

April 13, 2006

Mr. Michael Kansler
President
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

SUBJECT: PILGRIM NUCLEAR POWER STATION - ISSUANCE OF AMENDMENT RE:
REMOVAL OF MAIN STEAM ISOLATION VALVE TWICE PER WEEK
TESTING SURVEILLANCE REQUIREMENT (TAC NO. MC7052)

Dear Mr. Kansler:

The Commission has issued the enclosed Amendment No. 220 to Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station. This amendment is in response to your application dated May 24, 2005. This amendment deletes the main steam isolation valve twice per week partial stroke testing surveillance specified in Technical Specification 4.7.A.2.b.1.c.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly *Federal Register* Notice.

Sincerely,

/RA/

James Shea, Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosures:

1. Amendment No. 220 to License No. DPR-35
2. Safety Evaluation

cc w/encls: See next page

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*See SE dated 01/03/06

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OFFICIAL RECORD COPY

Pilgrim Nuclear Power Station

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Pilgrim Nuclear Power Station

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ENTERGY NUCLEAR GENERATION COMPANY
ENTERGY NUCLEAR OPERATIONS, INC.
DOCKET NO. 50-293
PILGRIM NUCLEAR POWER STATION
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 220
License No. DPR-35

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by Entergy Nuclear Operations, Inc. (the licensee) dated May 24, 2005, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-35 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 220, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Richard J. Laufer, Chief
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the
Technical Specifications

Date of Issuance: April 13, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 220

FACILITY OPERATING LICENSE NO. DPR-35

DOCKET NO. 50-293

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove
3/4.7-6

Insert
3/4.7-6

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 220 TO FACILITY OPERATING LICENSE NO. DPR-35
ENERGY NUCLEAR GENERATION COMPANY
ENERGY NUCLEAR OPERATIONS, INC.
PILGRIM NUCLEAR POWER STATION
DOCKET NO. 50-293

1.0 INTRODUCTION

By letter dated May 24, 2005 (ADAMS Accession No. ML051520468), Entergy Nuclear Operations, Inc. (the licensee) submitted a request for a change to the Pilgrim Nuclear Power Station (Pilgrim) Technical Specifications (TSs). The proposed change would delete the main steam isolation valves (MSIVs) twice per week partial stroke testing surveillance specified in TS 4.7.A.2.b.1.c.

2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act of 1954, as amended (the "Act"), requires applicants for nuclear plant operating licenses to include TSs as part of the license. The Commission's regulatory requirements related to the content of TS are set forth in 10 CFR 50.36, "Technical specifications." The regulation requires that TSs 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 (SRs); (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TSs.

The Nuclear Regulatory Commission (NRC) staff and nuclear steam supply owners groups developed the Standard Technical Specifications (STS) that established models of the Commission's policy for TSs, and improved the format and clarity of the specifications. NUREG-1433, "Standard Technical Specifications General Electric Plants, BWR/4," Revision 3, was approved and issued for use by the NRC.

3.0 TECHNICAL EVALUATION

3.1 Specific Changes Requested

The licensee has proposed to delete SR 4.7.A.2.b.1.c, which requires that the main steam line power operated valves or as commonly referred to as MSIVs be exercised by partial closure and subsequent reopening twice per week. The TS Bases will also be revised to identify that the MSIVs are functionally tested in accordance with the inservice testing (IST) program.

3.2 Basis for Changes

The safety function of the MSIVs are to isolate the main steam lines in the event of a main steam line break, control rod drop, or loss of coolant accident in order to limit the loss of reactor coolant and/or the release of radioactive materials.

Pilgrim TS 3/4.13 requires full-stroke testing of the MSIVs to verify the valves safety function in accordance with the IST program, which is in compliance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code). The IST program requires full-stroke exercising and stroke timing of the MSIVs when practical during scheduled plant power reductions below 60% power, not to exceed a frequency greater than quarterly testing. For those cases when full-stroke testing cannot practically be conducted during a plant down power, valve stroking will be attempted again during the next scheduled plant down power. The IST surveillance tests the reliability, operability, and safety function of the MSIVs for fast and complete closure and reopening, and ensures that the closure times are within the limits of operability as assumed in the safety analysis. Additional testing is performed during refueling outages to demonstrate the functioning of the system.

The purpose of the twice weekly partial stroke test is to ensure that the MSIVs and their pilot valves are not binding. This partial stroke test actuates a test pilot valve instead of the pilot valves used for fast closure of the MSIVs. The partial closure movement does not test the safety function of the MSIVs for full closure, and is not as valid as the full stroke fast closure test of the MSIVs done in accordance with the IST program. The full-stroke fast closure test in compliance with TS 3.13 adequately demonstrates the safety function of the MSIVs and demonstrates that their associated pilot valves are not sticking.

The partial stroke test is a high risk surveillance with marginal or no impact on the reliability of the MSIVs safety function. The current twice per week partial stroke test while at power creates the potential for an inadvertent closure of an MSIV. This test is considered high risk due to the potential for closure of an MSIV, which would create higher steam flow in the other steam lines leading to possible reactor transients and/or reactor scrams.

The partial stroke test of the MSIVs at power is not necessary to assure safe reactor operation and reliability of the MSIVs. The full-stroke testing of the MSIVs in accordance with the IST program, while in compliance with TS 3.13, will continue to be performed to verify the safety function and closure times of the MSIVs. This verification of safety function and closure times ensures that Pilgrim will continue to comply with the design-basis accident analyses.

3.3 Staff Evaluation

The licensee proposed to delete SR 4.7.A.2.b.1.c, which requires that the MSIVs be exercised by partial closure and subsequent reopening twice per week. The SR 4.7.A.2.b.1.c test is a slow, partial closure of each MSIV. The testing arrangement is designed to give a slow closure of the MSIVs to avoid rapid changes in steam flow and nuclear system pressure, which could induce a transient condition. The partial closure test does not directly test the pilot valves used for fast closure of the MSIVs, but actuates a test pilot valve which slowly relieves pneumatic pressure from the actuator. The indirect indication partial closure movement does not test the safety function of the MSIVs for full closure, and is not as valid as the full-stroke fast closure test of the MSIVs done in accordance with the IST program. The full-stroke fast closure test in compliance with Pilgrim TS 3.13 adequately demonstrates the safety function of the MSIVs and verifies that the associated MSIV pilot valves are not sticking.

The NRC staff evaluated the licensee's submittal and concluded that the proposed change does not involve a significant increase in risk to the safe operation of the plant. The ASME Code requires fast closure testing of the Pilgrim MSIVs. The twice weekly testing to partially close and subsequently reopen the MSIVs is not required by the ASME Code and is not necessary to demonstrate adequate safety performance of the MSIVs. The twice weekly partial closure and reopening test utilizes a test pilot valve that is installed solely for the purpose of performing the slow speed partial closure test. This test pilot is not used during the fast closure test or normal actuation of the MSIVs. The NRC staff has determined that the proposed change is acceptable because (1) the fast closure test required by TS 3.13 verifies that the MSIVs can perform its safety function; (2) the test pilot used in the twice weekly test per SR 4.7.A.2.b.1.c is not repositioned for the safety-related fast closure function of the MSIVs; and (3) the General Electric STS NUREG-1433 Rev-3, does not contain a requirement to partial stroke the MSIVs.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Massachusetts State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and SRs. The NRC 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 amendment involves no significant hazards consideration, and there has been no public comment on such finding (70 FR 48205; August 16, 2005). Accordingly, the amendment meets 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 amendment.

6.0 CONCLUSION

The Commission 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: W. K. Poertner

Date: April 13, 2006