



2017 Mid-Atlantic Sub-Regional RTEP Assumptions

January 5, 2017

Base Case Power Flow Model

- PECO uses PJM developed RTEP power flow model for assessment if available
- Use most recent ERAG MMWG series power flow model if PJM RTEP case not available
- For 2017 planning year, anticipate using 2022 PJM RTEP Case
- Load and generation reduced to 70% of peak load for analysis of maintenance conditions

Baseline Analysis

- Both PECO and PJM study our system to determine baseline reliability upgrades
 - PJM Focus is PJM criteria (Manual 14B)
 - PECO focus is the portion of PECO's FERC Form 715 planning criteria that is not analyzed by PJM (Manual 14B, Attachment D, maintenance conditions)
- PECO works with PJM to analyze and validate results
- Potential violations are included in the PJM open window process
- Proposed solutions are presented to TEAC or Sub-Regional RTEP and become baseline projects

FERC Form 715 Planning Criteria

- PECO Transmission Planning Criteria
 - Included in FERC 715 filing
 - Posted on PJM web site
 - Exceeds PJM planning criteria as follows:
 - Includes analysis of opening any circuit breaker
 - Includes analysis of 69 kV conditions for capacitor and shunt reactor outage events
 - Includes analysis of all conditions for faults on 69 kV buses, 69 kV circuit breakers and 69 kV double circuit towers

Supplemental Projects

- A project that will typically impact transmission network flows or model
 - Transmission System configuration changes due to new or expansion of existing distribution substations
 - New transmission customer connections
 - Infrastructure replacement (EOL/condition/obsolescence) resulting in increased capacity and or configuration changes; consistent with efficient asset management decisions.
 - NERC Alert mitigation projects
 - Wood pole replacement program
 - Reliability improvements driven by internal standards (installing breakers on autos, removing tertiary capacitors)
 - Projects to address potential generation retirements
 - Enhancing Resiliency
 - Environmental drivers, for example, oil removal in water crossings or near waterways- Cables/OCBs
 - Enhanced Functionality /operability
 - Employee and public Safety- deteriorating condition, old technology, clearances, material construction, etc.
- Reviewed at PJM TEAC or Sub-Regional RTEP meetings for stakeholder input