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Pilgrim Station 2001 On-Line and Refueling Outage (RFO) - 13 Inservice Inspection (ISI) Plan

This Letter provides the Pilgrim Nuclear Power Station (PNPS) Inservice Inspection (ISI) Plan for 2001 On-Line and Refueling Outage 13 (RFO-13) - examinations on-line ISI examinations began in February 2001. RFO-13 is currently scheduled to start on April 21, 2001. The scope of inspections includes the following:

1. Attachment A provides the ASME code required inspections that have been scheduled for examination on-line prior to RFO-13 during the third inservice inspection interval in accordance with the 1989 edition of ASME XI for piping.
2. Attachment B provides the ASME code required inspections that have been scheduled for examination in RFO-13 during the third inservice inspection interval in accordance with the 1989 edition of ASME XI for piping and the 1992 edition with 1992 addenda for IWE containment examinations.

Pilgrim will begin implementation of the Pilgrim Risk-Informed In-service Inspection (RI-ISI) Program in RFO-13 as an alternative to the current 1989 ASME XI inspection requirements for Class 1 code category B-J and B-F welds. The new RI-ISI program was submitted on December 27, 2000 for NRC review via ENG. Ltr. 2.00.084 with additional information supplied in ENG. Ltr. 2.01.013 dated Jan. 19, 2001. NRC approval of the RI-ISI program is anticipated prior to the start of RFO-13 on April 14, 2001.

Examinations of Category C, D and E austenitic stainless steel piping welds in RFO-13 will be scheduled in accordance with the NRC Safety Evaluation issued on September 15, 2000 for BWRVIP-75, *Technical Basis for Revisions to Generic Letter 88-01 Inspection Schedules*, in lieu of Generic Letter 88-01 inspection schedule requirements. Pilgrim Station meets the requirements of the BWRVIP-75 Safety Evaluation including the open items identified by the NRC in the Safety Evaluation.

3. Attachment C provides examinations planned for reactor vessel internals. Examinations include those planned to follow the BWRVIP Guidelines and those recommended by industry and internal initiatives.

4. Pilgrim will be inspecting piping for the effects of Flow Accelerated Corrosion (FAC) both on-line (2 points) and during RFO-13 (61 points).
5. Ultrasonic examinations of seven Salt Service Water Piping Spools for wall thickness determination in accordance with Specification M-591 will be conducted online starting in March 2001.

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



J. Alexander

Attachment A: ASME XI Inservice Inspection Plan for 2001 Online Examinations Prior to RFO-13

Attachment B: ASME XI Inservice Inspection Plan for RFO-13 Examinations

Attachment C: Pilgrim Station RFO-13 In-Vessel Visual Inspection Scope (IVVI)

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ASME XI INSERVICE INSPECTION PLAN FOR 2001 ONLINE EXAMINATIONS PRIOR TO RFO-13

| Component | Description | Category | System | Isometric | Exam |
|------------------|--------------------|-----------------|---------------|------------------|-------------|
| 10-VB-1001-47 | VALVE BOLTING | B-G-2 | RHR | ISI-I-10-1A | VT-1 |
| 23-I-16 | PIPE TO ELBOW | B-J | HPCI | ISI-I-23-1 | UT |
| 23-I-17 | VALVE TO PIPE | B-J | HPCI | ISI-I-23-1 | UT |
| 3-WSD-11 | CAP TO PIPE | C-F-2 | CRD | ISI-I-3-1 | MT UT |
| GB-14-F46 | VALVE TO PIPE | C-F-2 | CS | ISI-I-14-2A | MT UT |
| HLB-14-F48H | PIPE TO ELBOW | C-F-2 | CS | ISI-I-14-2A | MT UT |
| GB-14-F21 | ELBOW TO PIPE | C-F-2 | CS | ISI-I-14-2B | MT UT |
| HL-14-F51 | PIPE TO FLANGE | C-F-2 | CS | ISI-I-14-2B | MT UT |
| DB-23-F53 | ELBOW TO PIPE | C-F-2 | HPCI | ISI-I-23-5 | MT UT |
| HL-23-F20 | PIPE TO VALVE | C-F-2 | HPCI | ISI-I-23-4 | MT UT |
| 23-P205-3 | ELBOW TO PIPE | C-F-2 | HPCI | ISI-I-23-4 | MT UT |
| HL-13-F661 | PIPE TO ELBOW | C-F-2 | RCIC | ISI-I-13-3 | MT UT |
| GB-10-16-1C | PIPE TO ELBOW | C-F-2 | RHR | ISI-I-10-4ASH | MT UT |
| GB-10-F65 | ELBOW TO VALVE | C-F-2 | RHR | ISI-I-10-4ASH | MT UT |
| GB-10-F62A | PIPE TO VALVE | C-F-2 | RHR | ISI-I-10-4ASH | MT UT |
| GL-10-F102 | VALVE TO | C-F-2 | RHR | ISI-I-10-5BSH | MT UT |
| HL-10-2-1E | PIPE TO ELBOW | C-F-2 | RHR | ISI-I-10-5BSH | MT UT |
| GB-10-3-5E | ELBOW TO PIPE | C-F-2 | RHR | ISI-I-10-4BSH | MT UT |
| GB-10-15-1E | TEE TO TEE | C-F-2 | RHR | ISI-I-10-4BSH | MT UT |
| HE-30-8HL | HANGER LUG | D-B | RBCCW | ISI-I-30-1SH1 | VT-3 |
| HE-30-62PS | STANCHION | D-B | RBCCW | ISI-I-30-1SH1 | VT-3 |
| HE-30-7PS | STANCHION | D-B | RBCCW | ISI-I-30-1SH1 | VT-3 |
| HE-30-46PS | STANCHION | D-B | RBCCW | ISI-I-30-1SH2 | VT-3 |

