



- Load Flow Modeling
 - Power flow topology will be based on the latest representation of the delivery year under study
 - Includes all PJM Board approved upgrades expected to be inservice for the delivery year.
 - Backbone projects must also meet criteria for including
- Firm Commitments
 - Long term firm transmission service will be consistent with operations
- Outage Rates
 - Generation outage rates will be based on the most recent Reserve Requirement Study performed by PJM
 - Generation outage rates for future PJM units will be estimated based on class average rates



• Load

- Load will be modeled consistent with the latest PJM Load
 Forecast Report for the applicable delivery year
- Load Management
 - Load management will be modeled consistent with the latest
 PJM Load Forecast Report for the applicable delivery year

Generation

- All existing generation expected to be in service for the year being studied will be modeled.
- Future generation with a signed Interconnection Service
 Agreement will be modeled along with any associated upgrades.



- All PJM bulk electric system facilities, all tie lines to neighboring systems and all lower voltage facilities operated by PJM will be monitored.
- Contingency analysis will include all bulk electric system facilities, all tie lines to neighboring systems and all lower voltage facilities operated by PJM.
- Thermal and voltage limits will be consistent with those used in operations.



- All LDAs are studied
 - 18 zonal
 - 2 subzones (PS-North and Delmarva South)
 - 5 Global LDAs (i.e. MAAC, EMAAC, SWMAAC, PJM West, Western MAAC)
- Generation deficiency assumed for one LDA at a time
 - Area external to the area under test is assumed to be experiencing normal outages



- Loads in the Power Flow
 - Area under test is assumed to be experiencing a capacity deficiency due to a combination of higher than expected demand and greater than expected generator unavailability
 - Load in the area under test is modeled at the 90/10 level reduced by EE and DR
 - If 90/10 EE DR is less than the 50/50 load then the 50/50 load is used
 - Load outside the area under test is assumed to be at 50/50 load level reduced by EE