



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 93 TO FACILITY OPERATING LICENSE NO. DPR-58
AND AMENDMENT NO. 79 TO FACILITY OPERATING LICENSE NO. DPR-74
INDIANA AND MICHIGAN ELECTRIC COMPANY
DONALD C. COOK NUCLEAR PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-315 AND 50-316

Background

By letter dated February 14, 1986, Indiana & Michigan Electric Company, the licensee for the Donald C. Cook Nuclear Power Plant, Units 1 and 2, submitted an application for amendment to their License Nos. DPR-58 and DPR-74 which, in part, would remove the restriction on the movement of loads in excess of 2500 lbs over the spent fuel pool with the Auxiliary Building crane. We have reviewed the existing D. C. Cook Technical Specification 3.97, as well as the proposed temporary change to this Technical Specification and the supporting basis.

Evaluation

In the February 14, 1986, letter the licensee indicated that the Auxiliary Building crane is the primary crane for moving equipment into and out of the auxiliary building. The trolley for this crane consists of two hooks, a main hook and an auxiliary hook, and the associated load blocks. The load blocks weigh approximately 4.25 tons for the main hook and less than 1000 lbs for the auxiliary hook. The current load limitation of 2500 lbs over the pool is exceeded by the weight of the load block of the main hook when either hook is in use since both hooks move in unison.

The licensee has stated that the main hook will be deenergized by pulling the electrical breakers and will not carry any load on the hook while the auxiliary hook is in use. By deenergizing the main hook it becomes a passive, integral component of the Auxiliary Building Crane and need not be considered a heavy load. Furthermore, simultaneous blocking of the main and auxiliary hooks would not be possible. The deenergizing of the main hook will be controlled administratively and will be included in the fuel handling procedures.

Based on our review, the proposed change to D. C. Cook Technical Specification 3.9.7 is in accordance with our acceptance criteria in SRP 9.1.5 for heavy load handling and is, therefore, acceptable.

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Basis for Emergency Technical Specification Change

The licensee's submittal dated February 14, 1986, for the emergency Technical Specification change was made following discussions with the staff on the licensee's September 11, 1985, and January 29, 1986, proposal to modify their heavy load program. These discussions held on February 12, 1986, concluded that a change to the Technical Specifications was appropriate and consistent with the Commission's heavy loads program which included provisions for a load drop analysis for load blocks and the basis for the existing Technical Specification limiting the impact energy to spent fuel from dropped loads. The licensee has not completed the load drop analysis for the main load block, therefore, it was inappropriate to conclude that the main load block met the impact energy considerations of the Technical Specification or that a Technical Specification interpretation was sufficient. The licensee's position that deenergizing the main hoist and unloading the main load block would create a passive component of the Auxiliary Building crane did have merit and supported the licensee's request for a Technical Specification change for one year until a load block analysis could be performed and new Technical Specifications proposed where appropriate.

Due to the timing of the staff's review and determination and the final discussion with the licensee on February 12, 1986, the licensee's submittal on February 14, 1986, did not allow enough time for a pre-notice of proposed license amendment and finding of no significant hazards consideration in the Federal Register. The change was needed at the facility to prevent schedule slippage and plant restart following the Unit 2 outage. The crane is needed to begin fuel shuffling on or before February 28, 1986. We have determined that the licensee has been responsive in the submittal of the proposed Technical Specification change once the staff determined that a Technical Specification interpretation was inappropriate. The licensee had informed the Commission of the heavy load since September 11, 1985, and the licensee's basis for the interpretation and the proposed Technical Specification change is the same. Based on our review, we do not believe the licensee delayed their submittal to create an emergency situation and take advantage of the post notice situation.

Discussion with the State of Michigan

On February 20, 1986, the proposed Technical Specification change, the conditions requiring an emergency amendment of the licenses, and the staff's final no significant hazards consideration were discussed with the State of Michigan contact for licensing matters. It was agreed that the analysis and evaluation to be completed by the licensee during the next year are appropriate and that the condition of the main hoist and load block would offer continued protection against load drops during this period. The State of Michigan understands the Commission's actions and has no further comments.

Final No Significant Hazards Determination

In our review of the proposed Technical Specification change, we have considered the state of the main hoist and its load block while the Auxiliary Building crane is over the spent fuel. The licensee will deenergize the main hoist so that the hoist cannot operate the load block up or down. Since the breakers will be pulled, electrical shorts cannot occur to inadvertently start the hoist. The hook will be unloaded so that the hoist cable, capable of carrying great loads, will only carry the load block. In this condition, the main hoist and its load block becomes a passive, integral component of the Auxiliary Building crane and need not be considered a heavy load.

Failure of the main hoist in this condition is significantly reduced and would possibly require a failure of the entire crane system to have any effect on other systems or the spent fuel. The main hoist in the deenergized and unloaded condition would not significantly increase the consequences or probability of previously analyzed accidents involving the crane system nor would the crane condition create the possibility of a new or different kind of accident from any previously analyzed. Since the failure mechanisms of the main hoist and load block are significantly reduced, operation in the deenergized, unloaded mode over the spent fuel does not involve a significant reduction in a margin of safety. Therefore, based on these considerations, the Commission has made a final determination that the amendment request involves a no significant hazards consideration.

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 determined that these amendments involve no significant hazards consideration. 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.

Principal Contributors:

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Dated: February 24, 1986



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