

#N34 Motiva 142 MW
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 - 142 MW Capacity Injection

The system, as planned, was evaluated for compliance with reliability criteria. **The N34 Motiva project was studied as an 120 MW Capacity injection into the Motiva 138 kV bus and 22 MW Capacity injection into the Delaware City 69 kV bus .** The results are summarized below.

Generator Deliverability

No problems were identified

Multiple Facility Contingency – Tower Line Outages

No problems were identified

Short Circuit

Not required.

New System Reinforcements

None

Contribution to Previously Identified Overloads

The N34 project was found to contribute to contingency overloads previously identified for projects N01 and N02. The N34 project may be required to contribute to the costs associated to upgrade the following facilities initially identified for Queues N01 and N02:

1. Reconductor the Graceton – Raphael 230 kV circuit. The total cost is estimated at \$12,700,000 and it is expected to take approximately 3 years to complete. The N34 project contributes approximately 10 MW (2 MW from G03, 2 MW from G06, and 6 MW from G07).
2. Reconductor the Graceton – N01 Tap 230 kV circuit. The total cost is estimated at \$1,615,000 and it is expected to take approximately 3 years to complete. The N34 project contributes approximately 11 MW (2 MW from G03, 2 MW from G06, and 7 MW from G07).
3. Reconductor the Conastone – Northwest 230 kV (#2322) circuit. The total cost is estimated at \$7,700,000 and it is expected to take 3 years to complete. The N34 project contributes approximately 10 MW (2 MW from G03, 2 MW from G06, and 6 MW from G07).

Docs #331558