OAK GROVE PROJECT (QUEUE #52)
FEASIBILITY STUDY ANALYSIS

DESCRIPTION OF PROJECT

The developer wishes to increase the summer output of the two combustion turbine (CT) generators for a maximum total generating capability of 354 MW (Summer) at their Oak Grove site in Pleasants County, West Virginia about 3.5 miles from AP's Belmont Substation at AP's Oak Grove Substation. The project will have a 138 kV interconnection at AP's Oak Grove Station. The units will generate at 18 kV using natural gas for fuel. The customer will interconnect into the 138 kV and plans to have the generators with inlet cooling (fogging) equipment in service and producing power by April 1, 2002.

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 multiple contingencies.

Multiple Contingency Conditions

A 138 kV line trap at Parkersburg Substation on the Oak Grove – Parkersburg 138 kV line overloads under certain 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

There are no additional costs associated with the increase in generation.

Required System Reinforcements

A l38 kV line trap on the Oak Grove – Parkersburg 138 kV line must be replaced with a larger line trap at a cost of **$15,000**.

Required Short Circuit Reinforcements

There were no short circuit reinforcements required.

Summary

The generator output can be increased from this station with one reinforcement, replacing the 138 kV line trap on the Oak Grove – Parkersburg 138 kV line. No additional interconnection facilities are needed.