(L06 Graceton 550)
Generation Interconnection

This analysis was completed to assess the reliability impact for a new generator interconnecting to the PJM system as an Energy Resource.

Network Impacts - 550 MW Injection

The **Queue L06** project was studied as a **550 MW capacity** injection into the Graceton –Nottingham 230kV line to determine compliance with reliability criteria for summer peak conditions in 2007.

A summary of the Network Impacts is as follows:

Generator Deliverability

1. The L06 – Graceton 230kV circuit is normally overloaded at **104%** of the normal rating (525 MVA). L06 – Graceton 230kV is also contingency overloaded at **106%** of the emergency rating (627 MVA) for the outage of the Conastone – Peach Bottom 500kV circuit. The L06 project contributes approximately **461 MW** to the normal facility loading and **443 MW** to the contingency facility loading.

Multiple Facility Contingency – Tower Line Outages (MAAC Criteria IIC)

No identified problems.

Short Circuit

Short circuit analysis screening was performed and there is a potential that the project will be required to contribute to the cost of replacing some breakers previously identified for other projects. Any required breaker replacements are not expected to materially alter the total network reinforcement cost.

New System Reinforcements

Overload #1 can be relieved by upgrading the L06 – Graceton 230kV circuit. The cost is estimated at $1.283 million and is expected to take two years to complete.

Contribution to Previously Identified System Reinforcements

None.