#O23 Powerton – Dresden 345kV

Generation Interconnection

Network Impacts

The **#O23 project was studied as a total injection of 300 MW (60 MW of Capacity) into a tap of the Dresden to Benson 345 kV line 1202**. Project #O23 was evaluated for compliance with reliability criteria for summer peak conditions in 2009. Potential network impacts were as follows:

Generator Deliverability

No problems were identified

Multiple Facility Contingency

No problems were identified

Contribution to Previously Identified Overloads

The O23 project contributes 28 MW to the thermal violation of the Kammer 765/500 kV transformer in AP, which was originally caused by the #N42 project. The necessary reinforcements and associated cost estimates are being studied by AP and will be available at the Impact Study phase for this project.

Contribution to Previously Identified System Reinforcements

To be determined during Impact Study

Short Circuit

The O23 project caused bus tie 2-3 circuit breaker on the 345kV blue bus at Sta. 12 Dresden to become overdutied at 100.8% of the circuit breaker rating.
Cost estimate to upgrade this breaker is $198,000.

Potential Issues

During certain maintenance outages the O23 project will be required to be taken off line.

The O23 project may impact the Powerton Stability Schemes due to the interconnection point on line 0302 Powerton to Dresden. To be assessed further during the Impact Study.

Note: Impact on the MISO member transmission Systems is not included in this analysis, but will be in the Impact Study, which possibly may reveal upgrades needed in the MISO system not identified in this Feasibility Study.