

Generation Interconnection

This analysis was completed to assess the reliability impact for a new generator interconnecting to the PJM system as a capacity resource.

Network Impacts - 750 MW Injection

Network impacts for the injection of 750 MW into the Perryman 230kV Bus were evaluated for 2004 summer peak conditions. Based on the power flow analysis performed the following network impacts were identified:

Normal System

- No identified problems

Single Contingency (MAAC Criteria IIA)

- Contingency overload on the Northeast 230 /115 kV transformer #3 due to contingencies involving the loss of the Northeast 230/115kV transformer #2. This problem can be relieved by the replacing the Northeast 230/115kV transformer #2 at an estimated cost of **\$5,500,000**.
- Contingency overload on the Northeast 230 /115 kV transformer #2 due to contingencies involving the loss of the Northeast 230/115kV transformer #3. This problem can be relieved by the replacing the Northeast 230/115kV transformer #3 at an estimated cost of **\$5,500,000**.

Multiple Facility Contingency (MAAC Criteria IIC)

- No identified problems

SHORT CIRCUIT ANALYSIS

- A short circuit screening analysis was performed to determine the impact to network circuit breakers because of increased short circuit current provided by the proposed injection of generation. At this point, the short circuit screening analysis has shown that 230 kV OCB for 34 Bank at Riverside Generating Station is overstressed. This violation appears to be a pre-existing condition.

The estimated time to construct the above Network Upgrades is 24 to 36 months.