

**System Operations Subcommittee – Generation and Transmission**  
**PJM Conference and Training Center**  
**June 24, 2015**  
**09:00am – 11:00am (EDT)**

## Transmission Members Present

LAST NAME	FIRST NAME	COMPANY	
Bryson (Acting Chair)	Mike	PJM Interconnection	In-Person
Scott (Secretary)	Nicole	PJM Interconnection	In-Person
Baker	Jeff	Duke Energy Ohio	Teleconference
Garavaglia	John	Commonwealth Edison Company	Teleconference
Gibellino	Dana	Allegheny Power	Teleconference
Guarneri	Matt	Baltimore Gas & Electric	Teleconference
Hunt	Randy	Virginia Electric & Power Company	Teleconference
Kern	Steve	American Transmission Systems	Teleconference
Klohonatz	Mark	Allegheny Power	Teleconference
Lloyd	Dave	UGI Utilities, Inc	Teleconference
Lombrazo	Laura	Rockland Electric Company	Teleconference
Lowe	Connie	Dominion Virginia Power	In-Person
Mahler	David	Duquesne Light Company	Teleconference
Schloendorn	Ron	PECO	Teleconference
Skumanich	Bill	PPL Electric Utilities Corp	Teleconference
Slade	Louis	Virginia Electric & Power Company	In-Person
Stine	Randy	Metropolitan Edison Company	Teleconference
Sullivan	James	Neptune Regional Transmission System	Teleconference
Verner	Jane	Potomac Electric Power Company	Teleconference
Wagner	Dan	Appalachian Power Company	Teleconference
Wharton	Ron	Public Service Electric and Gas Company	Teleconference

## Generation Members Present

Bonner	Charles	Dominion Virginia Power	Teleconference
Dinsmore	Frank	Appalachian Power Company	Teleconference
Fusek	Dave	Appalachian Power Company	Teleconference
Grear	Mark	Exelon Generation Co.	Teleconference
Hastings	David	Consultant – Supplier	Teleconference
Horstmann	John	Dayton Power & Light Company	Teleconference
Johnston	Todd	Appalachian Power Company	Teleconference
Keilholtz	Kenny	GenOn Energy Management	Teleconference

LeFevre	Donna	Dominion Virginia Power	Teleconference
Libbos	Robin	Allegheny Power	Teleconference
Metzler	Jakob	Castleton Commodities Merchant Trading	Teleconference
Pleiss	Gary	Jersey Central Power & Light company	Teleconference
Rhodes	Sherri	FirstEnergy Corporation	Teleconference
Vicini	Dave	PPL EnergyPlus	Teleconference
Whittaker	Greg	East Kentucky Power Cooperative	Teleconference

## Others Present

Caven	Augustine	PJM Interconnection	In-Person
Curley	Maureen	PJM Interconnection	In-Person
Ford	Andy	PJM Interconnection	In-Person
Gordon	Brad	PJM Interconnection	In-Person
Heimbach	Mark	PJM Interconnection	Teleconference
Ike-Egbuonu	Chidi	PJM Interconnection	In-Person
Lee	Ray	PJM Interconnection	In-Person
Luna	Tawnya	PJM Interconnection	In-Person
Liu	Jay	PJM Interconnection	Teleconference
Schweizer	David	PJM Interconnection	In-Person
Sitarchyk	Mike	PJM Interconnection	In-Person
Tam	Simon	PJM Interconnection	In-Person
Thompson	Jonathan	PJM Interconnection	In-Person

## Administration

1. The Agenda for this meeting was approved.
2. The Draft Minutes of the May 27th, 2015 Joint meeting were approved.

## Review of Operations

3. Mr. Bryson provided an update of System Operations. For May, the CPS1 was 149.8%, CPS2 was 87.3%, BAAL was 99.8%, and DCS was 100%. For the partial month of June:

3 Hot Weather Alert, 1 HLV Schedule Warning, 1 HLV Schedule Action

9 Emergency Procedure Events, 4 Load Management Events

1 Max Emergency Gen Alert, 2 Max Emergency Gen Events

1 Manual Load Dump Warning, 1 Primary Reserve Warning, 2 Voltage Reduction Warnings

17 High system voltage events

5 Shared Reserves events, 0 Spinning Events, and 54 PCLLRWs.

8 Minimum Generation Alert events, 0 Minimum Generation Declaration Events and 0 Minimum Generation events.

Member Operational Issues: None

Mr. Bryson provided some information on the AE load shed event that occurred on 6/23 due to storms. There will be some analysis and further updates provided to the group. PS, PE, and AE were the hardest hit and are still in process of recovering.

