Generation Interconnections

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 into the Hosensack 500kV substation

Network Impacts

The proposed new generation will be terminated in the Hosensack 500kV substation.

Normal System

- No identified problems

Single Contingency (MAAC Criteria IIA)

Contingency overload on the Martins Creek to Morris Park 230 kV circuit due to the loss of the circuit from the B03 project interconnection point to the Hosensack 500 kV bus. This violation would require increasing the operating temperature of the circuit by replacing terminal equipment and reconfiguring two distribution line crossings at an estimated cost of **$160,000**. The feasibility of this upgrade is based upon existing drawings and assumption that operating the line at 170 degrees C is viable. The drawings and assumptions will be verified in the facility study.

Double Circuit Tower Circuit Outages (MAAC Criteria IIC)

- No identified problems

Short Circuit Analysis

- The 230 kV switchyards at Quarry and Martins Creek are approaching their design capability, especially with respect to short circuit capability. The Impact Study will evaluate the short circuit implications of adding this project, determining what breakers, if any, will need to be replaced.

System Reinforcements

The following reinforcement is required to alleviate the network problem described above.

- Increase the Martins Creek-Morris Park 230 kV line rating to 955 MVA by replacing a wave trap on the Morris Park terminal. **The estimated cost for replacement is $160,000**. The estimated time for replacement is 9 months.