



**INDIANA  
MICHIGAN  
POWER**

*A unit of American Electric Power*

**Indiana Michigan Power**  
Cook Nuclear Plant  
One Cook Place  
Bridgman, MI 49106  
AEP.com

March 7, 2006

AEP:NRC:6090  
10 CFR 50.90

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Stop O-P1-17  
Washington, DC 20555-0001

SUBJECT: Donald C. Cook Nuclear Plant Units 1 and 2  
Docket Nos. 50-315 and 50-316  
Application for Amendment to Revise Technical Specification 5.5.2

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant Units 1 and 2, proposes to amend Appendix A, Technical Specifications (TS), of Facility Operating Licenses DPR-58 and DPR-74. I&M proposes to modify TS 5.5.2, "Leakage Monitoring Program," by expanding the list of systems monitored by the program and by making an editorial change. Presently, the Liquid Waste Disposal System, the Waste Gas System, and the Post-Accident Containment Hydrogen Monitoring System are included in the CNP leakage monitoring program, but are not listed in TS 5.5.2. I&M proposes adding these systems to the TS 5.5.2 list.

Enclosure 1 to this letter provides an oath and affirmation affidavit. Enclosure 2 provides I&M's evaluation of the proposed change. Attachments 1A and 1B provide the marked up TS pages for Unit 1 and Unit 2 respectively. Attachments 2A and 2B provide the proposed TS pages with the change incorporated for Unit 1 and Unit 2 respectively.

I&M requests Nuclear Regulatory Commission (NRC) review and approval in accordance with normal NRC review schedules for this type of request. I&M requests a 45-day implementation period following approval.

No pending amendment requests affect the TS pages that are submitted in this request. If any further submittals affect these TS pages, I&M will coordinate the change to the pages with the NRC Project Manager to ensure proper TS page control when the associated license amendment requests are approved. In addition, I&M has evaluated this proposed change in accordance with

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10 CFR 50.91(a)(1) using the criteria of 10 CFR 50.92(c) and has determined that this change does not involve a significant hazards consideration.

Copies of this letter and its enclosures and attachments are being transmitted to the Michigan Public Service Commission and Michigan Department of Environmental Quality in accordance with the requirements of 10 CFR 50.91.

This letter contains no new commitments. Should you have any questions, please contact Mr. Michael K. Scarpello, Regulatory Affairs Supervisor at (269) 466-2649.

Sincerely,



Joseph N. Jensen  
Site Vice President

RV/rdw

Enclosures:

1. Affirmation
2. Application for Amendment to Revise Technical Specification 5.5.2

Attachments:

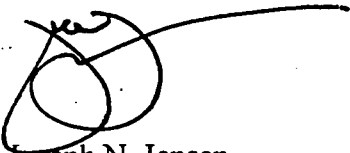
- 1A. Unit 1 Technical Specification Page Marked to Show Proposed Change
- 1B. Unit 2 Technical Specification Page Marked to Show Proposed Change
- 2A. Unit 1 Proposed Technical Specification Page
- 2B. Unit 2 Proposed Technical Specification Page

c: J. L. Caldwell – NRC Region III  
K. D. Curry – AEP Ft. Wayne  
J. T. King – MPSC  
MDEQ – WHMD/RPMWS  
NRC Resident Inspector  
P. S. Tam – NRC Washington, DC

**AFFIRMATION**

I, Joseph N. Jensen, being duly sworn, state that I am Site Vice President of Indiana Michigan Power Company (I&M), that I am authorized to sign and file this request with the Nuclear Regulatory Commission on behalf of I&M, and that the statements made and the matters set forth herein pertaining to I&M are true and correct to the best of my knowledge, information, and belief.

