



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

#### Administration

- 1. OC Agenda for this meeting was approved.
- 2. Draft Minutes of the May 5<sup>th</sup>, 2015 OC meeting were reviewed and approved.
- 3. OC Work Plan was reviewed.
- 4. OC Posting Report Card was reviewed.

#### Review of Operations

- 5. Mr. Pilong reviewed PJM Operations since the last Operating Committee (OC) Meeting, including details of the 5/27 load shed event in the AEP territory. John Baranowski presented details of the root cause analysis being performed for the April Chalk Point disturbance event.
- 6. Mr. Bryson presented the PJM Operating Metric Slides and reviewed changes to pricing interfaces. There were seven new or updated pricing interfaces.
- 7. Mr. Bryson provided an update on GridX.

#### OC Subcommittee Updates

- 8. Mr. Pilong provided a summary of the SOS meeting.
- 9. Mr. Graff provided a summary of the SIS meeting.
- 10. Mr. Lifer will provide a summary of the SRCS meeting.

#### Manual Endorsements

- 11. Mr. Ford reviewed changes to Manual 03A: Energy Management System (EMS) Model Updates and Quality Assurance (QA). Changes included adding a new Sub-Transmission and Modeling section (Section 4.9), and combining several sub-sections under Section 5.2. Updates were also made to Appendix A, C and D. \*\*The Operating Committee endorsed these changes with 0 objections and 0 abstentions.
- 12. Mr. Bryson reviewed changes to Manual 03: Transmission Operations regarding clarifications to the Load Dump language changes presented at last month's meeting. \*\*The Operating Committee endorsed these changes with 0 objections and 0 abstentions.

#### Fast Response Regulation Problem Statement

13. The Fast Response Regulation Problem Statement update was deferred until the Regulation Performance Impacts Group discussion immediately following the OC meeting.

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#### 2015 Winter Report

14. Ms. Hendrzak presented the 2015 Winter Report. The report shows a comparison of numerous 2014 vs. 2015 winter metrics including: peak system load, lowest seasonal temperature and wind chill, wind generation performance, and several generator outage rate comparisons. Several recommendations were then presented based on 2015 winter operational review. These recommendations included additional improvements to Gas / Electric Coordination, as well as continued implementation of the Capacity Performance proposal.

### **Cold Weather Resource Improvement**

15. Ms. Reiter and Mr. Schweizer reviewed the results of the recent survey on the Cold Weather Resource Improvement process and next steps. The survey yielded a number of suggested changes to testing criteria, as well as some additional comments for consideration. Stakeholders decided to reflect on the suggestions and comments. If necessary, a vote will be held in the form of proposed manual updates to determine what (if any) changes will be made to future cold weather resource performance exercises.

#### Performance Updates

- 16. Mr. Hsia provided an update on Regulation Performance.
- 17. Mr. Hauske provided an update on Synchronous Reserves.
- 18. Ms. Martini provided an update on Frequency Response.

#### PJM Training and Certification

19. Mr. Boyle provided an update on the continuing non-compliance of PJM Training and Certification requirements.

#### **PPL SPS Removals**

20. Mr. Santarelli, PPL Energy, discussed the removal of the Susquehanna Generator Loss of Outlet, Wescosville T3 and Montour Runback special protection schemes.

#### **Manual First Reads**

- 21. Mr. Nice reviewed changes to Manual 01: Control Center and Data Exchange Requirements. Changes involved a re-organization of Section 5: Metering Requirements. Other updates included the removal of a fixed-tap transformer telemetry requirement (Section 3.6), addition of a LTC monitoring requirement (Section 3.6), addition of a phasor data storage requirement (Section 3.3.2), and an additional entry to Appendix B for GMD data submittal. \*\*The Operating Committee will be asked to endorse these changes at the next Operating Committee meeting.
- 22. Mr. Pilong reviewed changes to Manual 13: Emergency Operations. The term "Mandatory" was removed from load management procedure names in Section 2.3.2 and 5.2 as these procedures are not mandatory in all situations. Section 5.4 was updated to reference the new PCLLRW eTool. Other changes included revisions to PJM phone number in Attachment D, updates to load shed tables in





Attachments E and F based on updated load forecasts, as well as several other administrative changes. \*\*The Operating Committee will be asked to endorse these changes at the next Operating Committee meeting.