ASME XI INSERVICE INSPECTION PLAN FOR 2001 ONLINE EXAMINATIONS PRIOR TO RFO-13

| | | | | | |
|-----------------|----------------|---------|-------|---------------|------|
| HE-30-53PS | STANCHION | D-B | RBCCW | ISI-I-30-2SH2 | VT-3 |
| HE-30-54PS | STANCHION | D-B | RBCCW | ISI-I-30-2SH2 | VT-3 |
| HE-30-440PS | STANCHION | D-B | RBCCW | ISI-I-30-1SH2 | VT-3 |
| HE-30-441PS | STANCHION | D-B | RBCCW | ISI-I-30-1SH2 | VT-3 |
| HE-30-442PS | STANCHION | D-B | RBCCW | ISI-I-30-1SH2 | VT-3 |
| JF-29-1321HL | HANGER LUG | D-B | SSW | ISI-I-29-1SH2 | VT-3 |
| JF-29-1333HL | HANGER LUG | D-B | SSW | ISI-I-29-1SH2 | VT-3 |
| H-50-1-TORUSBAY | TORUS SUPPORTS | F-A | CONT | C1A175SH1 & | VT-3 |
| H-23-1-4SR | RIGID HANGER | F-A | HPCI | ISI-I-23-4 | VT-3 |
| H-23-1-21 | RIGID HANGER | F-A | HPCI | ISI-I-23-4 | VT-3 |
| H-30-1-292 | GUIDE | F-A | RBCCW | ISI-I-30-1SH1 | VT-3 |
| H-30-1-62SA | ANCHOR | F-A | RBCCW | ISI-I-30-1SH1 | VT-3 |
| H-30-1-1SA | ANCHOR | F-A | RBCCW | ISI-I-30-2SH2 | VT-3 |
| H-13-1-43 | RESTRAINT | F-A | RCIC | ISI-I-13-1 | VT-3 |
| H-10-1-87SA | ANCHOR | F-A | RHR | ISI-I-10-4ASH | VT-3 |
| H-10-1-41SG | GUIDE | F-A | RHR | ISI-I-10-5BSH | VT-3 |
| H-10-1-44SA | ANCHOR | F-A | RHR | ISI-I-10-1B | VT-3 |
| H-10-1-49SG | GUIDE | F-A | RHR | ISI-I-10-1B | VT-3 |
| H-12-1-113 | GUIDE | F-A | RWCU | ISI-I-12-2 | VT-3 |
| H-12-1-8 | SPRING HANGER | F-A | RWCU | ISI-I-12-2 | VT-3 |
| H-11-1-37 | GUIDE | F-A | SBLC | ISI-I-11-1 | VT-3 |
| H-11-1-40 | GUIDE | F-A | SBLC | ISI-I-11-1 | VT-3 |
| H-30-1-74SA | ANCHOR | F-A-CL4 | RBCCW | ISI-I-30-2SH1 | VT-3 |
| H-26-1-3SA | ANCHOR | F-A-CL4 | RHR | ISI-I-10-5BSH | VT-3 |

