

#O24 Pontiac Midpoint – Dresden 345kV Generation Interconnection

Network Impacts

The #O24 project was studied as a total injection of 300 MW (60 MW of Capacity) into a tap of the Dresden to Pontiac 345 kV line 8014. Project #O24 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

The Elwood to Goodings Grove Red 345 kV line 11622 loads from 96% to 103% of its load-dump rating (1760 MVA) for the Dresden to Wolfs and Dresden to Electric Junction 345 kV tower outage of lines 1221 and 1222. The O24 project contributes approximately 122 MW to cause this thermal violation.

Cost estimate to reconductor this section of line to eliminate the thermal violation is \$8,265,900.

Contribution to Previously Identified Overloads

It 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

No problems identified.

Potential Issues

The O24 project may impact the Powerton Stability Schemes due to the interconnection point on line 8014 Pontiac 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.