Queue O52
Gold – Potter 115 kV

Network Impacts

The #O52 project was studied as an addition of 100 MW (20 MW of Capacity) into a tap of the Gold-Potter 115 kV line. Project #O52 was evaluated for compliance with reliability criteria for summer peak conditions in 2009. 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

None

Short Circuit

No overdutied breakers were found.

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. The Sabinsville-N36 115 kV line loads to 101% of its normal rating (130 MVA). The #O52 project contributes approximately 39 MW to cause this thermal violation.
2. The #O52 contributes 15 MW to the overload at Lewistown-Juniata 230 kV for the outage of Juniata to Keystone 500 kV line, which was originally caused by the #O38 project.
3. The #O52 contributes approximately 2.5 MW to the overload of the Sabinsville 115-34.5 kV transformer #1 for the outage of the Sabinsville-Niles Valley 115 kV line, which was originally caused by N36.

4. The #O52 contributes approximately 2.6 MW to the overload of the Sabinsville 115-34.5 kV transformer #2 for the outage of the Sabinsville-Niles Valley 115 kV line to cause an overload to 117%. This is the first project to cause the overload of this facility.
5. Gaines-Ansonia 34.5 kV line loads to 146% of its rating (15 MVA) for the outage of the Sabinsville-Niles Valley 115 kV line outage. The #O52 contributes approximately 5.3 MW to cause this thermal violation.
   Ansonia-Wellsboro 34.5 kV line loads to 141% of its rating (15 MVA) for the outage of the Sabinsville-Niles Valley 115 kV line outage. The #O52 contributes approximately 5.3 MW to cause this thermal violation