

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

## RELATED TO AMENDMENT NO. 201 TO FACILITY OPERATING LICENSE NO. DPR-58

## AND AMENDMENT NO. 186 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 <u>INTRODUCTION</u>

By letters dated November 12, 1993, November 18, 1994, May 30, 1995, and August 8, 1995, the Indiana Michigan Power Company (the licensee) requested amendments to the Technical Specifications (TS) appended to Facility Operating License Nos. DPR-58 and DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2. The proposed amendments would delete from the Unit 1 TS Section 5.9.1 and Table 5.9-1, and from the Unit 2 TS Section 5.7.1 and Table 5.7-1. These specifications contain cyclic and transient limits for the reactor coolant and secondary systems. The limits of these TS would be relocated to the Updated Final Safety Analysis Report (UFSAR) and would be administratively controlled. In addition, the Index and Administrative Controls Sections would be revised to accommodate the change. The November 18, 1994, letter provided an additional administrative TS change to Section 6 to correct a reference from the deleted table to the UFSAR. The May 30, 1995, letter provided a change to the administrative controls section to require that a program be implemented and maintained which would track cyclic and transient occurrences. The August 8, 1995, letter provided additional clarifying information which revised the proposed TS to specify the section of the UFSAR that lists the cyclic and transient occurrences to be tracked. These changes were within the scope of the original application and did not affect the NRC staff's initial proposed no significant hazards considerations determination.

#### 2.0 BACKGROUND

9510050018 950928 PDR ADDCK 05000315

PDR

Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to state TS to be included as part of the license. The Commission's regulatory requirements related to the content of TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TS.

The Commission has provided guidance for the contents of TS in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power

Reactors" ("Final Policy Statement"), 58 FR 39132 (July 22, 1993), in which the Commission indicated that compliance with the Final Policy Statement satisfies §182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TS to licensee-controlled documents, consistent with the standard enunciated in *Portland General Electric Co*. (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety."

Consistent with this approach, the Final Policy Statement identified four criteria to be used in determining whether a particular matter is required to be included in the TS, as follows: (1) installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; and (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety. As a result, existing TS requirements which fall within or satisfy any of the criteria in the Final Policy Statement must be retained in the TS, while those TS requirements which do not fall within or satisfy these criteria may be relocated to other, licensee-controlled documents.

#### 3.0 EVALUATION

Currently, specification 5.9.1 (Unit 1) and 5.7.1 (Unit 2) of the Cook TS states that, "The components identified in Tablé 5.9-1 (5.7-1) are designed and shall be maintained within the cyclic or transient limits of Table 5.9-1 (5.7-1)." This table lists cyclic and transient operating conditions which are assumed to occur over the service lifetime of the plant, and which are considered to be sufficiently severe or frequent to be of possible significance to the fatigue life of reactor coolant system (RCS) components. The licensee must monitor the occurrence of these cyclic/transient conditions to ensure that the components of the RCS are not subjected to conditions that are more severe than those which were considered in the component fatigue

<sup>&</sup>lt;sup>1</sup>The Commission recently adopted amendments to 10 CFR 50.36, pursuant to which the rule was revised to codify and incorporate these criteria. See Final Rule, "Technical Specifications," 60 FR 36953 (July 19, 1995). The Commission indicated that reactor core isolation cooling, isolation condenser, residual heat removal, standby liquid control, and recirculation pump trip systems are included in the TS under Criterion 4, although it recognized that other structures, systems, and components could also meet this criterion. (60 FR at 36956)

analyses which were performed to comply with Section III of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Section III). Although limits are provided in the table, there are no specific limiting conditions for operation or action statements provided.

The licensee proposed to delete TS Table 5.9-1 (5.7-1), relocate the table of limits to UFSAR, Section 4.1, and revise TS Section 6, Administrative Controls, to maintain record of transient or operational cycles for those facility components identified in the UFSAR. The licensee indicated that a plant procedure already exists that verifies that the requirements of the component cyclic and transient limits table are implemented. To emphasize the importance of the table in the UFSAR, the licensee will add a note to the plant procedure to ensure that any changes to the component cyclic or transient limits undergo an unreviewed safety question determination per the requirements of 10 CFR 50.59.

The proposed change is consistent with the *improved* "Standard Technical Specifications - Westinghouse Plants," NUREG 1431, September 1992. The Procedures, Programs, and Manuals section of the *improved* STS specifies a Component Cyclic or Transient Limit program to track occurrences for components listed in the UFSAR. The Record Retention section of the *improved* STS requires maintaining records of transients or operational cycles for components identified in the UFSAR.

The staff has reviewed the licensee's proposed change and supporting information, and finds that it is adequate to ensure that RCS fatiguesignificant cyclic/transient occurrences are properly monitored. The removal of TS Table 5.9-1 (5.7-1) in conjunction with the associated changes, will not eliminate the licensee's responsibility to ensure that the cyclic/transient limits of the RCS are properly maintained, nor will it change the plant's design bases or operating procedures. Therefore, the staff finds that the licensee's proposed amendments are acceptable.

#### 4.0 <u>SUMMARY</u>

The staff reviewed the proposed changes and determined that the removal of these tables and the related requirements do not eliminate the requirements for the licensee to ensure that the system, structure, or component is capable of performing its safety function. Although these tables are removed from the TS and incorporated into D.C. Cook administratively controlled documents, the licensee must continue to evaluate any plant modifications that affect any of these components in accordance with 10 CFR 50.59. Should the licensee's determination conclude that an unreviewed safety question is involved, due to either (1) an increase in the probability or consequence of accidents or malfunctions of equipment important to safety, (2) the creation of a possibility for an accident or malfunction of a different type than any evaluated previously, or (3) a reduction in the margin of safety, NRC approval and a license amendment would be required prior to implementation of the change. Based on this review, the staff concluded that 10 CFR 50.36 does not require these tables to be retained in the TS. The staff determined that the inclusion of these tables is an operational detail related to the licensee's safety analysis, which are adequately controlled by the requirements of 10 CFR 50.59. Therefore, the continued processing of license amendments related to revisions of the affected tables, where the revisions to those requirements do not involve an unreviewed safety question under 10 CFR 50.59, would afford no significant benefit with regard to protecting the public health and safety.

The staff has concluded, therefore, that removal of these tables and references to them is acceptable because (1) their inclusion in the TS is not specifically required by 10 CFR 50.36 or other regulations, (2) the tables have been incorporated into D.C. Cook administratively controlled documents, and (3) changes that are deemed to involve an unreviewed safety question will require prior NRC approval in accordance with 10 CFR 50.59(c).

#### 5.0 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.

#### 6.0 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. 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 the amendments involve no significant hazards consideration and there has been no public comment on such finding (58 FR 67849). 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 énvironmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

#### 7.0 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 Contributors: John B. Hickman M. McBrearty

Date: September 28, 1995