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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

APR 14 1980

Docket Nos.: 50-352
and 50-353

The Honorable E. Raymond Lynch
Pennsylvania House of Representatives
211 Welsh Pool Road
Lionville, Pennsylvania 19353

Dear Mr. Lynch:

This is in response to your March 4, 1980 letter concerning the question of building two coal units and stopping construction on the Limerick Nuclear Units. Coal is a viable alternative energy source in Pennsylvania and it can produce power for about one-half the cost of oil. There are a number of factors to be considered in the selection of an energy source for electricity generation. It appears however, that the cost of converting Limerick to a coal operation would be significant.

The construction of the Philadelphia Electric Company's Limerick Generating Station Unit 1 is 60% complete and Unit 2 is 40% complete. Approximately $1.2 billion of the estimated $2.6 billion has been expended and a large share of the remaining costs have been committed to this project due to delivery contracts, etc. Limerick Unit No. 1 is scheduled to start commercial operation in 1983 and Unit No. 2 in 1985, assuming no delays in construction and regulatory approval.

The Electric Power Research Institute's "Technical Assessment Guide," July 1979, estimates the cost of two 1000 MWe nuclear units constructed at a single site at $818/kWe, and the cost of two 500 MWe coal units constructed at a single site at $800/kWe. It would require more than four 500 MWe coal plants to replace the 2100 MWe capacity of the Limerick Units. These costs are for units starting commercial operation in 1978. The NRC staff has also independently conducted similar studies and has concluded that the capital cost of nuclear units is 5% more on a dollar/kWe basis than the smaller coal units. The capital cost of two 1000 MWe coal units is about 13% less than the cost of nuclear units of equivalent capacity.

The approval and construction of coal units require about a ten year period. Therefore, assuming favorable scheduling of equipment procurement, contracting and regulatory approval, the utility would experience a five to six year delay in placing the coal units into service compared to the scheduled nuclear units. Since the Philadelphia Electric Company system is now 80% oil, the replacement power cost for this period would be $2.3 to $2.8 billion. These costs are in 1984 dollars.

The replacement of the Limerick Nuclear Units with equivalent coal capacity would add $4.7 to $5.0 billion to electricity bills over the life of the units, in 1984 dollars. This is composed of $2.5 billion in higher fuel costs for coal over the plant lifetime, plus $2.2 to $2.5 billion to build the equivalent coal capacity based upon the 5% to 13% differential in capital cost. This added cost does not include the capital cost already committed to the Limerick Units and the replacement power cost during the additional five to six years needed to construct the coal units.

Thank you for your concerns about the cost of replacing the Limerick Units.

Sincerely,

Harold R. Denton, Director
Office of Nuclear Reactor Regulation