



Entergy Nuclear Operations, Inc.  
Palisades Nuclear Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043

May 22, 2007

10 CFR 50.90

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Palisades Nuclear Plant  
Docket 50-255  
License No. DPR-20

License Amendment Request: Inservice Testing Program

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Entergy Nuclear Operations, Inc. (ENO) requests Nuclear Regulatory Commission (NRC) review and approval of a proposed license amendment for the Palisades Nuclear Plant. The proposed amendment affects Technical Specification (TS) Section 5.5.7, "Inservice Testing Program."

ENO proposes to incorporate changes based on NRC-approved Technical Specification Task Force (TSTF) TSTF-479-A, "Changes to Reflect Revision of 10 CFR 50.55a," revision 0, as modified by NRC-approved TSTF-497, "Limit Inservice Testing Program [Surveillance Requirement] SR 3.0.2 Application to Frequencies of Two Years or Less," revision 0. The proposed changes include two deviations from the NRC-approved TSTFs that are administrative in nature.

Enclosure 1 provides a detailed description of the proposed change, background and technical analysis, No Significant Hazards Consideration Determination, and Environmental Review Consideration. Enclosure 2 provides the revised TS pages reflecting the proposed change. Enclosure 3 provides the annotated TS pages showing the changes proposed.

ENO requests approval of this proposed license amendment by June 1, 2008, with a 60-day implementation period.

A copy of this request has been provided to the designated representative of the State of Michigan.

A047

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

I declare under penalty of perjury that the foregoing is true and correct. Executed on  
May 22, 2007.



Christopher J. Schwarz  
Site Vice President  
Palisades Nuclear Plant

Enclosures (3)

CC Regional Administrator, Region III, USNRC  
Project Manager, Palisades, USNRC  
NRC Resident Inspector, Palisades USNRC

# ENCLOSURE 1

## DESCRIPTION OF REQUESTED CHANGES

### 1.0 DESCRIPTION

Entergy Nuclear Operations, Inc. (ENO) requests to amend Renewed Facility Operating License DPR-20 for the Palisades Nuclear Plant (PNP). The proposed amendment affects Technical Specification (TS) Section 5.5.7, "Inservice Testing Program."

ENO proposes to incorporate changes based on NRC-approved Technical Specification Task Force (TSTF) TSTF-479-A, "Changes to Reflect Revision of 10 CFR 50.55a," revision 0, as modified by NRC-approved TSTF-497, "Limit Inservice Testing Program [Surveillance Requirement] SR 3.0.2 Application to Frequencies of Two Years or Less," revision 0. The proposed changes include two deviations from the NRC-approved TSTFs that are administrative in nature.

### 2.0 PROPOSED CHANGES

ENO proposes to revise the requirements in TS 5.5.7 to update references to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (B&PV Code), Section XI as the source of requirements for the inservice testing of ASME Code Class 1, 2, and 3 pumps and valves. The proposed changes delete reference to Section XI of the Code and incorporate reference to the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code) and address the applicability of SR 3.0.2 to other normal and accelerated frequencies specified as two years or less in the Inservice Testing (IST) Program.

ENO proposes to revise TS 5.5.7 to indicate that the IST Program shall incorporate testing frequencies applicable to the ASME OM Code. ENO proposes to revise TS 5.5.7b. to indicate that there may be some nonstandard testing frequencies specified as two years or less in the IST Program to which the provisions of SR 3.0.2 are applicable.

The proposed changes include two deviations from the NRC-approved TSTFs that are administrative in nature. ENO proposes to add "ASME" to TS 5.5.7 to make references to "ASME OM Code." ENO proposes to use the term "intervals" instead of "frequencies."

### 3.0 BACKGROUND

Currently PNP TS 5.5.7 references ASME B&PV Code, Section XI, as the standard for testing frequencies and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves. The ASME Code of record for the fourth ten-year IST Interval Program for PNP is the ASME OM Code 2001 Edition through the 2003 Addenda. The Fourth Inservice Test Interval began on March 25, 2006.

