

***Generation Interconnection
Combined Feasibility/Impact Study Report
Web Version***

For

***PJM Generation Interconnection Request
Queue Position W2-075***

Tolna Unit 2

Overview

Interconnection Customer (IC) has submitted an Attachment N to propose a 0.9 MW increase of the energy, maximum facility output, and Capacity of the Tolna Unit 2 to 19.9 MW. Since this capability has been available at this existing plant since August 2010, the IC is seeking Commercial Operation as soon as possible. The analysis was performed using a 2014 base year. This is a FERC jurisdictional interconnection and will result in the developer receiving a PJM Interconnection Service Agreement.

PJM Report on the Transmission System

This portion of the report addresses the impacts on and the required reinforcements to that part of the transmission system under PJM jurisdiction.

Network Impacts

Queue project W2-075 was studied as a 0.9 MW (0.9MW of which was Capacity) injection into METED's system at Tolna's Unit 2. The project was studied on a combined feasibility-impact basis which utilizes an AC analysis, and incorporates all contingency types. Project W2-075 was evaluated for compliance with reliability criteria for summer peak conditions in 2014. Potential network impacts were as follows:

Generator Deliverability

(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 full energy output)

No problems identified.

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)

No problems identified.

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

Not required.

MetEd (FirstEnergy) Feasibility Analysis Report

This portion of this Feasibility Study Report has been prepared for PJM queue project W1-075 by MetEd (FirstEnergy). It addresses the impacts on and required reinforcements to that portion of the network, including the attachment and direct connection facilities.

MetEd concurs with the PJM conclusion that there are no network upgrades or costs associated with an increase of the Tolna Unit 2 CT capacity from 19.0 to 19.9 MW.

In summary, the results from the FE analysis show that the Tolna Unit 2 CT (W2-075) Project requires no new Direct Connection facilities as it is an increment in output at an existing plant and will require no new network upgrades based on the studies performed. In addition, all of the attachment metering and SCADA requirements are adequate as installed so that no such changes are required. Therefore the IC will have no cost allocation for project upgrades and no obligations to FE to meet existing criteria for the incremental .9 MW of capacity being requested for its existing Tolna Unit 2 CT generator.