GANS PROJECT (QUEUE #4)
FEASIBILITY STUDY ANALYSIS

DESCRIPTION OF PROJECT

The developer wishes to interconnect two 44/48 MW combustion turbine generators at their Gans site in Fayette County, Pennsylvania near the town of Uniontown. The project will connect at 138 kV to a new Allegheny Power Gans Substation. The units will generate at 13.8 kV, using natural gas for fuel. The customer plans to have the generators in service and producing power by July 2000.

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

The Bethelboro-Connellsville No. 142, 138 kV line overloads for the outage of Layton Jct.

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 a new Gans Station:

- Install one 138 kV breaker and associated facilities.
- Install 138 kV metering equipment and associated facilities.
- Loop the Lake Lynn-South Union 138 kV line into Gans Station.

Total cost for direct interconnection reinforcements = $ 1,405,000

Required System Reinforcements

Reconductor/rebuild 4.5 miles of the Bethelboro-Connellsville No. 142, 138 kV line with 954 kcmil ACSR conductor.

Estimated Cost = $766,000

Required Short Circuit Reinforcements

None identified.

SUMMARY

Total estimated cost to interconnect the proposed generation facilities = $ 2,171,000