In 1990, the ASME published the initial edition of the ASME OM Code which established rules for inservice testing of pumps and valves. The ASME intended

that the ASME OM Code replace Section XI of the B&PV Code for inservice testing of pumps and valves. TSTF-479-A revised NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants," TS 5.5.8, "Inservice Testing Program," to indicate that the IST Program shall include testing frequencies applicable to the ASME OM Code. TSTF-479-A also revised TS 5.5.8b to state, "The provisions of SR 3.0.2 are applicable to the above required frequencies and other normal and accelerated frequencies specified in the Inservice Testing Program for performing inservice testing activities."

After the issuance of TSTF-479, the NRC determined that TSTF-479 did not provide adequate justification for applying SR 3.0.2 to test frequencies specified in the IST Program as greater than two years. The NRC determined that it would be acceptable to apply SR 3.0.2 to IST frequencies of two years or less that are not listed in the IST Program. TSTF-497, revision 0, reflects the revised NRC position that the 25% IST interval extension provision of SR 3.0.2 may be applied to test frequencies of two years or less.

#### **4.0 TECHNICAL ANALYSIS**

The purposes of the IST Program are to assess the operational readiness of pumps and valves, to detect degradation that might affect component operability, and to maintain safety margins, with provisions for increased surveillance and corrective action. 10 CFR 50.55a defines the requirements for applying industry codes to each licensed nuclear powered facility.

Section XI of the ASME Code has been revised on a continuing basis over the years to provide updated requirements for the inservice inspection and IST of components. Until 1990, the ASME Code requirements addressing the IST of pumps and valves were contained in Section XI, Subsections IWP (pumps) and IWV (valves). In 1990, the ASME published the initial edition of the OM Code that provides the rules for the IST of pumps and valves. Since the establishment of the 1990 Edition of the OM Code, the rules for IST are no longer being updated in Section XI. As identified in NRC SECY-99-017, "Proposed Amendment to 10 CFR 50.55a," the NRC has generally considered the evolution of the ASME Code to result in a net improvement in the measures for inspecting piping and components, and testing pumps and valves.

10 CFR 50.55a(f)(4)(ii) requires IST Programs to comply with the requirements of the latest edition and addenda of the ASME Code, as referenced in 10 CFR 50.55a(b), 12 months before the start of the new 10-year (120-month) interval. TS 5.5.7 currently references the ASME Boiler and Pressure Vessel Code, Section XI, as the source of the IST Program requirements for ASME Code 1, 2, and 3 components. The code of record for the ongoing fourth 10-year IST Interval Program is the ASME OM Code 2001 Edition through 2003 Addenda. The proposed changes to TS 5.5.7 are necessary for consistency with the IST requirements of 10 CFR 50.55a.

Additionally, the proposed changes to TS 5.5.7 indicate that the provisions of SR 3.0.2 are applicable to other normal and accelerated IST intervals specified as two years or less that are not specifically listed in the testing intervals that are identified in TS 5.5.7. The IST Program may have intervals for testing that are based on risk or other factors, and do not conform to the standard testing intervals specified in TS 5.5.7. The interval of the surveillance may be determined through a mix of risk-informed and performance-based means in accordance with the IST Program. Application of SR 3.0.2 to other IST intervals specified as two years or less is consistent with the guidance in NUREG-1482, "Guidelines for Inservice Testing at Nuclear Power Plants," paragraph 3.1.3. This would indicate that the 25% extension specified in SR 3.0.2 is applicable to any IST interval specified as two years or less.

The proposed change to use the term "intervals" instead of "frequencies" is a deviation from the TSTFs. This deviation is consistent with the current text in the TS. This deviation is administrative.

The proposed change to add "ASME" to TS 5.5.7 to make references to "ASME OM Code" is a deviation from TSTF-479-A. This deviation is administrative. This administrative deviation makes PNP more consistent with NUREG-1432.

