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FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
COLBERT FOSSIL PLANT DECONTAMINATION AND DECONSTRUCTION
COLBERT COUNTY, ALABAMA

The Tennessee Valley Authority (TVA) is proposing to deconstruct its retired Colbert Fossil Plant (COF), located near Tuscumbia in Colbert County, Alabama. There are five coal-fired generating units at COF and eight Combustion Turbine Units. TVA began operations at COF in November 1955 and continued to utilize the plant until March 2016. The five coal-fired units are shut down and disconnected from TVA's transmission system. All Combustion Turbine units at COF will continue to operate. TVA needs to manage the disposition of the COF site to provide necessary structures and facilities for ongoing site activities while considering capital costs, long-term operations and maintenance costs, environmental risks, and safety and security at the plant site.

TVA has prepared an environmental assessment (EA) for this proposed action that is incorporated by reference.

Alternatives

TVA evaluated four alternatives in the EA:

Alternative A – Assess, Close, and Secure Units 1-5, and Implement Operations and Maintenance Program to Maintain Structures and Equipment: TVA would de-energize non-essential systems at COF, minimize environmental and safety risks, and close and secure the facility to a "cold, dark, and dry" status. Existing buildings, structures, and equipment within the decontamination/deconstruction boundary would remain in place. Only essential lighting and water service necessary to allow inspections and fire suppression would remain operational. Deteriorating hazardous materials would be removed, and high-risk environmental and safety issues would be addressed. Select sump pumps would be maintained to prevent below-grade spaces from flooding. The plant staff and regular maintenance would be minimized to the extent practicable and labor from other TVA sources would be utilized as necessary.

Alternative B – Demolition of Units 1-5 and Other Structures to Three Feet Below Final Grade (Brownfield) including the Six Stacks: Buildings, including the main powerhouse, other retired or abandoned structures, roads, and parking lots associated with the coal-fired portions of the facility would be decontaminated, demolished, concrete foundations removed to 3 feet below finished grade, and the basements backfilled. Buried utilities would be cut and capped and left in place. Cooling water intake and discharge tunnels would be sealed or removed. Disturbed areas would be covered with topsoil and seeded to restore the project area to brownfield condition. Hazardous materials and potential safety risks would be removed. The Unit 1-5 chimneys would be demolished. Permanent operations and maintenance staff would not be needed onsite. Regular inspections of the structures and equipment would no longer be necessary.

Alternative C – Assess, Close, and Secure Units 1-5, Demolish Outlying Buildings, Structures, Retain Powerhouse: Alternative C is identical to Alternative A with one exception; outlying buildings and structures within the Deconstruction Study area would be demolished and the powerhouse would be left in place. All other conditions as described under Alternative A would apply to Alternative C.

Alternative D – No Action: Under this alternative TVA would not perform any deconstruction or other disposition activities and would allow the COF structures to remain in their current state. Additionally, TVA would take no action to maintain the units in operable condition. The plant would not generate power and it would not be possible to restart the units. The plant would not be heated, cooled, or supplied with electricity. TVA would continue to restrict access to COF. Periodic inspections and critical maintenance would be performed as needed. TVA would maintain the NPDES permit, implement the Integrated Pollution Prevention Plan, and perform environmental monitoring and reporting as required. TVA would continue current operations and maintenance practices to remove hazardous materials from COF.

Alternatives A and D have a higher potential for environmental impacts than the other action alternatives since existing structures would be left in place at the facility. The impacts of alternatives B and C are similar, and are minor and insignificant under both alternatives. Alternative B; however, has the lowest cumulative cost of all action alternatives.

Alternative B is safer and environmentally more beneficial than Alternatives A, C, and D. Peeling lead paint, falling concrete, buckling floor tiles, and asbestos deterioration are examples of the onsite hazards that will develop if structures are left in place under Alternatives A, C, and D. There are also issues maintaining the functionality of sump pumps over the long term. Alternatives A and D would leave all structures in place where they would degrade and potentially contaminate the environment and also present a health risk to trespassers, employees and any wildlife that might utilize the remaining buildings. Alternative B results in the lowest long-term maintenance and operation costs. Therefore, Alternative B is TVA's preferred alternative.

Impacts Assessment

Based on the analyses in the EA, TVA concludes that the implementation of Alternative B would have no negative impact on geology and groundwater; surface water; wetlands; aquatic ecology; wildlife; natural areas, parks, and recreation; cultural and historic resources; and environmental justice. Hazardous materials and solid and hazardous waste would be managed and disposed of in accordance with all applicable regulations such that there would be no measurable negative environmental impacts. There would be minor and mostly temporary adverse impacts to threatened and endangered species, air quality, transportation, noise and vibration, and safety.

