

Operating Committee
PJM Conference & Training Center, Audubon, PA
September 12, 2017
9:00 a.m. – 12:00 p.m. EPT

Administration

1. The agenda for this meeting was approved.
2. Draft Minutes of the August 8, 2017 OC meeting were reviewed and approved.
3. The OC Work Plan was reviewed.
4. Mr. Tom Zadlo, PJM provided a Data Miner 2 update.

Review of Operations

5. Review of Operational Events

Mr. Chris Pilong, PJM, reviewed PJM operations since the last OC Meeting. There was 1 Hot Weather Alert called during the month of August, occurring between August 20 and August 22. There was 1 High System Voltage Action event on August 27. There were no synchronous reserve events, and 3 Shared Reserve events. There were 4 Minimum Generation Alert events between August 4 and August 20.

6. Review of Operating Metrics

Mr. Joe Ciabattone, PJM, reviewed the PJM Operating Metrics data as of August. Metrics included PJM's load forecast error, BAAL performance, transmission / generation outage statistics, and Perfect Dispatch performance. A new metric was also presented which showed the hourly absolute percent delta between PJM's economic dispatch tool vs. PJM's EMS.

Endorsements / Approvals

There were no endorsements/approvals scheduled for this month.

First Readings

7. Operating Agreement Revisions

Mr. David Schweizer, PJM, reviewed proposed revisions to confidentiality provisions of PJM Operating Agreement Section 18.17.7 – Disclosure of Generator Data to Transmission Owners. The revisions are needed to address sharing of generator unit parameter data with Transmission Owners for system restoration planning purposes only. Operating Committee will be asked to endorse these changes at the next OC meeting.

OC Subcommittee / Task Force Updates

8. System Operations Subcommittee (SOS)

Mr. Chris Pilong, PJM, provided a summary of the most recent SOS meeting.

9. Data Management Subcommittee (DMS)

Mr. Andy Ford, PJM, provided a summary of the most recent DMS meeting.

10. System Restoration Coordinators Subcommittee (SRCS)

There were no SRCS updates presented at this OC meeting.

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

Mr. Glen Boyle, PJM, provided a summary of the most recent PFRSTF meeting.

Tool and Informational Updates

12. Preliminary 2018 Project Budget

Mr. Jim Snow, PJM, reviewed the Preliminary 2018 Project Budget.

13. System Resilience

Mr. Glen Boyle, PJM, provided an update on PJM's system resilience related efforts to include the three elements of resilience – prepare, operate and recover. Short term initiatives were discussed to include: reviewing generator attributes, gas-electric contingency screening and monitoring and evaluating the procurement of black start resources. This topic will be further explored at the September 19 Grid 20/20: Focus on Security and Resilience.

14. Synchrophasor Project Update

Mr. Ryan Nice, PJM, provided an update on the synchrophasor project.

15. August 21, 2017 Solar Eclipse Review

Mr. Joe Mulhern, PJM, reviewed observations from the August 21 solar eclipse event. PJM's work prior to the eclipse was discussed including the use of Generation Attribute Tracking System (GATS) to identify on grid and behind the meter solar resources. It was explained that the lessons learned from this event will be used to help in preparations for the April 2024 solar eclipse.

16. Regulation Update

Ms. Danielle Croop, PJM, provided an update on Regulation Performance. Performance statistics were provided for average median daily ACE, mileage ratio, and percent of time at full raise/lower (signal pegging). A discussion was held regarding the details that are used in the performance scorecard as well as the proportion of Reg A to Reg D in the regulation signals.

17. Synchronous Reserve Performance

Mr. David Kimmel, PJM, provided an update on synchronous reserve performance.

18. NERC Winter Preparation for Severe Cold Weather Webinar/NERC Lessons Learned Review

Mr. Donnie Bielak, PJM, reviewed a recently posted NERC Lessons Learned report regarding the loss of auxiliary power to STATCOM devices resulting in load shed. The NERC Winter Preparation for Severe Cold Weather webinar was cancelled due to Hurricane Irma preparations. A report will be presented at the October OC meeting if the webinar is rescheduled.

