



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 106 TO FACILITY OPERATING LICENSE NO. DPR-58  
AND AMENDMENT NO. 92 TO FACILITY OPERATING LICENSE NO. DPR-74

INDIANA AND MICHIGAN ELECTRIC COMPANY  
DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2  
DOCKET NOS. 50-315 AND 50-316

INTRODUCTION

The staff evaluated the Indiana and Michigan Electric Company's proposed design for instrumentation to detect inadequate core cooling (ICCI) in an SER dated December 13, 1983. With the exception of the confirmatory items discussed below the staff determined that the proposed design was satisfactory.

The confirmatory items required by the staff fell into two categories; upgrades to the quality of the Core Exit Thermocouple (CET) system and scheduler commitments for the system upgrade and, concerns regarding the environmental qualification of ICCI system components. The licensee's submittal dated August 20, 1984 committed to upgrade the CET system for Units 1 and 2. The installation on Unit 1 is now complete and Unit 2 will be completed during an outage scheduled for 1988. The environmental qualification issue has been resolved by the licensee's compliance with the environmental qualification rule, 10 CFR 50.49.

By letter dated October 11, 1985, the Indiana and Michigan Electric Company (the licensee) requested an amendment to the facility operating licenses for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2. The amendment would change the Technical Specifications by adding requirements for the Reactor Vessel Level Instrumentation System (RVLIS) and Core Exit Thermocouples (CET) in the Accident Monitoring Instrumentation section. The proposed change is in response to TMI Action Item II.F.2 of NUREG-0737 and Generic Letter 83-37.

By letter dated November 20, 1986, the licensee indicated that installation of the RVLIS equipment required by NUREG-0737 item II.F.2 is now complete. The installed equipment has been functionally tested and the system performs in accordance with design expectations and with design error tolerances. Furthermore, emergency guidelines have been developed and are ready to implement pending separate approval by the NRC.

EVALUATION

This evaluation covers the addition of the RVLIS and CET to the Technical Specifications. The surveillance requirements for Channel Check and Channel Calibration as specified in items 15 and 16 of Table 4.3-7 for Cook Unit 1 and Table 4.3-10 for Unit 2 are in accordance with NUREG-0737 and Generic

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Letter 83-37 and are acceptable. The licensee has also proposed to add footnote 1 and 3 to indicate when calibrations are to be performed for the RVLIS and CET and these are acceptable. Footnote 2 for both Units states that if one train of RVLIS is inoperable, the CET and subcooling margin can be used during a channel check to verify the remaining RVLIS train operable. This addition is also acceptable.

Generic Letter 83-37 dated November 1, 1983, provided typical technical specifications which the NRC would find acceptable. The Generic Letter did not preclude alternative requirements and was not meant to be used as a basis for finding different, existing action statements unacceptable. The Cook Technical Specifications were previously issued and found acceptable recognizing only the minimum channels operable for the accident instrumentation and with a 30 day requirement to restore the inoperable channel. The licensee proposes to maintain these requirements for the additional instrumentation (RVLIS and CET), and in order to maintain consistency with these and other accident instruments of equal or greater importance, we find the licensee's changes acceptable.

