



# Manual 03: Transmission Operations Updates

Nicole Scott

Sr. Lead Engineer, Transmission Operations

- **Manual First Reads:**
  - September 30th– SOS Joint
  - October 6<sup>th</sup> – OC
  - October 7<sup>th</sup> – MIC (Info Only)
  - October 8<sup>th</sup> – PC (Info Only)
  - October 22<sup>nd</sup> - MRC

- Manual Second Reads/Endorsement:
  - October 28<sup>th</sup> – SOS Joint
  - October 28<sup>th</sup> -- SOS-T (Section 5 only)
  - November 3<sup>rd</sup> – OC
  - November 19<sup>th</sup> – MRC (Approval)
  - November 24<sup>th</sup> -- SOS-T (Approval Section 5 only)
- December 1<sup>st</sup> Implementation

- 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

- 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- Section 5 and Attachments: Updated several schemes and procedures, removed outdated schemes and procedures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](mailto:M03_Change@pjm.com).



- 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

- 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.

- 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

- 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.



## Appendix: Manual-03 Section 5: PEPCO & BGE

- 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

- 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).