

#R76 Kanawha River 138kV **Generation Interconnection**

This analysis was completed to assess the reliability impact for the increase in generation interconnecting to the PJM system as a capacity resource.

Network Impacts

The #R76 project was studied as an injection of 100 MW into the Kanawha River substation. Project #R76 was evaluated for compliance with reliability criteria for summer peak conditions. 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, Line with Failed Breaker and Bus Fault contingencies for the full energy output)

No problems identified

Short Circuit

No problems identified

Stability Analysis

Stability studies were not performed as part of this Feasibility Study and are not typically performed as part of the Feasibility Study effort. The stability assessments are part of the System Impact Study. Therefore, based upon the results of the future System Impact Study assessment, which includes the stability assessment, the extent of system upgrades could be significantly different from those identified in this Feasibility Study.

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