Changes in land use and effects on prime farmland and floodplains may result in minor beneficial impacts depending on the future use of the property. Additionally, there would be potential minor beneficial impacts to vegetation with the reseeding of the area. During demolition, there would be notable short-term increases in employment, payroll, and tax payments, resulting in beneficial direct and indirect socioeconomic impacts. Since the facility has been shut down since March 2016, the economic impact of plant closure has already been experienced by the community. Future jobs may be created as the site may be converted to another use. Implementing Alternative B would not cause low-income or minority populations to be disproportionately affected by adverse environmental impacts. The visual landscape would also be beneficially impacted as the stacks and aging buildings will be removed from the riverside area which is primarily rural and recreational. Implementation of Alternative B would be consistent with EO 11988 (Floodplain Management) and EO11990 (Protection of Wetlands).

Compared to Alternatives A, C, and D, demolition of the facility to grade under Alternative B would result in substantially reduced negative potential impacts to groundwater (and potentially surface water and aquatic ecology) as no buildings or structures would be left in place to degrade, and all hazardous and solid waste would be removed. The temptation for trespassers to access

the facility would be greatly reduced also reducing safety impacts. The property would be available for other potential beneficial uses.

Public and Intergovernmental Review

A Draft Environmental Assessment (EA) of the proposed Colbert Fossil Plant Decontamination and Deconstruction Project was released for comment on July 19, 2016. The 30-day comment period closed on August 22, 2016. The Draft EA was transmitted to various agencies and the Tennessee Valley Authority (TVA) consulted with federally recognized tribes. The Draft EA was posted on TVA's public National Environmental Policy Act (NEPA) review website. A notice of availability including a request for comments on the Draft EA was published in newspapers serving the Colbert County, Alabama area. Comments were accepted through August 22, 2016, via TVA's website, mail, and e-mail. One comment was received, a letter in support of Alternative A.

Pursuant to Section 106 of the National Historic Preservation Act, TVA consulted with the Alabama State Historic Preservation Officer who concurred that the proposed demolition action would not adversely affect any historic property that is eligible for listing to the National Register of Historic Places. TVA received no objection from any of the federally recognized Native American tribes. Pursuant to Section 7 of the Endangered Species Act, TVA consulted with the U.S. Fish and Wildlife Service who concurred that the project would not likely adversely affect the gray, Indiana, or northern long-eared bats. TVA has considered all of the comments it received on the Draft EA and has responded to them in the Final EA as appropriate.

Mitigation

TVA would implement operating permit requirements and routine best management practices (BMPs) listed in the EA for avoiding or reducing minor adverse environmental effects associated with the demolition of the plant. The following mitigation measures and BMPs have been identified to reduce potential health, safety, and environmental effects:

Mitigation Measures

- Survey of buildings and structures within the project footprint at least one month prior to demolition to determine if threatened or endangered species and/or migratory birds are nesting or roosting inside. Coordinate with the U.S. Fish and Wildlife Service (USFWS) if nests or roosting species are identified, and, if necessary, minimize and mitigate potential impacts to threatened and endangered species and/or migratory birds.
- Any blasting activities would be limited to May through September.
- Close all openings to the extent possible and use deterrents as appropriate to minimize potential for nesting or roosting.
- Maintain security with fencing and security personnel.
- Restrict river, rail, and road traffic in the vicinity during any explosive demolition activities.
- Prepare a vibration model simulating the effects of explosive demolition of the stacks to verify that the vibrations would not result in measurable impacts on nearby structures.
- Notify the FAA and follow all local, state, and federal guidelines regarding removal of obstruction lighting in association with demolition of the chimneys.
- Develop a blast plan to minimize vibration effects to cultural resource sites. Consult with the SHPO on the blast plan prior to implementation.
- Place a 20 meter buffer around Sites 1CT630, 1CT631, and 1CT626; these areas will be avoided.
- If any soil disturbance or grading greater than 40 centimeters below surface would occur in the vicinity of Site 1CT116, additional testing and evaluation would be required.
- Develop a demolition plan and security plan(s) to be communicated and distributed to affected parties including emergency personnel.

- Notify the public prior to the use of explosives as defined in the demolition plan.
- In the event of discoveries of previously unknown sites or cultural materials, stop all work within 200 feet of the find and TVA will notify and consult with the SHPO and Muscogee Creek Nation and United Keetoowah Band of Cherokee Indians in Oklahoma Tribal Historic Preservation Officers (THPOs).

Best Management Practices

- Implement erosion controls and best management practices under applicable permits for minimizing storm water impacts.
- Use best management practices and comply with all relevant federal, state, and local regulations during the removal of hazardous material and solid waste.
- Use measures such as wetting the structure and fall zone and use of berms to minimize release of fugitive dust during stack felling.

Conclusion and Findings

Based on the findings in the EA, TVA concludes that implementing Alternative B – Demolition of Units 1-5 and other structures to 3 feet below final grade (brownfield) including the six stacks would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required to implement Alternative B.

Amy B. Henry, Manager
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11/14/16
Date Signed