

Operating Committee PJM Conference and Training Center October 6th, 2015 9:00 a.m.

Administration

- 1. The OC Agenda for this meeting was approved.
- 2. Draft Minutes of the September 8th, 2015 OC meeting were reviewed and approved.
- 3. The OC Work Plan was reviewed.
- 4. The OC Posting Report Card was reviewed.

Review of Operations

- 5. Mr. Boyle reviewed PJM Operations since the last OC Meeting which included a complete summary of August operational events, and a partial summary of September events. The August events included 2 Geomagnetic Disturbance Warnings, 2 Synchronous Reserve events, and 2 Shared Reserve events. The Partial September summary included 3 Hot Weather Alerts, 3 Geomagnetic Disturbance Warnings, 3 Synchronous Reserve events, and 7 Shared Reserve events.
- Operational performance data was still being gathered and processes as of the date of the October OC meeting. As a result, the Operating Metrics Slides review (for September) was deferred until the November OC meeting.
- Mr. O'Neill provided a summary of the 2015 Load Management Events. Load Management DR resources were dispatched in the PENELEC zone on April 21st and 22nd, resulting in load reductions of 36 MW and 59 MW respectively.
- 8. Mr. Bryson reviewed the most recent NERC Lessons Learned.
- 9. There were no new or updated Closed Loop Interfaces since the last OC.

OC Subcommittee Updates

- 10. Mr. Boyle provided a summary of the SOS meeting.
- 11. Mr. McLaughlin provided a summary of the SIS meeting.
- 12. Mr. Hatch provided a summary of the SRCS meeting.

Long-Term Transmission Outage Submission

13. Mr. Tam provided an update on the proposed long-term transmission outage submission rule change, which was initially reviewed at the August 11, 2015 OC meeting. The proposed change would broaden the scope of the current 30 day transmission outage rule to apply to any transmission facilities which are out of service for a total of more than 30 days within an 8 week timespan of a single planning year.



Due to concerns that the proposed change may be too restrictive on legitimate outages that cannot meet the February 1st submission deadline, PJM will not be formally adding the proposed rule to Manual 03. PJM will instead monitor outages for adherence to the rule, and work with the Transmission Owner and the market monitor if questionable behavior is identified.

First Readings

- 14. Ms. Scott reviewed changes to Manual 03: Transmission Operations. Changes included clarifying language throughout the manual around the use of the term System Operating Limit (SOL). Administrative changes were made to Sections 1.2, 1.5.2, 1.7, and 3.3.1. The term 'eData' was replaced with 'Data Viewer' throughout the Manual to reflect the new tool. Several voltage limit updates were made to Section 3 Exhibit 5, and numerous changes were made throughout Section 5 to reflect operating procedure revisions and updates. **The Operating Committee will be asked to endorse these changes at the next Operating Committee meeting.
- 15. Mr. Hsia reviewed the proposed changes to Manual 13: Emergency Operations. Section 2.2 of Manual 13 identifies the Day Ahead Scheduling Reserve (DASR) requirement. The draft 2016 DASR requirement is 5.80%, down from the 2015 requirement of 5.93%. Other changes included the updating of Max Emergency terminology for consistency with the PJM Tariff. Language was removed from Section 2.3 which indicated that generators connected below 230kV participate in voltage reduction. Lastly, various updates were made to Section 3.7: Geo-Magnetic Disturbances. **The Operating Committee will be asked to endorse these changes at the next Operating Committee meeting.
- 16. Mr. Falin reviewed the preliminary 2015 / 2016 Winter Weekly Reserve Target. PJM is recommending a Winter Weekly Reserve Target of 27%, which is unchanged from the 2014 / 2015 Winter value. The PJM Planning Committee (PC) will be voting on this reserve value at the October 8, 2015 PC meeting. **The Operating Committee will be asked to endorse the Winter Reserve Target at the next Operating Committee meeting.
- 17. Ms. Ike-Egbuonu reviewed changes to Manual 12: Balancing Operations. Changes included the elimination of MISO as the Interconnection Time Monitor in section 3.2. Changes were also made to Section 4 and Attachment A (Exhibits 17, 18 and 19) for consistency with new Instantaneous Reserve Check. **The Operating Committee will be asked to endorse these changes at the next Operating Committee meeting.
- 17b. Mr. Nice reviewed changes to Manual 01: Control Center and Data Exchange Requirements. Language related to interpersonal communication was updated in Sections 2.3, 3.1, and 4 to align with the NERC COM-001-2 standard. **The Operating Committee will be asked to endorse these changes at the next Operating Committee meeting.

Tool and Informational Updates

 Mr. Boyle provided an update on the PJM Training and Certification Requirements Non-Compliance issue currently being addressed through the SOS. The proposed solution to the certification noncompliance issue was presented. The target completion date for this issue is November 30, 2015.