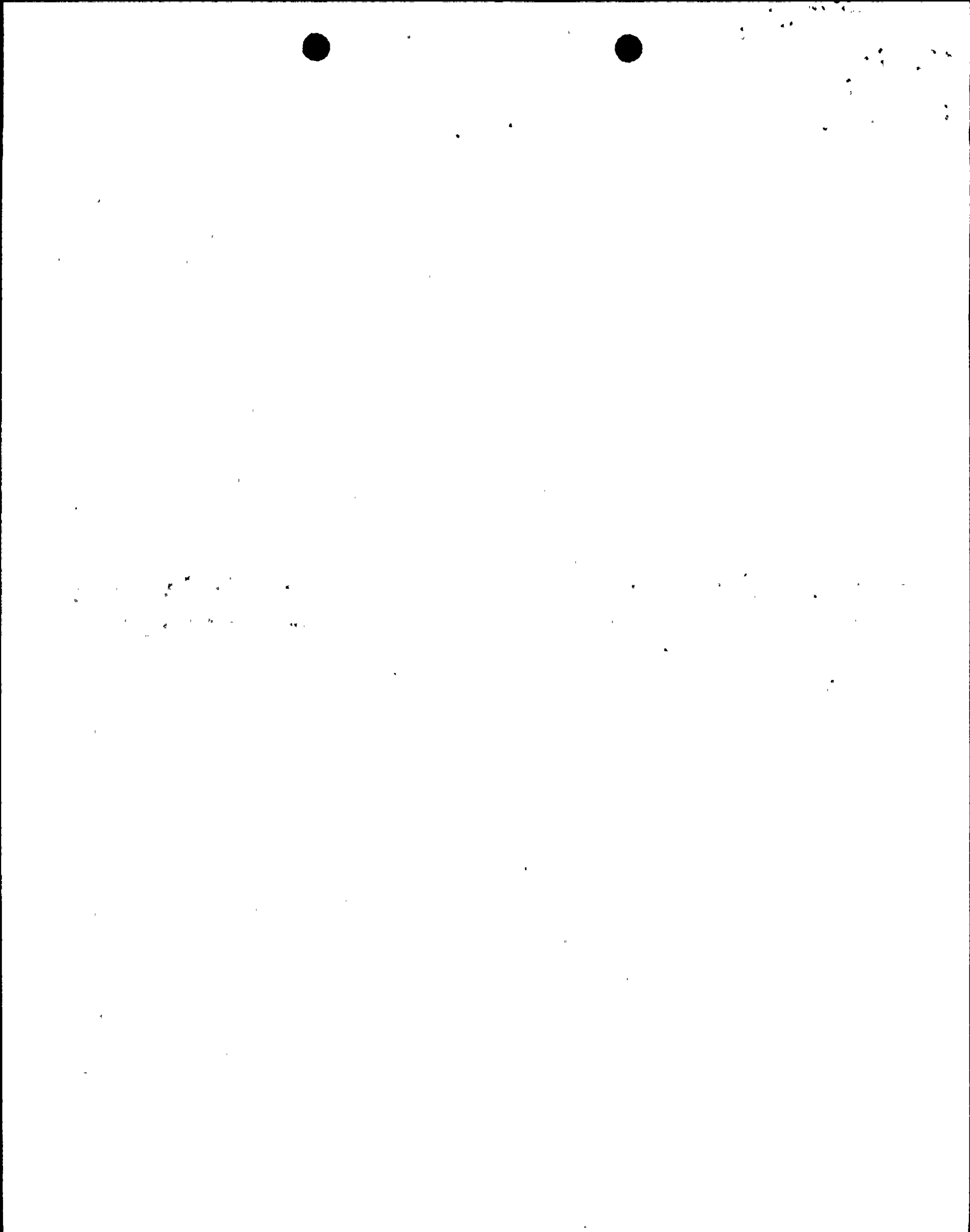
We have concluded, based on the considerations discussed above, that the proposed Technical Specification change for the ICCI system is generally in accordance with the guidelines of G.L. 83-37. The proposed Technical Specifications forwarded by the licensee's letter dated October 11, 1985 are satisfactory.

#### IMPLEMENTATION

The Indiana and Michigan Electric Company has successfully implemented the ICCI requirements of NUREG-0737 Item II.F.2 on Unit 1 and will have completed implementation on Unit 2 in 1988 when the upgrade of their core exit thermocouples is completed. This is considered satisfactory. The NRC staff's review in this area is now complete. If the installation of the remaining core exit thermocouples in Unit 2 is not completed in the scheduled 1988 refueling outage, the licensee should notify the NRC before startup following the refueling outage.

#### ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of the facilities' components located within the restricted areas as defined in 10 CFR 20. The staff has determined that these 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 Sec 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.

