V1-027 Limerick 20 MW

Generator Interconnection

This analysis was completed to assess the reliability impact for a new generator interconnecting to the PJM System as a Capacity Resource.

Network Impacts

Queue V1-027 was studied as an injection of 20 MW into the Limerick 500 kV substation. V1-027 was evaluated for compliance with reliability criteria for summer peak conditions in 2013. Potential network impacts were as follows:

Generator Deliverability

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

No problems were identified

Multiple Facility Contingency

(Double Circuit Tower Line contingencies only for the full energy output, Stuck breaker and Bus Fault contingencies will be evaluated for the Impact Study)

No problems were identified

Short Circuit Analysis

Not required for the Capacity addition, there are no changes to the Queue V1-026 generator or generator step-up transformer impedance.

Stability Analysis

Will be performed for the Impact Study.

Power Factor and Reactive Requirements

Will be performed for the Impact Study.

Queue V1-027 Attachment N information: Queue V1-027's stated MFO (Maximum Facility Output) will increase from 1213 MW to 1233 MW. Net Winter Energy will increase from 1179 MW to 1199 MW.

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 identified.

NETWORK UPGRADE REQUIREMENTS

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

None identified.

Contribution to Previously Identified System Reinforcements
(Overloads initially caused by prior Queue positions with additional contribution to overloading by this project.)

None identified.