

Queue #Q50 - Dresden 345kV 70 MW Generator Interconnection

Network Impacts

The #Q50 project was studied as an increase in capacity of 70 MW to the #3 unit at the Dresden 345 kV generating facility in ComEd. Project #Q50 was evaluated for compliance with PJM reliability criteria for summer peak conditions in 2011. Potential network impacts were as follows:

Generator Deliverability

No problems were identified.

Multiple Facility Contingency

No problems were identified.

Contribution to Previously Identified Overloads

None.

New System Reinforcements

None.

Contribution to Previously Identified System Reinforcements

To be determined at the SIS phase.

Short Circuit

There were no overdutied circuit breakers due to #P50 identified at this time.

Potential Issues

Impacts on the MISO member transmission systems are not included in this analysis, but they will be included in the Impact Study, which may reveal upgrades needed in the MISO system not identified in this Feasibility Study.

A transient stability study for #Q50 will be conducted as part of the Impact Study, which may reveal upgrades not identified in this Feasibility Study.

Power Factor Requirement

It is necessary to provide at least 84 MVAR of additional reactive power support to maintain 0.9 pf lagging at the machine terminals: 34 MVAR for the 70 MW increase and 50 MVAR to compensate for the reactive power derate as the unit's operating point moves from 912 MW to 982 MW.