MILL RUN PROJECT (QUEUE #8)
FEASIBILITY STUDY ANALYSIS

DESCRIPTION OF PROJECT

The developer wishes to interconnect twelve 1.3 MW wind turbine generators at their Mill Run site in Fayette County, Pennsylvania near the town of Normalville. The project will connect to the 25 kV line through a new Allegheny Power Mill Run Station. The units will use wind as a fuel. The customer plans to have the generators in service and producing power by December 2001.

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 so long as the generator's power factor is maintained between 0.95 and 0.99 lagging.

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 new Mill Run Station:

- Install one 25 kV breaker and associated facilities.
- Install 25 kV metering equipment and associated facilities.

Cost = $ 417,000

Construct 25 kV line to connect new station into existing 25 kV grid = $ 61,600
Total direct interconnection facilities cost = $ 478,600

Required System Reinforcements

Install a 25 kV breaker at Normalville Substation = $ 202,800

Install local and remote voltage control on the 25 kV capacitor at Donegal Substation = $ 32,300

Required Short Circuit Reinforcements

None identified.

SUMMARY

Total estimated cost to interconnect the proposed generation facilities = $ 713,700