## Working Group and Task Force Updates

4. eDART User Groups – Ms. Ike-Egbuonu provided an update on eDART changes and enhancements. The timeline for the IRC implementation was reviewed. **July-August 2015** – PJM dispatch will issue weekly tests for new IRC every Tuesday in July (1500 – 1600) then daily in late July/early August. Members will submit new data via New IRC during tests. PJM will contact any non-reporters. **September 2015** – New IRC becomes official tool (9/1) and will be renamed to IRC in Q3 eDART release. Records of past IRC's will be kept. Q3 enhancements for eDART include transmission tickets linkage, network model notification, inclusion of external outages in conflict identifier, and company system impacts reports. Unit types will also be updated in eDART to better match other PJM tools. PJM will be reaching out to impacted GO's.
5. Dispatcher Training Subcommittee (DTS) – No updates

## System Operator Training and Certification

6. Ms. Scott provided the results of certification and training statuses on behalf of Mr. Hoke. Generation: 9 companies were non-compliant for certification, 7 have a mitigation plan in place; 2 companies were non-compliant for training, both of those companies have a mitigation plan in place. Small Generation: 4 companies were non-compliant for both certification and training and requirements, 1 of those has a mitigation plan in place. Transmission: All were compliant for certification and training. For CSP's: 4 companies were non-compliant, none of those companies has a mitigation plan in place. PJM is working with all companies to develop mitigation plans.
7. Mr. Bryson reviewed a problem statement/issue charge regarding System Operator Training and Certification requirements. PJM has seen some increasing chronic non-compliance with M-40 requirements. TO's are typically in compliance, most issues are related to Generation. PJM is seeing some instances where members are not aware of their operational responsibilities. A compliance score was created for each company and some results were displayed. This will be brought to the OC in July, but the assignment may come back to the SOS.

## Regional Standards, NAESB, and Compliance Update

8. Mr. Gordon provided an update on NERC, SERC, RFC, and NAESB Regional Standards. IRO-006-EAST-2 and IRO-009-2: Project 2015-06 Interconnection Reliability Operations and Coordination has an initial ballot period from 6/29/15 – 7/8/15 and a comment period from 5/21/15 – 7/8/15. From the Glossary, Project 2015-04 Alignment of Terms has an initial ballot period of 7/17/15 – 7/27/15 and a

comment period open through 7/27/15.. He also reviewed the standards subject to future enforcement thru July 1, 2017. As of **July 1, 2015**, the following standard is being enforced: MOD-032-1: Data for Power System Modeling and Analysis. As of **October 1, 2015**, the following standards are being enforced: CIP-014-1: Physical Security, and COM-001-2: Communications. The remainder of the list can be found in the presentation.

9. The SOS addressed any ongoing Member issues regarding NERC/RFC Audits. None identified.

## Manual Updates

10. Mr. Bryson reviewed changes to M-13: Emergency Procedures. Several administrative changes were made. Sections 1.3.1, 1.3.2, and 1.3.3 now clarify reference to 'unplanned' database/ICCP outages. Sections 2.2 and 5.4 added references to M-12 for member actions when PJM loads 100% synchronized reserves and references to the new IRC process. Section 5.4 included references to the new PCLLRW eTool. Attachment D revised PJM phone number on Emergency Bid form. Attachments E & F load shed tables were updated for 6/1/15 load forecasts. This was the second read for this revision to M-13. It will move on to the OC for endorsement.
11. Mr. Bryson reviewed changes to M-03: Transmission Operations (version 47A). The change for this version was regarding the ratings methodology language requiring a separation between Emergency and Load Dump ratings. This was considered the first and second read for this revision as it has been approved and will be implemented on July 1, 2015.

## NERC MOD-032 Implementation Update

12. Mr. Thompson reviewed the new NERC MOD-032-1 standard which is effective **July 1, 2015**. The purpose of this standard is to establish consistent modeling data requirements and reporting procedures for development of planning horizon cases necessary to support analysis of the reliability of the interconnected transmission system. As a result of this standard, PJM will be taking over the MMWG case build responsibilities from RFC/SERC. There will be monthly updates on this at the Planning Committee meetings.

