



Entergy Nuclear Generation Company  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360

J. F. Alexander  
Director  
Nuclear Assessment

10 CFR 50.55a(a)(3)(i)

ENGC. Ltr. 2.01.008  
January 16, 2000

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

Docket No. 50-293  
License No. DPR-35

Pilgrim Relief Request (PRR)-26  
Relief from the Inspection Percentage Requirements under 1989 ASME Code, Articles  
IWB-2412 and Table IWB-2412-1 for Refueling Outage 13

Reference: "Pilgrim Risk-Informed Inservice Inspection Program", ENGC Letter No.  
2.00.084, dated December 27, 2000.

This letter requests NRC approval of Pilgrim Relief Request (PRR) No 26, in support of refueling outage (RFO)-13. RFO -13 is scheduled to begin on April 14, 2001.

This relief request is submitted in accordance with 10 CFR 50.55a(a)(3)(i) and applies to the minimum and maximum percentages of inspection requirements specified in the 1989 ASME Code, Article IWB-2412 and Table IWB-2412-1 for Class 1 code category B-J and B-F piping welds. This relief request is based upon the Pilgrim Risk-Informed Inservice Inspection Program, which was submitted for NRC review and approval on December 27, 2000. The attachment provides PRR-26 for your review and approval.

The RI-ISI Program has been developed in accordance with the EPRI methodology contained in EPRI TR-112657, "Risk-Informed Inservice Inspection Evaluation Procedure." EPRI TR 112657 was approved by NRC Safety Evaluation Report, dated October 28, 1999. The Pilgrim-specific RI-ISI program supports the conclusion that the proposed alternative provides an acceptable level of quality and safety as required by 10 CFR 50.55a(a)(3)(i).

NRC has previously approved RI-ISI Programs based upon EPRI Topical Report TR-112657 for James A. Fitzpatrick plant (Docket Number 50-333, TAC No. MA6926 dated September 12, 2000).

A047

ENGC Ltr. 2.01.008  
Page 2

If you have any questions regarding the information contained in this letter, please contact Walter Lobo at (508) 830-7940.

J. Alexander

WGL/PRR-26.doc

Attachment: Pilgrim Relief Request No. 26

CC: Mr. Alan B. Wang, Project Manager  
Project Directorate I-3  
Office of Nuclear Reactor Regulation  
Mail Stop: OWFN 8F2  
U. S. Nuclear Regulatory Commission  
1 White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

U.S. NRC, Region 1  
475 Allendale Road  
King of Prussia, PA 19406

Senior Resident Inspector  
Pilgrim Nuclear Power Station

Pilgrim Station 3<sup>rd</sup> Interval  
Inservice Inspection Plan

**RELIEF REQUEST NUMBER PRR-26**

**REVISION 0**

(Page 1 of 2)

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

ASME B&PV Code, Section XI, 1989 Edition, Division 1, Examination Categories B-F and B-J.

Two previous Pilgrim regulatory commitments are affected by this request. They are the inspection of Category B-F and B-J welds identified as being constructed of "resistant material" (i.e. Category A weldments) under Generic Letter 88-01. These welds shall be examined according to the extent and frequency as defined in the RI-ISI submittal for Pilgrim Station currently under review by USNRC. Secondly, augmented inspections for thermal fatigue as described in NRC Bulletin 88-08, "Thermal Stresses in Piping Connected to the Reactor Coolant Systems" are replaced by examinations performed under the new RI-ISI program. This integration of augmented inspection programs that are outside the scope of ASME XI with the Pilgrim RI-ISI submittal is consistent with the EPRI risk-informed methodology as outlined in section 6.5 of EPRI Topical Report TR-112657.

There are no other commitments being modified by this request.

**CODE REQUIREMENT(S):**

IWB-2412 requires that examinations completed within an inspection period meet minimum and maximum percentages as defined in Table IWB-2412-1.

**REQUIREMENT(S) FROM WHICH RELIEF IS REQUESTED:**

Relief is requested from meeting the minimum percentages in Table IWB-2412-1, while the approval process for the recently submitted Risk-Informed ISI (RI-ISI) Program for Pilgrim Station is completed.

