DRAFT MEETING MINUTES
PJM Interconnection
Joint System Operations Subcommittee
Generation and Transmission
PJM Conference & Training Center
April 24, 2013
9:00 a.m. EDT

Transmission Members Present:

<table>
<thead>
<tr>
<th>LAST NAME</th>
<th>FIRST NAME</th>
<th>COMPANY</th>
<th>Location</th>
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<tr>
<td>Pilong</td>
<td>Chris</td>
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<tr>
<td>Hoang</td>
<td>Liem</td>
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<tr>
<td>Boltz</td>
<td>Jeff</td>
<td>FirstEnergy Solutions Corp.</td>
<td>Teleconference</td>
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<tr>
<td>Buhler</td>
<td>Tom</td>
<td>Rockland Electric Company</td>
<td>Teleconference</td>
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<tr>
<td>Garavaglia</td>
<td>John</td>
<td>Commonwealth Edison Company</td>
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<td>Gibellino</td>
<td>Dana</td>
<td>Allegheny Power</td>
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<tr>
<td>Klohonatz</td>
<td>Mark</td>
<td>FirstEnergy Corp</td>
<td>Teleconference</td>
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<tr>
<td>Lloyd</td>
<td>Dave</td>
<td>UGI Utilities</td>
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<td>Lowe</td>
<td>Connie</td>
<td>Dominion Virginia Power</td>
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<td>Mahler</td>
<td>David</td>
<td>Duquesne Light Company</td>
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<td>Rogers</td>
<td>J.B.</td>
<td>Delmarva Power and Light Company</td>
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<tr>
<td>Schloendorn</td>
<td>Ron</td>
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<td>Skumanich</td>
<td>Bill</td>
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<td>Verner</td>
<td>Jane</td>
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<td>Wagner</td>
<td>Dan</td>
<td>American Electric Power</td>
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<td>Wharton</td>
<td>Ron</td>
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Generation Members Present:

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<tr>
<td>Bearden</td>
<td>Joel</td>
<td>Cargill Power Markets LLC</td>
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<td>Brodbeck</td>
<td>John</td>
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<td>Dinsmore</td>
<td>Frank</td>
<td>Appalachian Power Company</td>
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<tr>
<td>Grear</td>
<td>Mark</td>
<td>Exelon Generation Co., LLC (Power Team)</td>
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<tr>
<td>Horstmann</td>
<td>John</td>
<td>Dayton Power &amp; Light Company</td>
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<td>Keilholtz</td>
<td>Kenny</td>
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<td>LeFevre</td>
<td>Donna</td>
<td>Dominion Virginia Power</td>
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<td>Ondayko</td>
<td>Brock</td>
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<td>Vicini</td>
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<td>Others Present:</td>
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<tr>
<td>Aurely</td>
<td>Marc</td>
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<td>D'Antonio</td>
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<td>Dropkin</td>
<td>Rob</td>
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<tr>
<td>Handlin</td>
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<tr>
<td>Hui</td>
<td>Jason</td>
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<td>Ike-Egbuonu</td>
<td>Chidi</td>
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<td>Kenney</td>
<td>Susan</td>
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<td>Ng</td>
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<td>Patel</td>
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<td>Powell</td>
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<tr>
<td>Reiter</td>
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<tr>
<td>Thomas</td>
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<tr>
<td>Wesley</td>
<td>Cathy</td>
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1. **ADMINISTRATION**

   A. The Agenda for this meeting was approved with one addition.

   B. The Draft Minutes of the March 27, 2013 Joint meeting were approved.

2. **REVIEW OF OPERATIONS**

   A. Mr. Pilong provided an update of System Operations for the month of April (partial).

      a) CPS1 was 151.3%, CPS2 was 92.4%, and BAAL was 99.8%.

      b) Two 100% spinning events, two Share Reserves events, and 22 PCLLRWs.

      c) 15 high voltage events.
d) LaSalle station event on 4/17. The event was caused by lightning strike on a transformer and tripped two LaSalle units loaded at 1205 MW each.

B. Member Operational Issues: None identified.

3. WORKING GROUP AND TASK FORCE UPDATES
   A. eDART User Groups – Ms. Ike-Egbuonu provided an update of upcoming eDart changes. The April 10th release went smoothly without issues. The May release was delayed to June for enhancements to the Cranking paths and fault clearing times.
   B. Dispatcher Training Subcommittee (DTS) – No update was provided this month.

4. SYSTEM OPERATOR TRAINING AND CERTIFICATION
   A. Mr. Hoang provided the results of certification and training statuses. Generation: 8 companies were out of compliance for certification and 5 companies were out of compliance for training. Small Generation: All are compliant for certification and training. Transmission: All are compliant for certification and training. CSP: 1 was out of compliance for training.

