MCCONNELLSBURG PROJECT (QUEUE#72)
FEASIBILITY STUDY ANALYSIS

DESCRIPTION OF PROJECT

The developer wishes to connect three combustion turbine generators for a maximum total generating capability of 285 MW at their McConnellsburg site in Fulton County, Pennsylvania. The project will interconnect at a new switching station on the McConnellsburg – Cherry Run 138 kV line. The developer plans to have the generators in service and producing power by June 2003.

ANALYSIS RESULTS

Normal (Base) System Conditions

No base case overloads were identified.

Single Contingency Conditions

The following overloads occurred due to single contingency events:

- Overload on the Cherry Run – Harmony Jct 138 kV line section
- Overload on the Ringgold – Catoctin 138 kV line
- Overload on the Bedington – Shepherdstown 138 kV line

Multiple Contingency Conditions

No overloads due to multiple contingency events were identified.

Short Circuit Conditions

The following breakers were identified as being over their maximum interrupting rating.

Reid Substation:
- RI-2
- RGU

Ringgold Substation:
- RWA1
- #4 Transformer
- #3 Transformer
- RCMO
- RCM1
- Bus Tie

SYSTEM REINFORCEMENTS

Required Direct Interconnection facilities

Interconnect at a new 138 kV switching station:

- Construct a 3-breaker, 138 kV breaker-and-a-half switching station
- Install 138 kV metering equipment and associated facilities

Estimated cost to install facilities at new switching station -- **$1,630,000**

Required System Reinforcements

The necessary system reinforcements and associated costs are as follows:

- Reconductor Cherry Run – Harmony Junction 138 kV -- **$2,500,000**
- Reconductor Catoctin – Ringgold 138 kV -- **$2,204,690**
- Reconductor Bedington – Shepherdstown 138 kV -- **$495,310**

Total reconductoring cost -- **$5,200,000**

Required Short Circuit Reinforcements

Breaker replacement costs are as follows:

- Reid -- **$312,500**
- Ringgold -- **$937,500**

Total breaker replacement cost -- **$1,250,000**

Summary

Total estimated cost to interconnect the proposed generation facilities = **$8,080,000**.