50-250

JUN 19 1979

The Honorable Paul Trible
United States House of Representatives
Washington, D. C. 20515

Dear Congressman Trible:

This letter is in response to your memo of April 26, 1979 in which you requested a reply to the concerns of one of your constituents regarding the shutdown of the two reactor units at the Surry Power Station, operated by the Virginia Elecric and Power Company (VEPCO).

The sequence of events which led to the Nuclear Regulatory Commission's Orders of March 13, 1979 to shut down five nuclear power reactors, including the two-unit Surry Power Station, was delineated in the Federal Register, a copy of which is enclosed. Our actions were not the result of a Senate committee hearing or report.

As indicated in the enclosure, our actions to shut down the reactor were due to the discovery that safety system piping, essential to the safe shutdown of the reactors in the event of an earthquake, had been analyzed using an unacceptable computer technique. An acceptable full reanalysis of all the affected systems was not available and a preliminary partial reanalysis indicated that, for at least some systems, calculated pipe stress levels would exceed the maximum allowable stress levels under earthquake conditions. Likewise, the adequacy of the design of various pipe hangers and supports was questioned. Thus, we determined that protection of public health and safety required that the reactors in question be shut down until the results of reanalyses of all affected pipe systems and pipe supports were submitted for our review and until any necessary pipe system modifications were implemented.

Our order to shut down the Surry Power Station was not based on a new finding of a seismic fault in the Surry area. In fact, there has been no such new finding. However, one important characteristic of the Surry site is that the facility rests on about 1300 feet of sediments which overlays rock. This condition, including the characteristics of overburden damping and amplification of vibrations from bedrock to the surface, was considered in establishing the seismic design basis for the facility. However, the 1300 feet of overburden at the Surry site masks the basement rock so that faulting

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cannot be identified in the area. This is true for most of the eastern United States. Since the tectonic structures which give rise to earthquakes cannot be identified and localized, our practice is to assume that earthquakes at least as severe as regional historical earthquakes could occur anywhere in the region. In addition, in establishing the seismic design bases for a nuclear power plant, we take into account the impacts on that plant of more distant earthquakes. For example, the Charleston, South Carolina earthquake of 1886 was felt in the region of the Surry site.

We are aware of the energy concerns alluded to by your constituent. Our actions were based, however, on assuring public health and safety. While we continue to meet with VEPCO and Stone and Webster representatives to discuss preliminary results of their reanalyses, we are at this time awaiting submittal of the results and analysis justification by VEPCO for staff evaluation. Following the staff evaluation of the VEPCO submittals for each reactor unit, we will be in a position to reconsider whether continued suspension of operations at that unit remains necessary or appropriate. The staff's recommendation concerning possible resumption of operation will be considered by the Commission before a final decision is made.

Sincerely,

(Signed) Lee V. Gossick
Lee V. Gossick
Executive Director
for Operations

Enclosure:
"Federal Register Notice"

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Sincerely,

Enclosure:
"Facts Related to the
Shutdown of Five Plants"

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