ASME XI INSERVICE INSPECTION PLAN FOR RFO-13 EXAMINATIONS

| Component | Description | Category | System | Isometric | Exam |
|------------------|---------------------|-----------------|---------------|------------------|-------------|
| RPV-HF-120-240 | HEAD TO FLANGE | B-A | RPV | ISI-I-54-2 | MT UT |
| RPV-N10-NIR | NOZZLE INNER RADIUS | B-D | RPV | ISI-I-54-1 | UT |
| RPV-N10-NV | NOZZLE TO VESSEL | B-D | RPV | ISI-I-54-1 | UT |
| RPV-N6B-NIR | NOZZLE INNER RADIUS | B-D | RPV | ISI-I-54-1 | UT |
| RPV-N6B-NV | NOZZLE TO VESSEL | B-D | RPV | ISI-I-54-1 | UT |
| RPV-CB-19-36 | CLOSURE BUSHINGS | B-G-1 | RPV | ISI-I-54-2 | VT-1 |
| RPV-CHN-19-36 | CLOSURE HEAD NUTS | B-G-1 | RPV | ISI-I-54-2 | MT |
| RPV-CS-19-36 | CLOSURE STUDS | B-G-1 | RPV | ISI-I-54-2 | UT |
| RPV-CW-19-36 | CLOSURE WASHERS | B-G-1 | RPV | ISI-I-54-2 | VT-1 |
| RPV-FT-19-36 | THREADS IN FLANGE | B-G-1 | RPV | ISI-I-54-2 | UT |
| 1-VB-220-1 | VALVE BOLTING <2' | B-G-2 | MS | ISI-I-1-1SH2 | VT-1 |
| 1-VB-220-2 | VALVE BOLTING <2' | B-G-2 | MS | ISI-I-1-1SH2 | VT-1 |
| 13-VB-1301-16 | VALVE BOLTING | B-G-2 | RCIC | ISI-I-13-1 | VT-1 |
| 2R-FB-N1B-9BC-1 | FLANGE BOLTING | B-G-2 | RECIRC | ISI-I-2R-A | VT-1 |
| 2-VB-202-4B | VALVE BOLTING | B-G-2 | RECIRC | ISI-I-2R-B | VT-1 |
| 10-VB-1001-33A | VALVE BOLTING | B-G-2 | RHR | ISI-I-10-1 | VT-1 |
| 10-VB-1001-68A | VALVE BOLTING | B-G-2 | RHR | ISI-I-10-1 | VT-1 |
| 10-VB-1001-50 | VALVE BOLTING | B-G-2 | RHR | ISI-I-10-1A | VT-1 |
| 10-VB-1001-51 | VALVE BOLTING | B-G-2 | RHR | ISI-I-10-1A | VT-1 |
| RPV-FB-CRD | CRD BOLTING | B-G-2 | RPV | N/A | VT-1 |
| 11-VB-1101-1 | VALVE BOLTING | B-G-2 | SBLC | ISI-I-11-1 | VT-1 |
| 11-VB-1101-15 | VALVE BOLTING | B-G-2 | SBLC | ISI-I-11-1 | VT-1 |
| 14-B-17 | PIPE TO PENETRATION | B-J | CS | ISI-I-14-1 | UT |
| 14-B-18 | ELBOW TO PIPE | B-J | CS | ISI-I-14-1 | UT |
| 14-B-19 | PIPE TO ELBOW | B-J | CS | ISI-I-14-1 | UT |
| 14-B-20 | PIPE TO PIPE | B-J | CS | ISI-I-14-1 | UT |
| 6-A-10 | PIPE TO FLUED HEAD | B-J | FW | ISI-I-6-1 | UT |
| 6-A-12 | PIPE TO PIPE | B-J | FW | ISI-I-6-1A | UT |

