

UNITED STATES NUCLEAR REGULATORY COMMISSION
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.
DOCKET NO. 50-440
PERRY NUCLEAR POWER PLANT, UNIT NO. 1
ENVIRONMENTAL ASSESSMENT AND FINDING OF
NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of several exemptions from the requirements of 10 CFR Part 50, Appendix J to the Cleveland Electric Illuminating Company, Centerior Service Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and Toledo Edison Company (the licensees), for operation of the Perry Nuclear Power Plant, Unit 1, located in Lake County, Ohio.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would grant exemptions from the requirements of Sections III.A.5(b)(2), III.B.3, III.C.3, III.A.1(d), III.D.1(a), and III.D.3 of Appendix J to 10 CFR Part 50. Section III.A.5(b)(2) requires that the measured leakage for the containment integrated leak rate test (L_{am}) be less than 75% of the maximum allowable leakage rate ($0.75 L_g$). The proposed exemption would permit separate treatment of main steam isolation valve leakage from the containment integrated leak rate tests.

Sections III.B.3 and III.C.3 require that the combined leakage of valves and penetrations subject to Type B and C local leak rate testing be less than 0.6 times the maximum allowable leakage rate ($0.6 L_m$). The proposed exemption would permit separate treatment of main steam isolation valve leakage from local leak rate testing.

Section III.A.1(d) requires that all fluid systems that would be open to containment following post-accident conditions, be vented and drained prior to conducting the containment integrated leak rate test. The proposed exemption would permit separate treatment of the main steam line penetrations and would not require them to be vented and drained prior to conducting containment integrated leak rate tests.

Section III.D.1.(a) requires that a set of three Type A tests be performed at approximately equal intervals during each 10-year service period and that the third test of each set be conducted when the plant is shut down for the 10-year plant inservice inspection (ISI). The proposed exemption would permit performance of the third Type A test at times other than when the plant is shut down for the 10-year plant ISI.

Section III.D.3 requires that Type C tests shall be performed during each reactor shutdown for refueling but in no case at intervals greater than 2 years. The proposed exemption would allow the licensee to perform the required Type C tests while the plant is at power.

The proposed action is in accordance with the licensee's application for exemption dated October 21, 1994.

The Need for the Proposed Action:

Assumptions used in both the Perry FSAR and Standard Review Plan 15.6.5, Appendix D, "Radiological Consequences of a Design Basis Loss-of-Coolant Accident," for computing the total radiological consequences from a hypothetical loss-of-coolant accident (LOCA), include separate contributions for the containment leak rate and the main steam line isolation valve leak rate. The value for the maximum allowable containment leak rate, L_c , of 0.2%/day, was established based on separate accounting for the main steam line isolation valve leak rate. The proposed exemption from Section III.A.5 (b)(2) is needed to allow separate treatment of main steam line isolation valve leakage from the containment integrated leak rate.

Sections III.B.3 and III.C.3 of Appendix J state that the combined leakage from all valves and penetrations subject to Type B and C local leak rate testing shall be less than $0.6 L_c$. However, separate leakage limits have been established for the main steam isolation valves at Perry. An exemption from Sections III.B.3 and III.C.3 is needed to allow separate treatment of main steam isolation valve leakage from local leak rate testing.

Section III.A.1(d) requires that those systems that would be exposed to the containment atmosphere following a design basis LOCA, be vented and drained prior to conducting the containment integrated leak rate test. However, the main steam piping between the inboard and outboard isolation valves at Perry are filled with water during the containment integrated leak rate tests. This practice ensures that any leakage through the isolation valves will not contribute to the overall containment test results. An exemption from Section III.A.1(d) is needed to allow this alternative practice.

The proposed exemption from 10 CFR Part, Appendix J, Section III.D.1(a), is needed to avoid unnecessary restraints in outage scheduling. The licensee proposed to perform the three Type A tests at approximately equal intervals within each 10-year period, with the third test of each set conducted as close as practical to the end of the 10-year period. However, there would be no required connection between the Appendix J 10-year interval and the ISI 10-year interval.

Section III.D.3 of Appendix J to 10 CFR Part 50 states that Type C tests shall be performed during each reactor shutdown for refueling but in no case at intervals greater than 2 years. The proposed exemption is needed to allow the option to perform Type C testing at power.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed action and concludes that the exemption would not significantly increase the probability or amount of expected primary containment leakage, and that containment integrity would thus be maintained.

The change will not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action does involve features located entirely within the restricted area as defined in 10 CFR Part 20. It does not affect nonradiological plant effluents and has no other environmental impact. Accordingly, the Commission concludes that

there are no significant nonradiological environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

Since the Commission has concluded there is no measurable environmental impact associated with the proposed action, any alternatives with equal or greater environmental impact need not be evaluated. As an alternative to the proposed action, the staff considered denial of the proposed action. 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 the Perry Nuclear Power Plant, Units 1 and 2," dated August 1982.

Agencies and Persons Consulted:

In accordance with its stated policy, on September 13, 1995, the staff consulted with the Ohio state official, Lawrence Grove, of the Ohio Emergency Management Agency, regarding the environmental impact of the proposed action. The state official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

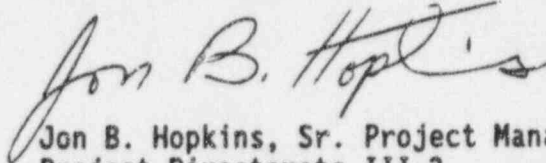
Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated October 21, 1994, which is available for public

inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Perry Public Library, 3753 Main Street, Perry, Ohio 44087

Dated at Rockville, Maryland, this 26th day of September 1995.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script that reads "Jon B. Hopkins". The signature is written in dark ink and is positioned above the typed name and title.

Jon B. Hopkins, Sr. Project Manager
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