



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 160 TO FACILITY OPERATING LICENSE NO. DPR-58  
AND AMENDMENT NO. 144 TO FACILITY OPERATING LICENSE NO. DPR-74

INDIANA MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-315 AND 50-316

1.0 INTRODUCTION

By letter dated April 16, 1991, the Indiana Michigan Power Company (the licensee) requested amendments to Facility Operating License Nos. DPR-58 and DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2 (the facilities). The Technical Specifications (TS) definitions and requirements relating to Units 1 and 2 containment integrity and containment air lock operability and surveillance would be revised as follows; the definition of CONTAINMENT INTEGRITY (TS 1.8) along with its related surveillance requirement (TS 4.6.1.1.b), and containment leakage limitations (TS 4.6.1.2.e) would be revised to indicate that for containment integrity to exist, air locks must be in compliance with the applicable operability requirements. In addition, the proposed amendment would delete a Unit 1 surveillance requirement (TS 4.6.1.3.a) that air locks be visually inspected after each opening to verify that the seal has not been damaged and renumber the remaining surveillance requirements.

2.0 DISCUSSION AND EVALUATION

Containment air locks are double-door chambers provided in the containment boundary to enable personnel to enter and leave the containment. By keeping at least one of the two doors closed at all times, personnel can enter and leave the containment without momentary loss of containment integrity. In the event that a Design Basis Accident pressurizes the containment to its Peak Accident Pressure, one operable air lock door, in each air lock, is capable of limiting air lock leakage to a small fraction of the total containment leakage. An air lock is thus capable of performing its design function (i.e., is "operable") when one of its two doors is closed. The closed door must, of course, itself be "operable" (i.e., capable of meeting its leakage test acceptance criteria).

The present Technical Specifications (TS) which establish requirements regarding containment integrity, fail to make a distinction between air lock door inoperability and air lock inoperability. As discussed above, an air lock may be operable even though one of its two doors is inoperable. It is, therefore, unnecessary to initiate those remedial actions normally taken in event of loss of complete air lock integrity. The amendments requested

propose to clarify the TS to reflect the above. The proposed changes are consistent with the terminology provided in the staff guidance contained in NUREG-0452 ("Standard Technical Specifications") and are acceptable.

In addition to the above, the licensee proposed to delete a requirement in the Unit 1 TS that requires a visual inspection of each air lock seal after each opening. Because of the frequency at which air lock doors are opened under certain plant conditions and because of the administrative and recordkeeping requirements applicable to TS-required surveillances, this TS imposes an undue burden on the licensee. It is the staff position that such testing and/or inspection is only necessary for certain types of seals (i.e., such as those associated with certain large resiliently-seated vent and purge valves) that have demonstrated poor resistance to mechanical damage. This is not the case with the air lock seals. The proposed change is consistent with NUREG-0452 ("Standard Technical Specifications") and is acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Michigan State official was notified of the proposed issuance of the amendments. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendments change the requirements with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes in surveillance requirements. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

### 5.0 CONCLUSION

The staff has concluded, based on the considerations discussed above that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: W. Long

Date: December 5, 1991



DATED: December 5, 1991

AMENDMENT NO. 160 TO FACILITY OPERATING LICENSE NO. DPR-58-D. C. COOK  
AMENDMENT NO. 144 TO FACILITY OPERATING LICENSE NO. DRP-74-D. C. COOK

**Docket File**

NRC & Local PDRs

PDIII-1 Reading

D.C. Cook Plant File

B. Boger

J. Zwolinski

L. Marsh

P. Shuttleworth

T. Colburn

OGC-WF

D. Hagan, 3302 MNBB

G. Hill (8), P-137

Wanda Jones, MNBB-7103

C. Grimes, 11/F/23

ACRS (10)

GPA/PA

OC/LFMB

W. Shafter, R-III

cc: Plant Service list

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF PHYSICS

RECEIVED  
JAN 10 1964  
PHYSICS  
UNIVERSITY OF CHICAGO  
LIBRARY  
CHICAGO, ILL.