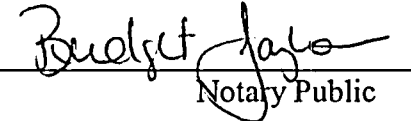
Indiana Michigan Power Company



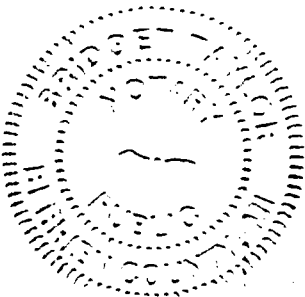
Joseph N. Jensen  
Site Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 7<sup>th</sup> DAY OF March, 2006

  
\_\_\_\_\_  
Notary Public

My Commission Expires 6/10/2007



## Enclosure 2 to AEP:NRC:6090

### Application for Amendment to Revise Technical Specification 5.5.2

#### 1.0 DESCRIPTION

Pursuant to 10 CFR 50.90, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP) Units 1 and 2, proposes to amend Appendix A, Technical Specifications (TS), of Facility Operating Licenses DPR-58 and DPR-74. I&M proposes to modify TS 5.5.2, "Leakage Monitoring Program," by making the list of monitored systems all-inclusive.

#### 2.0 PROPOSED CHANGE

The proposed change expands the list of systems in Unit 1 and Unit 2 TS 5.5.2 to include the Liquid Waste Disposal System, the Waste Gas System, and the Post-Accident Containment Hydrogen Monitoring System. Additionally, the proposed change revises the format for the currently listed post-accident sampling system by using title case and adding the word system.

#### 3.0 BACKGROUND

NUREG-0578 (Reference 1), Item 2.1.6.a as supplemented by a Nuclear Regulatory Commission (NRC) letter dated October 17, 1979 (Reference 2), initially provided recommendations for a program to ensure the integrity of systems outside containment likely to contain highly radioactive materials after an accident. The recommendations were issued as a Three Mile Island Lessons Learned Category "A" item, requiring immediate action to perform leak reduction measures. The recommendations were later clarified in NUREG-0737 as Item III.D.1.1 (Reference 3).

On February 26, 1980, I&M personnel met with members of the NRC staff to discuss implementation of NUREG-0578 Category "A" items. The NRC staff requested that I&M document the information presented at the meeting. By Reference 4, I&M responded to the request and addressed Item 2.1.6.a by including a list of systems outside of containment that would or could contain highly radioactive fluids during a serious accident or transient and that were monitored for leakage. The NRC concluded, by Reference 5, that CNP was in compliance with Item 2.1.6.a. Additionally, the NRC approved a license condition (Reference 6) for both Unit 1 and Unit 2 requiring the implementation of a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This license condition did not list the systems included in the program.

When CNP converted to the Improved Technical Specifications (ITS), the license condition was deleted and TS 5.5.2, "Leakage Monitoring Program" was added to the ITS. TS 5.5.2 is based on NUREG-1431 (Reference 7) TS 5.5.2, "Primary Coolant Sources Outside Containment," which includes a list of plant-specific systems that have been evaluated for inclusion in the Leakage Monitoring Program. The three systems being proposed for inclusion in TS 5.5.2, although included in CNP's Leakage Monitoring Program described in Reference 4, were overlooked during the conversion process, and not included in TS 5.5.2.

I&M subsequently discovered that the three systems, although monitored in accordance with the Leakage Monitoring Program, had not been included in TS 5.5.2. Following the discovery, I&M implemented administrative controls in accordance with Administrative Letter 98-10 pending approval of the proposed amendment.

#### **4.0 TECHNICAL ANALYSIS**

The proposed amendment does not alter the design or the operation of the CNP. Additionally, the proposed amendment does not impact any safety analysis. The amendment incorporates additional systems that are presently in the Leakage Monitoring Program into the technical specifications.

#### **5.0 REGULATORY SAFETY ANALYSIS**

##### **No Significant Hazards Consideration**

Indiana Michigan Power Company (I&M) has evaluated whether or not a significant hazards consideration is involved with the proposed amendments by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of Amendment," as discussed below:

- 1.0 Does the proposed change involve a significant increase in the probability or consequences of any accident previously evaluated?