- 19. Mr. Boyle reviewed operating instructions (emergency vs. non-emergency) associated with the upcoming NERC COM-002-4 standard.
- 20. Ms. Jani reviewed the Unit Specific Parameter Adjustment Process, developed as part of the Capacity Performance FERC Order. The process was established for Generation Capacity Resources that may not be capable of meeting the unit-specific operating parameters established by the Office of the Interconnection due to actual operating constraints. Revisions to PJM Manual 11: Energy & Ancillary Services Market Operations are currently in progress.
- 21. Mr. Moleski provided an update on NERC, SERC and RFC standards and other pertinent regulatory and compliance information, and solicited feedback from the members on the N&RC departmental efforts. There are currently several standards under development, and several standards subject to future enforcement.

Capacity Performance Examples

22. Mr. Bryson and Mr. Keech led continued discussions, and reviewed additional examples related to Capacity Performance operational scenarios.

Future Meeting Dates

November 3, 2015	9:00 am
December 1, 2015	9:00 am
January 5, 2016	9:00 am
February 9, 2016	9:00 am
March 8, 2016	9:00 am
April 5, 2016	9:00 am
May 10, 2016	9:00 am
June 7, 2016	9:00 am

PJM Conference and Training Center PJM Conference and Training Center

Author: Jeff McLaughlin

In Attendance (In Person)

Last Name	First Name	Company	Sector
Bryson (Chair)	Mike	PJM Interconnection, LLC	Not Applicable
McLaughlin (Secretary)	Jeffrey	PJM Interconnection, LLC	Not Applicable
Benchek	Jim	FirstEnergy Solutions Corporation	Transmission Owner
Bleiweis	Bruce	DC Energy LLC	Other Supplier
Brodbeck	John	Potomac Electric Power Company	Electric Distributor
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner



Fitch	Neal	NRG Power Marketing LLC	Generation Owner
Foladare	Kenneth	IMG Midstream LLC	Generation Owner
Griffiths	Dan	Consumer Advocates of PJM States	Not Applicable
Hagaman	Derek	GT Power Group	Transmission Owner
Herel	Suzanne	RTO Insider	Not Applicable
Horstmann	John	Dayton Power & Light Company	Transmission Owner
Jardot	Gina	Essential Power Rock Springs, LLC	Transmission Owner
Johnson	Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Kogut	George	New York Power Authority	Other Supplier
Leonard	Ryan	Iberdrola Renewables	Generation owner
O'Connell	Bob	Main Line Electricity Market Consultants	Not Applicable
Pratzon	David	GT Power Group	Not Applicable
Stewart	Travis	Gable and Associates	Not Applicable
Trayers	Barry	Citigroup Energy, Inc.	Other Supplier
Weaver	David	Exelon	Transmission Owner

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
Barker	Jason	Exelon	Transmission Owner
Batta	Mike	Dominion Virginia Power	
Blackshear	David	Constellation Energy Control and Dispatch, LLC	Other Supplier
Bolan	Martin	First Energy Solutions	



Bonner	Charles	Dominion Virginia Power	
Carmean	Gregory	OPSI	Not Applicable
Сох	Jason	Dynegy	Generation Owner
Currier	Jeff	Dominion Virginia Power	
Davis	Connie	City of Cleveland, DPU	Electric Distributor
DeNavas	Joe	Potomac Electric Power Company	
Denise	James	Dominion Virginia Power	
DePillo	Raymond	Public Service Electric & Gas	
DeVitto	Ralph	Orange and Rockland Utilities, Inc.	Transmission Owner
DiNicola	Laura	First Energy Solutions Corporation	
Doremus	Steven	EnerNOC, Inc.	Other Supplier
Douglass	Robert	Constellation Energy	
Duan	Robert	Ontario Power Generation	Other Supplier
Erickson	Bruce	Alleghany Electric Cooperative, Inc.	Electric Distributor
Feierabend	Rick	Dominion Virginia Power	
Filomena	Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Garnett	Bryan	Duke Energy	
Gates	Terry	Appalachian Power Company	Transmission Owner
Gebele	Don	Dayton Power & Light Company	Transmission Owner
Gebolys	Debbie	Other	Not Applcable
Gell	Richard	Ontario Power Generation	Other Supplier
Gockley	Beatrice	Johnson Controls, Inc.	Not Applicable
Gouda	John	Old Dominion Electric Cooperative	Electric Distributor



