

#Q23 - Bayard
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

The #Q23 project was studied as a 19 MW (3.8 MW of Capacity) resource at the Bayard substation in the APS territory. Project #Q23 was evaluated for compliance with reliability criteria for summer peak conditions in 2011. Potential network impacts were as follows:

Generator Deliverability

No problems were identified

Multiple Facility Contingency

No problems were identified

Contribution to Previously Identified Overloads

None

New System Reinforcements

None

Contribution to Previously Identified System Reinforcements

To be determined at the System Impact Study

Short Circuit

No overdutied breakers were identified.

Delivery of Energy Portion of interconnection Request

PJM also studied the delivery of the energy portion of this interconnection request. Any problems identified below are likely to result in operational restrictions to the project under study. The developer can proceed with network upgrades to eliminate the operational restriction at their discretion by submitting a Merchant Transmission Interconnection request.

As a result of the aggregate energy resources in the area, the following violations were identified:

1. Contribution of 6 MW further overloads the Albright-P52 138 kV line from 227% to 230% of its emergency rating (202 MVA) for the outage of the N.Peters-N.Frank-Seneca 138 kV line.
2. Contribution of 6 MW further overloads the William-Mettiki 138 kV line from 192% to 195% of its emergency rating (202 MVA) for the outage of the N.Peters-N.Frank-Seneca 138 kV line.
3. Contribution of 6 MW further overloads the P52-Mettiki 138 kV line from 196% to 199% of its emergency rating (202 MVA) for the outage of the N.Peters-N.Frank-Seneca 138 kV line.