

- ✓ PECO develops several power system simulation models for internal study use and to meet external obligations
- ✓ Representations include detail for all voltage levels from 500kV to 69kV, 34kV network and 34kV & 13kV radial substations
- ✓ Representations include near term and long term and load levels from summer peak to light load
- ✓ Either MMWG or RTEP power flow base cases are used as a starting point

- ✓ Annually, PECO studies a variety of system conditions that may occur over the next ten years
- ✓ Cases are developed to represent expected conditions as well as more extreme conditions
- ✓ Intention is to identify potential future system problems before solutions are required to allow sufficient time to develop and study alternative plans
- ✓ Specific thermal and voltage limits applicable to PECO's facilities are described in the "PECO Transmission Planning Criteria" document

- ✓ PECO will perform local criteria testing associated with portions of the “PECO Transmission Planning Criteria” that will not be tested by PJM during the upcoming RTEP
- ✓ The 2021 RTEP base case will be used to:
 - Monitor all facilities after opening individual circuit breakers, 69 kV bus and circuit breaker faults and 69 kV tower outages
 - Monitor 69 kV facilities after capacitor bank outages, BES bus faults, BES circuit breaker faults and BES tower outages
- ✓ The 2021 RTEP base case will be modified by scaling load and generation in PECO and surrounding areas to a 70% load level and used to analyze maintenance conditions:
 - Monitoring all facilities after outage of any individual element with any other element, bus or circuit breaker out for maintenance