



Generation Interconnections

Network Impacts

Potential network impacts for the injection of 23.3 MW into the Raritan River-Parlin 230kV circuit and an additional injection of 46.7 MW into the Raritan River-South River 230kV circuit in the GPU Energy system was evaluated for summer peak conditions in 2005.

Normal System

- No identified problems

Multiple Facility Contingency (MAAC Criteria IIC)

- The Raritan River - Kilmer "I" 230 kV circuit is overloaded for the double circuit tower outage that includes the South River - Atlantic 230 kV and Parlin - Frenau 230 kV circuits.

Generator Deliverability

- No identified problems.

Short Circuit Analysis

- Not required since the proposed chillers do not affect the short circuit characteristics of the proposed units described in project A-15.

System Reinforcements

To eliminate the overload identified above, the following system upgrade is required. Re-conductor the Raritan River - Kilmer "I" 230 kV circuit to bundled 2-1590 ACSR conductor. Total cost estimate for the network reinforcement listed above is \$16.7 million and is expected to take 2.5 years to complete from the execution of the Interconnection Agreement with the transmission owner. The estimated cost does not include a tax gross - up which will be addressed in Interconnection Agreement. The current tax rate is 38 % in New Jersey.

The new generator will be allocated a percentage of the costs for the replacement of the wave trap at the Raritan River terminal of the Raritan River - Kilmer "I" 230 kV line

that is required for the Lakewood (A55) project. Replacement of the wavetrap is expected to cost \$60,000 and take nine months to complete.

Cost allocation percentages are not provided as part of the Feasibility Study analysis, however, cost allocation will be provided at the conclusion of the Impact Study evaluations.