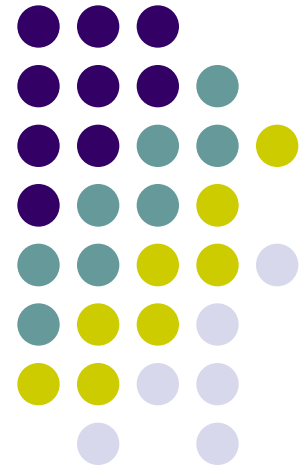
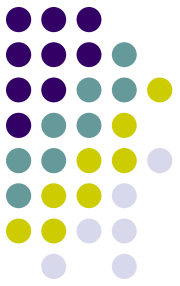


# 2015 Sub-Regional RTEP Assumptions

Mid-Atlantic Sub-Region  
PPL Electric Utilities

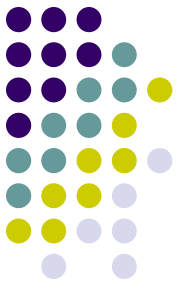


# 2015 RTEP Assumptions

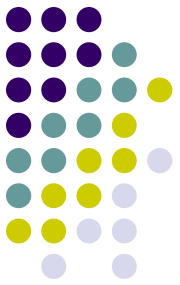


- PPL starts with a PJM RTEP developed Power Flow model which includes PPL 69 kV and above system topology.
- TO's began working with PJM to develop a 2020 basecase in December 2014.
- PPL's focus is assuring our system topology and load distribution is correct in the PJM RTEP model.
- 2020 Base Case Development is nearing completion.

# Load and Generation Assumptions



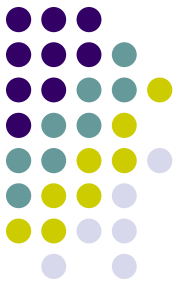
- Loads are modeled consistent with the 2015 PJM Load Forecast Report.
- PPL considers a 50/50 weather normalized peak summer load.
- Light load and winter peak cases are also analyzed to determine if more severe system reliability conditions exist.
- PPL considers various generation scenarios on 69 kV and 138 kV systems to determine the most severe load supply capability requirements.
- Topology Assumptions: the model includes all upgrades up to and including the 2020 study case year. Abnormal sectionalizing is not considered.



# Planning Guidelines

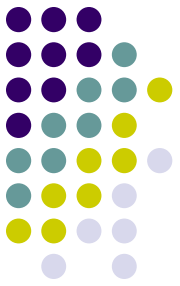
- PPL's Reliability Principles and Practices (P&P) document has been developed over the years to ensure that acceptable and appropriate levels of service remain consistent with good utility practice.
- PPL's FERC 715 Filing describes the reliability criteria for 69 kV and above facilities.
- Ensure the regional power system can sustain probable contingencies and disturbances with minimal customer interruptions. (Consistent with NERC TPL standards).
- Ensure PPL can adequately serve each customer's needs with respect to capacity, voltage, and reliability.

# 2015 RTEP Approach for Baseline Assessments



- Baseline Projects (bxxx)
  - ❖ Projects which resolve a system reliability criteria violation or operations performance issue. (Overload, low voltage or maximum allowable load drop concern)
- PJM and PPL perform separate analysis on the PPL LDA within the Mid-Atlantic Sub-Regional zone to comply with:
  - ❖ NERC Transmission Planning TPL standards
  - ❖ PJM Reliability Planning Criteria (Manual 14B, Attachment D)
  - ❖ PPL EU Reliability Principles and Practices (FERC 715 filing)
- PJM will open an RTEP Window to address a violation of system reliability criteria.
- Successful proposer will be given construction responsibility for the project.

# Supplemental Projects (sxxx)



- **Projects that do not violate NERC TPL standards for overloads or low voltage concerns but impact PPL P&P reliability standards.**
  - ❖ Examples include reinforcements to address local load growth, operational performance concerns, taps to new distribution substations, deteriorated equipment replacement, etc.
- **Will be reviewed at the Sub-Regional RTEP Meetings.**