

AUG 19 2016



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, TN 37902

August 18, 2016

Mr. E. Patrick McIntyre, Jr.  
Executive Director  
Tennessee Historical Commission  
2941 Lebanon Road  
Nashville, Tennessee 37243-0442

Dear Mr. McIntyre:

TENNESSEE VALLEY AUTHORITY (TVA), CLINCH RIVER SMALL MODULAR REACTORS PROJECT, APE EXPANSION TO INCLUDE MELTON HILL DAM, ROANE COUNTY, TENNESSEE 35° 55.01' N / 84° 23.29' W and 35° 53.18' N / 84° 18.01' W

Our offices recently executed a programmatic agreement (PA) for the management of historic properties affected by TVA's Clinch River Small Modular Reactor (SMR) Project in Roane County, Tennessee. The PA was signed by TVA and the SHPO on April 29, 2016 and May 12, 2016, respectively. In the PA, the undertaking's area of potential effects (APE) for archaeological resources is defined as "an approximately 1305-acre area bounded on the west, south, and east by Watts Bar Reservoir (between Clinch River miles 14.05 and 19.0); and on the northeast by land owned by the Department of Energy (DOE)." This APE is illustrated below in Figure 1. The APE was intended to encompass all areas within which ground disturbing activities related to the undertaking may take place, based on current project plans. The APE for historic architectural properties is defined in the PA as "a one-half mile radius surrounding the area in which vegetation clearing would take place in preparation for the construction phase of the Undertaking."

Recently, TVA identified the potential need for a future minor modification to the flow of the Clinch River in the vicinity of the APE. An increase in flow of up to 400 cubic feet per second (cfs) may be needed in order to regulate water temperatures in the Clinch River during times of low water levels, depending on the reactor design ultimately selected for the site. The change is related to TVA's proposed use of Clinch River water as cooling water for the proposed SMR facility, and would be needed for TVA's compliance with various environmental laws and regulations. The magnitude of the change would be small compared to the average unregulated flow of 4,520 cfs at Melton Hill Dam, approximately 3.5 river miles upstream. TVA is considering a number of alternatives for providing this additional flow. Some of the alternatives could require changes at Melton Hill Dam. Currently, however, TVA has not proposed any project designs, and does not expect to do so until a reactor design is selected.

As the possible changes to Melton Hill Dam would stem from requirements of the Clinch River SMR project, TVA proposes to revise the undertaking's APE, as allowed by Section I.A. of the PA, in order to include areas that could be affected by possible changes to Melton Hill Dam.

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The new APE would consist of all areas that are currently included in the APE, plus Melton Hill Dam and a half-mile radius surrounding the dam. Figure 2, below, illustrates this proposed new APE.

Pursuant to 36 CFR Part 800.4(a)(1), we are coordinating with your office TVA's determination of this expansion of the undertaking's APE.

TVA will consult further with your office in future to determine whether this part of the undertaking could affect historic properties. TVA will continue to adhere to the stipulations of the PA in evaluating the undertaking's possible effects on historic properties.

In addition, we wish to inform you that the Nuclear Regulatory Commission (NRC) requested TVA to provide the Commission with a copy of the PA, which will be made publicly available as part of TVA's Early Site Permit Application. TVA has redacted the PA by removing Appendices C and D, both of which displayed the locations of archaeological sites of undetermined NRHP eligibility. TVA will provide this redacted version of the PA to NRC.

If you have any questions or comments, please contact Richard Yarnell at 865/632-3463 or [wryarnell@tva.gov](mailto:wryarnell@tva.gov).

Sincerely,



Clinton E. Jones  
Manager, Biological & Cultural Compliance  
Safety, River Management and Environment  
WT11C-K

SCC:CSD  
Enclosure  
cc (Enclosure):

Ms. Jennifer Barnett  
Tennessee Division of Archaeology  
1216 Foster Avenue, Cole Bldg. #3  
Nashville, Tennessee 37210

