



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

Stephen J. Bethay
Director, Nuclear Assessment

August 24, 2009

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

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

Pilgrim Refueling Outage (RFO) -17
In-Service Inspection (ISI) Owners Activity Report (OAR)-1 Submittal

LETTER NUMBER: 2.09.053

Dear Sir or Madam:

By this letter Entergy submits to NRC the attached Pilgrim Nuclear Power Station In-Service Inspection (ISI) Owners Activity Report (OAR-1) Results Report for Refueling Outage (RFO)-17 in accordance with ASME Section XI and NRC approved Code Case N-532-4.

The report contains a tabulation of all in-service examinations and Code repairs/replacements performed at Pilgrim Station from the end of RFO-16 through RFO-17. Copies of the examination vendor reports and data sheets are retained at Pilgrim Station for NRC review, if required.

Pilgrim is in the Fourth In-Service Inspection (ISI) Interval and is subject to the 1998/2000 Addenda of ASME Section XI.

A047
NRR

There are no new commitments made in this letter.

If you have any questions regarding the information contained in this letter, please contact Pilgrim Licensing Manager, Joseph R. Lynch at (508) 830-8403.

Sincerely,



Stephen J. Bethay
Director Nuclear Safety Assessment

WGL/Lic

Attachment: In-service Inspection Summary Report for Refueling Outage 17 at Pilgrim Nuclear Power Station, Engineering Report No. PNPS-NE-09-00002, Rev. 0, dated August 23, 2009 (5 pages)

cc: Mr. James S. Kim, Project Manager
Office of Nuclear Reactor Regulation
Mail Stop: 0-8C2
U.S. Nuclear Regulatory Commission
1 White Flint North
11555 Rockville Pike
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U.S. NRC, Region 1
475 Allendale Road
King of Prussia, PA 19406

Senior Resident Inspector
Pilgrim Nuclear Power Station

Attachment to Entergy Letter No. 2.09.053

In-service Inspection Summary Report for Refueling Outage 17 at

Pilgrim Nuclear Power Station

Engineering Report No. PNPS-NE-09-00002, Rev. 0

Dated August 23, 2009

(5 pages)

Engineering Report No PNPS-NE-09-00002 Rev 0

Page 1 of 5

Attachment 1 pages: 1-2

Attachment 2 pages: 1

**ENTERGY NUCLEAR
Engineering Report Cover Sheet**

Engineering Report Title:

PNPS OWNERS ACTIVITY REPORT(OAR) FOR SECOND OUTAGE
FIRST PERIOD OF FOURTH INTERVAL

Engineering Report Type:

New Revision Cancelled Superseded

Applicable Site(s)

IP1 IP2 IP3 JAF PNPS VY WPO
 ANO1 ANO2 ECH GGNS RBS WF3 PLP

DRN (EC) No. N/A; _____

Report Origin: Entergy Vendor
Vendor Document No.: N/A

Quality-Related: Yes No

Prepared by: Katie Bienvenue *Katie Bienvenue* Date: 8/21/09
Responsible Engineer (Print Name/Sign)

Design Verified/ N/A Date: N/A
Design Verifier (if required) (Print Name/Sign)

Reviewed by: Rich Pardee *R. Pardee* Date: 8/21/09
Reviewer (Print Name/Sign)

Reviewed by*: Curt Hanson (HSB) *Curt Hanson* Date: 8/23/09
ANII (if required) (Print Name/Sign)

Approved by: Steve Woods *Steve Woods* Date: 8/23/2009
Supervisor (Print Name/Sign)

*: For ASME Section XI Code Program plans per EN-DC-120, if required

**FORM OAR-1
OWNERS ACTIVITY REPORT**

Report Number PNPS-NE-09-00002, Rev. 0

Plant PILGRIM NUCLEAR POWER STATION, 600 Rocky Hill Road, Plymouth, MA 02360
(Name and Address of Plant)

Plant Unit 1 Commercial Service Date June 8, 1972 Refueling Outage Number 17

Current Inspection Interval 4th
(1st, 2nd, 3rd, 4th, Other)

Current Inspection Period 1st
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans 1998 Edition, 2000 Addenda

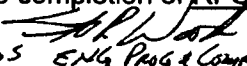
Date and Revision of Inspection Plan: PNPS ISI Program Plan, No. PNPS-RPT-05-001 Rev. 1

Edition and Addenda of ASME Section XI applicable to Repairs and Replacements, if different than the inspection plans N/A

Code Cases used: Reference PNPS - RPT-05-001, Rev 1 for code cases used

CERTIFICATE OF CONFORMANCE

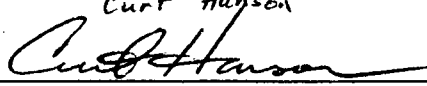
I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of RFO 17 conform to the requirements of Section XI.

