

Generation Interconnection

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

Network Impacts -350 MW Injection into the South Akron 230kV substation

Network Impacts

Potential network impacts for the injection of 350 MW into the South Akron 230 kV bus were evaluated for summer peak conditions in 2004.

A summary of the results follows:

Normal System

- No identified problems.

Multiple Facility Contingency (MAAC Criteria IIC)

- No identified problems.

Generator Deliverability

- No identified problems.

Short Circuit Analysis

- Two Manor (West Hempfield and Graceton) 230 kV and one South Reading (Transformer #7) 230 kV circuit breakers are overdutied.
- Two South Akron 69 kV circuit breakers are overdutied.

System Reinforcements

- Replacement of two 230 kV circuit breakers at Manor is estimated to cost \$ 700,000.
- Replacement of one 230 kV circuit breaker at South Reading is estimated to cost \$ 350,000.
- Replacement of two 69 kV circuit breakers at South Akron is estimated to cost \$ 350,000
- It is estimated all five circuit breakers will be replaced in 24 – 30 months.