

**Operating Committee**  
**PJM Conference & Training Center, Audubon, PA**  
**July 12, 2016**  
**9:00 a.m. – 12:30 p.m. EPT**

## Administration

1. The Agenda for this meeting was approved.
2. Draft Minutes of the June 7, 2016 OC meeting were reviewed and approved.
3. The OC Work Plan was reviewed.

## Review of Operations

### 4. Review of Operational Events

Mr. Chris Pilong, PJM, reviewed PJM Operations since the last OC Meeting. The review included a complete summary of May 2016 operational events, and a partial summary of June 2016 events. The May summary included 7 High System Voltage events, 1 Synchronous Reserve event and 4 Shared Reserve events. The June partial summary included 2 High System Voltage events and 1 Synchronous Reserve event. A brief operational summary of the recently implemented generator pseudo-ties was also provided. Lastly, a review of the June 22, 2016 tornado in the ComEd territory was provided, which caused several 345kV tower line outages to occur. Slides related to this event have been posted for informational purposes with the July 12, 2016 Operating Committee meeting materials.

### 5. Review of Operating Metrics

Mr. Chris Pilong reviewed the PJM Operating Metrics Slides, updated with June metrics data. Metrics included PJM's load forecast error, BAAL performance, transmission / generation outage statistics, and Perfect Dispatch performance.

## Endorsements / Approvals

### 6. Manual 03A Changes

Mr. Ron DeLoach, PJM, reviewed proposed changes to *Manual 03A: Energy Management System (EMS) Model Updates and Quality Assurance (QA)* regarding administrative and modeling process updates, including data submissions for Behind the Meter generation. **The Operating Committee endorsed these changes with 0 objections and 0 abstentions.**

## First Readings

### 7. Manual 37 Changes

Mr. Phil D'Antonio, PJM, reviewed proposed changes to *Manual 37: Reliability Coordination* as part of the manual's periodic review. The changes included the addition of several controlling actions to section 3.2, as well as a number of administrative updates. The Operating Committee will be asked to endorse these changes at the next OC meeting.

## 8. **Manual 12 Changes**

Ms. Danielle Croop, PJM, reviewed proposed changes to *Manual 12: Balancing Operations* which included several administrative and conforming updates. Section 4.4 was updated to add clarity and remove redundant language which is already outlined in *PJM Manual 11: Energy & Ancillary Services Market Operations*. Section 3.1.1 and Attachment E of the manual were also updated to align with the newly implemented requirements within BAL-001-1 and BAL-003-1. The Operating Committee will be asked to endorse these changes at the next OC meeting.

## 9. **Manual 14C Changes**

Mr. Jason Shoemaker, PJM, reviewed proposed changes to *Manual 14C: Generation and Transmission Interconnection Facility Construction*. The updates were presented to the Operating Committee for informational purposes. The updates included administrative changes, and changes related to FERC Order 1000. A proposed new section to the manual regarding tie line processes which was originally presented to the Planning Committee as part of this revision has now been removed so that further discussion can take place.

## 10. **Manual 14D Changes**

Mr. David Schweizer, PJM, reviewed proposed changes to *Manual 14D: Generator Operational Requirements*, as part of the manual's periodic review. Administrative and clarifying changes were made to sections 4.2.1, 4.3.4, and 7.1.2, as well as attachments E, G and H. The manual revision also proposes new language to eliminate Capacity Performance resources from being eligible to participate in the Cold Weather Testing Program. PJM will also add clarifying language to the manual summarizing the VAR-001 exemption criteria in section 7.1.2. The Operating Committee will be asked to endorse these changes at the next OC meeting.

## OC Subcommittee / Task Force Updates

### 11. **System Operations Subcommittee (SOS)**

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

### 12. **Systems Information Subcommittee (SIS)**

Mr. Mike Del Viscio, PJM, provided a summary of the most recent SIS meeting.

### 13. **System Restoration Coordinators Subcommittee (SRCS)**

The SRCS had not met since the last OC meeting. The next SRCS meeting is scheduled for July 26, 2016.

### 14. **Metering Task Force (MTF)**

Mr. Ed Kovler, PJM, provided a summary of MTF activity since the last OC meeting.

## Tool and Informational Updates

### 15. **PJM/NYISO Wheel Termination**

Mr. Phil D'Antonio led a discussion regarding the April 2017 expiration of the PJM/NYISO wheel agreement. PJM is currently working with NYISO on a replacement operating protocol which focuses on open access and mutual benefit, while ensuring system reliability. The goal is to have details of the protocol worked out by fall of 2016, and implemented in the appropriate market models by May 1,

2017. Over the next several months, PJM will be communicating progress of this process through the OC, MIC and PC.

## 16. NERC Lessons Learned

Mr. Phil D'Antonio reviewed the recently posted NERC Lessons Learned.

