

UNITED STATES NUCLEAR REGULATORY COMMISSIONTENNESSEE VALLEY AUTHORITYBROWNS FERRY NUCLEAR PLANT, UNIT 2DOCKET NO. 50-260ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from the requirements of Sections III.D.2(a) and III.D.3 of Appendix J to 10 CFR Part 50 to the Tennessee Valley Authority (the licensee) for the Browns Ferry Nuclear Plant, Unit 2. The unit is located at the licensee's site in Limestone County, Alabama. The exemption was requested by the licensee in its letter dated December 20, 1991.

ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action:

The proposed exemption would allow the licensee deviation from the provisions of Sections III.D.2(a) and III.D.3 of Appendix J to 10 CFR Part 50 that require Type B and Type C component leak rate testing during refueling outages on an interval not to exceed two years. In its letter of December 20, 1991, the licensee requested an extension of the allowable test interval for 87 components to permit realignment of the test program with the Browns Ferry Nuclear Plant, Unit 2 refueling outage schedule. The letter stated this outage will begin no later than January 29, 1993. The required extension is no more than 177 days for any single component.

5206030247 920528  
PDR ADJCK 05000260  
P PDR

The Need for the Proposed Action:

The proposed exemption is required to permit the licensee to avoid an otherwise unnecessary and lengthy plant outage. The required testing is ordinarily performed during refueling outages.

Environmental Impacts of the Proposed Action:

The proposed exemption will not increase potential radiological environmental effects due to containment leakage beyond those already permitted by the regulations. Testing of Type B and Type C components under Appendix J to 10 CFR Part 50 is intended to demonstrate that containment leakage from these components is within defined acceptable limits. These limits provide information used to calculate the maximum radiological consequences of a design-basis accident. Appendix J limits the combined leak rate for all penetrations and valves subject to Type B and C tests to less than 0.6 times the maximum allowable containment leakage rate with the containment pressurized to its design limit (commonly termed "0.6 La"). The licensee states in its December 20, 1991 letter that the most recent testing of the Type B and C components yielded leakage of less than 17% of the Appendix J limit. When the projected component degradation is added, leakage at the end of the proposed extended interval is expected to be well within acceptable limits. Therefore, the Commission concludes there would be no adverse radiological environmental impact as a consequence of the proposed exemption beyond that already permitted by the regulations.

With regard to potential non-radiological environmental impact, the proposed exemption involves systems located within the restricted areas as defined in 10 CFR Part 20. The exemption does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the

Commission concludes that there is no significant non-radiological environmental impact associated with the proposed exemption.

Since it does not involve adverse radiological or other environmental impacts, the Commission concludes the proposed exemption does not significantly change the conclusions of the licensee's "Final Environmental Statement, Browns Ferry Nuclear Plant Units 1, 2, and 3", dated September 1, 1972.

Alternative to the Proposed Action:

Because the staff has concluded that there is no significant environmental impact associated with the proposed exemption, any alternative to the exemption will have either no significantly different environmental impact, or greater environmental impact.

The principal alternative would be to deny the requested exemption. This denial would require an additional plant outage to perform testing. Such an outage would result in additional occupational radiation dose to plant workers without a compensatory increase in public health and safety. Therefore, this alternative is not desirable.

Alternative Use of Resources:

This action does not involve the use of resources not previously considered in connection with the "Final Environmental Statement, Browns Ferry Nuclear Plant Units 1, 2, and 3", dated September 1, 1972.

Agencies and Persons Contacted:

The NRC staff has reviewed the licensee's request dated December 20, 1991, that supports the proposed exemption. The NRC staff did not consult other agencies or persons.

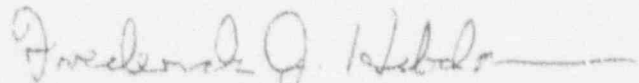
FINDING OF NO SIGNIFICANT IMPACT

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

For details with respect to this action, see the licensee's request for the exemption dated December 20, 1991, which is available for public inspection at the Commission's Public Document Room, Gelman Building, 2120 L Street, N.W., Washington DC, and at the Athens Public Library, South Street, Athens, Alabama 35611.

Dated at Rockville, Maryland this 28th day of May 1992.

FOR THE NUCLEAR REGULATORY COMMISSION



Frederick J. Hebdon, Director  
Project Directorate II-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

DISTRIBUTION

Docket File

NRC & Local PDRs

S. Varga 14-E-1

G. Lainas 14-H-3

F. Hebdon

M. Sanders

J. Williams

T. Ross

OGC

E. Jordan

ACRS (10)

OPA

E. Wilson RII

BFN Rdg. File