FORT MARTIN PROJECT (QUEUE #51)
FEASIBILITY STUDY ANALYSIS

DESCRIPTION OF PROJECT

The developer wishes to interconnect two combustion turbine (CT) generators and one steam turbine generator for a maximum total generating capability of 580/620 MW (Summer/Winter) at their Fort Martin site in Monongalia County, West Virginia near Fort Martin Power Station. The project will require a 500 kV interconnection at Fort Martin Switching Station. The units will generate at 18 kV using natural gas for fuel. The customer wishes to interconnect into the 500 kV and plans to have the generator in service and producing power by January 1, 2006.

ANALYSIS RESULTS

Normal (Base) System Conditions

No overloads or other system deficiencies were identified.

Single Contingency Conditions

No overloads or other system deficiencies were identified as being caused by credible 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 or other equipment were identified as being over their maximum interrupting or through-fault rating.

SYSTEM REINFORCEMENTS

Required Direct Interconnection Facilities

Interconnect at Fort Martin Switching Station:

- Extend the North and South 500 kV buses and install an additional cross bus with three 500 kV circuit breakers and associated equipment.
- Relocate the Kammer-Harrison #502 500 kV line terminal
- Install two 500 kV meters and associated facilities
- Relaying testing and coordinating

Estimated cost to install facilities at Fort Martin Switching Station = $3,725,000

Required System Reinforcements

There were no system reinforcements required.

Required Short Circuit Reinforcements

There were no short circuit reinforcements required.

Summary

Total estimated cost to interconnect the proposed generation facilities = $3,725,000.