Network Impacts - 661 MW into the Larrabee 230 kV Bus

Network Impacts

Potential network impacts for the injection of 661 MW into the Larrabee 230 kV system was evaluated for summer peak conditions in 2005.

Normal System

- No identified problems

Multiple Facility Contingency (MAAC Criteria IIC)

- No identified problems.

Generator Deliverability

- No identified problems.

Short Circuit Analysis

- This project causes five of the eight circuit breakers at the Larrabee 230kV substation to be overdutied (4R, HB, RZ, ZD and Capacitor #4). This project contributes to the overdutied condition of the circuit breakers (GK, BG, and K4) that were originally identified for replacement in previous projects.

System Reinforcements

Replacement of five 230 kV breakers at Larrabee 230 kV substation is estimated to cost $2.443 million and 2.5 years to complete.

The new generator will be allocated a percentage of the costs for the three Larrabee 230 kV circuit breakers (GK, BG, and K4) required to be replaced by previous projects based on the magnitude of the short circuit contribution in relation to other new generators. Cost allocation percentages are not provided as part of the feasibility study analysis. Cost allocation will be provided in the Impact Study report.