#V4-039 (Church 10.2 MW)

Generation Interconnection

This analysis was completed to assess the reliability impact for a new Generation Interconnection to the PJM System.

Network Impacts

Queue V4-039 was studied as a 10.2 MW energy / 3.8 MW Capacity injection into the Church 25 kV bus. Queue V4-039 was evaluated for compliance with reliability criteria for summer peak conditions in 2014. Potential network impacts were as follows:

NETWORK IMPACTS

Local Transmission System Impacts

(Normal system conditions with all facilities in service, and contingency analysis per documented Reliability Criteria, generally FERC Form 715, for Transmission Owner's underlying system)

No problems identified.

Generator Deliverability

(Normal System with all facilities in-service and Single, or N-1, contingencies for the Capacity portion only of the interconnection)

No problems identified.

Multiple Facility Contingency

(Double Circuit Tower Line, stuck breaker and bus fault contingencies for the interconnection request full net energy output)

No problems identified.

Short Circuit Analysis

No problems identified.

Steady-State Voltage and Reactive Power Requirements

(Evaluation of steady-state voltage and reactive requirements)

No problems identified.

Stability

Not required because of size, location and technology of generation interconnection.

Contribution to Previously Identified Overloads

(This project contributes to the following contingency overloads, i.e. "Network Impacts", identified for earlier generation or transmission interconnection projects in the PJM Queue. This project will have a cost allocation toward the upgrade cost.)

None.

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

(This project contributes to the Network Impact causing the need for these Network Upgrades. This project will be allocated a cost to be determined during the Impact Study)

None required.