

TENNESSEE VALLEY AUTHORITY  
WATTS BAR NUCLEAR PLANT, UNITS 1 AND 2  
DOCKET NOS. 50-390 AND 50-391  
ENVIRONMENTAL ASSESSMENT AND FINDING  
OF NO SIGNIFICANT IMPACT

The Nuclear Regulatory Commission (the Commission) is considering issuance of an extension of the latest construction completion dates specified in Construction Permit Nos. CPPR-91 and CPPR-92 issued to Tennessee Valley Authority (applicant) for the Watts Bar Nuclear Plant, Units 1 and 2. The facility is located at the applicant's site on the west branch of the Tennessee River approximately 50 miles northeast of Chattanooga, Tennessee.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action: The proposed action would extend the latest construction completion date of Construction Permit No. CPPR-91 to July 1, 1991 and the latest construction completion date of Construction Permit No. CPPR-92 to December 31, 1992. The proposed action is in response to the applicant's request dated June 29, 1988.

The Need for the Proposed Action: The proposed action is needed because the construction of the facility is not yet fully completed. The applicant states that completion of Unit 1 will continue to be delayed pending review and implementation of several key issues/programs, such as the Vertical Slice Program and the Watts Bar Program Plan. These corrective action programs (CAPs) address the outstanding issues and the proposed plan for resolution. The implementation of these CAPs would confirm the design and construction

adequacy of the Watts Bar plant. Resolution of these issues may require reinspection, analysis, and possible modifications to the facility prior to fuel load.

In addition, certain engineering and construction resources originally allocated for completion of work at Watts Bar have been diverted to the restart programs for Sequoyah and Browns Ferry Nuclear Power Plants.

Environmental Impacts of the Proposed Action: The environmental impacts associated with the construction of the facility have been previously discussed and evaluated in TVA's Final Environmental Statement (FES) issued on November 9, 1972 for the construction permit stage which covered construction of both units. The FES issued in December 1978 for the operating license stage addressed the environmental impacts of construction activities not addressed previously. These activities included: (1) construction of the new transmission route for the Watts Bar - Volunteer 500 kV line, (2) construction of the settling pond for siltation control for construction runoff at a different location from that originally proposed in the Final Environmental Statement - Construction Permit (FES-CP), and (3) the relocation of the blowdown diffuser from the originally proposed site indicated in the FES-CP. The staff addressed the terrestrial and aquatic environmental impacts in the Final Environmental Statement - Operating License (FES-OL) and concluded that the assessment presented in the FES-CP remains valid.

The construction of Unit 1 is essentially 100% complete and Unit 2 is approximately 75% complete, therefore, most of the construction impacts discussed in the FES have already occurred. Since this action would only extend the period of construction as described in the FES, it does not involve any different impacts as described and analyzed in the original environmental impact statement. The proposed extension will not allow any work to be performed

that is not already allowed by the existing construction permit. The extension will merely grant the applicant more time to complete construction in accordance with the previously approved construction permit. The activities related to the various CAPs will result in additional workforce, being primarily engineering and technical personnel rather than construction workforce. At the present time, this workforce is basically dedicated to the completion of Unit 1. This increase will be temporary and decline as the CAPs are completed and Unit 1 approaches fuel loading (currently planned for December 1990). A large percentage of the additional workforce are contractors and consultants who do not live in the area and use only temporary quarters. While the current workforce level has caused a temporary, increased demand for services in the community and increased traffic on local roads, there are no major impacts due to the arrival of worker's families and due to demands for services necessary to support permanent residents (for example, housing and schools).

Based on the foregoing, the NRC Staff has concluded that the proposed action would have no significant environmental impact. Since this action would only extend the period of construction activities described in the FES, it does not involve any different impacts or a significant change to those impacts described and analyzed in the original environmental impact statement. Consequently, an environmental impact statement addressing the proposed action is not required.

Alternatives Considered: A possible alternative to the proposed action would be to deny the request. Under this alternative, the applicant would not be able to complete construction to the facility. This would result in denial of the benefit of power production. This option would not eliminate the environmental impacts of construction already incurred.

If construction were halted and not completed, site redress activities would restore some small areas to their natural states. This would be a slight environmental benefit, but much outweighed by the economic losses from denial of use of a facility that is nearly completed. Therefore, this alternative is rejected.

Alternative Use of Resources: This action does not involve the use of resources not previously considered in the FES for Watts Bar.

Agencies and Persons Contacted: The NRC staff reviewed the applicant's request and applicable documents referenced therein that support this extension. The NRC did not consult other agencies or persons.

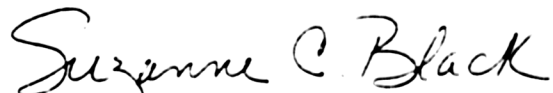
FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for this action. Based upon the environmental assessment, we conclude that this action will not have a significant effect on the quality of the human environment.

For details with respect to this action, see the request for extension dated June 29, 1988 which is available for public inspection at the Commission's Public Document Room, 2120 L Street, N.W., Washington, D.C. and at the Local Public Document Room, Chattanooga-Hamilton County Bicentennial Library, 10001 Broad Street, Chattanooga, Tennessee 37402.

Dated at Rockville, Maryland this 5 day of December, 1988.

FOR THE NUCLEAR REGULATORY COMMISSION



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for Projects  
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