## **5.0 REGULATORY SAFETY ANALYSIS**

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

Pursuant to 10 CFR 50.90, Entergy Nuclear Operations, Inc. (ENO) requests to amend Renewed Facility Operating License DPR-20 for the Palisades Nuclear Plant. The proposed change would revise Appendix A, Technical Specifications (TS), to incorporate changes based on NRC-approved Technical Specification Task Force (TSTF) TSTF-479-A, "Changes to Reflect Revision of 10 CFR 50.55a," revision 0, as modified by TSTF-497, "Limit Inservice Testing Program SR 3.0.2 Application to Frequencies of Two Years or Less," revision 0. The proposed changes include two deviations from the NRC-approved TSTFs that are administrative in nature.

ENO has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of Amendment," as discussed below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. The

proposed changes do not have any impact on the integrity of any plant system, structure, or component that initiates an analyzed event. The proposed changes would not alter the operation of, or otherwise increase the failure probability of any plant equipment that initiates an analyzed accident. Thus, the probability of any accident previously evaluated is not significantly increased.

The proposed changes do not affect the ability to mitigate previously evaluated accidents, and do not affect radiological assumptions used in the evaluations. The proposed changes do not change or alter the design criteria for the systems or components used to mitigate the consequences of any design basis accident. The proposed amendment does not involve operation of the required structures, systems, or components (SSCs) in a manner or configuration different from those previously recognized or evaluated. Thus, the radiological consequences of any accident previously evaluated are not increased.

Therefore, operation of the facility in accordance with the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed amendment does not involve a physical alteration of any SSC or a change in the way any SSC is operated. The proposed amendment does not involve operation of any required SSCs in a manner or configuration different from those previously recognized or evaluated. No new failure mechanisms would be introduced by the changes being requested.

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

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

The amendment does not involve a significant reduction in a margin of safety. The proposed amendment does not affect the acceptance criteria for any safety analysis analyzed accidents or anticipated operational occurrences. The proposed amendment does not alter the limiting values

and acceptance criteria used to judge the continued acceptability of components tested by the IST Program. The safety function of the affected pumps and valves will be maintained.

Therefore, the proposed amendment would not involve a significant reduction in a margin of safety.

Based on the evaluation above, ENO concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c).

## 5.2 Applicable Regulatory Requirements/Criteria

10 CFR 50.55a defines the requirements for applying industry codes to each licensed nuclear powered facility. Licensees are required by 10 CFR 50.55a(f)(4)(i) to initially prepare programs to perform inservice testing of certain ASME Section III, Code Class 1, 2, and 3 pumps and valves during the initial 120-month interval. The regulations require that programs be developed utilizing the latest edition and addenda incorporated into paragraph (b) of 10 CFR 50.55a on the date 12 months prior to the date of issuance of the operating license subject to the limitations and modification identified in paragraph (b).

In conclusion, based on the considerations discussed above, (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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

## 6.0 ENVIRONMENTAL CONSIDERATION

ENO 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 in 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(c)(9). Therefore, pursuant to 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. TSTF-479-A, "Changes to Reflect Revision of 10 CFR 50.55a," Revision 0.
2. TSTF-497, "Limit Inservice Testing Program SR 3.0.2 Application to Frequencies of Two Years or Less," Revision 0.
3. American Society of Mechanical Engineers (ASME), "Operation and Maintenance of Nuclear Power Plants (OM Code)," 2001 Edition through the 2003 Addenda.
4. SECY-99-017, "Proposed Amendment to 10 CFR 50.55a," January 13, 1999.
5. NUREG 1482, "Guidelines for Inservice Testing at Nuclear Power Plants," Revision 1.
6. NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants."

## **8.0 PRECEDENT**

By letter dated February 1, 2006 (ADAMS Accession # ML060410117), as supplemented by letter dated May 24, 2006 (ADAMS Accession # ML061520402), Wolf Creek Nuclear Operating Corporation (WCNOC) submitted a license amendment request (LAR) for Wolf Creek Generating Station (Wolf Creek). The LAR requested changes to the Wolf Creek TS, specifically, changes that implemented NRC-approved TSTF-479. By letter dated November 15, 2006 (ADAMS Accession # ML062980233), the NRC approved the LAR for Wolf Creek. Similar to this submittal, ENO is requesting approval to implement changes included in TSTF-479. WCNOC's submittal did not include changes from TSTF-497 that ENO is requesting for Palisades. However, the intent of TSTF-497 was included in WCNOC's LAR. ENO's submittal differs from WCNOC's submittal in that ENO is specifically requesting to implement TST-497 and make administrative deviations to TSTF-479 and TSTF-497.

