Generation Interconnection

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

Network Impacts

The # K17 project was studied with a total of 5 MW capacity injection into the Allegheny Power 25 kV system at/near the Emerald 6 substation. Project # K17 was evaluated for compliance with reliability criteria for summer peak conditions in 2007. Potential network impacts were as follows:

Normal System:
No identified problems.

Single Contingency:
No identified problems.

Multiple Facility Contingencies (i.e. Tower Line Outages);
No identified problems.

Generator Deliverability:
No identified problems.

Short Circuit Study:
No breaker replacements required for interconnection.

New System reinforcements (upgrades):
No identified problems.

Contribution to Previously Identified System Reinforcements;
None.

Cost allocation percentages are not provided as part of the Feasibility Study analysis, however, cost allocation will be provided during the Impact Study evaluations.

Other Comments

Adding the proposed new generation will require that protective relaying coordination in the entire area be reviewed and changes will likely be required at one or more area substations. It is estimated that the total cost for Allegheny Power Controls Engineering staff to complete the coordination review, develop new settings and for their field technicians to implement the necessary changes to be approximately **$2,100 in 2004 dollars**.

In addition to the above construction cost, a monthly direct access charge will also be charged, since this installation is not directly connected to Allegheny Power's transmission system. This charge will be calculated prior to the completion of the System Impact Study