce	Energy Connect, Inc.	Other Supplier
Carmean	Gregory	OPSI	Not Applicable
Chen	Jennifer	Natural Resources Defense Council	Not Applicable
Clark	Barrett	DC Energy Mid-Atlantic LLC	Other Supplier
Соссо	Michael	Old Dominion Electric Cooperative	Electric Distributor
Сох	Edward	Appalachian Power Company	Transmission Owner
Crystle	Gil	UGI Development	Transmission Owner
Dasher	Brett	Energy Authority, Inc. (The)	Other Supplier
Davis	James	Dominion Energy Marketing, Inc.	Generation Owner
DeGiusto	Vince	UGI Development Company	Generation Owner
DeLosa	Joe	Delaware Public Service Commission	Not Applicable
Denby	Brett	Novec	Not Applicable
Depillo	Raymond	PSEG Energy Resources and Trading	Other Supplier



Dolan	Ryan	AEP Energy Partners, Inc.	Other Supplier
Domian	Christin	Mitsubishi Electric Power Products Inc.	Not Applicable
Duan	Bob	Ontario Power Generation Inc.	Other Supplier
Dugan	Chuck	East Kentucky Power	Transmission Owner
Evans	Dave	ComEd	Transmission Owner
Filomena	Guy	Customized Energy Solutions, Ltd.	Not Applicable
Fitch	Neal	NRG Power Marketing LLC	Generation Owner
Frederickson	Joe	Public Service Electric & Gas	Transmission Owner
Garbini	Marj	Potomac Electric Power	Electric Distributor
Gebolys	Debbie	The Public Utilities Commission of Ohio	Not Applicable
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Giraldo	Juan	Monitoring Analytics LLC.	Not Applicable
Grear	Mark	Constellation Energy	Generation Owner
Guntle	Vince	UGI Development	Generation Owner
Hammack	Matt	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Heisey	Bradley	Wolf Hills Energy, LLC.	Generation Owner
Helms	Joe	Rainbow Energy	Other Supplier
Hoatson	Tom	Riverside Generating, LLC	Other Supplier
Hopkins	Sandra	Dominion Virginia Power	Not Applicable
Hozempa	Lawrence	FirstEnergy Solutions Corp.	Transmission Owner
Hunter	Andrew	Metropolitan Edison	Transmission Owner
Janicki	Diane	Boston Energy Trading and Marketing LLC	Generation Owner



Jankowski	Christopher	Talen Energy Marketing, LLC.	Generation Owner
Kinser	Cynthia	Tennessee Department of Agriculture	Not Applicable
Kogut	George	New York Power	Other Supplier
Krawczyk	Leslie	Reliability First Corporation	Not Applicable
Кио	David	DC Energy Mid-Atlantic LLC	Other Supplier
Leasure	Jill	Keystone Projects	Not Applicable
Lumbrazo	Laura	Orange and Rockland	Transmission Owner
Mabry	David	McNees Wallace & Nurick LLC	Not Applicable
Mack	Amanda	NextEra Energy Power	Generation Owner
Markiewicz	Cindy	Allegheny Power	Transmission Owner
Mendelsohn	Mark	Noble Americas Gas & Power	Other Supplier
Nguyen	Minh	ComEd	Transmission Owner
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
O'Hara	Brian	Noble Americas Gas & Power	Other Supplier
O'Leary	Chris	PSEG Energy Resources and Trade LLC	Other Supplier
Olinger	Rob	Keystone Projects	Not Applicable
Ondayko	Brock	AEP Energy Supply	Generation Owner
Pakela	Gregory	DTE Energy Trading	Other Supplier
Patten	Kevin	AEP Energy, Inc.	Other Supplier
Phillips	Marjorie	Direct Energy Business, LLC	Other Supplier
Phillips	Rod	American Transmission Systems, Inc.	Transmission Owner
Pratzon	David	GT Power Group	Not Applicable
Price	Mark	DC Energy Mid-Atlantic LLC	Other Supplier



Rohrbach	John	Southern Maryland Electric Cooperative	Electric Distributor
Ruck	Andrew	PSEG Energy Resources and Trade LLC	Other Supplier
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
Sauriol	Dennis	AEP Ohio Transmission Company, Inc.	Transmission Owner
Schloendorn	Ron	PECO Energy Company	Transmission Owner
Singh	Mohit	ComEd	Transmission Owner
Smith	Jacquie	Duquesne Light Company	Transmission Owner
Stack	James	Duquesne Light Company	Transmission Owner
Sturgeon	John	Duke Energy Carolinas LLC	Other Supplier
Tsao	Stephanie	S&P Global Market Intelligence	Not Applicable
White	Doug	North Carolina Electric	Electric Distributor
Whitehead	Jeffrey	GT Power Group	Not Applicable
Wilson	James	Wilson Energy Economics	Not Applicable
Yang	Dan	Oncept Consulting Group	Not Applicable
PJM Attendees			
Last Name	First Name	Company	Sector
Bielak	Donnie	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Bryson	Mike	PJM Interconnection, LLC	Not Applicable
Carroll	Rebecca	PJM Interconnection, LLC	Not Applicable
Caven	Augustine	PJM Interconnection, LLC	Not Applicable
Ciabattoni	Joe	PJM Interconnection, LLC	Not Applicable
Croop	Danielle	PJM Interconnection, LLC	Not Applicable



Davis	Elizabeth	PJM Interconnection, LLC	Not Applicable
DelViscio	Mike	PJM Interconnection, LLC	Not Applicable
Derin	Bilge	PJM Interconnection, LLC	Not Applicable
Fabiano	Janell	PJM Interconnection, LLC	Not Applicable
Fahr	Suzie	PJM Interconnection, LLC	Not Applicable
Fernandes	Anisha	PJM Interconnection, LLC	Not Applicable
Ford	Andy	PJM Interconnection, LLC	Not Applicable
Gresh	Leslie	PJM Interconnection, LLC	Not Applicable
Hendrzak	Chantal	PJM Interconnection, LLC	Not Applicable
Herel	Suzanne	PJM Interconnection, LLC	Not Applicable
Holland	Risa	PJM Interconnection, LLC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Jani	Alpa	PJM Interconnection, LLC	Not Applicable
Jayachandran	Marilyn	PJM Interconnection, LLC	Not Applicable
Jiang	Kuang	PJM Interconnection, LLC	Not Applicable
Kimmel	David	PJM Interconnection, LLC	Not Applicable
King	Kendra	PJM Interconnection, LLC	Not Applicable
Manno	Dean	PJM Interconnection, LLC	Not Applicable
McGlynn	Paul	PJM Interconnection, LLC	Not Applicable
Pilong	Chris	PJM Interconnection, LLC	Not Applicable
Pincus	Steven	PJM Interconnection, LLC	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Stadelmeyer	Rebecca	PJM Interconnection, LLC	Not Applicable





Stefanowicz	Vince	PJM Interconnection, LLC	Not Applicable
Tam	Simon	PJM Interconnection, LLC	Not Applicable
Thomas	Jack	PJM Interconnection, LLC	Not Applicable
Tutino	Joseph	PJM Interconnection, LLC	Not Applicable
Velasco	Cheryl Mae	PJM Interconnection, LLC	Not Applicable
Walker	Preston	PJM Interconnection, LLC	Not Applicable
Walker	William	PJM Interconnection, LLC	Not Applicable

Provide feedback on the progress of this group: *Facilitator Feedback Form* Visit *learn.pjm.com*, an easy-to-understand resource about the power industry and PJM's role.