HARRISON PROJECT (QUEUE #45)
FEASIBILITY STUDY ANALYSIS

DESCRIPTION OF PROJECT

The developer wishes to interconnect two 165 MW combustion turbine generators (CT) and one 170 MW steam turbine generator (ST) for a maximum total generating capability of 500 MW (summer) at their site in Harrison County, West Virginia near the town of Haywood. The project will be located on property adjacent to the existing AP Harrison Power Station. The units are assumed to generate at 16.5 kV, using natural gas for fuel. The customer wishes to interconnect by constructing a 500 kV line into the station and plans to have the generators in service and producing power by the second quarter of 2004.

ANALYSIS RESULTS

Normal (Base) System Conditions

No overloads or other system deficiencies were identified as being caused by this facility under normal system conditions.

Single Contingency Conditions

No overloads or other system deficiencies were identified as being caused by single contingencies.

Multiple Contingency Conditions

No overloads or other system deficiencies were identified as being caused by credible multiple contingencies.

Short Circuit Conditions

No breakers were identified as exceeding their maximum interrupting capacity.

SYSTEM REINFORCEMENTS

Required Direct Interconnection Facilities

Construct substation facilities for Harrison Substation:

- Install two 500 kV breakers and associated facilities.
- Install 500 kV metering equipment and associated facilities.

Estimated cost to construct substation = $3,000,000

Customer site

- Protective relaying at customer site.

Estimated cost for protective relaying = $31,900

Required System Reinforcements

None identified.

Required Short Circuit Reinforcements

None identified.

Summary

Total estimated interconnection costs = $3,031,900