

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 -300 MW Injection into the Keystone 500kV substation

Network Impacts

Potential network impacts for the injection of 300 MW into the Keystone 500 kV substation were evaluated for summer peak conditions in 2004. The analysis performed for this project included a revised breaker configuration at the Erie West 345 kV as shown in Figure #2.

The system, as planned, was evaluated for compliance with reliability criteria. The results are summarized below.

Normal System

No identified problems.

Single Contingency (MAAC Criteria IIA)

No identified problems.

Multiple Facility Contingency (MAAC Criteria IIC)

No identified problems

Short Circuit Analysis

Fault duty was evaluated at all substations that had a greater than 5% increase in fault current due to the new generator. The fault duty was below all circuit breaker interrupting capabilities and, as such, no circuit breaker replacements are anticipated due to this project..

System Reinforcements

No transmission system reinforcements were identified as necessary for connection of this project.

Figure #1

Keystone 500kV Station B10 Configuration

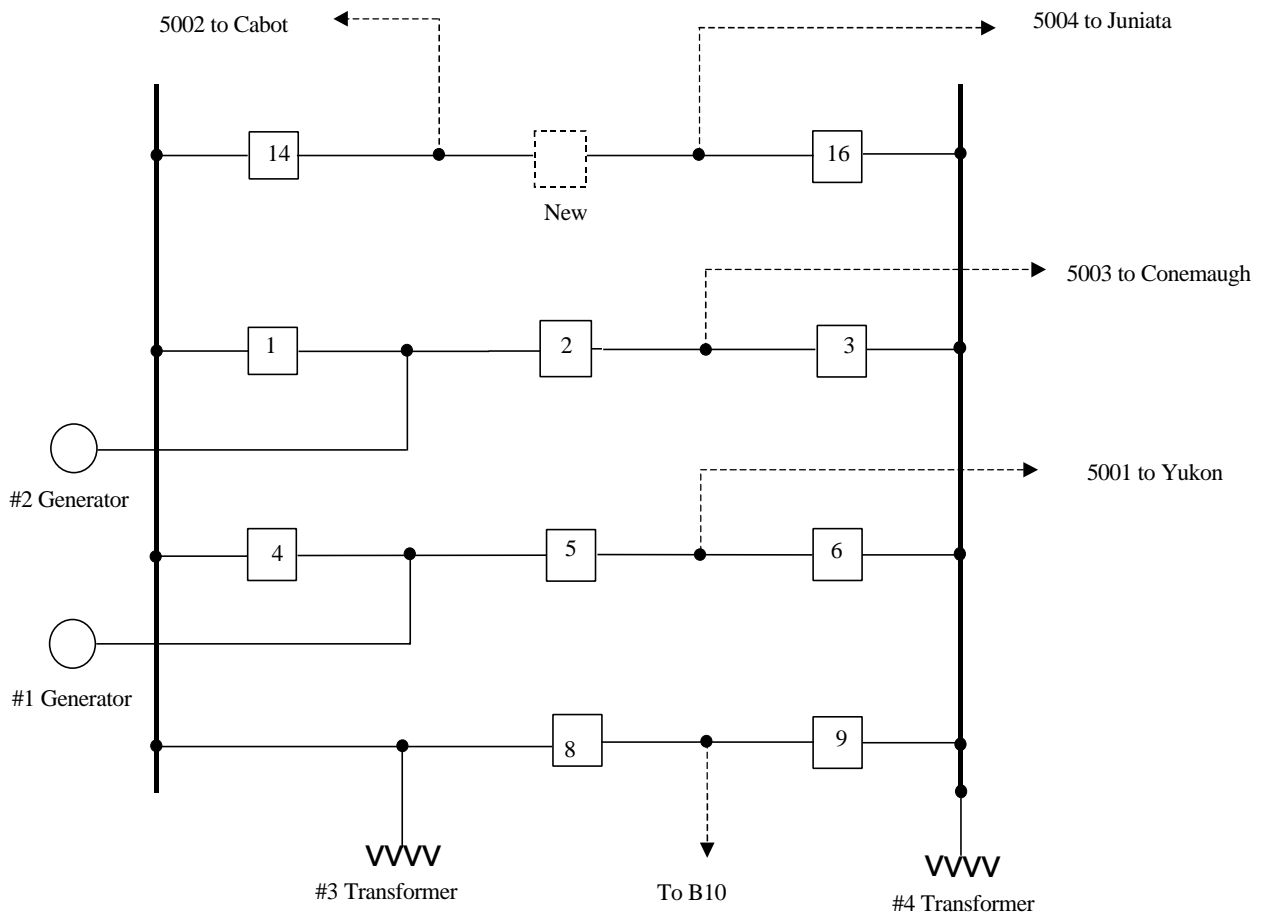


Figure #2

Erie West 345 kV