**ENCLOSURE 2**

**LICENSE AMENDMENT REQUEST: INSERVICE TESTING PROGRAM**

REVISED TECHNICAL SPECIFICATION PAGE 5.0-11  
AND  
OPERATING LICENSE PAGE CHANGE INSTRUCTIONS

2 Pages Follow

**ATTACHMENT TO LICENSE AMENDMENT NO.**

**FACILITY OPERATING LICENSE NO. DPR-20**

**DOCKET NO. 50-255**

Remove the following pages of Appendix A Technical Specifications and replace with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

**REMOVE**

5.0-11

**INSERT**

5.0-11

5.5 Reporting Requirements

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5.5.7 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies applicable to the ASME Code for Operations and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda as follows:

<u>ASME OM Code terminology for inservice testing activities</u>	<u>Required interval for performing inservice testing activities</u>
Weekly	≤ 7 days
Monthly	≤ 31 days
Quarterly or every 3 months	≤ 92 days
Semiannually or every 6 months	≤ 184 days
Every 9 months	≤ 276 days
Yearly or annually	≤ 366 days
Biennially or every 2 years	≤ 731 days

- b. The provisions of SR 3.0.2 are applicable to the above required intervals and to other normal and accelerated intervals specified as 2 years or less in the Inservice Testing Program for performing inservice testing activities;
- c. The provisions of SR 3.0.3 are applicable to inservice testing activities; and
- d. Nothing in the ASME OM Code shall be construed to supersede the requirements of any Technical Specification.

5.5.8 Steam Generator (SG) Program

A Steam Generator Program shall be established and implemented to ensure that SG tube integrity is maintained. In addition, the Steam Generator Program shall include the following provisions:

- a. Provisions for condition monitoring assessments. Condition monitoring assessment means an evaluation of the “as found” condition of the tubing with respect to the performance criteria for structural integrity and accident induced leakage. The “as found” condition refers to the condition of the tubing during an SG inspection outage, as determined from the inservice inspection results or by other means, prior to the plugging of tubes. Condition monitoring assessments shall be conducted during each outage during which the SG tubes are inspected or plugged to confirm that the performance criteria are being met.
- b. Performance criteria for SG tube integrity. SG tube integrity shall be maintained by meeting the performance criteria for tube structural integrity, accident induced leakage, and operational LEAKAGE.

**ENCLOSURE 3**

**LICENSE AMENDMENT REQUEST: INSERVICE TESTING PROGRAM**

MARK-UP OF TECHNICAL SPECIFICATION PAGE 5.0-11  
(showing proposed changes)  
(additions are highlighted; deletions are strikethrough)

1 Page Follows

5.5 Reporting Requirements

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5.5.7 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies applicable to ~~specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda (B&PV for Operations and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda~~ as follows:

<u>B&amp;PV ASME OM Code terminology for inservice testing activities</u>	<u>Required interval for performing inservice testing activities</u>
Weekly	≤ 7 days
Monthly	≤ 31 days
Quarterly or every 3 months	≤ 92 days
Semiannually or every 6 months	≤ 184 days
Every 9 months	≤ 276 days
Yearly or annually	≤ 366 days
Biennially or every 2 years	≤ 731 days

- b. The provisions of SR 3.0.2 are applicable to the above required intervals and to other normal and accelerated intervals specified as 2 years or less in the Inservice Testing Program for performing inservice testing activities;
- c. The provisions of SR 3.0.3 are applicable to inservice testing activities; and
- d. Nothing in the ~~B&PV~~ ASME OM Code shall be construed to supersede the requirements of any Technical Specification.

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- b. Performance criteria for SG tube integrity. SG tube integrity shall be maintained by meeting the performance criteria for tube structural integrity, accident induced leakage, and operational LEAKAGE.