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 -550 MW Injection into the Hunterstown-Conemaugh 500kV transmission line (D22)

Network Impacts

The D22 project was modeled as an injection of 550 MW into the Conemaugh-Hunterstown 500 kV circuit (refer to the Direct Connection section of this report). A summary of network impacts follows:

Normal System

- No identified problems

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

- No identified problems.

Generator Deliverability

The generator contributes to a greater than 5% voltage drop at Juniata 500kV substation for the outage of Hunterstown - Conastone 500kV circuit and the Hunterstown 500/230 kV transformer #1.

Short Circuit Analysis

- No identified problems.

System Reinforcements

Install a 350 MVAR SVC at the Juniata 500 kV substation. Estimated cost $20.3 million.

The actual cost allocation amounts for network upgrades required by more than one generation project will be defined in the Impact Study report.