Signed STEVEN P. WOODS  ENR Project Comp Mgr. Date 8/23/2009
Owner or Owner's designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by HSB-CT of Hartford, Connecticut have inspected the items described in this Owners Report, and state that, to the best of my knowledge and belief, the Owner has performed all the activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Curt Hanson  Commissions NB11916 ABNI MA1651
Inspector's Signature National Board, State, Province, and Endorsements

Date 8/23/2009

TABLE 1

ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category and Item Number	Item Description	Evaluation Description
B-A	ISI examination of the RPV head to flange weld (RPV-HF) identified a linear indication requiring further evaluation to meet ASME Section XI requirements. Magnetic particle (MT) examination of the weld was performed per work order 00180079 and identified a linear surface indication approximately 1 inch in length at 320 degrees.	Accepted for continued service. A fracture mechanics evaluation of the flaw indication in the RPV closure head has been evaluated in accordance with ASME BPVC SC XI IWB-3600 & Appendix A and found acceptable for continued service. The RPV closure head is fully functional and meets all design bases requirements. It is not non-conforming or degraded. The vendor calculation (0900530.303 dated 5/4/09) was performed to our purchase order 10235773 has been accepted in accordance with EN-DC-149 Rev 2. This calculation also had an independent review by WPO.T CR09-1514
B-G-2	CR 01874 - VT-1 Examination of valve 6-CK-62A body to bonnet bolting found (3) studs and (1) nut rejected due to thread damage. This visual examination was performed during valve disassembly under W/O 51551858-01.	Accepted for continued service. This issue of reusing the studs has been discussed with our valve vendor responsible for rebuilding the feedwater check valves. The studs were chased and new nuts obtained from the warehouse. The new nuts run smoothly on the chased threads and the threads are acceptable for reuse. There is no degradation or non-conformance associated with the threads in their final condition. CR09-1974
C-F-1	Radiography of ISI weld location GB-14-F33 has identified indications (corrosion) which are unacceptable per the criteria specified by ASME Section XI. This location was examined per work order 00134539.	Accepted for continued service. The UT data for the Core Spray piping in the corrosion area demonstrates that the remaining wall thickness is greater than the required nominal wall thickness. Therefore the corrosion is acceptable. Given that this pipe has been in service for the life of the plant, the corrosion rate is low, and the minimum remaining wall .415 in is well above nominal (vs .345 in), and no further inspections are required for corrosion purposes. CR09-1688
C-F-1	Radiography of ISI weld location GB-14-F85 has identified indications (corrosion) which are unacceptable per the criteria specified by ASME Section XI. This location was examined per work order 00134537-01.	Accepted for continued service, through pipe stress analysis the minimum wall thickness for this pipe to resist applicable stresses is 0.126". The pipe wall thickness is greater than the required thickness, therefore continued operation is acceptable. With the wear rate of 0.004 inches per year, the pipe has a remaining service life of 16.4 years. CR09-02056

TABLE 1

ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category and Item Number	Item Description	Evaluation Description
F-A	ISI RFO17 VT-3 examination of 'SDC' loop RHR snubber H-10-1-SS22 (SS-10-20-2) has determined that the cold piston setting is out of tolerance. Allowable tolerance should be between 3 3/8" - 4 1/8" and our inspection found it to be at 3.25".	Accepted for continued service. The snubber stroke is 6". Civil Mechanical calculation M-1192 provides Snubber Piston Rod Extension operability limits. So long as the snubber has room to displace during plant/system Heatup there is no issue. CR09-1182
F-A	During Inservice Inspection of the GIBBs stabilizer @ azimuth 225 (H-50-1-225GIBs) , one (1) loose stud was identified (far right stud out of 4 studs). The inspection result is identified on the ISI data sheet VT-09-077	Per Engineering direction the bolt was retorqued and is acceptable for continued service. CR09-1996

TABLE 2

ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE

Code Class	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
1	Replacement	Replacement bolting for Gibbs manway 225/270	8/20/2009	193067
1	Repair	N9A Nozzle Overlay	8/10/2009	192146
1	Replacement	Replace bolting on the RPV N8 Nozzle Head	8/18/2009	179979
2	Repair	Repair of Support H-10-1-12	8/7/2009	193071
2	Repair	Repair of support H-10-1-101S	8/10/2009	190668