Response: No.

The proposed change revises an administrative technical specification by expanding a list of systems that are included in the leakage monitoring program and revises the format for a system listed in Technical Specifications (TS) 5.5.2. There is no change to any plant equipment or procedures impacting equipment operation.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

- 2.0 Does the proposed change create the possibility of a new or different kind of accident from an accident previously evaluated?

Response: No.

The proposed change revises an administrative TS by expanding a list of systems that are included in the leakage monitoring program and revises the format for a system listed in TS 5.5.2. The proposed change does not introduce any mechanisms that are potential accident initiators.

Therefore, the proposed change does not create the possibility of a new of different kind of accident from any previously evaluated.

3.0 Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed change revises an administrative TS by expanding a list of systems that are included in the leakage monitoring program and revising the format of a system listed in TS 5.5.2. The proposed change does not impact any systems or components that are relied on to mitigate the consequences of an accident.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, I&M concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

**Applicable Regulatory Requirements/Criteria**

The Donald C. Cook Nuclear Plant (CNP) leakage monitoring program was implemented in response to the lessons learned from the Three Mile Island accident (Reference 1). In response to Reference 1, I&M identified systems outside of containment that would contain highly radioactive materials that were included in the CNP leakage monitoring program. Amendment 49 to License DPR-58 and Amendment 34 to DPR-74 (Reference 6) required I&M to implement a leakage monitoring program for CNP Unit 1 and Unit 2.

**6.0 ENVIRONMENTAL CONSIDERATION**

I&M has evaluated this license amendment request against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. I&M has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined by 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

## 7.0 REFERENCES

1. NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations," dated July 1979.
2. Letter from Darrell G. Eisenhut, NRC, to All Operating Nuclear Power Plants, "Radioactive Release at North Anna Unit 1 and Lessons Learned," dated October 17, 1979.
3. NUREG-0737, "Clarification of TMI Action Plan Requirements," dated November 1980.
4. Letter from John E. Dolan, I&M, to Harold R. Denton, NRC, "Donald C. Cook Nuclear Plant Unit Nos. 1 and 2, Docket Nos. 50-315 and 50-316, License Nos. DPR-58 and DPR-74," AEP:NRC:00334B, dated March 10, 1980.
5. Letter from A. Schwencer, NRC, to John Dolan, I&M, dated March 20, 1980.
6. Letter from Steven A. Varga, NRC, to John Dolan, I&M, dated August 25, 1981.
7. NUREG-1431, Revision 2, "Standard Technical Specifications Westinghouse Plants," dated June 2001.

Attachment 1A to AEP:NRC:6090

UNIT 1  
TECHNICAL SPECIFICATION PAGE  
MARKED TO SHOW PROPOSED CHANGE

5.5-2



## 5.5 Programs and Manuals

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### 5.5.2 Leakage Monitoring Program

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include Safety Injection System, Chemical and Volume Control System, Residual Heat Removal System, Containment Spray System, Liquid Waste Disposal System, Waste Gas System, Post-Accident Containment Hydrogen Monitoring System, Post-Accident Sampling System, and the boron injection tank injection flowpath of the Centrifugal Charging System. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at least once per 24 months.

The provisions of SR 3.0.2 are applicable.

### 5.5.3 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;
- b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001-20.2402;
- c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM;
- d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;
- e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days;

Attachment 1B to AEP:NRC:6090

UNIT 2  
TECHNICAL SPECIFICATION PAGE  
MARKED TO SHOW PROPOSED CHANGE

5.5-2

## 5.5 Programs and Manuals

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Attachment 2A to AEP:NRC:6090

UNIT 1  
PROPOSED TECHNICAL SPECIFICATION PAGE

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## 5.5 Programs and Manuals

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Attachment 2B to AEP:NRC:6090

UNIT 2  
PROPOSED TECHNICAL SPECIFICATION PAGE

5.5-2

## 5.5 Programs and Manuals

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