March 22, 2001

Mr. Mike Bellamy Site Vice President Entergy Nuclear Generation Company Pilgrim Nuclear Power Station 600 Rocky Hill Road Plymouth, MA 02360

SUBJECT: EVALUATION OF REQUEST FOR RELIEF FROM 10 CFR 50.55a(g)(6)(ii)(C),

IMPLEMENTATION OF APPENDIX VIII TO SECTION XI, DIVISION 1, 1995 EDITION WITH THE 1996 ADDENDA OF ASME CODE FROM ASME SECTION

XI REQUIREMENTS FOR PILGRIM NUCLEAR POWER STATION

(TAC NO. MB0562)

Dear Mr. Bellamy:

By letter dated November 15, 2000 (ENGC Letter 2.01.012), as supplemented on January 19, 2001, Entergy Nuclear Generation Company (Entergy/the licensee) requested relief from certain 1995/96 Adenda American Society of Mechanical Engineers Boiler and Pressure Vessel Code inservice inspection requirements associated with the implementation of Appendix VIII to Section XI for nondestructive examination personnel at the Pilgrim Nuclear Power Station. Based on our review of the information provided in your submittal, the staff finds that for relief request PRR-25, the alternative proposed is authorized pursuant to 10 CFR 50.55a(a)(3)(i) on the basis that the alternative provides an acceptable level of quality and safety. The basis for the staff's conclusion is in the enclosed safety evaluation. This action closes TAC No. MB0562. If you have any questions regarding the relief request, please contact Alan Wang at (301) 415-1445.

Sincerely,

/RA/

James W. Clifford, Chief, Section 2 Project Directorate I Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosure: Safety Evaluation

cc w/encl: See next page

Mr. Mike Bellamy Site Vice President Entergy Nuclear Generation Company Pilgrim Nuclear Power Station 600 Rocky Hill Road Plymouth, MA 02360

SUBJECT: EVALUATION OF REQUEST FOR RELIEF FROM 10 CFR 50.55a(g)(6)(ii)(C),

IMPLEMENTATION OF APPENDIX VIII TO SECTION XI, DIVISION 1, 1995 EDITION WITH THE 1996 ADDENDA OF ASME CODE FROM ASME SECTION

XI REQUIREMENTS FOR PILGRIM NUCLEAR POWER STATION

(TAC NO. MB0562)

### Dear Mr. Bellamy:

By letter dated November 15, 2000 (ENGC Letter 2.01.012), as supplemented on January 19, 2001, Entergy Nuclear Generation Company (Entergy/the licensee) requested relief from certain 1995/96 Adenda American Society of Mechanical Engineers Boiler and Pressure Vessel Code inservice inspection requirements associated with the implementation of Appendix VIII to Section XI for nondestructive examination personnel at the Pilgrim Nuclear Power Station. Based on our review of the information provided in your submittal, the staff finds that for relief request PRR-25, the alternative proposed is authorized pursuant to 10 CFR 50.55a(a)(3)(i) on the basis that the alternative provides an acceptable level of quality and safety. The basis for the staff's conclusion is in the enclosed safety evaluation. This action closes TAC No. MB0562. If you have any questions regarding the relief request, please contact Alan Wang at (301) 415-1445.

Sincerely,

/RA/

James W. Clifford, Chief, Section 2

Project Directorate I

Division of Licensing Project Management

Office of Nuclear Reactor Regulation

**DISTRIBUTION:** 

PUBLIC J. Clifford G. Hill (2) OGC

PDI-2 R/F T. Clark ACRS JLinville, RI

E. Adensam A. Wang J. Shea

ACCESSION NUMBER: ML010320604

\*See previous concurrence

OFFICE	PM:PDI-2	LA:PDI-2	BC:EMCB *	OGC*	SC:PDI-2
NAME	AWang	TClark	WBateman	MO'Neill	JClifford
DATE	3/19/01	3/19/01	2/12/01	3/5/01	3/21/01