19. NERC Project 2015-010 Single Points of Failure Update

Mr. Bill Harm, PJM, provided an update on the 2015-010 Single Points of Failure project.

20. 2017/2018 Winter Season Transmission Outage Review

Mr. Lagy Mathew, PJM, reviewed significant transmission outages for the 2017/2018 winter season.

21. Distributed Energy Resources (DER) Update

Mr. Scott Baker, PJM, provided an update on the DER Stakeholder Process and the new Senior Task Force.

22. NERC and Regional Coordination Update

Mr. Preston Walker, PJM, provided an update on comment periods being open on NERC standards BAL-001-2 and BAL-005-0.2b. It was presented that on September 19-21 PJM will participate in an on-site Internal Controls Evaluation (ICE) engagement with ReliabilityFirst (RF). The engagement will be led by the RF Entity Development Group. PJM personnel from several Operations Departments will be scheduled for interviews with RF personnel. Interview questions will focus on processes related to IROL and SOLs, PCLLRWs and data samples submitted by PJM.

23. Generation Transfer Process Update

Ms. Rebecca Stadelmeyer, PJM, reviewed the current generation transfer process and engaged in a discussion about future updates to the process and Manual language. It was requested that data entry be made easier for participants because of challenges to transferring units such as reactive credits and legal issues.

24. Seasonal Fuel Survey Review

Mr. Vince Stefanowicz, PJM, reviewed the upcoming Seasonal Fuel Survey which will be made available to Generator Owners via eDART on October 13, 2017.

25. Yards Creek RAS/SPS Retirement

Mr. Evan Ferrell of First Energy presented the retirement of the Yards Creek RAS/SPS.

26. Aurora Energy Center RAS/SPS Retirement

Mr. Alan Engelmann of ComEd presented the retirement of the Aurora Energy Center RAS/SPS.

27. Unit Specific Parameter Updates

Ms. Alpa Jani, PJM, provided an update on Unit Specific Parameters. It was noted that the new fields for soak time are planned to be implemented into Markets Gateway by June 2018. Also, approved unit parameters will remain in place unless a change is communicated to PJM. The deadline for adjustment requests for DY 2018/2019 is February 28, 2018 with the final request status being e-mailed by April 15, 2018.

28. Pricing Interface Update

There were no newly created pricing interfaces.

Action Items

Future Meeting Dates

October 10, 2017	9:00 a.m.	PJM Interconnection - Conference and Training Center
November 7, 2017	9:00 a.m.	PJM Interconnection - Conference and Training Center
December 12, 2017	9:00 a.m.	PJM Interconnection - Conference and Training Center
January 9, 2018	9:00 a.m.	PJM Interconnection - Conference and Training Center

Author: Don Wallin

In Attendance (In Person)

Last Name	First Name	Company	Sector
Seiler (Chair)	Ken	PJM Interconnection, LLC	Not Applicable
McLaughlin (Secretary)	Jeffrey	PJM Interconnection, LLC	Not Applicable
Benchek	Jim	First Energy Solutions	Transmission Owner
Blair	Tom	Monitoring Analytics, LLC	Not Applicable
Foladare	Ken	Tangibl Group	Not Applicable
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Greiner	Gary	PSEG Energy Resources and Trade LLC	Other Supplier
Haas	Howard	Monitoring Analytics, LLC	Not Applicable
Horstmann	John	Dayton Power & Light Company	Transmission Owner
Johnson	Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Kogut	George	New York Power Authority	Other Supplier
Lowe	Connie	Dominion Virginia Power	
Midgley	Sharon	Exelon Business Services	Transmission Owner
O'Connell	Robert	PPGI Fund A/B Development, LLC	Generation Owner
Pratzon	David	GT Power Group	Not Applicable
Sweeney	Rory	RTO Insider	Not Applicable

Whitehead	Jeffrey	GT Power Group	Not Applicable
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In Attendance (Via Conference Call)