5. REGIONAL STANDARDS, NAESB, AND COMPLIANCE UPDATE
   A. Ms. Wesley provided an update on NERC, SERC, RFC, and NAESB Regional Standards. BAL 001, 002, and 013 comments are open until April 25 which PJM is requesting members to support. The PJM CIP audit is from April 22-26. PJM 693 Audit has no potential violations. The EKPC certification did not identify any issues.
   B. The SOS addressed any ongoing Member issues regarding NERC/RFC Audits. None identified.

6. MANUAL UPDATES
   A. Mr. Boyle reviewed changes to Manual 36: System Restoration. The changes are part of an annual review and included to revisions to Attachment G, B, H, and I. Some of the changes were for the EOP-005 and -006 standards.
   B. Mr. Thomas reviewed changes to Manual 03A: Energy Management System (EMS) Model Updates and Quality Assurance. The changes included Section 1.2 for modeling data, Section 1.7 for TSA, Section 3.3 on ratings, Section 4.4 for cut-ins, Section 5.1 for SE solution, and Appendix A and other minor changes throughout.
   C. Mr. Hoang reviewed changes to Manual 03: Transmission Operations. The changes included replacing BES with SOL, Section 3 for the voltage coordination, ComEd interface, and TSA, Section 4 on reportable outages clarification, numerous procedures in Section 5, and Attachments A, D, and E.
7. CONTACT NUMBER CONFIDENTIALITY CONCERNS FOR JOINT OWNED RESOURCES
   A. Ms. Kenney reviewed the Resource Tracker tool contact information for joint owned units and solicited feedback concerning confidentiality of contact phone numbers. Members did not express concern with sharing the numbers with participants with part ownership.

8. HURRICANE SANDY LESSON LEARNED
   A. Mr. Bryson discussed action plan for the Hurricane Sandy lessons learned. As results of the event, PJM procedures may change and the issue may be discussed at a forum outside of the SOS. PERCS will be used to share information.

9. IRO-010 PROGRESS UPDATE
   A. Mr. Collier reviewed the IRO-010 team progress for data submittals. The attestation approach was reviewed and if the RSCS concurs, Manual-01 will be updated.

10. SUMMER EMERGENCY PROCEDURES DRILL
    A. Mr. Powell reviewed the Summer Emergency Procedures Drill scenario. The drill will be held on Tuesday May 14th with a backup date of May 21st.

11. REACTIVE CURVE VERIFICATION REMINDER
    A. Mr. Dropkin reviewed the semi-annual generator reactive curve verification. The generation owner verification started on April 1st and will end on April 30th. The transmission owner verification will start on May 1st and will end on May 31st.

12. PG&E EVENT COMMUNICATION
    A. Mr. Schloendorn reviewed the PG&E event where gunshots were fired at a substation and expressed concern with the PJM delay in relaying the event a couple of days later. Mr. Bryson commented that various entities and SERC had posted the event and a message was relayed to the SOS.

13. FUTURE AGENDA ITEMS
    A. Reactive Curve Verification - Reoccurring
       1) Generator Semi-annual Review (October / April)
       2) LCC Semi-annual Review (November / May)
3) Reactive Testing Update – Robert Dropkin

4) Impact of MOD 25 Standard – David Schweizer

B. VAR-002 Compliance – Dave Souder

C. Capacity Max Notification and Start Up Times – Mike Bryson

D. Annual Review of Manuals M-01 (March), M-03 (April, October), M-13 (May), M-36(June), and M-12 (July) as well as all Restoration Manuals (April or May)

E. PJM Congestion Management / Post Contingency Congestion Management Facility Submission Deadline – Reoccurring (September)

F. SOS Charter Annual Review – (July)

G. Manual M-03 Section 5 Procedure Review for CIP - (August)

H. Generator Performance Monitor Update - Robert Dropkin

14. FUTURE MEETING AND DRILL DATES

Drills

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>May 14, 2013</td>
<td>Summer Emergency Procedures Drill (back-up May 21)</td>
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<tr>
<td>November 2013</td>
<td>Winter Emergency Procedures Drill (back-up TBD)</td>
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<tr>
<td>February 12-13, 2013</td>
<td>System Restoration Drill (back-up Feb 26-27)</td>
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<td>October 1, 2013</td>
<td>FE-APS and Duquesne Restoration Drill</td>
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<td>October 2-3, 2013</td>
<td>AEP, Dayton, and FE-ATSI Restoration Drill</td>
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<td>October 9-10, 2013</td>
<td>Dominion and Duke Kentucky Restoration Drill</td>
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<td>October 16, 2013</td>
<td>PPL, FE-PN, and UGI Restoration Drill</td>
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<td>October 17, 2013</td>
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<td>October 30-31, 2013</td>
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<td>November 5, 2013</td>
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<td>November 6-7, 2013</td>
<td>COMED and EKPC Restoration Drill</td>
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Meetings
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<tr>
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Author: Liem Hoang