

BGE Planning Assumptions



An Exelon Company

Base Case Power Flow Model

- BGE uses PJM developed RTEP power flow models for all assessments where available
- 5 year assessments – 2022 PJM RTEP Case
- Retool analyses – Prior year PJM RTEP base cases, updated as appropriate for consistency with PJM modeling procedures
- Use most recent ERAG MMWG series power flow models for other years where PJM cases are not available
- BGE loads are modeled to be consistent with load levels shown in the 2017 PJM Load Forecast Report
 - BGE 2022 (Preliminary) forecasted load is 6,786 MW



Baseline Analysis

- Both BGE and PJM study our system to determine baseline reliability upgrades
 - PJM criteria (Manual 14B)
 - BGE FERC Form 715 planning criteria
 - NERC Planning criteria
- BGE works with PJM to analyze and validate results
- Potential violations are included in the PJM open window process
- For immediate need projects (< 3 years out) BGE works with PJM to develop solutions
- Proposed solutions are presented to TEAC or Sub-Regional RTEP and become baseline projects



FERC Form 715 Planning Criteria

- BGE Transmission Planning Standards
 - Radial transmission supplies are restricted to serve no more than 30,000 customers where restoration would take more than four hours for a common mode failure.
- Included in FERC 715 filing
- Posted on PJM web site



Supplemental Projects

- A project that will typically impact transmission network flows or model (ratings changes, new connectivity, configuration or load changes):
 - Transmission System configuration changes due to new or 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

