

#O57 – Kanawha 138kV Generation Interconnection

This analysis was completed to assess the reliability impact for an existing generator moving from behind the meter and interconnecting to the PJM system as an energy resource.

Network Impacts

The system was evaluated for compliance with reliability criteria based upon the 2009 system. Elkem Metals' participation in the PJM market via their normal Kanawha River 138 kV interconnection will not change the power flow pattern in the vicinity of the Kanawha River Station. However, studies were performed to evaluate the 24 MW, 46 kV interconnection request. The results are summarized below.

Normal System

No problems identified.

Single Contingency

No problems identified.

Short Circuit Analysis

No problems were identified since the inverter portion of the frequency converter is line-commutated and is not a potential source and, therefore, does not contribute significant short circuit energy.

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. Stability assessments are part of the System Impact Study.

Contribution to Previously Identified System Reinforcements

To be determined

Required System Reinforcement

None