

W1-108 Grays Ferry 13MW Upgrade Feasibility Study

General

Queue W1-108 Grays Ferry is a request for an 13 MWs of CIRs (Capacity Interconnection Rights) and energy rights at Grays Ferry Substation. The planned service date for this upgrade is June 1, 2011.

Network Impacts

The queue W1-108 project was studied as a 13MW capacity injection at the Grays Ferry 230kV substation. Project W1-108 was evaluated for compliance with reliability criteria for summer peak conditions in 2014. Potential network impacts were as follows:

Generator Deliverability

(Normal non-contingency with all transmission facilities in service, and Single or N-1 contingencies for the Capacity portion only of the interconnection)

No problems were identified

Multiple Facility Contingency

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

No problems were identified

Short Circuit

Not applicable.

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 were identified

New System Reinforcements

(Upgrades required to mitigate reliability criteria violations, i.e. "Network Impacts", initially caused by the addition of Queue R36 generation)

None

Contribution to Previously Identified System Reinforcements

(Overloads initially caused by prior Queue positions with additional contribution to overloading by this project)

None identified.