

***Generation Interconnection
Feasibility Study Report
For
PJM Generation Interconnection Request
Queue Position X1-087***

Cherry Valley—Stillman Valley

July 2012

Network Impacts for Primary POI

The Queue Project X1-087 was studied as a 19 MW(Capacity 19 MW) injection into ComEd's system on a new 34kV line connected to the 34kV bus at TSS 176 Stillman Valley. Project X1-087 was evaluated for compliance with reliability criteria for summer peak conditions in 2015. Potential network impacts were as follows:

Generator Deliverability

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

No violations identified.

Multiple Facility Contingency

(Double Circuit Tower Line, Line with Failed Breaker and Bus Fault contingencies for the full energy output)

No violations identified.

Short Circuit

To be determined in the System Impact Study

Steady-State Voltage Requirements

To be determined in the System Impact Study

Stability and Reactive Power Requirement

To be determined in the System Impact Study

New System Reinforcements

None required

Contribution to Previously Identified System Reinforcements

None required

Energy Portion of Interconnection Request

PJM also studied the delivery of the energy portion of the surrounding generation. Any potential problems identified below are likely to result in operational restrictions to the project under study. The developer can proceed with network upgrades to eliminate the operational restriction at their discretion by submitting a Transmission Interconnection request.

Note: Only the most severely overloaded conditions are listed. There is no guarantee of full delivery of energy for this project by fixing only the conditions listed in this section. With a Transmission Interconnection Request, a subsequent analysis will be performed which analyzes all overload conditions associated with the overloaded element(s) identified. As a result of the aggregate energy resources in the area, the following violations were identified.

None identified.

Network Impacts for Alternate POI

Network Impacts

The Queue Project X1-087 was studied as a(n) 19MW(Capacity 19MW) injection into ComEd's system on the 138kV line L15621 between TSS 156 Cherry Valley and TSS 176 Stillman Valley. Project X1-087 was evaluated for compliance with reliability criteria for summer peak conditions in 2015. Potential network impacts were as follows:

Generator Deliverability

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

No violations identified.

Multiple Facility Contingency

(Double Circuit Tower Line, Line with Failed Breaker and Bus Fault contingencies for the full energy output)

No violations identified.

Short Circuit

To be determined in the System Impact Study

Steady-State Voltage Requirements

To be determined in the System Impact Study

Stability and Reactive Power Requirement

To be determined in the System Impact Study

New System Reinforcements

None required

Contribution to Previously Identified System Reinforcements

None required

Energy Portion of Interconnection Request

PJM also studied the delivery of the energy portion of the surrounding generation. Any potential problems identified below are likely to result in operational restrictions to the project under study. The developer can proceed with network upgrades to eliminate the operational restriction at their discretion by submitting a Transmission Interconnection request.

Note: Only the most severely overloaded conditions are listed. There is no guarantee of full delivery of energy for this project by fixing only the conditions listed in this section. With a Transmission Interconnection Request, a subsequent analysis will be performed which analyzes all overload conditions associated with the overloaded element(s) identified. As a result of the aggregate energy resources in the area, the following violations were identified.

None identified.

Common Potential Issues (either POI)

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.