Last Name	First Name	Company	Sector
Ainspan	Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Bolan	Martin	First Energy Solutions	Transmission Owner
Bonner	Charles	Dominion Virginia Power	Not Applicable
Campbell	Bruce	Energy Connect, Inc.	Other Supplier
Chen	Jennifer	Natural Resources Defense Council	Not Applicable
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
Cox	Edward	Appalachian Power Company	Transmission Owner
Crider	Craig	Virginia Electric & Power Company	Transmission Owner
Dasher	Brett	Energy Authority, Inc. (The)	Other Supplier
Davis	Becky	Talen Energy Marketing, LLC	Generation Owner
Davis	James	Dominion Energy Marketing, Inc.	Generation Owner
DeGiusto	Vince	UGI Development Company	Generation Owner
DeLosa	Joe	Delaware Public Service Commission	Not Applicable
Domian	Christin	Mitsubishi Electric Power Products Inc.	Not Applicable
Engelmann	Alan	Commonwealth Edison Company	Transmission Owner
Farber	John	Delaware Public Service Commission	Not Applicable
Ferrell	Evan	First Energy Solutions Corp.	Transmission Owner
Filomena	Guy	Customized Energy Solutions, Ltd.	Not Applicable
Frederickson	Joe	Public Service Electric & Gas	Transmission Owner
Gahimer	Mike	IN Office of Utility Consumer Counselor	End User Customer

Garavaglia	John	Commonwealth Edison Company	Transmission Owner
Garnett	Bryan	Duke Energy Ohio, Inc.	Transmission Owner
Gebolys	Debbie	Public Utilities Commission of Ohio (The)	Not Applicable
Grear	Mark	Constellation Energy	Generation Owner
Guntle	Vince	UGI Development Company	Generation Owner
Hanebuth	Michele	Consolidated Edison Company of NY, Inc.	Transmission Owner
Helms	Joseph	Rainbow Energy Marketing Corporation	Other Supplier
Hoatson	Tom	Riverside Generating, LLC	Other Supplier
Holland	Cynthia	New Jersey Board of Public Utilities	Not Applicable
Hopkins	Sandra	Dominion Virginia Power	Not Applicable
Janicki	Diane	Boston Energy Trading and Marketing LLC	Generation Owner
Jansen	Sunny	MidAmerican Energy Company	Other Supplier
Jardot	Gina	Essential Power Rock Springs, LLC	Transmission Owner
Kauffman	Brian	NRG Curtailment Solutions	Other Supplier
Kazerooni	Hamid	Talen Energy Marketing, LLC	Generation Owner
Keeney	Jerry	Dynegy Marketing & Trade, LLC	Generation Owner
Kelly	Stephen	Brookfield Energy Marketing LP	Other Supplier
Kilgallen	Kevin	Avangrid Renewables LLC	Generation Owner
Leasure	Jill	Keystone Projects	Not Applicable
Lowe	Connie	Dominion Virginia Power	Not Applicable
Lumbrazo	Laura	Rockland Electric Company	Transmission Owner
Ma	Alex	Invenergy, LLC	Generation Owner
Mabry	David	McNees Wallace & Nurick LLC	Not Applicable

Mack	Amanda	NextEra Energy Power Marketing, LLC	Generation Owner
Mahler	David	Duquesne Light Company	Transmission Owner
Markiewicz	Cindy	Allegheny Power	Transmission Owner
Marton	David	First Energy Solutions Corp.	Transmission Owner
McAlister	Lisa	American Municipal Power, Inc.	Electric Distributor
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
O'Connell	Bob	PPGI Fund A/B Development, LLC	Generation Owner
O'Leary	Chris	PSEG Energy Resources and Trade LLC	Transmission Owner
Ondayko	Brock	AEP Energy Supply	Generation Owner
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Patten	Kevin	AEP Energy, Inc.	Other Supplier
Poulos	Greg	CAPS	Not Applicable
Price	Ruth	Division of the Public Advocate of the State of Delaware	End User Customer
Rohrbach	John	Southern Maryland Electric Cooperative	Electric Distributor
Rothey	Kristin	American Municipal Power, Inc.	Electric Distributor
Ruck	Andrew	PSEG Energy Resources and Trade LLC	Other Supplier
Runowski	Brian	Commonwealth Edison Company	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
Sauriol	Dennis	AEP Ohio Transmission Company, Inc.	Transmission Owner
Schloendorn	Ronald	PECO Energy Company	Transmission Owner
Smith	Jacque	ReliabilityFirst Corporation	Not Applicable
Stern	Alexander	Public Service Electric & Gas Company	Transmission Owner

