



Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360

November 18, 2016

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

SUBJECT: Response to Request for Additional Information - Relief Request on Volumetric Exam Requirements, PNPS-ISI-004 & 005 (CAC NO. MF8095 and MF8096)

Pilgrim Nuclear Power Station  
Docket No. 50-293  
Renewed License No. DPR-35

REFERENCE: NRC to Entergy Transmittal, "Pilgrim: Request for Additional Information – Relief Request on Volumetric Exam Requirements, PNPS-ISI-004 & 005 (CAC NO. MF8095 and 8096)" (1.16.057)

LETTER NUMBER: 2.16.072

Dear Sir or Madam:

Pursuant to the request by the U.S. Nuclear Regulatory Commission Staff for additional information contained in the Reference, please find attached the Pilgrim Nuclear Power Station response.

Please contact me at (508) 830-8323 or Murray Williams at (508) 830-8275 if you have any questions.

There are no regulatory commitments included in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Everett P. Perkins, Jr.", with a stylized flourish at the end.

Everett P. Perkins, Jr.  
Manager, Regulatory Assurance

EPP/mw

Attachments:

1. Response to Request for Additional Information - Relief Request on Volumetric Exam Requirements, PNPS-ISI-004
2. Response to Request for Additional Information - Relief Request on Volumetric Exam Requirements, PNPS-ISI-005

A047  
NR

cc: Mr. Daniel H. Dorman  
Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
2100 Renaissance Blvd., Suite 100  
King of Prussia, PA 19406-2713

Ms. Booma Venkataraman, Project Manager  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Mail Stop O-8C2A  
Washington, DC 20555

NRC Senior Resident Inspector  
Pilgrim Nuclear Power Station

**Attachment 1**

**to**

**Letter Number 2.16.072**

**Response to Request for Additional Information - Relief Request on Volumetric Exam  
Requirements, PNPS-ISI-004**

**(1 Page)**

**REQUEST FOR ADDITIONAL INFORMATION  
RELIEF REQUEST ON VOLUMETRIC EXAM REQUIREMENTS, PNPS-ISI- 004  
PILGRIM NUCLEAR POWER STATION  
ENTERGY NUCLEAR OPERATIONS, INC.  
DOCKET NO. 50-293  
(CAC NO. MF8095)**

**Request for Additional Information (RAI) 1**

**Please describe the relevant Editions and Addenda of ASME Code Section XI that apply to Appendix VIII and non-Appendix VIII examinations.**

**Response to RAI 1**

All the welds listed were performed as Appendix VIII examinations using the ASME Code and Addenda as listed on the following table.

<b>Cat</b>	<b>Item NO</b>	<b>Comp ID</b>	<b>Date Performed</b>	<b>ASME Edition</b>	<b>Item Description</b>
C-F-1	C5.11	DC-10-F10R	4/25/2011	01 Edition w/03 Addenda	Pipe-to-Valve Weld, Line # 18"-GB-10
C-F-1	C5.11	DC-14-F31	5/6/2009	98 Edition w/00 Addenda	Pipe-to-Valve Weld, Line # 10-DC-14

**RAI 2**

**Please describe the specific systems associated with welds DC-10-F10R and DC-14-F31.**

**Response to RAI 2**

DC-10-F10R is associated with the Residual Heat Removal System.  
DC-14-F31 is associated with the Core Spray System.

**Attachment 2**

**to**

**Letter Number 2.16.072**

**Response to Request for Additional Information - Relief Request on Volumetric Exam  
Requirements, PNPS-ISI-005**

**(3 Pages)**

**REQUEST FOR ADDITIONAL INFORMATION  
RELIEF REQUEST ON VOLUMETRIC EXAM REQUIREMENTS, PNPS-ISI- 005  
PILGRIM NUCLEAR POWER STATION  
ENTERGY NUCLEAR OPERATIONS, INC.  
DOCKET NO. 50-293  
(CAC NO. MF8096)**

**Request for Additional Information (RAI) 1**

**Please describe the relevant Editions and Addenda of ASME Code Section XI that apply to Appendix VIII and non-Appendix VIII examinations.**

**Response to RAI 1**

All the welds listed were performed as Appendix VIII examinations using the ASME Code and Addenda as listed on the following table.

Cat	Item No.	Comp ID	Date Performed	ASME Edition	Item Description
R-A	R1.20	2R-HB-3	4/22/2009	98 Edition w/00 Addenda	Cross-to-Header Weld, Line # 22"-DCA-2
R-A	R1.20	12-O-24	4/26/2011	01 Edition w/03 Addenda	Pipe-to-Flued Head Weld
R-A	R1.20	14-A-10A	4/28/2011	01 Edition w/03 Addenda	Valve-to-Pipe DM Weld
R-A	R1.20	14-B-10A	4/25/2011	01 Edition w/03 Addenda	Valve-to-Pipe DM Weld, Line # 10"-DBA-14
R-A	R1.11	10R-IA-6	4/28/2011	01 Edition w/03 Addenda	Pipe-to-Valve Weld, Line# 18"-DCA-10
R-A	R1.11	10R-IA-7	4/28/2011	01 Edition w/03 Addenda	Valve-to-Pipe Weld, Line # 18"-DCA-10
R-A	R1.20	10R-IB-14	4/22/2009	98 Edition w/00 Addenda	Pipe-to-Flued Head Weld
R-A	R1.20	14R-A-11	4/27/2015	01 Edition w/03 Addenda	Pipe-to-Valve Weld, Line # 10"-DBA-14

**RAI 2**

**Please describe the specific systems associated with welds 2R-HB-3, 12-O-24, 10R-IB-14, and 14R-A-1.**

**Response to RAI 2**

2R-HB-3 is associated with the Recirculation System.

12-O-24 is associated with the Reactor Water Clean-Up System.

10R-IB-14 is associated with the Residual Heat Removal System.

14R-A-11 is associated with the Core Spray System.

**RAI 3**

The coverage diagrams supplied for welds 14-A-10A and 14-B-10A do not appear to be consistent with the claimed code coverage of 50 percent. Please describe how the 50 percent code coverage was determined.

**Response to RAI 3**

Table 5-1 of the Relief Request submittal was in error. The correct code coverage obtained was properly documented on the data sheet as follows:

- 14-A-10A – 28.4% CRV obtained.
- 14-B-10A – 24.2% CRV obtained.

**RAI 4**

**Please discuss the operational experience for the other core spray dissimilar metal welds and the results of other dissimilar metal core spray weld inspections.**

**Response to RAI 4**

There are four (4) other Core Spray dissimilar metal welds and the results of these inspections are shown below. There was no leakage, repairs or evaluations for acceptability for continued service on any of these weld inspections.

Weld ID	Exam Results	Comments	RFO
14-A-3	NRI / Auto PA + Manual / Acceptable / Limited	Limited Coverage 93.9% PRV/ 97.6% CRV 100% Axial / 95.2% Circumferential	18
14-B-3	NRI / Auto PA + Manual / Acceptable / Limited	Limited Coverage 92.5% PRV/96.6% CRV 93.2% Axial / 100% Circumferential	18
DB/DC-14-3002-5-1	Acceptable	100% CRV	18
DB/DC-14-3001-4-1	Acceptable	100% CRV	18

**RAI 5**

**Please describe any surface examinations performed on welds 14-A-10A and 14-B-10A.**

**Response to RAI 5**

These welds are Category R-A, Item R1.20 – A surface exam is not required.