

Generator 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 U4-016 project was studied as a 48 MW Capacity injection into the Harwood Substation Berwick and Continental 69 kV lines. The project was evaluated for compliance with reliability criteria for summer peak conditions in 2013. Potential network impacts were as follows:

NETWORK IMPACTS

Generator Deliverability

(Normal System, Single or N-1 contingencies for the Capacity portion only of the interconnection)

No problems identified.

Multiple Facility Contingencies

(Double Circuit Tower Line contingencies for the full energy output. Stuck Breaker and Bus Fault contingencies will be tested at the Impact Study.)

No problems identified

Contribution to Previously Identified Overloads

(This project contributes greater than the PJM cost allocation threshold loading to the following contingency overloads, i.e. "Network Impacts", identified for either earlier generation or transmission interconnection projects in the PJM Queue)

No problems identified

Stability Analysis

TBD.

Will be performed for the Queue U4-016 Impact Study.

Short Circuit

No new overduty breakers or contribution of >3% to existing overduty breakers.

NETWORK UPGRADE REQUIREMENTS

New System Reinforcements

(Upgrades required to mitigate reliability criteria violations, i.e. “Network Impacts”, initially caused by the addition of this project generation)

None required.

Contribution to Previously Identified System Reinforcements

(Overloads initially caused by prior Queue positions with additional contribution to overloading by this project. This project will have a % allocation cost responsibility which will be calculated during the Impact Study at this position in the Queue. Later Queue positions may also have a cost allocation and reduce this Queue’s responsibility)

None required.