

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
JOHN SEVIER FOSSIL PLANT DECONSTRUCTION PROJECT
HAWKINS COUNTY, TENNESSEE

The Tennessee Valley Authority (TVA) is proposing to deconstruct its retired John Sevier Fossil Plant (JSF) in Hawkins County, Tennessee. The facility has four coal-fired generating units and associated infrastructure. TVA began operations at JSF in 1957 and continued to utilize the plant until 2012. The coal-fired power generating units on the John Sevier reservation were replaced with a natural gas-fired combined-cycle plant, which began commercial operation in April 2012. The four JSF coal-fired units are shut down and disconnected from TVA's transmission system. TVA needs to determine the most cost-effective disposition of JSF while also considering safety, security, liability, and environmental risk at the plant site.

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

Alternatives

TVA evaluated four primary alternatives in the EA:

Alternative A - Assess, Secure and Close Site: TVA would close and secure the JSF coal facility. Existing structures would remain in place. Only essential lighting and water service necessary to allow inspections and fire suppression would remain operational. Hazardous materials would be removed, and high-risk environmental and safety issues would be addressed. 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 – Selective Demolition: some buildings, including the main powerhouse, would be assessed, secured, and closed. Selected outlying structures and infrastructure would be demolished. Hazardous materials would be removed.

Alternative C - Demolition to Grade (“Brownfield”): buildings, including the main powerhouse, other retired or abandoned structures, roads, and parking lots associated with the coal-fired facility would be removed, some concrete foundations removed, and some basements backfilled. Disturbed areas would be covered with topsoil and seeded to restore the project area to brownfield condition. Permanent operations and maintenance staff would not be needed onsite. Hazardous materials and potential safety risks would be removed. Regular inspections of the structures and equipment would no longer be necessary.

Alternative D – No Action: under this alternative TVA would not perform any deconstruction or other disposition activities and would allow the JSF structures to remain in their current state with no routine maintenance. The condenser cooling water system would remain in natural circulation (low energy maintenance) mode.

TVA's preferred alternative is Alternative C (Demolition to Grade - Brownfield) because it represents the most environmentally beneficial alternative. Currently, JSF systems and structures are degrading rapidly and lighting in the facility is poor. Peeling lead paint, failing concrete, buckling floor tiles, and asbestos breakdowns are examples of the onsite hazard risks. There are also issues with the functionality of sump pumps, and some are not considered to be viable in the long term. Alternatives A, B and D would leave some or all structures in place to 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 C also results in the lowest long-term maintenance and operation costs.

Impacts Assessment

Based on the analyses in the EA, TVA concludes that the implementation of Alternative C would have no impact on climate and greenhouse gas, groundwater and geology, threatened and endangered species, vegetation, natural areas, parks, recreation, floodplains, or wetlands. There would be minor and mostly temporary impacts to common wildlife, aquatic resources, air, surface water, local transportation networks, noise and cultural resources. The warm water discharge that attracted fish during the operation of the facility was discontinued in 2012. The proposed deconstruction project would not impact the discharge channel bank fishing area. TVA plans to reevaluate access to the fishing access area at JSF as a future NEPA action when any such action is proposed. The JSF location is zoned for industrial use. Changes in land use and effects on prime farmland may result in positive impacts depending on the future use of the property.

During demolition, there would be notable short-term increases in employment, payroll, and tax payments, resulting in beneficial direct and indirect economic impacts. Since the facility has been shut down since 2012, the economic impact of plant closure and start-up of the gas plant have already been realized by the community. Implementing Alternative C would not cause low-income or minority populations to be disproportionately affected by adverse environmental impacts. Additionally, implementing Alternative C would beneficially affect socioeconomics with temporary jobs created during the deconstruction. Future jobs may be created as the facility may be converted to another use. 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. Significant long-term beneficial impacts will be realized in overall safety. With the removal of the retired facility, the potential for trespassers entering the (demolished) buildings would be eliminated, reducing the potential for safety hazards or personal injuries. In addition, the potential degradation of materials from buildings (e.g., metals from framing, lead from lead paint, or other materials) and the potential impacts to groundwater and surface water would be eliminated.

Compared to Alternatives A, B and D, demolition of the facility to grade would result in substantially lower potential impacts to groundwater 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. Negative impacts would result from the selection of Alternative A with regard to visual resources and land use. The property would be available for other potential uses, but the degradation of buildings would continue to be an eyesore to the community. These impacts would be somewhat reduced with Alternative B; however, the full benefits to the economy, land use, visual resources and safety would not reach the same level as Alternative C.

Public and Intergovernmental Review

A Draft EA was released for comment on December 4, 2014. The comment period closed on January 8, 2015. The Draft EA was transmitted to state, federal, and local agencies and federally recognized tribes. It was also posted on TVA's public NEPA review website. A notice of availability, including a request for comments on the Draft EA, was published in newspapers serving the Rogersville area. Comments were accepted through January 8, 2015, via TVA's website, mail, and e-mail.

TVA received three sets of comments: from a resident; from EPA, and collectively from a group consisting of the Southern Alliance for Clean Energy (SACE), Southern Environmental Law Center (SELC), Sierra Club, Environmental Integrity Project (EIP), Tennessee Clean Water Network (TCWN), and Earthjustice. TVA has considered all of the substantive comments it received on the Draft EA and has responded to them in the Final EA as appropriate. Pursuant to Section 106 of the National Historic Preservation Act, TVA consulted with the Tennessee SHPO, which concurred that the proposed demolition action will not adversely affect any historic property that is eligible for listing to the NRHP. TVA received no objection from any of the federally recognized Native American tribes.

No impact to any federally listed wildlife, aquatic or plant species would occur as a result of implementation of Alternative C. Further, implementation of Alternative C, which would have no impact on the 100-year floodplain or wetlands, would be consistent with EO 11988 and EO 11990.

Mitigation

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

- Implement erosion controls and BMPs for storm water impacts;
- Schedule demolition activities to avoid disturbing ospreys while nesting, or remove nests when ospreys are not present;
- One month prior to demolition activities, conduct bat survey to confirm absence of listed species;
- Remove hazardous material and solid waste;
- Implement dust control during demolition; and
- Potable water supply to JSF will be disconnected and/or removed.

Conclusion and Findings

Based on the findings in the EA, TVA concludes that implementing Alternative C - Demolition to Grade ("Brownfield") would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



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Date Signed