Generation Interconnection
Feasibility Study Report
Queue Position AC2-018

The Interconnection Customer (IC) has proposed a 60 MW (8.0 MWC) increase to their existing natural gas fueled generating Units 3 and 4 located in Rising Sun, Cecil County, Maryland. PJM studied AC2-018 as a 60 MW injection into the Essential Power system at the Rock Springs 500 kV Substation and evaluated it for compliance with reliability criteria for summer peak conditions in 2020. The planned in-service date, as requested by the IC during the project kick-off call, is June, 2017. This date is not attainable due to additional required PJM studies (System Impact).

Point of Interconnection

The Interconnection Customer requested the same Point of Interconnection (POI) as their existing Units 3 and 4 at the Rock Springs 500 kV Substation.

Transmission Owner Scope of Direct Connection Work

No Transmission Owner work is required.

Interconnection Customer Scope of Work

The Interconnection Customer is responsible for all design and construction related to activities on their side of the Point of Interconnection. Site preparation, including grading and an access road, as necessary, is assumed to be by the IC. Route selection, line design, and right-of-way acquisition of the direct connect facilities is not included in this report, and is the responsibility of the IC.

Metering

The IC is required to provide revenue metering and real-time telemetering data to PJM in conformance with the requirements contained in PJM Manuals M-01 and M-14 and the PJM Tariff.

Required Relaying and Communications

Protective relaying design and installation must comply with SMECO's applicable standards.

Summer Peak Analysis - 2020

Transmission Network Impacts

Potential transmission network impacts are as follows:

Generator Deliverability

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

None

Multiple Facility Contingency

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

None

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)

None

Summer Peak Load Flow Analysis Reinforcements

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

None

Contribution to Previously Identified System Reinforcements
(Overloads initially caused by prior Queue positions with additional contribution to overloading by this project. This project may have a % allocation cost responsibility which will be calculated and reported for the Impact Study)

None

Steady-State Voltage Requirements

To be performed during later study phases.

Short Circuit

No issues identified.

Stability Analysis

To be performed during the System Impact Study if required.

Light Load Analysis - 2020
Light Load Studies to be conducted during later study phases (as required by PJM Manual 14B).

Facilities Study Estimate

To be determined.

Delivery of Energy Portion of Interconnection Request
PJM also studied the delivery of the energy portion of this interconnection request. Any 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 Merchant Transmission Interconnection request.
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 will study all overload conditions associated with the overloaded element(s) identified.

None