



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 66 TO FACILITY OPERATING LICENSE NO. DPR-58
AND AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. DPR-74
INDIANA AND MICHIGAN ELECTRIC COMPANY
D. C. COOK UNITS 1 AND 2
DOCKET NOS. 50-315 AND 50-316

Background

The Containment Systems Branch (CSB) evaluation of the generic issue of containment purging and venting during normal plant operation (MPA B-24) was transmitted to J. Dolan of the Indiana and Michigan Electric Company by letter dated October 30, 1981. The only remaining issues requiring CSB attention are the purge valve test frequency and the allowable number of hours per year of purge/vent system operation. D. C. Cook Unit 2 is presently barred from purging during Modes 1, 2, 3, and 4 whereas D. C. Cook Unit 1 is allowed to purge in accordance with the October 23, 1979 NRC Interim Position on this topic.

Evaluation

The CSB position on frequency for purge/vent valve leakage testing (three month interval for active valves and six month interval for passive valves) applies to valves with resilient seat material. The licensee has replaced all purge valves in Cook, Unit 1 with valves having non-resilient seats, and will do the same for the Cook, Unit 2 purge valves during the refueling outage beginning in November 1982. Therefore, we find acceptable the licensee's position that the purge valves need not be tested more frequently than as required by Appendix J.

The licensee has committed to operate the containment purge system for safety related reasons only and will not exceed 200 hours of operation per year. We have reviewed the justifications provided for this annual usage and find them acceptable.

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The proposed changes to the Technical Specifications, attached to the August 30, 1982 letter from R. Hunter of the Indiana and Michigan Electric Company to H. Denton of the NRC, contain the necessary changes for purge system operation during normal plant operations. We have reviewed these proposed changes to the Technical Specifications and find them acceptable.

For Cook, Unit 2, the licensee plans to upgrade the radiation monitors and replace the present purge valves with valves having non-resilient seats during the refueling outage scheduled to begin in November, 1982. These modifications have already been made for Cook, Unit 1. To accomplish this, the licensee requested by its letter dated October 29, 1982, a temporary relief from the requirements of certain specifications in the Cook, Unit 2 Technical Specifications (T/S) namely, 3.9.9 and 3.3.3.1 regarding the "Action Statement" while in Mode 6 (refueling); They also requested relief from T/S 3.04 to allow the transition from Mode 5 to Mode 6 while in an "Action Statement".

The staff has reviewed these proposed changes to the Technical Specifications and the operations proposed by the licensee, and concludes that the only relief needed is from T/S 3.9.9, and then only when purging is taking place while in Mode 6. T/S 3.9.9 states that the containment purge and exhaust isolation system must be operable during core alterations or movement of irradiated fuel within the containment. T/S 3.9.9 will be satisfied as purge valves are replaced, as long as the redundant purge valve is maintained closed. T/S 3.3.3.1 will not be effective until after the 1982 refueling outage, and T/S 3.04 will not be violated by removing radiation monitors from service since no core alterations or irradiated fuel movement will take place as plant operations move from Mode 5 to 6.

To meet the provisions of T/S 3.9.9, which provides that each purge system isolation valve that is open during core alterations or irradiated fuel movement (i.e., Mode 6) must have a high radiation isolation signal, the licensee proposes the following:

- 1) One of the two valves in series will have an automatic isolation signal generated from radiation monitors located inside containment; and
- 2) The other valve in series, which will not receive a high radiation isolation signal as the replacement of radiation monitors by plant personnel progresses, will be closed by a control room operator when containment area radiation monitors alarm in the control room.

The staff finds this interim method of meeting T/S 3.9.9 acceptable.

Environmental Consideration

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not authorize a significant increase in the probability or consequences of an accident previously evaluated, do not create the possibility of an accident of a type different from any evaluated previously, and do not involve a significant reduction in a margin of safety, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: December 8, 1982

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