#### **Tool and Informational Updates**

- 23. Mr. Bryson reviewed a Capacity Performance Assessment Hour Example which included proposed Tariff definitions of "Performance Assessment Hour" and "Emergency Action". An explanation of the Emergency Procedure trigger for Performance Assessment Hour(s) was provided, and an Assessment Hour example was reviewed.
- 24. Ms. Miehlke provided an update on the member request for an Email Address Distribution List.
- 25. Ms. Luna provided an update regarding several PJM.com changes. The new Meeting Center goes live Friday, June 26 and it will allow stakeholders to more easily register for meetings. Ms. Luna also highlighted the Inside Lines news site located at inside.lines.pjm.com. The site provides more timely news than the former monthly newsletter. To address member feedback through the 2013 survey, PJM has also been working on its search engine and has longer term plans to further enhance the search engine. In the meantime, the Markets & Operations section is being refreshed to provide more streamlined, easy to navigate content.
- 26. Ms. Holland reviewed the new tool, Data Viewer, as part of PJM's tool refresh project.
- 27. Ms. Hendrzak provided an update on the 2013 Hot Weather and 2014 Cold Weather Recommendations. Updates on this topic will be information only beginning with the July OC meeting.
- 28. Mr. Kappagantula provided an update on NERC, SERC and RFC standards and other pertinent regulatory and compliance information and solicited feedback from the members on N&RC efforts. Specifically, an update was provided on FAC-010-3, FAC-011-3, FAC-014-2, IRO-006-EAST-2, and IRO-009-2 all of which are currently under development. A list of standards subject to future development, and a timeline for those changes was also provided.
- 29. An update on the Markets Gateway Tool that is replacing eMarket has been posted for informational purposes.

#### Regulation Performance Impacts Group

At the completion of the OC, the Regulation Performance Impacts Group met and approved the Fast Response Regulation Problem Statement. The working group charter has also been approved, and a work plan has been developed. The group is targeting a completion date of October 2015.

#### **Future Meeting Dates**

July 7, 2015	9:00 am	PJM Conference and Training Center
August 11, 2015	9:00 am	PJM Conference and Training Center
September 8, 2015	9:00 am	PJM Conference and Training Center
October 6, 2015	9:00 am	PJM Conference and Training Center
November 3, 2015	9:00 am	PJM Conference and Training Center
December 1, 2015	9:00 am	PJM Conference and Training Center





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### In Attendance (In Person)

Last Name	First Name	Company	Sector
Bryson (Chair)	Mike	PJM Interconnection, LLC	Not Applicable
McLaughlin	Jeffrey	PJM Interconnection, LLC	Not Applicable
(Secretary)			
Benchek	Jim	FirstEnergy Solutions Corporation	Transmission Owner
Borgatti	Michael	Gable and Associates	Not Applicable
Brownell	Stanley	Monitoring Analytics, LLC	Not Applicable
D'Alessandris	Lou	FirstEnergy Corporation	Transmission Owner
Fitch	Neal	NRG Power Marketing LLC	Generation Owner
Herel	Suzanne	RTO Insider	None
Hill	Cody	IS Power	Not Applicable
Kogut	George	New York Power Authority	Other Supplier
O'Connell	Bob	Main Line Electricity Market Consultants	Not Applicable
Pratzon	David	GT Power Group	Not Applicable
Scarp	David	Calpine Energy Services LP	Generation Owner
Singh	Randhir	PSEG Fossil LLC	Generation Owner
Stadelmeyer	Rebecca	Exelon Business Services Company, LLC	Transmission Owner
Trayers	Barry	Citigroup Energy, Inc.	Other Supplier
Weghorst	Bradley	PPL Energy Plus, L.L.C.	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
Berlinski	Mike	Customized Energy Solutions, Inc.	None
Blackshear	David	Constellation Energy Control and Dispatch, LLC	Other Supplier
Campbell	Bruce	EnergyConnect, Inc.	Other Supplier
Carmean	Gregory	OPSI	Not Applicable
Cedeno- Mendoza	Oscar	Duke Energy Ohio, Inc. (EDC)	None
Citrolo	John	PSEG Energy Resources and Trade LLC	Transmission Owner
Crusey	Dave	Dayton Power & Light Company	Transmission Owner
Czigler	Frank	Public Service Electric & Gas	Transmission Owner
Davis	Connie	City of Cleveland, DPU	Electric Distributor
De Geeter	Ralph	Maryland Public Service Commission	Not Applicable
Diamant	Martin	Public Service Electric & Gas	Transmission Owner
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Erickson	Bruce	Alleghany Electric Cooperative, Inc.	Electric Distributor
Filomena	Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Garavaglia	John	Commonwealth Edison Company	Transmission Owner
Gates	Terry	Appalachian Power Company	Transmission Owner
Gebele	Don	Dayton Power & Light Company	Transmission Owner
Gebolys	Debbie	Other	Not Applcable
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Greening	Michele	PPL EnergyPlus, L.L.C.	Transmission Owner





Harris	Stewart	Carmen Group	Not Applicable
Hastings	David	Market Interconnection LLC	Not Applicable
Haynes	Gregory	Energy Authority, Inc.	Other Supplier
Hebert	Chris	Beacon Power, LLC	Other Supplier
Hoatson	Tom	Riverside Generating, LLC	Other Supplier
Hopkins	Sandra	Dominion Virginia Power	Not Applicable
Horstmann	John	Dayton Power & Light Company	Transmission Owner
Hostetler	Tim	Appalachian Power Company	Transmission Owner
Hunter	Andy	FirstEnergy Solutions Corporation	Transmission Owner
Johnson	Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Josyula	Siva	Monitoring Analytics, LLC	Not Applicable
Kowalczyk	Nick	Rockland Electric Company	Transmission Owner
Kumaraswamy	Kiran	AES Energy Storage LLC	Generation Owner
Libbos	Robin	FirstEnergy Solutions Corporation	Transmission Owner
Lieberman	Steve	Old Dominion Electric Cooperative	Electric Distributor
Lowe	Connie	Dominion Virginia Power	Not Applicable
Ма	Alex	Invenergy	Generation Owner
Mabry	David	McNees Wallace & Nurick LLC	Not Applicable
Mahler	Dave	Duquesne Light Company	Transmission Owner
Mahoney	Julie	NYSEG Solutions, Inc.	Other Supplier
Markiewicz	Cindy	Allegheny Power	Transmission Owner
Martin	Valerie	Federal Energy Regulatory Commission	Not Applicable
Marton	David	FirstEnergy Solutions Corporation	Transmission Owner





