

UNITED STATES NUCLEAR REGULATORY COMMISSION

INDIANA AND MICHIGAN POWER COMPANY
DONALD C. COOK NUCLEAR PLANT, UNIT NO. 2
DOCKET NO. 50-316

NOTICE OF ISSUANCE OF ENVIRONMENTAL ASSESSMENT
AND FINDING OF NO SIGNIFICANT IMPACT

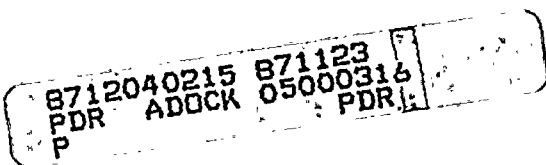
The U. S. Nuclear Regulatory Commission (NRC) is considering issuance of a license amendment to Facility Operating License No. DPR-74 issued to Indiana and Michigan Power Company (the licensee) for operation of the Donald C. Cook Nuclear Plant, Unit No. 2, located in Berrien County, Michigan.

Identification of Proposed Action

The license amendment would permit the licensee to replace major components of the four steam generators in Cook Unit 2 in order to restore the plant to its original operating condition.

The amendment would revise the Technical Specifications in response to the licensee's application dated March 12, 1987, as supported by the Steam Generator Repair Report submitted November 7, 1986 and revised March 30 and July 24, 1987, as may be further revised based on the NRC staff's continuing review.

The NRC staff has prepared an environmental assessment of the proposed action, "Environmental Assessment by the Office of Nuclear Reactor Regulation Related to the Repair of Steam Generators, Indiana and Michigan Electric Company, Donald C. Cook Nuclear Plant, Unit No. 2, Docket No. 50-316," dated November 23, 1987.



Summary of Environmental Assessment

The steam generators (SG) at Cook Unit 2 have experienced corrosion-related phenomena which have required periodic examination and plugging of SG tubes to ensure continued plant operation. The licensee has limited plant operation to 80% power to retard the rate of SG tube degradation. However, the need to plug tubes will continue and will eventually result in further power reductions and operating difficulties. There are no practical repair techniques; thus, the licensee proposed to replace SG lower assemblies. This replacement would repair the SG's and allow the unit to operate at its design capacity.

The proposed license amendment would not degrade the level of safety attained by the original licensing of the plant. The repaired steam generators would be constructed of tube materials less prone to corrosion than the original tube materials. There would be a diminished chance of accident doses to the environment since the probability of an SG tube rupture, the accident of concern, would have a lower probability of occurrence than in the originally licensed plant.

The NRC staff has reviewed the potential environmental impact of the proposed action that would permit the licensee to replace major components of the four steam generators. This evaluation considered the previous environmental studies, including the "Final Environmental Statement Relating to Operation of Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2," dated August 1973.

Radiological Impacts

The licensee has taken appropriate steps to ensure that occupational doses to the work force and population will be within the limits of 10 CFR Part 20 and are below the annual dose design objectives of 10 CFR Part 50, Appendix I. Therefore, the radiological impact of the repair project to the public and the work force will not significantly affect the human environment.

Nonradiological Impacts

With regard to potential nonradiological impacts, the proposed license amendment involves features located entirely within the restricted area as defined in 10 CFR Part 20. It does not affect nonradiological plant effluents. Any such effluents will be controlled by the licensee under existing plans to prevent or mitigate the impact of such effluents. The licensee will control noisy operations of construction machinery and will restore any area inadvertently disturbed. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed license amendment.

FINDING OF NO SIGNIFICANT IMPACT

The staff has reviewed the proposed steam generator repair program and the proposed amendment relative to the requirements set forth in 10 CFR Part 51. Based upon the environmental assessment, the staff concluded that there are no significant radiological or nonradiological impacts associated with the

proposed action and that the proposed action will not have a significant effect on the quality of the human environment. Therefore, the Commission has determined, pursuant to 10 CFR 51.31, not to prepare an environmental impact statement for the proposed amendment.

For further details with respect to this action, see (1) the Environmental Assessment dated November 23, 1987; and (2) the application for amendment dated March 12, 1987 as supported by an earlier transmittal dated November 7, 1986 with the Steam Generator Repair Report that was later revised on March 30 and July 24, 1987. These documents are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, DC, and at the Maude Preston Palenske Memorial Library, 500 Market Street, St. Joseph, Michigan 49085.

Dated at Bethesda, Maryland, this 23rd day of November 1987.

FOR THE NUCLEAR REGULATORY COMMISSION



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