

January 6, 2017

MEMORANDUM TO: Joseph Donoghue, Chief  
Licensing Branch 3  
Division of New Reactor Licensing  
Office of New Reactors

FROM: Michael Dudek, Chief */RA/*  
Geosciences and Geotechnical Engineering Branch  
Division of Site Safety and Environmental Analysis  
Office of New Reactors

SUBJECT: ACCEPTANCE REVIEW RESULTS FOR THE CLINCH RIVER EARLY  
SITE PERMIT APPLICATION

The Geosciences and Geotechnical Engineering Branch (RGS) has completed its acceptance review of the Clinch River Early Site Permit (ESP) application and supplementary material submitted by Tennessee Valley Authority (TVA). This review covered the following Site Safety Analysis Report (SSAR) Section for which RGS has primary review responsibilities:

- SSAR Section 2.5 Geology, Seismology, and Geotechnical Engineering

Completeness and Sufficiency:

Based on its review, RGS staff has concluded that the application and its supplements contain the information required by applicable regulations and that the submitted information is technically sufficient for RGS to conduct the Clinch River ESP detailed technical review.

Schedule:

The staff reviewed the pre-baseline schedule provided during the acceptance review and believes that a 30-month schedule could be a challenge due to: (1) the complex geology of the site necessitates the review of a 2-D site response, the first of a kind for the staff, and (2) TVA has committed to submitting a PLAXIS analysis to provide assurance that the karst morphology of the site will not affect the structure, system, and components important to safety. This analysis will not be completed or submitted to the NRC until February 2017. RGS staff recommends that additional discussion be held between the Division of New Reactor Licensing and the Division of Site Safety and Environmental Analysis management on ways to effectively complete the ETS Review with the desired timeframes.

CONTACT: David Heeszal, NRO/DSEA  
(301) 415-5066

Review Dependencies:

RGS's detailed technical review of the Clinch River ESP application is independent of other ongoing reviews by the staff.

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