Manual 03: Transmission Operations
Updates

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Review Timeline

Manual First Reads:
- September 30th – SOS Joint
- October 6th – OC
- October 7th – MIC (Info Only)
- October 8th – PC (Info Only)
- October 22nd - MRC
• Manual Second Reads/Endorsement:
  – October 28\textsuperscript{th} – SOS Joint
  – October 28\textsuperscript{th} -- SOS-T (Section 5 only)
  -- November 3\textsuperscript{rd} – OC
  – November 19\textsuperscript{th} – MRC (Approval)
  – November 24\textsuperscript{th} -- SOS-T (Approval Section 5 only)
• December 1\textsuperscript{st} Implementation
Overview of changes

• Throughout: Administrative changes, revision of some terms to reflect new names
• Sections 3.5 – 3.7: Reorganized sections for clarity (no changes to content)
• Section 3.9: Added additional language on the use of the real-time Transient Stability Assessment (TSA) Tool
Section 3.3.3: Updated the generator voltage schedule coordination among TOs, GOs, and PJM.

- Clarified Transmission Owner responsibilities.
- Added voltage schedule deviation criteria for GO notification to the TO and PJM.

Reason for the changes are:
- Aligning with language in VAR-001-4 R5
- Aligning the PJM Manual with the PJM TOP/TO Assigned Task Matrix
- Consistency with operational practice
Overview of changes

• Section 3 Exhibit 5: Updated several voltage limits

• Section 5 and Attachments: Updated several schemes and procedures, removed outdated schemes and procedures
  – Moved remainder of single CB de-rate tables to OASIS (with link in manual) to allow for more frequent updates as needed
  – Added Oscillation Mitigation Procedure

• Attachment B – Open Circuit Terminal Voltage Control: Removed from Manual 3.
  – Information is located on PJM EMS try-back displays
• Attachment E: Automatic Sectionalizing Schemes (90 days notification)
  – Added the Guilford #1 138/34.5 kV transformer sectionalizing scheme (effective 2/1/2016)
  – Added the Guilford #2 138/69 kV transformer sectionalizing scheme (effective 2/1/2016)
  – Added the Monocacy #1 230/34.5 kV transformer sectionalizing scheme (effective 2/1/2016)
• Detailed changes on Section 5 can be reviewed on the M03 secure page:
  http://www.pjm.com/documents/manuals/private-m03.aspx

• Specific questions on Section 5 changes can be sent to M03_Change@pjm.com.
Appendix: Manual-03 -Throughout and Sections 1-4

- Throughout – Revised/clarified language around use of the term SOL
- Throughout – Replaced the term ‘eDATA’ with ‘Data Viewer’
- Section 1.2 – Added full name for Manual 1
- Section 1.5.2 – Revised DMWG to DMS to reflect new name and subcommittee
- Section 1.7 – Added language to indicate the term SPS and RAS are used interchangeably
Appendix: Manual-03 Throughout and Sections 1-4

• Section 3.3.1 Exhibit 3 – Revised PJM baseline voltage limits to 1 decimal point
• Section 3.3.3: Updated the generator voltage schedule coordination among TOs, GOs, and PJM. Added voltage deviation criteria for GO notification to the TO and PJM.
• Sections 3.5 to 3.7 – Reorganized sections for better clarity
• Section 3.5.3 - Updated Bulk Electric System Capacitor/SVC Operation, included the Shingletown capacitor bank #3 logic.
Appendix: Manual-03 Throughout and Sections 1-4

• Section 3.9: Added additional language on the use of the real-time Transient Stability Assessment (TSA) Tool.
  – Section 3.9.1: Revised the title of the section/process.
• Section 3 Exhibit 5: Clarified PSE&G 230 kV prevailing voltage limits
• Section 3 Exhibit 5: Updated FE-West (ATSI) 138 kV equipment voltage drop limit
• Section 3 Exhibit 5: Updated FE-South (APS) voltage drop limits for 500 kV, 230 kV, and 115 kV voltage class
• Updated list of facilities impacting PSE&G/ConEd Wheel deliverability
• Added new Oscillation Mitigation procedure
• Updated BGE/PEPCO/NOVA/Doubs Area Operating Procedure to remove import capability
• Updated nuclear voltage limit table for Cook, North Anna, Surry, Beaver Valley plants.
• AEP - Modified Gavin Mountaineer - Rolling Hills Stability Guide to reflect updates due to new lines in the area
• AEP - Updated Rockport Operating procedure
• ComEd – Removed SPS designation for the Lisle Auto Sectionalizing Scheme and Auto Closing Scheme
Appendix: Manual-03 Section 5: FE-East, -West, -South

- FE-East – Added the Mainesburg switching procedure to PJM/NY-ISO Transfers section
- FE-East – Deleted Burma-Piney 138 kV from FE-East/South border facilities that may be opened for an actual or post-contingency control
- FE-East – Updated Seneca stability restrictions and pumping procedure
- FE-South – Updated the Black Oak SVC settings
- FE-South – Updated Title for Single Breaker Derates
• DVP - Updated Clover Generator Shed Scheme
• DVP - Revised Bath County Stability SPS procedure to reflect the use during the Cloverdale-Lexington outage.
• DVP - Updated Bath County Stability Restrictions procedure to reflect new outage.
• DVP - Updated Bath County Thermal SPS procedure.
• PEPCO - Updated Chalk Point transformer #5 procedure
• BG&E - Updated Title for Single Breaker Derates procedure
• PPL – Removed Montour Runback Scheme (SPS)
• PPL – Removed Sunbury 500/230 Transformer ratings table and included with single breaker derates on OASIS link
• PPL – Revised Jenkins SPS procedure to include Jenkins–Stanton #2 230 kV line and new CBs
• PSEG – Revised N.O. Bus Section breakers procedure based on transmission upgrades
• PSEG – Removed single breaker de-rate table and added OASIS link
Appendix: Manual-03 Section 5: DEOK & DLCO

- **DEOK** – Deleted Dimmick–Port Union 138 kV line relief procedure
- **DEOK** – Removed single breaker de-rate table and added OASIS link for single breaker de-rate posting
- **DLCO** – Updated Crescent #1 and #3 345/138 kV autotransformer relief procedure
- **DLCO** - Removed DLCO single breaker de-rates table and added OASIS link for the DLCO single breaker de-rates posting
• Added “RAS” to column header
• Removed Montour Runback Scheme (SPS)
• Revised PPL Jenkins SPS description
• Revised Susquehanna 1 SPS description
• Revised Bath County Stability SPS description
• Removed Lisle Auto Sectionalizing Scheme and Auto Closing Scheme
• Removed Attachment B – Open Circuit Terminal Voltage Control. Information in this attachment can be found on PJM EMS Try-Back Displays
• Attachment E: Added the Guilford #1 138/34.5 kV transformer sectionalizing scheme (effective 2/1/2016)
• Attachment E: Added the Guilford #2 138/69 kV transformer sectionalizing scheme (effective 2/1/2016)
• Attachment E: Added the Monocacy #1 230/34.5 kV transformer sectionalizing scheme (effective 2/1/2016)

• Previous Revision History: Added the missing revision 45 list to the Revision History (listing only).