



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 130 TO FACILITY OPERATING LICENSE NO. DPR-58
AND AMENDMENT NO. 115 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 February 6, 1989, Indiana Michigan Power Company (the licensee) requested approval of an amendment to the D. C. Cook, Units 1 and 2 plant Technical Specifications (TS). The proposed changes include revisions to action statements, deletion of special reporting requirements, additions of fire detection and suppression systems, and certain clarifications. The staff reviewed the amendment and expressed concern that some proposed changes were not consistent with the Standard Technical Specifications. At the staff's request, the licensee submitted revisions to the original amendment by letter dated November 10, 1989.

2.0 DISCUSSION

The Technical Specification amendment includes the following changes:

- Revisions to the Action Statements under Fire Detection Instrumentation to be more consistent with the language of the Standard Technical Specifications;
- Deletion of special reporting requirements;
- Addition of detection systems which have been installed in response to the requirements of Appendix R to 10 CFR Part 50;
- Deletion of detection systems associated with certain charcoal filter units;
- Modification of the Action Statements under Fire Suppression Water System to include a requirement to establish a backup fire suppression water system within seven days if only one of the fire pumps is operable;
- Change to allow fire pump diesel inspections during plant operation;
- Change to reflect observations of three points on the fire pump performance curve during surveillance testing;

9002230303 900208
PDR ADOCK 05000315
P PDC

D

1950
10 11 12

1950
10 11 12

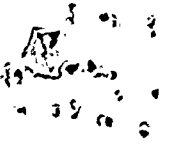
1950

- Revision to the Action Statement under Spray and/or Sprinkler Systems to reflect the implementation of an hourly fire water patrol when area fire detectors are verified operable;
- Deletion of piping inspections of air supervised pre-action-type sprinkler systems;
- Addition of spray/sprinkler systems which have been installed in response to the requirements of Appendix R to 10 CFR Part 50;
- Modifications to the Action Statements under gaseous fire suppression systems to eliminate the fire watch requirement when the systems are isolated for personnel protection and to reflect the implementation of hourly fire water patrols when area fire detectors are verified operable;
- Change to reflect the conversion of several carbon dioxide systems from automatic to manual operation;
- Change to reflect the use of a liquid level meter to confirm the fill capacity of the halon storage tank;
- Revision to credit the presence of an operable fire suppression system when fire hose stations are inoperable;
- Modifications to the Action Statements under fire rated assemblies to credit other compensatory measures such as operable fire suppression systems and closed fire doors and dampers;
- Addition of a functional test of fire dampers on a 10 percent sample basis;
- Changes to the Bases to reflect the above revisions;
- Editorial changes to improve clarity.

3.0 EVALUATION

The net effect of the licensee's proposed Technical Specifications changes is to make the TS more consistent with the Standard Technical Specifications, to incorporate newly installed fire protection features, and to make the TS language clearer while incorporating some plant-specific aspects.

The revisions to the Action Statements of the various fire protection specifications reflect the general philosophy that the staff has implemented in the past, that hourly fire water patrols in conjunction with operable fire detection systems are an acceptable interim measure pending completion of modifications or repairs to return an inoperable fire protection system or barrier to operable status. The licensee has extended this concept to credit operable fire suppression systems. Because the suppression systems feature both a fire detection and alarm capability as well as a fire extinguishing capability, the staff considers this proposal to be acceptable.



Vertical text or markings on the left side of the page, appearing as a series of small, dark, irregular marks.

Small mark or character on the right side of the page.

Small mark or character on the right side of the page.

Small mark or character at the bottom left of the page.

Deletion of special reporting requirements is consistent with the guidance issued in Generic Letter 86-10 and is, therefore, acceptable.

Over the past several years, the licensee has installed a number of new fire protection features, including fire detection and suppression systems, in response to the requirements contained in Appendix R to 10 CFR Part 50. To the extent that these modifications are covered by Technical Specifications; the licensee has included these systems in the inventory of features that are to be surveilled. This conforms with staff fire protection guidelines including those found in Appendix A to BTP APCS 9.5-1.

Deletion of detectors associated with the charcoal filters is considered acceptable by the staff because of the limited fire hazard and the presence of area fire detectors that are located above the filter plenums.

The change to permit fire pump diesel engine surveillance during plant operation is considered acceptable based on the limited time associated with the testing and maintenance and the availability of the electric driven fire pump which would be operational to supply water for fire fighting.

Several of the licensee's proposed changes, such as the addition of a requirement to establish a backup fire pump under certain circumstances and observation of pump performance along more than one point on the pump performance curve are clearly conservative enhancements of the Technical Specifications which the staff approves.

Deletion of piping inspections of air supervised pre-action type sprinkler systems is considered acceptable because significant pipe damage which would affect system performance would cause loss of air resulting in a trouble alarm being transmitted. This automatic capacity is considered more effective in determining loss of pipe integrity than a visual inspection.

When gaseous fire suppression systems are isolated so as to avoid risk to the safety of plant personnel it is inconsistent to then implement a fire water patrol in the area. The change to the technical specifications to eliminate this inconsistency is considered acceptable. Fire safety is assured during these relatively brief intervals by the presence of operable fire detectors in the area and the capability to re-activate the system in a timely manner in the event of an actual fire.

The use of a liquid level meter to determine halon quantity in storage tanks is a method accepted by the industry as sanctioned in the National Fire Protection Association Standard No. 12A. The staff, therefore, concurs with the licensee's proposal to credit this method in lieu of weighing the cylinder as has been done in the past.

The proposed change to credit the presence of an automatic fire suppression system in an area with an inoperable fire hose station is acceptable because the system is the primary means of fire fighting and the plant fire brigade has the capability to deploy hand hose lines from other operable hose stations.

11

11

When fire doors and dampers are found to be inoperable, fire watches are normally posted. Under certain circumstances, the licensee has proposed to assure closure of the door or damper in lieu of a fire watch. Because this is the intended position of the device in a fire situation, the staff concludes that as long as the degraded condition pertains to the closure mechanisms and not the structural integrity of the device, the licensee's proposed Technical Specification change is acceptable.

The remaining changes are of an editorial nature which have improved the clarity and organization of the Technical Specifications.

Based on the above evaluation, the staff concludes that the licensee's proposed Technical Specification amendment, as delineated in the February 6, 1989 letter and as amended by letter dated November 10, 1989, are acceptable.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments involve a change in a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves 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 the amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the 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 the amendments.

5.0 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, (2) such activities will be conducted in compliance with the Commission's regulation, 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: Dennis Kubicki, SPLB

Dated: February 1, 1990