## 17. Pricing Interface Update

There were no new or updated Closed Loop Interfaces implemented since the last OC.

## 18. NERC and Regional Coordination Update

Mr. Sri Kappagantula, PJM, 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. Several NERC standards currently under development were reviewed including TOP-001-3 and IRO-002-4, as well as several EOP standards. Standards subject to future enforcement were also reviewed, including FAC-003-4 and MOD-031-2 which become enforceable on October 1, 2016.

## 19. New 500kV Transmission Line Designation

Mr. Paul Santarelli, PPL Electric Utilities, reviewed a new 500kV transmission line designation resulting from the future cut-in of the new Shickshinny 500kV switchyard in PPL. The cut-in will split the existing Susquehanna – Lackawanna 500kV line. The Susquehanna – Shickshinny line segment will re-use the existing 5062 line number, while the Shickshinny – Lackawanna portion will use the new 5067 line number.

## 19b. MOD-032 Data Submissions

Mr. Jonathan Thompson, PJM, reminded stakeholders of the upcoming July 31, 2016 deadline for generation owner data submissions. The data submissions are being requested in compliance with the NERC MOD-032-1 standard, and should be provided through the PJM Planning Center web application.

## Capacity Performance

## 20. Unit Specific Parameter Process Update

Ms. Alpa Jani, PJM, provided an update on the Unit Specific Parameter adjustment review process. Adjustments are currently being accepted for the 2017/18 delivery year, with a deadline of February 28, 2017 for all adjustment requests to be submitted (for the 2017/18 delivery year). Stakeholders are encouraged to submit these requests as early as possible.

## 21. Data Requests

Ms. Rebecca Stadelmeyer, PJM, provided an informational review of the current triggers and communications related to CP Performance Assessment Hours (PAHs). PJM is currently reviewing several data requests by members who wish to receive communication of a PAH through ICCP data links. PJM is currently analyzing the feasibility of these requests, and will provide feedback at upcoming OC meetings. The concept of a non-ramp limited resource basepoint signal was also reviewed, and an example was provided. PJM requested additional stakeholder feedback and guidance on this topic.

## Future Meeting Dates

August 9, 2016	9:00 a.m.	PJM Interconnection - Conference and Training Center
September 13, 2016	9:00 a.m.	PJM Interconnection - Conference and Training Center
October 4, 2016	9:00 a.m.	PJM Interconnection - Conference and Training Center
November 1, 2016	9:00 a.m.	PJM Interconnection - Conference and Training Center
December 13, 2016	9:00 a.m.	PJM Interconnection - 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
Borgatti	Michael	Gabel and Associates	Not Applicable
Brodbeck	John	EDP Renewables North America, LLC	Other Supplier
Fitch	Neal	NRG Power Marketing LLC	Generation Owner
Greiner	Gary	PSEG Energy Resources and Trade LLC	Other Supplier
Griffiths	Dan	Consumer Advocates of PJM States	Not Applicable
Herel	Suzanne	RTO Insider	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
Lieberman	Steven	Old Dominion Electric Cooperative	Electric Distributor
Midgley	Sharon	Exelon Business Services	Transmission Owner
Pratzon	David	GT Power Group	Not Applicable
Scarpignato	David	GT Power Group	Not Applicable

Trayers	Barry	Citigroup Energy, Inc.	Other Supplier
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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	
Bonner	Charles	Dominion Virginia Power	
Carmean	Gregory	OPSI	Not Applicable
Collins	Leonard	State of Delaware	Not Applicable
D'Alessandris	Lou	FirstEnergy Solutions Corporation	
Davis	Connie	City of Cleveland, DPU	Electric Distributor
DeLosa	Joe	Delaware Public Service Commission	Not Applicable
DiNicola	Laura	First Energy Solutions Corporation	Transmission Owner
Domian	Christin	Duquesne Light Company	Transmission Owner
Duan	Robert	Ontario Power Generation	Other Supplier
Dugan	Chuck	East Kentucky Power Cooperative	Transmission Owner
Esposito-Hils	Pati	TransCanada Power Marketing Ltd.	Other Supplier
Filomena	Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Garnett	Bryan	Duke Energy	Transmission Owner
Gates	Terry	Appalachian Power Company	Transmission Owner
Gebolys	Debbie	Public Utility Commission of Ohio	Not Applicable
Greening	Michele	PPL EnergyPlus, L.L.C.	Transmission Owner
Gupta	Vinit	ITC Holdings Corp	Transmission Owner
Hanebuth	Michele	Orange & Rockland	Transmission Owner