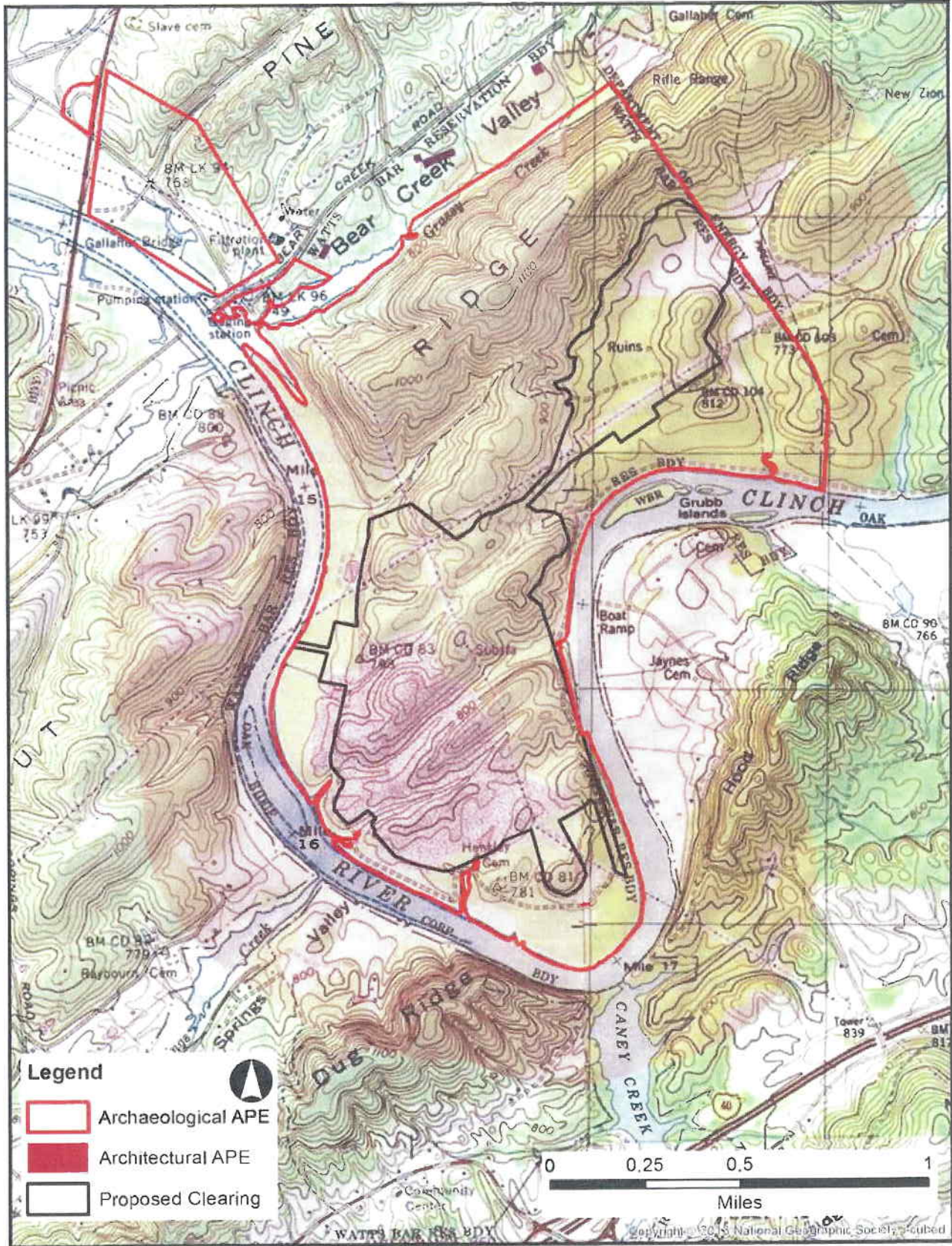


Figure 1. Clinch River SMR Project, current APE. Base map: Elverton and Bethel Valley, TN 7.5-min quadrangles.

### Clinch River SMR Site (CRN) and Melton Hill Dam (MHD)

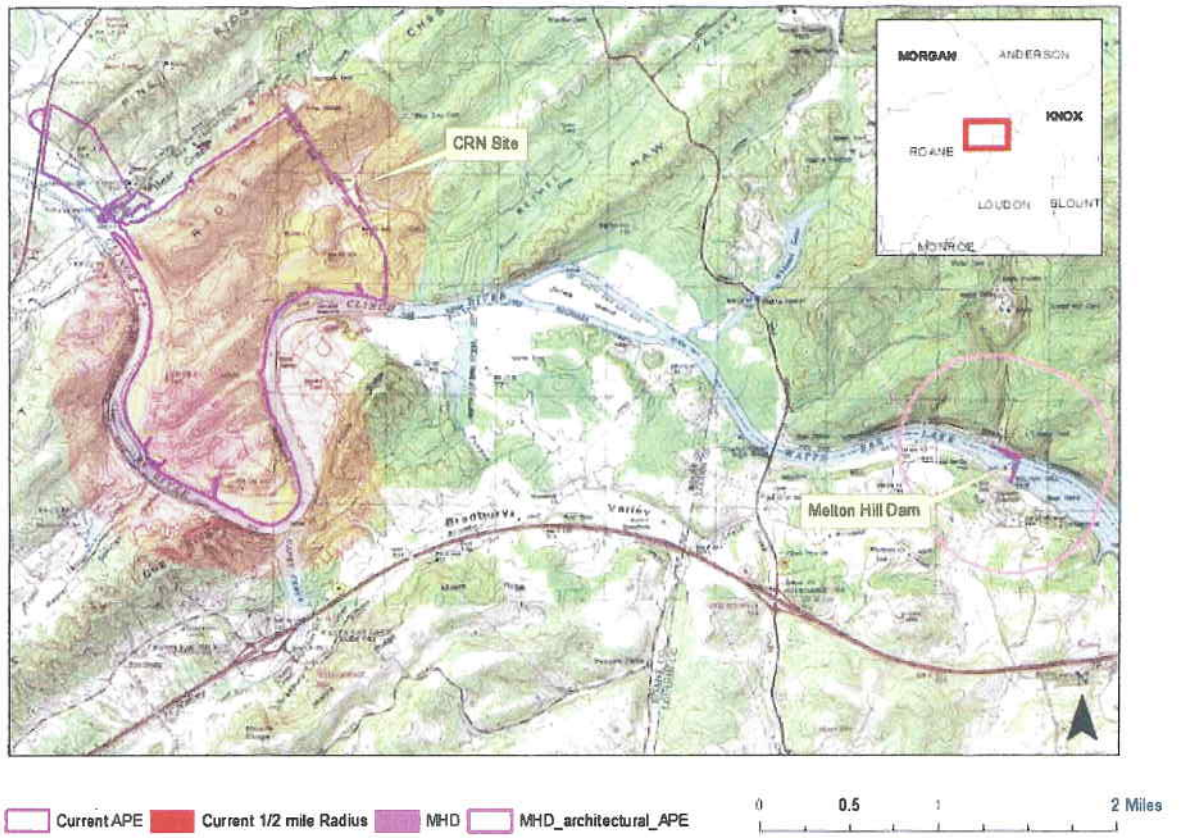


Figure 2. Proposed new APE.