

UNITED STATES NUCLEAR REGULATORY COMMISSION
INDIANA MICHIGAN POWER COMPANY
DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 50-315 AND 50-316
ENVIRONMENTAL ASSESSMENT AND FINDING OF
NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License Nos. DPR-58 and DPR-74, issued to Indiana Michigan Power Company, (the licensee), for operation of the Donald C. Cook Nuclear Plant Units 1 and 2, located in Berrien County, Michigan.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action

The proposed amendment would revise the provisions in the Technical Specifications (TS) relating to TS Section 5.6.1.1 "Criticality - Spent Fuel," for both units. Specifically, the current TS requirement to store Westinghouse Fuel assemblies with fuel enrichments of greater than 3.95 weight percent uranium-235 enrichment and burnup of less than 5,500 MWD/MTV in Region I of the spent fuel pool in a 3-out-of-4 array (one storage cell in each symmetrical array empty) is modified to allow an array of highly reactive fuel "checkerboarded" with adequately burnt fuel with no empty storage locations.

The proposed action is in accordance with the licensee's application for amendment dated February 15, 1991, as supplemented by letters dated October 8, 1991 and January 14, 1992.

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The Need for the Proposed Action

The proposed change to the TS is required in order to provide the licensee the ability to store fresh fuel in the spent fuel pool, to provide easier fuel handling operations and to optimize the available storage space in the spent fuel pool racks.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the proposed revision to the TS and concludes that the proposed change does not involve a significant hazards consideration. The proposed amendment would modify the current TS requirement which allows storage of fuel assemblies with fuel enrichments of greater than 3.95 weight percent uranium-235 and burnup of less than 5,500 MWD/MTV in Region I of the spent fuel pool in a 3-out-of-4 array to allow an array of highly reactive fuel "checkerboarded" within adequately burnt fuel with no empty storage locations. The storage of the higher enriched fuel in the above proposed pattern would not significantly increase the probability or consequences of any accident previously analyzed. Since the proposed change does not increase the probability or consequences of an accident, no changes are being made in the types or amounts of any radiological 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 this proposed action would result in no significant radiological environmental impact.

With regard to potential non-radiological impacts, the proposed change to the TS involves a change in the installation or use of a facility component located within the restricted area as defined by 10 CFR Part 20. The proposed change does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no



significant non-radiological environmental impacts associated with the proposed amendment.

Alternative to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduced operational flexibility.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statements for the Donald C. Cook Nuclear Power Plant Units 1 and 2, dated August 1973.

Agencies and Persons Consulted

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

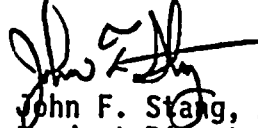
Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

For further details with respect to this action, see the application for amendment dated February 15, 1991 and supplements dated October 8, 1991 and January 14, 1992, which are available for public inspection at the Commission's

Public Document Room, 2120 L Street, N.W., Washington, D.C. and at the Maude
Preston Palenske Memorial Library, 500 Market Street, St. Joseph, Michigan 49085.

Dated at Rockville, Maryland, this 3rd day of March 1992.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stang, Acting Director
Project Directorate III-1
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Office of Nuclear Reactor Regulation