McAlister	Lisa	American Municipal Power, Inc.	Electric Distributor
Meier	Mariko	EnerNOC, Inc.	Other Supplier
Metzler	Jakob	Castleton Commodities Merchant Trading L.P.	Other Supplier
Morin	Graham	Johnson Controls, Inc.	Not Applicable
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
O'Connor	Siobhan	Energy Authority, Inc.	Other Supplier
O'Leary	Christopher	PSEG Energy Resources and Trade LLC	Transmission Owner
Ondayko	Brock	Appalachain Power Company	Transmission Owner
Ozkan	Deniz	Atlantic Grid Operations A, LLC	Other Supplier
Pakela	Gregory	DTE Energy Supply, Inc.	Other Supplier
Perez	Alexis		
Pleiss	Robert	Constellation Energy Commodities Group, Inc.	Other Supplier
Price	Russell	UGI Utilities, Inc.	Transmission Owner
Rutigliano	Tom	Achieving Equilibrium LLC	Other Supplier
Santarelli	Paul	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
Schafer	Anita	Duke Energy Business Services LLC	Generation Owner
Schneider	Jon	FirstEnergy Solutions Corporation	Transmission Owner
Sillin	John	Federal Energy Regulatory Commission	Not Applicable
Slade	Louis	Virginia Electric & Power Company	Transmission Owner
Sock	Bryan	Public Service Electric & Gas Company	Transmission Owner





Sullivan	James	Neptune Regional Transmission Systems, LLC	Transmission Owner
Summers	Jim	Delmarva Power & Light Company	Electric Distributor
Weghorst	Bradley	PPL EnergyPlus, LLC	Transmission Owner
Wharton	Ronald	Public Service Electric & Gas Company	Transmission Owner
White	Doug	North Carolina Electric Membership Corporation	Electric Distributor
Wilson	James	Wilson Energy Economics	Not Applicable
Wisersky	Megan	Madison Gas & Electric Company	Other Supplier
Yu	Haibin	Calpine Energy Services LP	Generation Owner
Yu	Joel	Rockland Electric Company	Transmission Owner

### **PJM Attendees**

Baker	Scott	PJM Interconnection, LLC	Not Applicable
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Carroll	Rebecca	PJM Interconnection, LLC	Not Applicable
Coyne	Suzanne	PJM Interconnection, LLC	Not Applicable
Ford	Adrien	PJM Interconnection, LLC	Not Applicable
Ford	Andy	PJM Interconnection, LLC	Not Applicable
Graff	Ron	PJM Interconnection, LLC	Not Applicable
Hauske	Tom	PJM Interconnection, LLC	Not Applicable
Heimbach	Mark	PJM Interconnection, LLC	Not Applicable
Hendrzak	Chantal	PJM Interconnection, LLC	Not Applicable
Holland	Risa	PJM Interconnection, LLC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable





Hugee	Jacqulynn	PJM Interconnection, LLC	Not Applicable
Kappagantula	Sri	PJM Interconnection, LLC	Not Applicable
Kenney	Susan	PJM Interconnection, LLC	Not Applicable
Luna	Tawnya	PJM Interconnection, LLC	Not Applicable
Martini	Danielle	PJM Interconnection, LLC	Not Applicable
McGee	Marion	PJM Interconnection, LLC	Not Applicable
Miehlke	Tracy	PJM Interconnection, LLC	Not Applicable
Morelli	Lisa	PJM Interconnection, LLC	Not Applicable
Nice	Ryan	PJM Interconnection, LLC	Not Applicable
Olaleye	Michael	PJM Interconnection, LLC	Not Applicable
Pilong	Christopher	PJM Interconnection, LLC	Not Applicable
Pitts	Martelle	PJM Interconnection, LLC	Not Applicable
Reiter	Heather	PJM Interconnection, LLC	Not Applicable
Sanchez	Frankie	PJM Interconnection, LLC	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Smith	Melissa	PJM Interconnection, LLC	Not Applicable
Souder	Michelle	PJM Interconnection, LLC	Not Applicable
Tam	Simon	PJM Interconnection, LLC	Not Applicable
Tribulski	Jennifer	PJM Interconnection, LLC	Not Applicable
Velasco	Cheryl Mae	PJM Interconnection, LLC	Not Applicable
Weiss	Glenn	PJM Interconnection, LLC	Not Applicable
Williams	Stan	PJM Interconnection, LLC	Not Applicable
Fan	Zhenyu	PJM Interconnection, LLC	Not Applicable