## PPL SPS Retirements

13. Mr. Bill Skumanich (PPL) reviewed the retirement of three SPS schemes in the PPL area in 2015. The Susquehanna Loss of Outlet Scheme was retired in May 2015. It is no longer needed with the addition of the Susquehanna – Roseland 500 kV line. The Wescosville Transformer #3 scheme was retired in May 2015. It is no longer needed with the installation of the Breinigsville 500-138-69 kV substation. The Montour Runback SPS will be retired in September 2015 it will no longer be needed with the rebuild of the Bushkill – Lackawanna 230 kV line and with both Susquehanna – Harwood 230 kV lines in service.

## Meeting Center Update

14. Ms. Luna gave an update on the new PJM Meeting Center. It will be going live on **Friday June 26<sup>th</sup>**. The system allows members to register for multiple meetings, and filter which meetings they would like to see. The feedback box will be up until the end of July. Other PJM.COM updates included information on insidelines.pjm.com which is a monthly newsletter now being updated more frequently.

The latest section to be updated is the “Markets & Operations” section. Content has been reduced and streamlined. All sections to PJM.COM are in the process of being updated. The search engine is also being worked on and will be addressed further in 2016.

## NERC Lessons Learned

- Mr. Bryson reviewed the latest NERC Lessons Learned posted on June 9, 2015. Lessons included “Real-time contingency analysis failure due to a modeling error” and “Generator distributed control system impact on AVR’s”

## Reactive Testing Process

- Mr. Lee reviewed some issues that have been encountered with reactive testing in an effort to reduce issues on troubleshooting tests. Testing issues are mainly due to telemetry errors from improperly calibrated equipment in the field or discrepancies between GO supplied data and PJM telemetered data. Approximately 40% of the tests conducted have issues that could take weeks or months to fix. These problems need to be addressed. Next steps to address the issues include: revise M-14D to strengthen the telemetry ‘checkout’ process to include language requiring the GO/MOC telemetry checks with the plant and PJM. (implementation in September/October); adding language to M-14D to clarify that eDART D-curves should reflect unit capability without violating ‘operating procedure limits’; possibly changing requirements so that leading tests are performed during off-peak hours and lagging tests are performed during on-peak hours; and reactive test tracking enhancements in eDART.

## Future Agenda Items (0:00)

Review of Communication protocols per COM-002-4 Standard (Sept/Oct) – Glen Boyle

Synchrophasors – how will PJM be using them in 2015 – Dave Hislop

Reactive Curve Verification – recurring

Generator semi-annual review (October/April)

TO semi-annual review (November/May)

Generator Performance Monitor Update

## Drill Dates

February 24-25, 2015

May 12, 2015

November 10, 2015

Spring RTO Restoration Drill

Summer Emergency Procedures Drill (Back-up date: 5/19/2015)

Winter Emergency Procedures Drill (Back-up date: 11/17/2015)

## Future Meeting Dates

June 24, 2015

9:00 AM

PJM Conference & Training Center

July 29, 2015

9:00 AM

PJM Conference & Training Center

August 26, 2015	9:00 AM	PJM Conference & Training Center
September 30, 2015	9:00 AM	PJM Conference & Training Center
October 28, 2015	9:00 AM	PJM Conference & Training Center
November 24, 2015	9:00 AM	PJM Conference & Training Center
December 22, 2015	9:00 AM	PJM Conference & Training Center

Author: Nicole Scott

**Anti-trust:**

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.

**Public Meetings/Media Participation:**

Unless otherwise noted, PJM stakeholder meetings are open to the public and to members of the media. Members of the media are asked to announce their attendance at all PJM stakeholder meetings at the beginning of the meeting or at the point they join a meeting already in progress. Members of the Media are reminded that speakers at PJM meetings cannot be quoted without explicit permission from the speaker. PJM Members are reminded that "detailed transcriptional meeting notes" and white board notes from "brainstorming sessions" shall not be disseminated. Stakeholders are also not allowed to create audio, video or online recordings of PJM meetings.

**On the Phone Dial**



Mute / Unmute