

400 Chestnut Street Tower II

December 24, 1980

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Denton:

In the Matter of the)	Docket Nos. 50-259
Tennessee Valley Authority)	50-260
		50-296

PROMPT NOTIFICATION OF THE PUBLIC

The Nuclear Regulatory Commission (NRC) and the Federal Emergency Management Agency (FEMA) have jointly issued radiological emergency planning guidance which requires the installation of a "prompt notification system." The system has a design objective of assuring notification of the public within a 10-mile plume exposure emergency zone (EPZ) in the event of an accident at a nuclear power reactor. The requirements specify notification must be completed within 15 minutes for the 5-mile EPZ and 45 minutes for the remainder of the 10-mile EPZ.

Extensive analysis of the accident sequences summarized in the Reactor Safety Study, WASH 1400, indicate that the time delay between the start of a major reactor accident and the release of radioactivity to the atmosphere would range from a minimum of 2-3 hours to a maximum of 30 hours. Also, the interval between awareness of impending core damage and the release of radioactivity from containment is estimated to be a minimum of one hour.

TVA assessments of the probabilities of accidents leading to significant releases and the resulting potential doses to the public in the vicinity of a nuclear facility have demonstrated the need for an automated notification system for areas within the 5-mile EPZ. However, beyond the 5-mile EPZ even conservative estimates of potential dose and probability do not warrant a fully automated notification system. Additionally, assessments presented to the commission during the November 18, 1980, NRC meeting on fission product releases during accidents indicate that the nongaseous fission product release potential may be much less than has been assumed as the basis for the current NRC guidance. TVA assessments indicate that with a reduced release potential for nongaseous fission products, many of the post Three Mile Island emergency planning requirements may not be justified, including the requirement for the 10-mile prompt notification system. It is our understanding that the NRC staff is now reevaluating the issue of fission product release and its impact on existing and proposed regulatory guidance. We also understand that the commission, in its review of the recent petition by Duke Power, determined that public notification guidance should be modified so that 100 percent of the population within 5 miles must be notified with no specified percentage cut to 10 miles.

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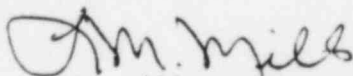
Mr. Harold R. Denton

TVA is committed to fully comply with the existing requirements including those regarding the prompt notification system. However, since our own assessments are consistent with the new information on releases presented to the Commission on November 18, 1980, TVA plans to implement installation of a prompt notification system for Browns Ferry Nuclear Plant in the 5-mile EPZ only. A schedule has been established to accomplish the installation of the 5-mile system for operating nuclear plants by July 1, 1981. TVA will continue to assist State and local authorities in the development and enhancement of conventional notification means within the 10-mile EPZ. Further, TVA will proceed with the design of a prompt notification system for the entire 10-mile EPZ and will implement expansion of the 5-mile system as appropriate upon completion of NRC's evaluation of fission product release potential.

Due to the long lead time required for the purchase and installation of prompt notification equipment, we request your comments regarding this approach by no later than January 15, 1981. By copy of this correspondence FEMA is also informed of our plans and requested to provide comments to TVA.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager
Nuclear Regulation and Safety

cc: Mr. Frank A. Camm
Associated Director for Plans
and Preparedness
Federal Emergency Management Agency
Washington, DC 20472