

#Q28 Eldred - Frackville 220 MW
Generation Interconnection

This analysis was completed to assess the reliability impact for a new generator interconnecting to the PJM system as a Capacity Resource.

Network Impacts

The Queue Q28 wind generation project was studied as a **220 MW (energy) and 44 MW Capacity injection into the Eldred 230kV bus** for summer peak conditions in 2011. Network impact results were as follows:

Generator Deliverability (single contingency)

No problems identified.

Local System Impacts

No problems identified.

Multiple Facility Contingency (MAAC Criteria IIC)

No problems identified.

Short Circuit Analysis

The three-phase symmetrical short circuit duty at the 230 kV point-of-connection, with Q28 generation in-service, is estimated to be approximately 3654 MVA. The phase-to-ground symmetrical short circuit duty will be approximately 8,485 Amps. No 69 kV or 230 kV breakers at the Eldred, Frackville, or Sunbury substations were identified as being overdutied. The analysis was based on the assumption that prior queue positions in the “Q” listing are in-service.

Stability (MAAC Stability Criteria)

To be performed for the Q28 Impact Study.

Network Upgrade Requirements

No network upgrades are required.

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