**BASIS FOR RELIEF:**

Implementation of previous RI-ISI programs have been shown to reduce risk (or maintain risk neutrality) while substantially reducing worker exposure and undue burden. Because RI-ISI programs focus inspections (and inspection methods) on locations potentially susceptible to degradation, while considering the consequence of piping failure, a more robust targeted inspection program can be defined.

In contrast, the traditional Section XI program constitutes essentially random inspections. As importantly, the Section XI examination volumes are not necessarily geared towards finding the type of degradation to which the component is potentially susceptible. This relief request allows Pilgrim Station to forgo existing ASME Section XI category B-F and B-J examinations until the USNRC has reviewed and approved the current RI-ISI application. Upon approval of the Pilgrim RI-ISI program and prior to the end of the current inspection interval, all required RI-ISI inspections for the remainder of the interval will be completed.

Pilgrim Station 3<sup>rd</sup> Interval  
Inservice Inspection Plan

**RELIEF REQUEST NUMBER PRR-26**

**REVISION 0**

(Page 2 of 2)

To require that currently scheduled Section XI examinations continue while the RI-ISI program is being reviewed would result in undue worker exposure (5.4 Rem for RFO13) and resource burden without a commensurate increase in the level of quality or safety.

**ALTERNATIVE EXAMINATION(S):**

The proposed RI-ISI program was submitted to NRC on December 27, 2000 for review and approval (Docket number 50-293). The RI-ISI program submitted by Pilgrim Station was developed in accordance with the "Safety Evaluation Report Related To Revised Risk-Informed Inservice Inspection Evaluation Procedure" (EPRI Topical Report TR-112657, Rev. B, July 1999). Additionally, the submitted program was prepared in a manner consistent with the guidance in ASME Code Case N-578 as applied to Class 1 piping.

Accordingly, Pilgrim Station commits to begin conducting RI-ISI inspections during Refuel Outage 13, which is currently scheduled to begin on April 14, 2001.

If, after USNRC review and approval, some inspection locations need to be adjusted, this will be done, so that the required RI-ISI program scope is completed by the end of the interval in July 2005.

Except as noted above, Pilgrim will continue augmented inspection programs, inspections required for flaws dispositioned by analysis, system pressure tests, and inspection of components other than piping in accordance with current commitments.

**IMPLEMENTATION SCHEDULE:**

The approved RI-ISI program will be implemented so as to complete the required examinations by the end of the current interval.

Pilgrim Station has completed 34% of the traditional ISI examinations during the current interval, which began on July 1, 1995.

Refuel Outage 13, the third outage of the third ten-year inspection interval, is currently scheduled to begin on April 14, 2001 and is the only outage scheduled during the second period. During this outage, Pilgrim will begin implementation of the recently submitted RI-ISI program, the scheduling of such will be that 66% of the welds selected for the RI-ISI program will be completed by the end of the interval in July 2005. Additionally, at least 16% of the RI-ISI examinations will be completed by the end of the second period yielding a combined completion percentage of at least 50%.

For subsequent inspection intervals, 100% of the RI-ISI inspections will be completed.

CORRESPONDENCE REVIEW SIGNATURE SHEET #1

EXHIBIT 3  
Sheet 1 of 2

TITLE: Pilgrim PRR-26, RI-ISI

<p>_____ Vice President Nuclear Operations/Station Director</p> <p>Date _____</p>	<p>Effect on safety and reliability of the plant has been evaluated adequately. Information is accurate, complete, and consistent with NUORG business planning strategy. Preserves PNPS reputation for conservative decision making.</p> <p>Explain:</p>
-------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>_____ General Manager, Technical</p> <p>Date _____</p>	<p>Effect on safety and reliability of the plant has been evaluated adequately. Information is accurate, complete, and consistent with NUORG business planning strategy. Preserves PNPS reputation for conservative decision making.</p> <p>Explain:</p>
---------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><i>A. Brennan for J. Alexander</i> Regulatory Relations Group Manager</p> <p>Date <u>1-16-01</u></p>	<p>Consistent with NUORG strategy governing regulatory activities. Information is accurate and complete. Information has received proper review for factual content, commitment ownership, and fiscal oversight.</p> <p>Explain: <i>NO NEW Commitments</i></p>
-----------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><i>A. Brennan</i> Regulatory Affairs Department Manager</p> <p>Date <u>1-15-01</u></p>	<p>Applicable regulatory documents have been considered in content of letter. Information is consistent with other regulatory strategies and commitments. Information is accurate and complete. Information is consistent with design and Licensing Basis.</p> <p>Explain: <i>ctr review + NO <sup>NEW</sup> commitments not contained in ctr 200.089</i></p>
---------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><i>Walter Lobo</i> Regulatory Affairs Engineer or Correspondence Team Leader</p> <p>Date <u>1/15/01</u></p>	<p>Information is accurate and complete. <i>No commitments.</i> Source documents verified. Commitments are identified and owners assigned. Letter is grammatically correct and free of typographical errors.</p> <p>Explain: <i>Based upon NRC Telecon on 1/10/01 and input from QA/QC.</i></p>
----------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

CORRESPONDENCE REVIEW SIGNATURE SHEET #2

EXHIBIT 3  
Sheet 2 of 2

TITLE: *Ritgim PRR ~~25~~ 26 for RI-ISI*

<p>_____</p> <p align="center">Group Manager</p> <p>Date _____</p>	<p>Configuration control of plant is maintained. Plant safety, reputation, and costs have been properly considered. Organizational interfaces are properly established to support information/commitment(s).</p> <p>Explain:</p>
--------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>_____</p> <p align="center">Department Manager</p> <p>Date _____</p>	<p>Technical input provided by Department is properly represented in letter. Scope and schedule of commitment(s) can be met with existing resources. Impact on existing analyses/operations has been appropriately considered.</p> <p>Explain:</p>
-------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><i>W. Greenes</i></p> <p align="center">Department Manager</p> <p>Date <i>1/16/2001</i></p>	<p>Technical input provided by Department is properly represented in letter. Scope and schedule of commitment(s) can be met with existing resources. Impact on existing analyses/operations has been appropriately considered.</p> <p>Explain: <i>See attached</i></p>
------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><i>R. Bardee</i></p> <p align="center">Correspondence Team Group Representative</p> <p>Date <i>1/15/2001</i></p> <p><i>by EMAIL</i></p>	<p>All statements, facts, and conclusions are true and accurately stated.</p> <p>Explain:</p>
------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------

<p>_____</p> <p>Date _____</p>	<p>My basis for recommending approval is:</p> <p>Explain:</p>
--------------------------------	---------------------------------------------------------------

## Kahler, Peter

---

**From:** Grieves, William  
**Sent:** Tuesday, January 16, 2001 12:46 PM  
**To:** Kahler, Peter  
**Subject:** FW: Relief Request -26 for Green Sheet approval.

-----Original Message-----

**From:** Grieves, William  
**Sent:** Tuesday, January 16, 2001 8:40 AM  
**To:** Lobo, Walter  
**Cc:** Pardee, Richard; Garrow, Charles; Sheridan, Robert  
**Subject:** FW: Relief Request -26 for Green Sheet approval.

Walter,  
i have reviewed and concur with the submittal for PRR-26 regarding Risk Informed ISI. In Bob Sheridan's absence this week, my approval constitutes approval by RSS for whom I have signature authority.  
Bill Grieves

-----Original Message-----

**From:** Pardee, Richard  
**Sent:** Monday, January 15, 2001 2:08 PM  
**To:** Lobo, Walter; Grieves, William  
**Subject:** RE: Relief Request -26 for Green Sheet approval.

Walter,  
looks fine to me, except the header at the top of each page of the relief request should be in the upper right hand corner, not centered, so it looks like the other pages in the ISI Program Plan.

rich p.

-----Original Message-----

**From:** Lobo, Walter  
**Sent:** Monday, January 15, 2001 1:40 PM  
**To:** Pardee, Richard; Grieves, William  
**Subject:** Relief Request -26 for Green Sheet approval.

Paula: Letter and attachment for final print for Jack's signature.

<< File: RISI Relief-PRR-26-Request for PNPS.doc >> << File: PRR-26.doc >>

Rich and Bill,

Please sign off via e-mail. If you do, I will get it signed by Jack Alexander tomorrow.