Generation Interconnection
Feasibility Study Report
Queue Position AD1-114

The Interconnection Customer (IC) has proposed a 75 MW MFO (75 MW Capacity) upgrade to their existing generating facility located in Waldorf, Maryland. PJM studied the AD1-114 project as a 75 MW injection into the Potomac Electric Power Company (Pepco) transmission system at the Kelson Ridge 230 kV Substation and evaluated it for compliance with reliability criteria for summer peak conditions in 2021. The planned in-service date of the upgrade, as requested by the IC during the project kick-off call, is April 30, 2018. This date may not be attainable due to additional required PJM studies and possible Transmission Owner work.

Point(s) of Interconnection

The Interconnection Customer requested AD1-114 use the same Point of Interconnection (POI) as their prior queue project X4-006.

Transmission Owner Scope of Attachment Facilities Work

No Transmission Owner work required.

Required Relaying and Communications

No additional relaying or communications required.

Metering

No additional metering required.

Interconnection Customer Scope of Direct Connection 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. Protective relaying and metering design and installation must comply with DPL's applicable standards. The IC is also 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.

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

Short Circuit

No issues identified.

Stability and Reactive Power Requirement

To be performed during later study phases.

Light Load Analysis - 2020

To be performed during later study phases (as required by PJM Manual 14B).