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FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
KINGSTON FOSSIL PLANT ASH RECOVERY –
UTILITY RESTORATIONS AND ENHANCEMENTS
ROANE COUNTY, TENNESSEE

Proposed Action and Need

On December 22, 2008, an ash storage pond dike failed at Kingston Fossil Plant (KIF) in Roane County, Tennessee, releasing about 5.4 million cubic yards of coal ash that covered about 300 acres. The ash spill covered portions of the rail line serving KIF, Swan Pond Road, and Swan Pond Circle and cut off utility connections resulting in interruptions of water, electrical, and gas services to the adjacent area. The utility lines were rerouted from other sources to temporarily restore services interrupted by the ash spill. Due to the temporary nature of the utility reroutes, there is a risk that utility services could become unreliable. The Tennessee Valley Authority (TVA) proposes to replace damaged water lines, an effluent line (sanitary sewer line), and gas lines that were impacted by the ash spill. These proposed actions are intended not only to restore needed utility lines in the vicinity of KIF impacted by the ash spill, but also to further expand and enhance the utility line network.

Alternatives

In accordance with the *National Environmental Policy Act* (NEPA), TVA developed and evaluated two feasible alternatives for the proposed actions in the attached environmental assessment (EA). These were the No Action Alternative and the Action Alternative.

Under the No Action Alternative, TVA would not replace the damaged utility lines serving the area in the vicinity of KIF. Under this alternative, the temporary utility line connections would continue to serve the area. Due to the temporary nature of the utility reroutes, there is a risk that utility services could become unreliable.

Under the Action Alternative, TVA would restore and enhance approximately 51,000 linear feet of utility lines in the vicinity of KIF that were impacted by the ash slide in December 2008. TVA would replace the damaged City of Kingston gravity water line by installing 18,600 linear feet of 8-inch and 10-inch water line ductile iron pipe. The utility lines that are no longer in service would remain in place. In addition, a new, three-segment water line project totaling 22,300 linear feet of 6-inch polyvinyl chloride pipe would be installed for the Harriman Utility Board (HUB). Furthermore, TVA would install/replace approximately 4,800 linear feet of 20-inch effluent line and approximately 5,200 linear feet of 4-inch gas line for HUB.

Impacts Assessment

Implementing the Action Alternative would not involve any changes in land use or affect prime farmland or natural areas. Similarly, no modification to wetlands, floodplains, recreational opportunities, or wild and scenic rivers is involved. Undertaking the proposed utility replacement project would not result in measurable changes in air quality or noise.

The anticipated duration of the utility installation project is approximately 8 weeks. Most of the work would occur along Swan Pond Road, Swan Pond Circle Road, Hassler Mill Road, and Berkshire Lane utility rights-of-way, including areas disturbed by ash removal activities, previous road construction, and ongoing roadside maintenance. The proposed actions are restricted mainly to the margins of roadway rights-of-way. Ground disturbance would be necessary to install the utility lines, and streams would be crossed using open trenches. Appropriate best management practices (BMPs) would be used to prevent the entry of sediment-laden runoff into surface waters. Thus, any effects to water quality would be minor and insignificant.

Seven stream crossings are proposed for the utility line installation project. Streams in the project area have been previously disturbed by the existing water line crossings, roadway construction, and right-of-way maintenance. Standard BMPs that apply to stream crossing and construction would be used to minimize any impacts to streams. Specific measures to protect water quality include the use of silt fences and sedimentation traps, seeding and mulching of exposed soils, and temporary installation of drainage channels with check dams. Any stream disturbances would be temporary.

Although the proposed actions would involve a small amount of site disturbance, any potential effects to wildlife or plant life would be minor and insignificant. Because appropriate BMPs would be followed to prevent adverse effects to water quality and instream habitat, no adverse effects to local aquatic life or aquatic habitats are anticipated.

Several federally listed plant and animal species are known from Roane County; however, appropriate habitat for these species does not occur within the proposed utility project routes. Several other plants and aquatic and terrestrial animals listed as endangered, threatened, or of special concern by the State of Tennessee have been reported from within a few miles of the proposed project area. Although there are no state-listed plant species known from the project area, potential habitat for state-listed plant species does occur. The likelihood that state-listed species are present is low because the project area has been highly disturbed by roadway construction and right-of-way maintenance and because much of the project area was directly impacted by the ash spill. The additional disturbance from utility installation activities could temporarily impact state-listed species if they are present. However, the work would not likely preclude species tolerant of disturbance from recolonizing areas after work is completed. Any potential impact to state-listed species would be minor.

No previously recorded or unrecorded archaeological or architectural resources were identified within the area of potential effect during surveys conducted November 2009. Based on field survey results, TVA has determined that the proposed undertaking would not affect any historic properties that are eligible or currently listed in the National Register of Historic Places (NRHP) and received concurrence from the Tennessee State Historic Preservation Officer (SHPO) in a letter dated December 7, 2009.

Construction activities associated with installation of the utilities would cause temporary traffic changes in the project area. Construction would last approximately 8 weeks. Visual changes due to the presence of work vehicles and other equipment would be localized and restricted to the construction period. Due to the availability of other traffic route alternatives, the temporary duration of the project, and planned implementation of an appropriate traffic control plan, the impacts to traffic are expected to be minor.

Mitigation

No specific nonroutine environmental commitments or mitigation measures were identified to reduce potential environmental effects. Implementation of routine BMPs during construction will minimize potential environmental effects associated with the installation of the proposed utility lines. The contractor will be required to apply the appropriate BMPs during the construction, while the engineer will provide observation during construction and will inform TVA as to the progress of construction and suitability of the identified mitigation measures.

Additionally, as a standard practice, in order to ensure that traffic impacts in the proposed project area are considered, a traffic control plan including preparations for minimizing impacts to local traffic will be developed before work commences.

Public and Intergovernmental Review

Appropriate recognized Native American tribes were consulted concerning the proposed undertaking. TVA received no comments from any of these tribes. TVA received concurrence from the Tennessee SHPO in a letter dated December 7, 2009 that there would be no effect to NRHP-listed or -eligible properties affected by this undertaking.

Conclusion and Findings

Adoption and implementation of the proposed action would cause no effects to any federally listed terrestrial or aquatic species or to their habitats. Thus, consultation with the U.S. Fish and Wildlife Service under Section 7 of the *Endangered Species Act* (ESA) was not necessary, and the proposed action complies with the ESA. There are no historic structures within the viewshed of the proposed actions. Based on November 2009 field survey results, TVA has determined that the proposed undertaking would not affect any historic properties that are eligible or currently listed in the NRHP. By the SHPO's concurrence with this "no effect" finding, TVA's obligations under Section 106 of the *National Historic Preservation Act* have been satisfied.

No placement of fill within the floodplain would be necessary, and proposed actions would not affect floodplain values or functions adversely. Implementation of the Action Alternative would be consistent with Executive Order (EO) 11988 (Floodplain Management). There would be no effects to wetland function from the proposed actions; thus, adoption of the Action Alternative is consistent with EO 11990 (Protection of Wetlands).

Based on the findings of the EA, TVA has concluded that the proposed installation of approximately 51,000 linear feet of water, effluent, and gas utility lines would not result in significant adverse impacts to the environment. NEPA Compliance has determined that the proposed action is not a major federal action significantly affecting the quality of the environment. Accordingly, an environmental impact statement is not required.



December 22, 2009

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Date Signed