Generation Interconnection

(Queue #H5 Riverside 600MW)

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

Network Impacts - 600 MW Capacity Injection

Capacity injection of 600 MW into the the existing Northeast to Brandon Shores 230kV circuits (2315 and 2337) was evaluated to determine Network Impacts. The network impacts identified were as follows:

Generator Deliverability
No identified problems.

Multiple Facility Contingency – Tower Line Outages (MAAC Criteria IIC)
No identified problems.

Short Circuit
Note: Underlying system, 138kV and below, circuit breaker adequacy was not checked.

A short circuit screening of the 230kV system identified the following:

1. The H5 project causes all four existing Riverside 230 kV circuit breakers to exceed their short circuit interrupting capability. The replacement of four 230kV circuit breakers is estimated at **$1.4 million.**
2. Approximately ten 230kV circuit breakers at Brandon Shores substation are potential problems due to the H5 project. If these 10 breakers require replacement the estimated cost is **$3.5 million.**

Contribution to Previously Identified System Reinforcements
None.