Hart	Ron	Dominion	
Hastings	David	Market Interconnection LLC	Not Applicable
Helmick	Doug	GenOps LLC	
Henry	Michelle	First Energy Corporation	
Hepplewhite	Peter	DC Energy, LLC.	Other Supplier
Hoatson	Tom	LS Power	
Hopkins	Sandra	Dominion	
Hostetler	Tim	Appalachian Power Company	Transmission Owner
Hudis	Gabriella	Gable Associates, LLC	Not Applicable
Janicki	Diane	Boston Energy Trading and Marketing, LLC.	Generation Owner
Jardot	Gina	Essential Power Rock Springs, LLC	Transmission Owner
Jones	David	Power Generation Services, Inc.	Other Supplier
Keefer	Brian	Dominion	Transmission Owner
Kilgallen	Kevin	Iberdrola	Generation Owner
Leasure	Jill	Keystone Conemaugh Projects	
Libbos	Robin	FirstEnergy Solutions Corporation	Transmission Owner
Lowe	Connie	Dominion Virginia Power	Not Applicable
Mabry	David	McNees Wallace & Nurick LLC	Not Applicable
Malkin	David	KOREnergy, Ltd.	Other Supplier
Mangonon	Rollie	Rockland Electric Company	Transmission Owner
Markiewicz	Cindy	Allegheny Power	Transmission Owner
McNally-Barsotti	Diana	Consolidated Edison	

Nadel	Steven	PPL Electric Utilities	Transmission Owner
Neubrandner	Kerry	DC Energy, LLC.	Other Supplier
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
O'Connell	Bob	Main Line Electricity Market Consultants	Not Applicable
Ondayko	Brock	AEP Energy Supply	Generation Owner
Patel	Munjal	Public Service Electric & Gas	
Price	Mark	DC Energy	
Price	Russel	UGI Utilities, Inc.	Transmission Owner
Rutigliano	Tom	Achieving Equilibrium LLC	Other Supplier
Santarelli	Paul	PPL Electric Utilities	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
Schloendorn	Ron	PECO	Transmission Owner
Schwarz	Rebecca	American Electric Power	
Sillin	John	Federal Energy Regulatory Commission	Not Applicable
Slagel	Ron		
Stefanowicz	Vince	Talen Energy Marketing, LLC	Generation Owner
Suh	Jung	Nobel Americas Energy Solutions, LLC	Other Supplier
Sweeney	Rory	RTO Insider	Not Applicable
Tavormina	John	Rockland Electric Company	Transmission Owner
Thomson	Heather	Mid-Atlantic Renewable Energy Coalition	Not Applicable
Wharton	Ron	Public Service Electric & Gas	Transmission Owner
White	Doug	North Carolina Electric Membership Corporation	Electric Distributor

Whitehead	Jeff	Direct Energy Business	Other Supplier
Wisersky	Megan	Madison Gas & Electric Company	Other Supplier
Yohnk	Darrel	ITC Interconnection	Other Supplier

## PJM Attendees

Last Name	First Name	Company	Sector
Boyle	Glen	PJM Interconnection, LLC	Not Applicable
Ciabattoni	Joe	PJM Interconnection, LLC	Not Applicable
Croop	Danielle	PJM Interconnection, LLC	Not Applicable
D'Antonio	Phil	PJM Interconnection, LLC	Not Applicable
Del Viscio	Michael	PJM Interconnection, LLC	Not Applicable
Deloach	Ron	PJM Interconnection, LLC	Not Applicable
Driscoll	Mary Ellen	PJM Interconnection, LLC	Not Applicable
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Fabiano	Janell	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
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Jani	Alpa	PJM Interconnection, LLC	Not Applicable
Kappagantula	Sri	PJM Interconnection, LLC	Not Applicable
Kenney	Susan	PJM Interconnection, LLC	Not Applicable
Kimmel	David	PJM Interconnection, LLC	Not Applicable
Militello	Nicole	PJM Interconnection, LLC	Not Applicable



Olaleye	Michael	PJM Interconnection, LLC	Not Applicable
Pilong	Christopher	PJM Interconnection, LLC	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Shoemaker	Jason	PJM Interconnection, LLC	Not Applicable
Stadlmeyer	Rebecca	PJM Interconnection, LLC	Not Applicable
Tam	Simon	PJM Interconnection, LLC	Not Applicable
Thompson	Jonathan	PJM Interconnection, LLC	Not Applicable
Tribulski	Jennifer	PJM Interconnection, LLC	Not Applicable
Weiss	Glen	PJM Interconnection, LLC	Not Applicable

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