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FINDING OF NO SIGNIFICANT IMPACT

TENNESSEE VALLEY AUTHORITY

PICKWICK LANDING DAM
FIRST UTILITY DISTRICT OF HARDIN COUNTY
RAW WATER INTAKE LINE RELOCATION

In September 2016, Tennessee Valley Authority (TVA) completed the Pickwick Landing Dam South Embankment Seismic Upgrade Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) to document the potential effects of TVA's upgrades to the south embankment of Pickwick Landing Dam to improve performance of the dam during and after a large earthquake. Following the initial EA, changes were made to the design to reduce overall risks to the integrity of the dam during construction and to address construction challenges. TVA then completed a Supplemental EA and FONSI in January 2019, which evaluated the anticipated environmental impacts of the proposed design changes, which were necessary to upgrade the south embankment of Pickwick Landing Dam. Construction of the Pickwick Landing Dam south embankment upgrades is currently underway.

The First Utility District of Hardin County (FUDHC) has a raw water intake line and screen assembly immediately upstream of the south embankment and within the construction limits of the upstream berm footprint of the Pickwick Landing Dam improvements. The purpose of the project is to relocate the FUDHC intake and screen outside the construction limits of the Pickwick Landing Dam improvements project. The relocation project is necessary to mitigate the risk of damage to the line or intake and to ensure that FUDHC water supply service is not disrupted or impacted during construction. This EA/FONSI addresses impacts related to the relocation of the raw water intake line including obtaining a permanent easement (as granted to FUDHC by TVA), a Section 26a permit, and a temporary construction license.

Alternatives

TVA identified three alternatives in the EA: the No Action Alternative; Alternative B, which would involve directionally boring the relocated intake; and Alternative C, which would involve conventional excavation and using pipe supports for the relocated intake. The No Action Alternative would not meet the purpose and need as this option would not mitigate the risk of damage that could potentially occur to the existing intake facilities during the construction activities associated with the dam improvements. The FUDHC does not have an alternate water supply source and damage to its intake facilities could result in the loss of water supply to its customers for a considerable period. Alternative C was not selected as the preferred alternative as it would have additional environmental impacts beyond those of Alternative B as it includes conventional excavation and trenching of the proposed relocated intake line.

As described in the EA, the preferred alternative (Alternative B) involves FUDHC relocating their raw water intake line and screen out of the construction area for the Pickwick Landing Dam south embankment improvement project. TVA would grant a permanent easement, issue a Section 26a permit, and issue a temporary construction license for the relocated intake. The new intake line would be installed by directional boring. Directional boring will reduce impacts to the lake bottom and limit turbidity in the water column that could negatively affect water quality

and aquatic species as compared to installation using conventional excavation construction methods.

Environmental Assessment
In the EA, TVA analyzed potential impacts to a number of resource areas. Generally, TVA's analysis found that most environmental resources would be minimally affected by the proposed project; thus, the EA analyses of these resources are concise. The primary environmental issues related to these resources include:

- Clearing of wooded areas (approximately 0.35 acres);
- Impacts to water supplies and water quality (temporary during construction);
- Noise impacts (temporary during construction);
- Impacts due to construction traffic (temporary); and
- Recreation (recreational boaters could be impacted while areas are blocked during construction).

Most actions associated with the proposed project are minor and would occur between FUDHC's existing raw water intake and Packaging Corporation of America's (PCA) existing raw water intake; therefore, impacts to resources are anticipated to be minimal. Mitigation efforts to minimize the impacts from construction of the project are noted below.

Public Involvement and Intergovernmental Review
On January 14, 2020, TVA issued a draft of the EA for a 30-day review and comment period. During the public review period, TVA received a one comment letter from the State of Tennessee Department of Environment and Conservation (TDEC) and one comment email. TVA responded to these comments in the final EA.

As required under Section 106 of the National Historic Preservation Act, TVA consulted with the Tennessee SHPO via letter dated June 14, 2019. In a letter dated June 25, 2019, the Tennessee SHPO concurred with TVA's finding of no effect. Pursuant to 36 CFR § 800.3(f)(2), in a letter dated June 18, 2019, TVA consulted with federally recognized Indian tribes regarding historic properties within the APE that may be of religious and cultural significance and are eligible for the NRHP. TVA received responses from the Chicksaw Nation, the Jena Band of Choctaw Indians, and the Shawnee Tribe. None of the tribes objected to the project

TVA began consultation with the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act (ESA) regarding the potential impacts to bat species within the project area related to the Pickwick Landing Dam Seismic Upgrades Project in 2018. A number of activities associated with the proposed project were addressed in TVA's programmatic consultation with the U.S. Fish and Wildlife Service on routine actions and federally listed bats in accordance with ESA Section 7(a)(2) and completed in April 2018. For those activities with potential to affect bats, TVA committed to implementing specific conservation measures. These activities and associated conservation measures are identified on the TVA Bat Strategy Project Screening Form found in Appendix C of the EA and needs to be reviewed/implemented as part of the proposed project.

Prior to implementing the proposal, FUDHC must also coordinate and update/amend existing permits from TDEC and the U.S. Department of Army, Corps of Engineers to address potential

impacts to water resources, including streams, floodplains and wetlands, under the Clean Water Act from the newly proposed action.

Mitigation
Mitigation measures were discussed in the EA Section 2.4 and by resource in Chapter 4. In addition to the requirements of any necessary permits, TVA would implement the following mitigation measures to avoid, minimize, or mitigate adverse impacts on the environment. All applicable permits would be acquired; therefore, associated permit-related mitigation measures and BMPs would be implemented to further minimize impacts.

- Erosion controls and other BMPs to reduce storm water runoff would be implemented, in accordance with a SWPPP developed in coordination with TDEC. All erosion and sediment controls would be installed, placed, implemented, or constructed in accordance with the provisions of the Tennessee Erosion and Sediment Control Handbook.

- To address impacts to reservoir surface waters, floating silt barriers/turbidity curtains would be placed in reservoir waters adjacent to the construction area to contain turbidity during construction. FUDHC or contractor personnel would conduct regular sampling of adjacent waters and continual visual inspections of waters to monitor for turbidity. Additional measures would be considered if necessary to control turbidity, including the use of flocculants (after the coordination and approval from TDEC).

- Water quality protection measures would be implemented (e.g., water quality monitoring during construction).

- To comply with EO 13112 (Invasive Species), disturbed areas would be revegetated with native species to avoid the introduction or spread of invasive species.

- Navigation notices concerning construction activities adjacent to the dam's navigational lock would be issued; navigation markers would be placed in the areas of the intake screen in the reservoir to denote boating hazards.

- Fill material would be clean and free of contaminants.

- Prior to mobilization, FUDHC would develop an evacuation plan to relocate flood-damageable, loose, or valuable equipment out of the floodplain during potential flood events.

Conclusion and Findings
Based on the findings listed above and the analyses in the EA, we conclude that the Proposed Action of relocating the FUDHC intake and screen outside the construction limits of the Pickwick Landing Dam improvements project., would not be a major federal action significantly affecting the environment. This finding is dependent on implementation of the mitigation measures described above. Accordingly, an environmental impact statement is not required.

4/23/2020

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Date Signed