

#M23 Henry 138kV Generation Interconnection

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

Project # M23 was evaluated for compliance with reliability criteria for summer peak conditions in 2008.

Network Impacts:

The #M23 project was studied as a total injection of 150 MW into the William 138 kV-facility, of which 30 MW was studied as capacity and the remaining 120 MW as energy-only.

Normal System (ECAR Standard 1):

The William substation 138 kV bus is overloaded to 111.7% of its rating by the generation addition.

Single Contingency (ECAR Standard 2):

No identified problems.

Multiple Facility Contingency (ECAR Standard 3):

No identified problems.

Generator Deliverability:

No identified problems.

Short Circuit Study:

No identified problems.

New System reinforcements (upgrades):

Two sections of the William substation 138 kV bus will be upgraded. The reserve bus will be upgraded to 954 ACSR strain bus and the main bus will be upgraded to 1272 ACSR strain bus. Additionally two switches in the reserve bus will be upgraded to 1200 amp VB switches.

Contribution to Previously Identified System Reinforcements:

None.