Generation Interconnection
Feasibility Study Report
Queue Position AD2-167

The Interconnection Customer (IC) has proposed a 90 MW Energy, 52 MW Capacity upgrade to their prior queue project Y3-102, a natural gas fueled 2x1 combined cycle generating facility located in Rock Springs, Maryland (a.k.a. Wildcat Point Generating Facility). The combined queue projects (Y3-102 and AD2-167) will now be a 1090 MW Maximum Facility Output (MFO) and a 992 MW Capacity resource. PJM studied AD2-167 as an injection into the Rock Springs 500 kV substation and evaluated it for compliance with reliability criteria for summer peak conditions in 2021. Project AD2-167 was studied with a commercial probability of 53%. The Attachment N requested in-service date was March 1, 2018. This date is unattainable due to required additional PJM studies.

Point(s) of Interconnection

The Interconnection Customer requested AD2-167 use the same Point of Interconnection (POI) as prior queue project Y3-102.

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. Protective relaying and metering design and installation must comply with Essential Power Rock Springs' 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 - 2021

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 - 2021

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