Official Record Copy

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# FOR RELIEF REQUEST FROM ASME SECTION XI REQUIREMENTS

# **ENTERGY NUCLEAR GENERATION COMPANY**

### PILGRIM NUCLEAR POWER STATION

**DOCKET NO. 50-293** 

#### 1.0 INTRODUCTION

The inservice inspection (ISI) of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code) Class 1, 2, and 3 components is to be performed in accordance with Section XI of the ASME Code and applicable addenda as required by 10 CFR 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). Title 10 CFR 50.55a(a)(3) states in part that alternatives to the requirements of paragraph (g) may be used, when authorized by the NRC, if the licensee demonstrates that: (i) the proposed alternatives would provide an acceptable level of quality and safety; or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) will meet the requirements, except the design and access provisions and the preservice examination requirements, set forth in the ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein. The inservice inspection Code of record for the Pilgrim Nuclear Power Station (Pilgrim), third 10-year interval is the 1989 Edition of the ASME Code. The components (including supports) may meet the requirements set forth in subsequent editions and addenda of the ASME Code incorporated by reference in 10 CFR 50.55a(b) subject to the limitations and modifications listed therein and subject to Commission Approval.

By letter dated November 15, 2000, as supplemented on January 19, 2001, the Entergy Nuclear Generation Company (the licensee) requested relief from certain ultrasonic testing (UT) requirements pertaining to UT training during the third 10-year inservice inspection interval at Pilgrim. Relief request PRR-25 proposed using the American Society for Nondestructive

Testing (ASNT) SNT-TC-1A, "Personnel Qualification and Certification in Nondestructive Testing," August 1984 Edition as the qualification requirements for nondestructive examination of UT personnel until they can implement CP-189 "Standard for Qualification and Certification of Nondestructive Testing Personnel," 1991 Edition.

### 2.0 PRR-25, DELAYED IMPLEMENTATION OF CP-189

This relief request affects all components subject to the UT examination requirements of Appendix VIII to the 1995 Edition with 1996 Addenda of Section XI of the Code.

## 2.1 Code Requirements for which Relief is Requested

Title 10 CFR 50.55a(g)(6)(ii)(C) imposes implementation of Appendix VIII to the 1995 Edition with 1996 Addenda of Section XI of the Code. The implementation schedule for the Supplements to Appendix VIII are May 22, 2000, for Supplements 1, 2, 3, and 8; November 22, 2000, for Supplements 4 and 6; November 22, 2001, for Supplement 11; and November 22, 2002, for Supplement 5, 7, 10, 12, and 13. Appendix VIII references Appendix VII which references Subarticle IWA-2300 of Section XI of the 1995 Edition with 1996 Addenda of the Code. Subarticle IWA-2310 requires qualification of nondestructive (NDE) examiners according to ANSI/ASNT-CP-189, 1991 Edition, as amended by the requirements of Division 1 of the Code.

#### 2.2 <u>Licensee's Proposed Alternative to Code</u>

The proposed alternative is to continue initial certification and re-certification of UT personnel in accordance with the requirements contained in the 1989 Edition of ASME Section XI, through August 1, 2001. Personnel performing UT examinations shall meet the requirements specified in 10 CFR 50.55a as amended by 64 FR 51370 for the qualification of personnel by demonstration. The combination of a certification procedure based on SNT-TC-1A and a performance demonstration for personnel performing UT examination of welds or components will ensure the structural integrity of the system/components.

#### 2.3 Evaluation

The staff performed a detailed comparison of SNT-TC-1A and CP-189. CP-189 contains essentially everything that is in SNT-TC-1A and some additional requirements. CP-189 has a larger definition of terms which are applicable to performance demonstrations than SNT-TC-1A. CP-189 requires a written certification procedure detailing the program for qualifying and certifying UT personnel. CP-189 requires Level III personnel to answer more questions in the method-specific examination (questions on specifications, equipment, techniques, and procedures) and to pass a performance demonstration.

