

UNITED STATES NUCLEAR REGULATORY COMMISSION
ENTERGY OPERATIONS, INC.
DOCKET NO. 50-368
ARKANSAS NUCLEAR ONE, UNIT 2
ENVIRONMENTAL ASSESSMENT AND FINDING OF
NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption from 10 CFR Part 50, Appendix J, for Facility Operating License No. NPF-6, issued to Entergy Operations, Inc. (the licensee), for operation of Arkansas Nuclear One, Unit 2 (ANO-2), located in Pope County, Arkansas.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would provide a one-time exemption to Entergy Operations, Inc. from the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix J, "Primary Reactor Containment Leakage Testing For Water-Cooled Power Reactors," which requires that licensees of all power reactors conduct integrated leakage rate tests (ILRT) under conditions representing design basis loss-of-coolant accident containment peak pressure. The licensee requires an exemption in order to conduct the ILRT at the same pressure that is used for the structural integrity test (SIT).

The proposed action is in accordance with the licensee's application for exemption dated June 29, 2000.

The Need for the Proposed Action:

The ANO-2 steam generators (SGs) are scheduled for replacement during the fall of 2000. The replacement SGs (RSGs) will require that an access opening be cut in the containment building structure. Upon closure of the structure, an ILRT will be required to test for primary containment leakage integrity.

The ANO-2 containment building was originally designed and tested for an internal pressure of 54 psig. The ANO-2 containment building has recently been reevaluated, to address the containment post-accident response resulting from the RSGs, for an increase in accident pressure to 58 psig with a design pressure of 59 psig, and shown to be acceptable as discussed in a letter to the NRC dated November 3, 1999, as revised by a letter dated June 29, 2000. As a result of this increase, an SIT will be performed to evaluate the ANO-2 containment building for the change in containment design pressure. The purpose of the SIT is to verify that the containment building structure can safely carry design loads and that the structural behavior is similar to that predicted by analysis. The post-RSG SIT will be performed at 68 psig (1.15 times the revised design pressure). The licensee would like to also perform the ILRT concurrently with the post-RSG SIT, at the SIT pressure of 68 psig, in order to recover approximately 30 hours of projected plant outage time. However, Appendix J requires that the ILRT be conducted at a pressure representing the design basis loss-of-coolant accident containment peak pressure, which is 58 psig. Hence, the need for the proposed exemption.

Environmental Impacts of the Proposed Action:

The NRC has completed its evaluation of the proposed action and concludes that the proposed action will not significantly increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released off site, and there is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action does not involve any historic sites. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, there are no significant nonradiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the “no-action” alternative). Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the “Final Environmental Statement Related to the Operation of Arkansas Nuclear One, Unit 2,” dated June 1977.

Agencies and Persons Consulted:

In accordance with its stated policy, on September 7, 2000, the staff consulted with the Arkansas State official, Bernie Bevill of the Arkansas Department of Health, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated June 29, 2000, which may be examined, and/or copied for a fee, at the NRC's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the ADAMS Public Library component on the NRC Web site, <http://www.nrc.gov> (the Electronic Reading Room).

Dated at Rockville, Maryland, this 28th day of September 2000.

FOR THE NUCLEAR REGULATORY COMMISSION

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Mohan C. Thadani, Acting Chief, Section 1
Project Directorate IV-1 & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation