



Entergy Nuclear Operations, Inc.  
Pilgrim Station  
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William J. Riggs  
Director, Nuclear Assessment

September 18, 2002

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

**SUBJECT:** Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station  
Docket No. 50-293  
License No. DPR-35

Supplement to Pilgrim Relief Request (PRR)-27, Relief from 1989 ASME Code Section XI requirements for Certification of VT-2 visual examination personnel.

**REFERENCE:** Entergy Letter No. 2.02.051, "Pilgrim Relief Request (PRR)-27 Relief from 1989 ASME Code Section XI requirements for Certification of VT-2 visual examination personnel", dated June 5, 2002

**LETTER NUMBER:** 2.02.083

Dear Sir or Madam:

This letter provides supplementary information in support of the referenced Entergy request for NRC approval of Pilgrim Relief Request (PRR) No. 27, in support of refueling outage (RFO)-14. RFO-14 is scheduled to begin in April 2003. This letter supercedes the previous request.

PRR-27 is based on ASME Code Case N-546, "Alternative Requirements for Qualification of VT-2 Examination Personnel, Section XI, Division 1". The Code Case provides an alternative to the qualification and certification requirements of subsection IWA-2300 to Section XI of 1989 ASME Code (no addenda) for personnel who would conduct VT-2 visual examinations.

The supplementary information relates to the qualification of personnel for VT-2 visual examinations. Specifically, in addition to the Code Case N-546 required qualifications, Entergy commits to the following conditions for the qualification of Pilgrim personnel for VT-2 visual examinations.

1. Examination personnel would be qualified by examination to demonstrate knowledge of Section XI and plant-specific procedures for VT-2 visual examinations.
2. Examination personnel would be re-qualified in accordance with the frequency specified in IWA-2314 in the 1995 Edition of the ASME Code.

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Pilgrim Nuclear Power Station

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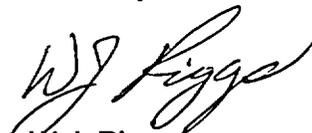
The ASME Code Case N-546 alternative method and the above commitments described above provide an acceptable level of quality and safety as required by 10 CFR 50.55a(a)(3)(i).

The NRC has previously approved the alternative provided by ASME Code Case N-546 and the above-described commitments for Fort Calhoun Station Unit 1 (TAC No. MB1497 dated August 15, 2001).

Revised PRR-27 is attached, which will be incorporated into the Pilgrim ISI Program upon receipt of NRC approval.

If you have any questions regarding the information contained in this letter, please contact Bryan Ford at (508) 830-8403.

Sincerely,



W.J. Riggs

Attachment: Pilgrim Relief Request No. 27 – 2 Pages

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Senior Resident Inspector  
Pilgrim Nuclear Power Station

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**SYSTEM/COMPONENT(S) FOR WHICH RELIEF IS REQUESTED**

Code Classes: 1, 2, and 3

References: ASME Section XI 1989 edition, paragraph IWA-2300; ASME Code Case N-546, "Alternate Requirements for Qualification of VT-2 Examination Personnel, Section XI, Division 1"; ASNT SNT-TC-1A 1984 edition

Examination Categories: B-E, B-P, C-B, C-H, D-A, D-B, and D-C

Item Numbers: B4.10 through B4.13, B15.10 through B15.71, C2.33, C7.10 through C7.80, D1.10, D2.10, D3.10

Component Numbers: All pressure retaining components within each system boundary subjected to a system hydrostatic/system pressure test.

**CODE REQUIREMENTS**

IWA-2312 states "Personnel performing visual examinations or using other NDE methods not addressed in SNT-TC-1A shall be qualified and certified to comparable levels of qualification as defined in SNT-TC-1A and the Employer's written practice."

**BASIS FOR RELIEF**

The VT-2 visual examination is conducted in accordance with ASME Section XI, paragraph IWA-2212 and subarticle IWA-5240 to locate evidence of leakage from pressure retaining components, or abnormal leakage from components with or without leakage collection system, as required, during the conduct of pressure testing.

As stated in Code Case N-546, plant personnel (e.g., licensed and non-licensed operators, system engineers, testing technicians) with the specified training and plant walkdown experience need not be qualified nor certified to comparable levels of competence in accordance with SNT-TC-1A. Experience in identifying equipment problems and knowledge of operating conditions will enhance the ability of plant personnel to locate leakage during VT-2 examination. With the specified four hours of training on Section XI requirements and plant specific procedures for VT-2 examinations, the designated plant personnel will understand how leaks should be identified and documented and be fully capable of performing VT-2 examinations.

A VT-2 examination is a simple examination for leakage. No special skills or technical training are required in order to observe water dripping from a component or bubbles forming on a joint wetted with leak detection solution. As such, qualification in accordance with the provisions of Code Case N-546 will not constitute a reduction in the level of quality and safety at Pilgrim Station. The qualification of personnel for VT-2 examinations under Code Case N-546 is less of a burden than maintaining the present VT-2 certification to levels comparable to those outlined in SNT-TC-1A.

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Use of this Code Case increases the pool of available personnel certified to perform VT-2 examinations. Certification of personnel already required to perform functions in the plant will reduce the number of personnel required to enter radiologically restricted areas, thereby enhancing efforts to keep radiation exposure as low as reasonably achievable.

Additionally, use of on-shift personnel will improve the process of returning systems to service. Prompt return to service of safety systems will improve the safety of the plant and the public.

Code Case N-546 allows those personnel most familiar with the walkdown of plant systems, such as licensed and non-licensed operators, local leak rate personnel, system engineers, inspection and nondestructive examination personnel to perform VT-2 examinations without formal qualification and certification. These personnel typically have a sound working knowledge of plant components and piping layouts, which makes them acceptable candidates for performing VT-2 visual examinations.

**ALTERNATE EXAMINATIONS**

Pilgrim Station will certify selected VT-2 examiners (licensed and non-licensed operators, local leak rate personnel, system engineers, maintenance supervisors, inspection and nondestructive examination personnel) in accordance with Code Case N-546 as an alternative to paragraph IWA-2300 of ASME Section XI, which requires certification to a level comparable to SNT-TC-1A and the Employer's written practice.

Case N-546 requires the following qualifications for VT-2 examiners:

1. At least 40 hours plant walkdown experience, such as that gained by licensed and non-licensed operators, local leak rate personnel, system engineers, and inspection and nondestructive examination personnel.
2. At least 4 hours of training on Section XI requirements and plant specific procedures for VT-2 visual examination.
3. Vision test requirements of IWA-2321, 1995 Edition.

In addition, the following conditions for the qualification of Pilgrim personnel for VT-2 visual examinations will be applied:

1. Examination personnel would be qualified by examination to demonstrate knowledge of Section XI and plant-specific procedures for VT-2 visual examinations.
2. Examination personnel would be re-qualified in accordance with the frequency specified in IWA-2314 in the 1995 Edition of the ASME Code.

PNPS will also implement procedural guidelines to ensure that consistent, quality VT-2 visual examinations are performed and will verify and maintain records to verify that persons selected are qualified by meeting the requirements of Code Case N-546. Additionally, persons other than those that performed the VT-2 examination shall perform an independent review and evaluation of all examination data indicating leakage.