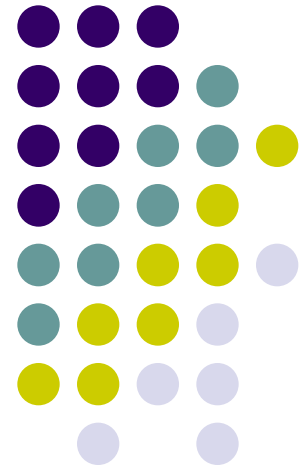


2010 Sub-Regional RTEP Assumptions

Mid-Atlantic Sub-Region
PPL Electric Utilities

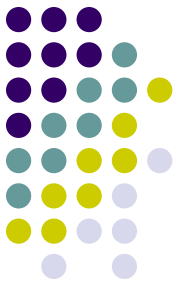


2010 RTEP Assumptions

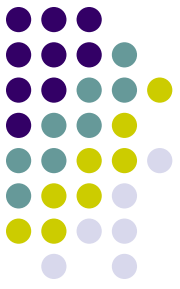


- 2010 RTEP assumptions presented at the January 2010 TEAC apply.
- PPL starts with a PJM RTEP developed Power Flow model which includes PPL 69 kV and above system topology.
- TO's began working with PJM to develop a 2015 basecase in December 2009.
- PPL's focus is assuring our system topology and load distribution is correct in the PJM RTEP model.
- 2015 Base Case Development is nearing completion.

Load and Generation Assumptions



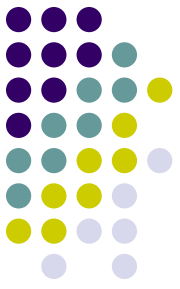
- Loads are modeled consistent with the 2010 PJM Load Forecast Report but the PPL zone is adjusted per it's own specific regional load growth projections.
- PPL considers a 50/50 weather normalized peak summer load.
- Light load and winter peak cases are also analyzed to determine if more severe system 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 2015 study case year. Abnormal sectionalizing is not considered.



Planning Guidelines

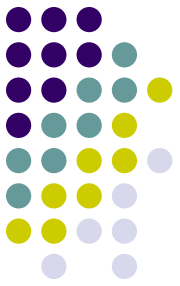
- PPL's Reliability Principles and Practices (P&P) document has been developed over the years to ensure that acceptable and appropriate levels of service remain consistent with good utility practice.
- PPL's FERC 715 Filing describes the reliability criteria for 69 kV and above facilities.
- Ensure the 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.

2010 RTEP Approach for Baseline Assessments



- Baseline Projects (bxxx)
 - ❖ Projects which resolve a system reliability criteria violation or operations performance issue. (Overload or low voltage 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 Manual 14B, Attachment D
 - ❖ PPL Reliability Principles and Practices (FERC 715 filing)
- Validate project with PJM and present it to TEAC and Sub-Regional TEAC stakeholders.
 - ❖ Stakeholder input regarding alternate solutions is welcome.
 - ❖ Power Flow cases can be made available to entities following CEI guidelines.

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 deteriorated equipment, maximum allowable load drop, etc.
- Will be reviewed at the Sub-Regional RTEP Meetings.