

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 (permittee) for the Watts Bar Nuclear Plant, Units 1 and 2. The facility is located at the permittee'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 December 31, 1993 and the latest construction completion date of Construction Permit No. CPPR-92 to June 30, 1997. The proposed action is in response to the permittee's request dated May 16, 1991.

The Need for the Proposed Action:

The proposed action is needed because the construction of the facility is not yet fully completed. The permittee states that completion of Unit 1 will continue to be delayed pending review and implementation of a comprehensive plan consisting of corrective action programs (CAPs), special projects (SPs),

inspections, audits, and walkdowns to provide assurance that WBN Unit 1 is designed and constructed in accordance with regulatory requirements and TVA commitments. Since the time of the last extension request, TVA has been engaged in extensive efforts to resolve problems which this comprehensive program was designed to address as well as problems which were discovered in the course of implementing the plan. These efforts include inspections, document reviews, and where necessary, redesign and/or modification of affected structures, systems, and components.

In addition to the significant amount of work associated with these efforts, TVA has also recently halted Unit 1 construction activities in order to improve work control practices. The delays associated with the above efforts to ensure that WBN meets regulatory requirements and licensing commitments make it necessary for TVA to request an extension of the expiration date for Construction Permit No. CPPR-91 until December 31, 1993.

With regard to Unit 2, TVA is committed to applying lessons learned from the Unit 1 corrective programs to the Unit 2 completion of construction and startup efforts and appropriately staging construction activities. Given the activities described above and the resulting delays at WBN Unit 1, TVA requests an extension of the expiration date for Construction Permit No. CPPR-92 (Unit 2) until June 30, 1997.

Environmental Impacts of the Proposed Action:

The environmental impacts associated with the construction of the facility have been previously discussed and evaluated in the staff'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 percent complete and Unit 2 is approximately 75 percent 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 permittee more time to complete construction in accordance with the previously approved construction permit. The activities related to the various corrective activities 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 will decline as the corrective activities are completed and Unit 1 approaches fuel loading. 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 workers' 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 permittee would not be able to complete construction of 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 permittee's request and applicable documents referenced therein that support this extension. The NRC did not consult other agencies or persons.

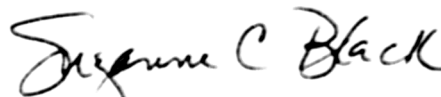
FINDING OF NO SIGNIFICANT IMPACT

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 May 16, 1991 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 Library, 1001 Broad Street, Chattanooga, Tennessee, 37402.

Dated at Rockville, Maryland this 18th day of June, 1991.

FOR THE NUCLEAR REGULATORY COMMISSION



Suzanne C. Black, Acting Director
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