Guerry	Katie	EnerNOC, Inc.	Other Supplier
Hart	Joy	North Carolina Electric Membership Corporation	Electric Distributor
Hastings	David	Market Interconnection LLC	Not Applicable
Hoatson	Tom	LS Power	
Horning	Lynn Marie		
Hostetler	Tim	Appalachian Power Company	Transmission Owner
Hough	James	Public Service Electric & Gas	
Hyzinski	Tom	Talen Energy Marketing, LLC	Generation Owner
Ishwanthlal	Shaun	Brookfield Renewable Energy Marketing	Other Supplier
lyer	Shrikant	Constellation Energy	
Johnson	Nick	Tenaska Power Services Company	Generation Owner
Liang-Nicol	Cecilia	First Energy Solutions Corporation	Transmission Owner
Libbos	Robin	FirstEnergy Solutions Corporation	Transmission Owner
Lieberman	Steve	Old Dominion Electric Cooperative	Electric Distributor
Mabry	David	McNees Wallace & Nurick LLC	Not Applicable
Markiewicz	Cindy	Allegheny Power	Transmission Owner
Marton	David	FirstEnergy Solutions Corporation	Transmission Owner
Metzler	Jakob	Castleton Commodities Merchant Trading L.P.	Other Supplier
Mok	Alan	Duke Energy	Transmission Owner
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
O'Leary	Christopher	PSEG Energy Resources and Trade LLC	Transmission Owner



Ondayko	Brock	Appalachain Power Company	Transmission Owner
Pakela	Gregory	DTE Energy Supply, Inc.	Other Supplier
Patten	Kevin	AEP Energy, Inc.	Other Supplier
Pleiss	Bob	Constellation Energy	
Price	Russell	UGI Utilities, Inc.	Transmission Owner
Rutigliano	Tom	Achieving Equilibrium LLC	Other Supplier
Santarelli	Paul	PPL Electric Utilities Corp.	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
Schum	Alice	Illinois Municipal Electric Agency	
Sillin	John	Federal Energy Regulatory Commission	Not Applicable
Singh	Harry	Goldman Sachs	Other Supplier
Slade	Louis	Dominion Virginia Power	Transmission Owner
Stefanowicz	Vince	Talen Energy Marketing, LLC	Generation Owner
Weghorst	Brad	Talen Energy Marketing, LLC	Generation Owner
Wharton	Ronald	Public Service Electric & Gas Company	Transmission Owner
Whitehead	Jeff	Direct Energy	Other Supplier
Wilmoth	Emily	Dominion Virginia Power	
Wilson	James	Wilson Energy Economics	Not Applicable
Wisersky	Megan	Madison Gas & Electric Company	Other Supplier
Yohnk	Darrel	ITC Transmission	
			1
PJM Attendees			
PJM Attendees Last Name	First Name	Company	Sector



Baker	Scott	PJM Interconnection, LLC	Not Applicable
Bhavaraju	Murty	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Brown	Rich	PJM Interconnection, LLC	Not Applicable
Bruno	Pat	PJM Interconnection, LLC	Not Applicable
Burlew	Jim	PJM Interconnection, LLC	Not Applicable
Caven	Augustine	PJM Interconnection, LLC	Not Applicable
Ciabattoni	Joe	PJM Interconnection, LLC	Not Applicable
Dolan	Jim	PJM Interconnection, LLC	Not Applicable
Falin	Tom	PJM Interconnection, LLC	Not Applicable
Hatch	Kevin	PJM Interconnection, LLC	Not Applicable
Hauske	Tom	PJM Interconnection, LLC	Not Applicable
Heimbach	Mark	PJM Interconnection, LLC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Hugee	Jacqui	PJM Interconnection, LLC	Not Applicable
Ike-Egbuonu	Chidi	PJM Interconnection, LLC	Not Applicable
Jani	Alpa	PJM Interconnection, LLC	Not Applicable
Keech	Adam	PJM Interconnection, LLC	Not Applicable
Kenney	Susan	PJM Interconnection, LLC	Not Applicable
Lavan	Ron	PJM Interconnection, LLC	Not Applicable
Lee	Ray	PJM Interconnection, LLC	Not Applicable
Martini	Danielle	PJM Interconnection, LLC	Not Applicable
Moleski	Tom	PJM Interconnection, LLC	Not Applicable



Nice	Ryan	PJM Interconnection, LLC	Not Applicable
Olaleye	Michael	PJM Interconnection, LLC	Not Applicable
O'Neill	Jack	PJM Interconnection, LLC	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Scott	Nicole	PJM Interconnection, LLC	Not Applicable
Souder	Dave	PJM Interconnection, LLC	Not Applicable
Souder	Rich	PJM Interconnection, LLC	Not Applicable
Stadelmeyer	Rebecca	PJM Interconnection, LLC	Not Applicable
Tam	Simon	PJM Interconnection, LLC	Not Applicable
Warner-Freeman	Jennifer	PJM Interconnection, LLC	Not Applicable
Weiss	Glenn	PJM Interconnection, LLC	Not Applicable
Yeddanapudi	Sree	PJM Interconnection, LLC	Not Applicable