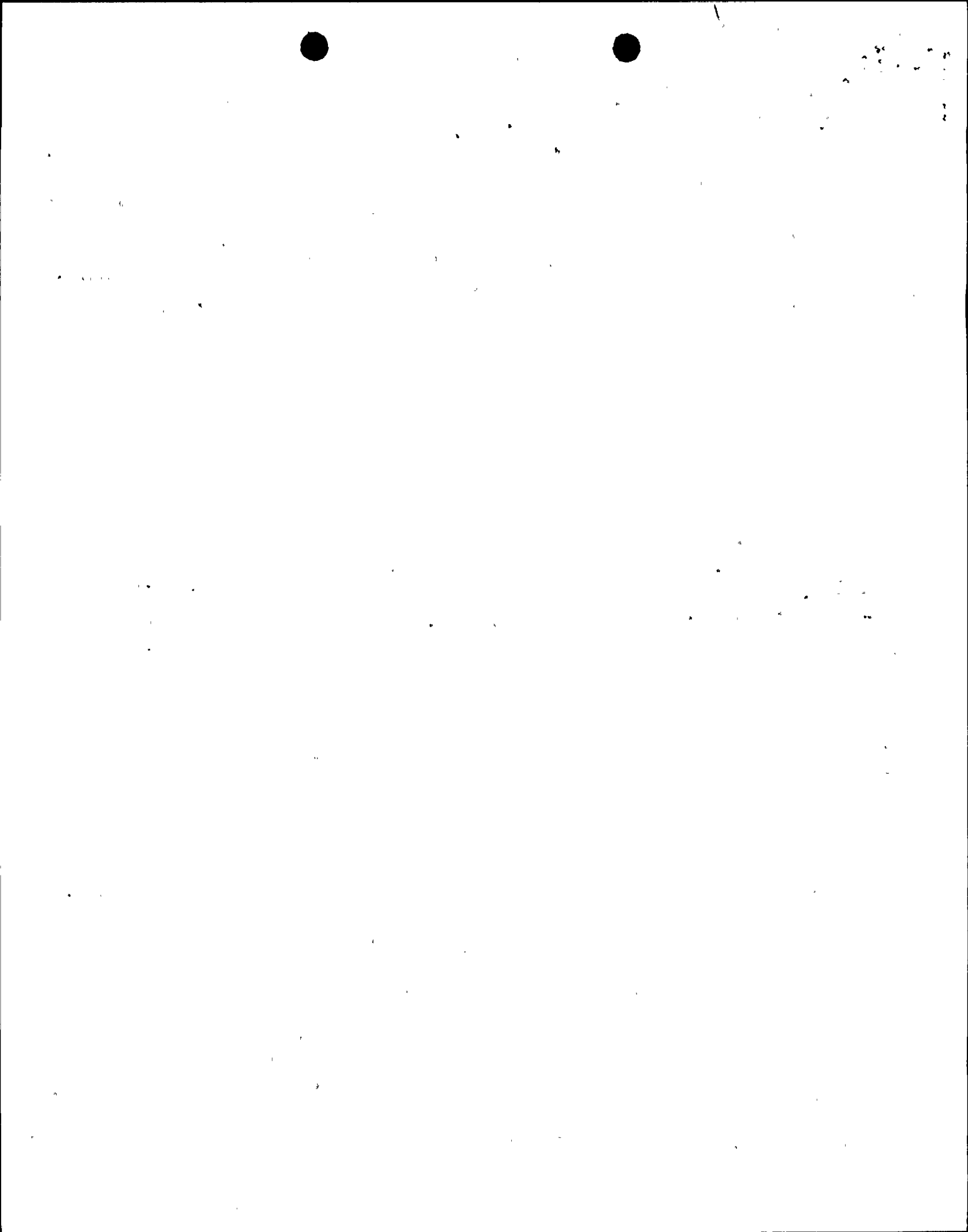


CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: April 10, 1987



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AMENDMENT NO. 106 TO FACILITY OPERATING LICENSE NO. DPR-58 - DONALD C. COOK, UNIT 1  
AMENDMENT NO. 92 TO FACILITY OPERATING LICENSE NO. DPR-74 - DONALD C. COOK, UNIT 2

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