BGE 2015 RTEP Planning Modeling and Procedures
Base Case Modeling

- BGE uses PJM developed RTEP power flow models for all assessments where available
  - 5 year assessments – 2020 PJM RTEP Case
  - Beyond 6 to 15 year assessments – 2023 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 not available
Load Modeling

- All loads will be modeled consistent with the load levels shown in the 2015 PJM Load Forecast Report
  - BGE 2020 forecasted load is 7,457 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
  - 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, discuss with BGE for concurrence. PJM and BGE work together to validate the analysis prior to bringing the violation for stakeholders review
  - Occasionally, BGE will identify a violation first, but process follows as outlined above
  - End result: PJM-identified baseline upgrade

- Generation Interconnection 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
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 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