Tangirala	Subha	ABB	Not Applicable
Tatum	Edward	American Municipal Power	Electric Distributor
Tsao	Stephanie	S&P Global Market Intelligence	Not Applicable
Vitiello	Jacqueline	Dominion Energy Marketing, Inc.	Generation Owner
Wharton	Ronald	Public Service Electric & Gas Company	Transmission Owner
Wilkie	Brian	Consolidated Energy Solutions, Inc.	Other Supplier
Wilson	James	Wilson Energy Economics	Not Applicable
Yu	Joel	Rockland Electric Company	Transmission Owner

PJM Attendees

Last Name	First Name	Company	Sector
Anders	Dave	PJM Interconnection, LLC	Not Applicable
Baker	Scott	PJM Interconnection, LLC	Not Applicable
Bennett	Daniel	PJM Interconnection, LLC	Not Applicable
Bielak	Donnie	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Bryson	Mike	PJM Interconnection, LLC	Not Applicable
Cawley	Troy	PJM Interconnection, LLC	Not Applicable
Ciabattoni	Joe	PJM Interconnection, LLC	Not Applicable
Croop	Danielle	PJM Interconnection, LLC	Not Applicable
Del Viscio	Mike	PJM Interconnection, LLC	Not Applicable
Driscoll	Mary Ellen	PJM Interconnection, LLC	Not Applicable
Endress	Eric	PJM Interconnection, LLC	Not Applicable
Fabiano	Janell	PJM Interconnection, LLC	Not Applicable

Ford	Andy	PJM Interconnection, LLC	Not Applicable
Handlin	Michael	PJM Interconnection, LLC	Not Applicable
Hauske	Thomas	PJM Interconnection, LLC	Not Applicable
Heimbach	Mark	PJM Interconnection, LLC	Not Applicable
Hendrzak	Chantal	PJM Interconnection, LLC	Not Applicable
Hoke	Michael	PJM Interconnection, LLC	Not Applicable
Holland	Risa	PJM Interconnection, LLC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Hugee	Jacqui	PJM Interconnection, LLC	Not Applicable
Jani	Alpa	PJM Interconnection, LLC	Not Applicable
Kimmel	David	PJM Interconnection, LLC	Not Applicable
Manion	Evelyn	PJM Interconnection, LLC	Not Applicable
Mathew	Lagy	PJM Interconnection, LLC	Not Applicable
Militello	Nicole	PJM Interconnection, LLC	Not Applicable
Morgis	Donna	PJM Interconnection, LLC	Not Applicable
Mulhern	Joseph	PJM Interconnection, LLC	Not Applicable
Lee	Lori Murphy	PJM Interconnection, LLC	Not Applicable
Nice	Ryan	PJM Interconnection, LLC	Not Applicable
Olaleye	Michael	PJM Interconnection, LLC	Not Applicable
Phillips	Darlene	PJM Interconnection, LLC	Not Applicable
Pilong	Chris	PJM Interconnection, LLC	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Snow	Jim	PJM Interconnection, LLC	Not Applicable

Stadelmeyer	Rebecca	PJM Interconnection, LLC	Not Applicable
Starkov	Stefan	PJM Interconnection, LLC	Not Applicable
Stefanowicz	Vince	PJM Interconnection, LLC	Not Applicable
Stone	Andy	PJM Interconnection, LLC	Not Applicable
Tam	Simon	PJM Interconnection, LLC	Not Applicable
Velasco	Cheryl Mae	PJM Interconnection, LLC	Not Applicable
Walker	Preston	PJM Interconnection, LLC	Not Applicable
Wallin	Don	PJM Interconnection, LLC	Not Applicable
Walter	Laura	PJM Interconnection, LLC	Not Applicable
Ward	Mike	PJM Interconnection, LLC	Not Applicable

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.

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