Except for Level III examiners, the changes from SNT-TC-1A to CP-189 are mostly programmatic and do not affect UT personnel skills. The licensee addresses the CP-189 requirement that Level III examiners demonstrate proficiency in UT in their submittal. The licensee committed to have UT Level III personnel performing Appendix VIII examinations demonstrate their proficiency with a UT performance demonstration, thereby satisfying the demonstration criterion in CP-189.

The Code has provided for an orderly transition from SNT-TC-1A to CP-189 with the continued recognition of certifications until re-certification is required. For Level I and II examinations, re-certification is every 3 years, and for Level III examiners, re-certification is every 5 years. However, the orderly transition by Code does not consider licensee specific difficulties. The licensee is requesting an extension until August 1, 2001, to implement CP-189 to accommodate a refueling outage scheduled for April 2001. The delay would provide the licensee with an opportunity to implement CP-189 with less impact after the refueling outage. Given the licensee's commitment to UT Level III performance demonstrations, the differences between SNT-TC-1A and CP-189 should not affect the proficiency of UT personnel over the short time that this relief is being requested. Therefore, the staff concludes that the proposed alternative would provide an acceptable level of quality and safety.

### 3.0 CONCLUSION

Based on the discussion above, the staff has concluded that the proposed alternative PRR-25 will provide an acceptable level of quality and safety. Pursuant to 10 CFR 50.55a(a)(3)(i), the proposed alternative RR-25 is authorized until August 1, 2001.

Principal Contributor: A. Wang

Date: March 22, 2001

#### Pilgrim Nuclear Power Station

CC:

Resident Inspector
U. S. Nuclear Regulatory Commission
Pilgrim Nuclear Power Station
Post Office Box 867
Plymouth, MA 02360

Chairman, Board of Selectmen 11 Lincoln Street Plymouth, MA 02360

Chairman, Duxbury Board of Selectmen Town Hall 878 Tremont Street Duxbury, MA 02332

Office of the Commissioner Massachusetts Department of Environmental Protection One Winter Street Boston, MA 02108

Office of the Attorney General One Ashburton Place 20th Floor Boston, MA 02108

Dr. Robert M. Hallisey, Director Radiation Control Program Commonwealth of Massachusetts Executive Offices of Health and Human Services 174 Portland Street Boston, MA 02114

Regional Administrator, Region I U. S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

John M. Fulton Assistant General Counsel Pilgrim Nuclear Power Station 600 Rocky Hill Road Plymouth, MA 02360-5599 Mr. C. Stephen Brennion Licensing Superintendent Pilgrim Nuclear Power Station 600 Rocky Hill Road Plymouth, MA 02360-5599

Mr. Jack Alexander
Manager, Reg. Relations and
Quality Assurance
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5599

Mr. David F. Tarantino Nuclear Information Manager Pilgrim Nuclear Power Station 600 Rocky Hill Road Plymouth, MA 02360-5599

Ms. Jane Perlov Secretary of Public Safety Executive Office of Public Safety One Ashburton Place Boston, MA 02108

Mr. Stephen J. McGrail, Director Attn: James Muckerheide Massachusetts Emergency Management Agency 400 Worcester Road Framingham, MA 01702-5399

Chairman, Citizens Urging Responsible Energy P.O. Box 2621 Duxbury, MA 02331

# Pilgrim Nuclear Power Station

Chairman Nuclear Matters Committee Town Hall 11 Lincoln Street Plymouth, MA 02360

Mr. William D. Meinert Nuclear Engineer Massachusetts Municipal Wholesale Electric Company P.O. Box 426 Ludlow, MA 01056-0426

Ms. Mary Lampert, Director Massachusetts Citizens for Safe Energy 148 Washington Street Duxbury, MA 02332