

FINDING OF NO SIGNIFICANT IMPACT

TENNESSEE VALLEY AUTHORITY

JOHN SEVIER FOSSIL PLANT (JSF) INTAKE DEBRIS REMOVAL

Proposed Action and Need

The John Sevier Fossil Plant (JSF) is a part of TVA's fleet of fossil power generating stations and supplies approximately five million megawatt hours of electricity to power consumers in the TVA power service area. JSF is experiencing decreased plant efficiency due to accumulation of debris and partial blockage of the trash racks on the raw water intake structure. TVA proposes to remove the debris from in front of the trash racks. TVA must decide whether to address the current problem and to establish protocols for future routine maintenance necessary to maintain JSF as an efficient, low cost generator of electricity in the TVA power service area.

Alternatives

Under the No Action alternative, TVA would not remove any accumulated debris from the front of the plant intake structure and would continue with routine trash rack cleaning. If not addressed, the reduced efficiency would require unit deratings in order to meet thermal water discharge limits. In addition, equipment could be damaged. Under the Action Alternative, TVA would use divers to manually remove the large logs and larger sized debris (such as tires, large plastic jugs, etc.) which are typical of the accumulated debris in front of plant intakes. Since divers would be needed to remove the larger debris, TVA also would have them manually remove all other smaller debris including Asiatic clams and shells, organic debris, small amounts of sediment, and trash, with a hand held, six-inch suction grinder pump. Because the small amounts of sediments have background mercury levels that are above laboratory method detection limits, but below any current regulatory action limits as a result of the upstream Saltville Waste Disposal Ponds Superfund Site, TVA is voluntarily considering precautionary measures to handle the smaller-sized debris. Four alternative options to handle the sediment, shells, and smaller material and the return water from the grinder pump were considered. If the action alternative is chosen, TVA could choose to select one of these precautionary methods for handling the smaller debris. TVA would also establish acceptable methods, as reflected in the EA, for routine debris removal operations at JSF to be conducted on a more frequent basis, likely resulting in substantially less materials and sediment than for the present situation.

Impacts Assessment

TVA evaluated the potential impacts and determined there would be no impacts to terrestrial threatened and endangered species or wetlands because none are known or

expected to occur within the area of work. With the nominal amounts of sediments anticipated to be mobilized by TVA's actions, coupled with the precautions being planned, cleaning the trash racks would have no impacts to surface water resources or aquatic species either state-listed or federally listed as threatened or endangered. The proposed action would have no effect on the Remedial Investigation/Feasibility Study water sampling results, as long as the actual sample collection efforts do not occur at the time of TVA's debris removal. TVA evaluated the potential for impact on groundwater. Under all four of the precautionary options, the disposal of the dredged sediment and or return water in the proposed dredge pond area, without prior filtration, would not produce significant groundwater mercury contributions to the plant intake channel or the Holston River. No impacts are anticipated on air quality, recreation, and navigation.

Mitigation

Routine and Compliance Commitment

TVA will obtain necessary permits and will comply with permit terms and conditions.

If sediments and debris are removed, they will be tested per state regulatory requirements, prior to disposal unless sufficient sediment data can be obtained to make a process knowledge determination (to be documented by the appropriate staff of FPG Environmental Affairs) that would indicate no increase in mercury concentrations and then disposed of at an approved landfill. Should any of this material be hazardous, it will be containerized and managed as hazardous waste per TVA's established procedures.

Special Commitments

The divers, when possible, will pump the smaller debris first to minimize mobilization of loose material through the plant intake.

TVA will notify Olin of the dates for debris removal and appropriate delay periods so Olin's crews could avoid sample collection during those times.

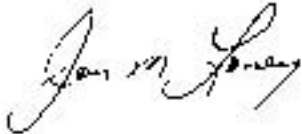
TVA will select one of the precautionary measures identified in this EA under the Action Alternative for handling of smaller debris.

If the precautionary measure option 4 is selected, the dredge holding pond cap required for cover will be designed in accordance with specifications from the state or other sound engineering practice, unless sufficient sediment data can be obtained to make a process knowledge determination (to be documented by the appropriate staff of FPG Environmental Affairs) that this would not be necessary.

Conclusion and Findings

The nominal amounts of sediments to be mobilized by TVA's actions would be insignificant, even unmitigated, and coupled with the precautions identified, would have no measurable influence on water quality, aquatic ecology, threatened or endangered

species, groundwater, or other water resources. There would be no impacts to terrestrial threatened and endangered species or wetlands because none are known or expected to occur within the area of work. TVA also has determined there would be no effect to historic properties. Under Executive Order 11988, the project would be considered a repetitive action in the floodplain that should not result in adverse impacts. Based on the analysis in the attached TVA-prepared EA and the identified mitigation measures, we conclude that the proposed action to remove debris from the plant intake area 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