

# BGE 2016 RTEP Planning Modeling and Procedures



An Exelon Company

# Base Case Modeling

BGE uses PJM developed RTEP power flow models for all assessments where available

- 5 year assessments – 2021 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 scales and reconfigures available RTEP power flow cases to approximate 7 to 10 year cases for internal long term studies



# Load Modeling

All loads will be modeled consistent with the load levels shown in the 2016 PJM Load Forecast Report

- BGE 2021 forecasted load is 7,064 MW
- Load management and energy efficiency will be implemented consistent with PJM policy



# Planning Criteria

## NERC Transmission Planning Criteria

- Used for all BES facilities

## PJM Transmission Planning Criteria – Manual 14B

## BGE Transmission Planning Criteria

- Documented in FERC 715 Filing and available on PJM website
- Also used for all non-BES transmission facilities



# Identification of Required Upgrades

## PJM-identified Criteria Violations (NERC, RF, PJM)

- In general, PJM will identify a criteria violation and discuss with BGE for concurrence. PJM and BGE work together to validate the analysis prior to bringing the violation for stakeholder review
- Occasionally, BGE will identify a violation first, but process follows as outlined above
- End result: PJM-identified baseline upgrade

## Generation Interconnect requirements

- PJM notifies BGE after an interconnection request is received. PJM works with BGE for the completion of the Feasibility, Impact, and Facility Studies as described in PJM manual 14A
- End result: Possible PJM-identified network upgrade



# Identification of Required Upgrades

## BGE-identified criteria violations on radial facilities

- BGE examines radial transmission facilities for violations of BGE standards for radial facility coincident peaks
  - BGE will determine appropriate enhancement and communicate with PJM
  - End Result: BGE-identified supplemental project

## Requirements for Distribution Planning projects

- BGE will model the associated loading for new or upgraded distribution facilities in all MMWG cases
- If the new loadings produce a violation of NERC/PJM standards, the planning process will follow the general PJM-identified criteria violation process
- If the new loadings do not produce a violation of NERC/PJM standards, BGE will determine required system enhancements and communicate results to PJM
- - End Result: PJM-identified RTEP project or BGE- identified supplemental project



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## Generation Interconnect requirements

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- End result: Possible PJM-identified network upgrade



# Identification of Required Upgrades

## Customer connections to transmission facilities

- BGE will model the associated loading for new customer connections in all MMWG cases
- If the new loadings produce a violation of NERC/PJM standards, the planning process will follow the general PJM-identified criteria violation process
- If the new loadings do not produce a violation of NERC/PJM standards, BGE will determine what system enhancements are required and communicate results to PJM
- End Result: PJM-identified RTEP project or BGE-identified supplemental project

## Aging infrastructure and proactive generation retirement issues

- BGE will identify system enhancements required and communicate results to PJM
- End Result: BGE-identified supplemental project





# Supplemental Projects

Proposed system enhancements will be presented at either TEAC or Sub-Regional RTEP meetings to solicit comments

