

KEMPTON PROJECT (QUEUE #55)

FEASIBILITY STUDY ANALYSIS

DESCRIPTION OF PROJECT

The developer wishes to interconnect one steam turbine generator for a maximum total generating capability of 500 MW at their Kempton site in Garrett County, Maryland near the Mettiki Mine Wash Plant. The project will require a 500 kV interconnection at a new 500 kV Switching Station. The unit will generate at 18 kV using coal 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 a new 500 kV Switching Station:

- ◆ Construct a new 500 kV switching station with two main buses, two cross buses, five 500 kV circuit breakers and associated equipment.
- ◆ Install 500 kV metering equipment and associated facilities
- ◆ Loop the Pruntytown-Mt Storm 500 kV line into the station
- ◆ Install and coordinate protective relaying

Estimated cost for facilities related to the new 500 kV Switching Station =
\$10,452,000

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 = **\$10,452,000**.