



**FEMA**

January 24, 2018

Michael Scott  
Division of Preparedness and Response  
Office of Nuclear Security and Incident Response  
U.S. Nuclear Regulatory Commission  
Mail Stop T4D22A  
Washington, D.C. 20555

**SUBJECT: FEDERAL EMERGENCY MANAGEMENT AGENCY REVIEW OF AN  
EARLY SITE PERMIT APPLICATION FOR THE TENNESSEE  
VALLEY AUTHORITY CLINCH RIVER NUCLEAR SITE**

Dear Mr. Scott:

This letter provides additional information related to our June 12, 2017 and August 11, 2017 letters to the NRC regarding the Early Site Permit Application (ESPA) submitted by the Tennessee Valley Authority (TVA) for the Clinch River Nuclear (CRN) Site in Oak Ridge, Tennessee. This letter follows several discussions between FEMA and NRC headquarters and regional staff on this application.

In your February 13, 2017 letter, the NRC requested that FEMA review certain parts of the ESPA. Since the ESPA only included proposed major features of the onsite emergency plan, and did not include any offsite emergency plans, the requested FEMA deliverable (to the NRC) was limited to a determination regarding (1) whether there is a significant impediment to the development of offsite emergency plans for the 2-mile plume exposure pathway (PEP) EPZ (for Emergency Plan 5B) (see 10 CFR 52.17(b)(1) and 10 CFR 52.18); and (2) whether the proposed major features of the emergency plan, specifically related to the exact size and configuration of the 2-mile PEP EPZ, is acceptable (for Emergency Plan 5B) (see 10 CFR 52.17(b)(2)(i) and 10 CFR 52.18).

With respect to the issue of significant impediments, as described in our August 11, 2017 letter, FEMA, working with Tennessee Emergency Management Agency (TEMA), has not identified physical characteristics of the proposed site that could pose a significant impediment to the development of emergency plans, including evacuation if needed from the 2-mile EPZ.

With respect to the issue of whether the proposed major features of the emergency plan, specifically related to the exact size and configuration of the 2-mile PEP EPZ, is acceptable (for Emergency Plan 5B), FEMA and NRC staffs have engaged in multiple discussions to better clarify the appropriate FEMA deliverable. Specifically, the NRC has not requested FEMA's approval of the 2-mile radius for the PEP EPZ. Rather, NRC requests FEMA's determination, as part of a limited major feature review, that the exact size and configuration of the 2-mile PEP EPZ for Emergency Plan 5B was

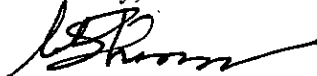
established relative to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries, in accordance with Section I.3 of Appendix E to 10 CFR Part 50. Therefore, NRC seeks a FEMA determination whether the boundary established for the proposed 2-mile PEP EPZ, as described in Emergency Plan 5B and the evacuation time estimate (ETE) report, adequately addresses these criteria.

Accordingly, FEMA, working with the TEMA, has determined that the boundary established for the proposed 2-mile PEP EPZ (as reflected in Emergency Plan 5B and its ETE Report), was established relative to local emergency response needs and capabilities, as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. This finding does not, however, endorse or determine the adequacy of a proposed 2-mile PEP EPZ for the CRN Site if proposed during the licensing process.

Notwithstanding these determinations, as the licensing process moves forward and the NRC staff reviews TVA's exemption request that would permit the use of a methodology for establishing a scalable PEP EPZ boundary for the small modular reactor (SMR) design that will later be selected for the combined license (COL) application, FEMA looks forward to providing continued consultative support to the NRC consistent with each agency's statutes, applicable regulations, and the joint FEMA/NRC memorandum of understanding.

Please do not hesitate to contact me directly at 202.212.2376 if you have any questions or desire further clarification on any of these areas of concern.

Sincerely,



Michael S. Chesney  
Director (Acting)  
Technological Hazards Division