#N51 - Harwood

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 #N51 project was studied as a total injection of 100.5 MW (20 MW of capacity) at two distinct points in the system: (1) Into the Harwood 69 kV substation and (2) Into the Harwood 230 kV substation. Project #N51 was evaluated for compliance with reliability criteria for summer peak conditions in 2008. Potential network impacts for both interconnection options were as follows:

Generator Deliverability

No problems were identified

Multiple Facility Contingency – Tower Line Outages

No problems were identified

Short Circuit

No circuit breaker upgrades identified.

Short circuit duty at the Harwood 230 kV bus is 14,000 amperes. Duty at the 69 kV bus is 25,000 amperes. All duties are 3-phase, symmetrical, without the N51 generation connected. Refer to the "NOTE" on 69 kV bus capability to withstand short-circuit conditions.

Contribution to Previously Identified Overloads

None

New System Reinforcements

None

Contribution to Previously Identified System Reinforcements

None