ASME XI INSERVICE INSPECTION PLAN FOR RFO-13 EXAMINATIONS

| | | | | | |
|-----------------|------------------------------|-------|--------|----------------|-------|
| 23-O-17 | PENETRATION TO PIPE | B-J | HPCI | ISI-I-23-1 | UT |
| 23-O-18 | PIPE TO ELBOW | B-J | HPCI | ISI-I-23-1 | UT |
| 23-I-3 | ELBOW TO PIPE | B-J | HPCI | ISI-I-23-1 | UT |
| 1-B-15 | FLUED HEAD TO PIPE | B-J | MS | ISI-I-1-1SH2 | UT |
| 13-O-18 | PIPE TO PIPE | B-J | RCIC | ISI-I-13-1 | UT |
| 13-O-19 | PIPE TO VALVE | B-J | RCIC | ISI-I-13-1 | UT |
| 2R-HB-1 | HEADER TO BEND | B-J | RECIRC | ISI-I-2R-B | UT |
| 2R-HB-4 | HEADER TO BEND | B-J | RECIRC | ISI-I-2R-B | UT |
| 10R-IB-12 | PENETRATION TO ELBOW | B-J | RHR | ISI-I-10-1 | UT |
| 12R-O-7 | ELBOW TO PIPE | B-J | RWCU | ISI-I-12-1SH1 | UT |
| 12-O-24 | PENETRATION TO PIPE | B-J | RWCU | ISI-I-12-1SH1 | UT |
| 10-O-25HL1(4) | SUPPORT LUGS | B-K-1 | RHR | ISI-I-10-1A | MT |
| RPV INTERIOR | VESSEL INTERIOR | B-N-1 | RPV | N/A | VT-3 |
| EB-23-59HL1(4) | SUPPORT LUGS | C-C | HPCI | ISI-I-23-2 | MT |
| HE-26-175HL1(1) | SUPPORT LUGS | C-C | HPCI | ISI-I-23-4 | MT |
| HB-13-F-HL1(2) | HANGER LUGS | C-C | RCIC | ISI-I-13-3 | MT |
| HL-10-200HL1(4) | SUPPORT LUGS | C-C | RHR | ISI-I-10-4ASH1 | MT |
| HB-10-91PS | PIPE STANCHION | C-C | RHR | ISI-I-10-1B | MT |
| HB-10-92HL1(4) | 4 HANGER LUGS | C-C | RHR | ISI-I-10-1B | MT |
| EB-23-F66 | PIPE TO ELBOW | C-F-2 | HPCI | ISI-I-23-2 | MT UT |
| SLT RHR-13 | PRESSURE BOUNDARY | C-H | RHR | ISI-I-10-1C | VT-2 |
| IWE-ANNDNRN-080 | ANNULUS DRAINS(2) AT 80 AZ. | E-C | CONT | ISI-IWE-AUG-1 | VT-2 |
| IWE-ANNDNRN-170 | ANNULUS DRAINS(2) AT 170 AZ. | E-C | CONT | ISI-IWE-AUG-1 | VT-2 |
| IWE-ANNDNRN-260 | ANNULUS DRAINS(2) AT 260 AZ. | E-C | CONT | ISI-IWE-AUG-1 | VT-2 |
| IWE-ANNDNRN-350 | ANNULUS DRAINS(2) AT 350 AZ. | E-C | CONT | ISI-IWE-AUG-1 | VT-2 |
| IWE-SNDCUSH-305 | AUGMENTED DRYWELL UT AT 9 | E-C | CONT | ISI-IWE-AUG-1 | UT |
| IWE-UPDW-72-288 | AUGMENTED DRYWELL UT AT 72 | E-C | CONT | ISI-IWE-AUG-1 | UT |
| IWE-UPDW-83-072 | AUGMENTED DRYWELL UT AT 83 | E-C | CONT | ISI-IWE-AUG-1 | UT |
| IWE-UPDW-83-108 | AUGMENTED DRYWELL UT AT 83 | E-C | CONT | ISI-IWE-AUG-1 | UT |

ASME XI INSERVICE INSPECTION PLAN FOR RFO-13 EXAMINATIONS

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|---------------|---------------------|--------|--------|---------------|------|
| IWE-CB-X213A | CONTAINMENT BOLTING | E-G | CONT | N/A | VT-1 |
| IWE-CB-X35A | CONTAINMENT BOLTING | E-G | CONT | N/A | VT-1 |
| IWE-CB-X4 | CONTAINMENT BOLTING | E-G | CONT | N/A | VT-1 |
| IWE-CB-X6 | CONTAINMENT BOLTING | E-G | CONT | N/A | VT-1 |
| IWE-CB-DWHEAD | CONTAINMENT BOLTING | E-G | CONT | N/A | VT-1 |
| H-14-1-41 | SPRING HANGER | F-A | CS | ISI-I-14-1 | VT-3 |
| H-14-1-40 | SPRING HANGER | F-A | CS | ISI-I-14-1 | VT-3 |
| H-6-1-68 | RIGID HANGER | F-A | FW | ISI-I-6-1A | VT-3 |
| H-6-1-69 | RIGID HANGER | F-A | FW | ISI-I-6-1A | VT-3 |
| H-6-1-SS-3 | SNUBBER | F-A | FW | ISI-I-6-1 | VT-3 |
| H-6-1-SS-5 | SNUBBER | F-A | FW | ISI-I-6-1 | VT-3 |
| H-6-1-X9A | ANCHOR | F-A | FW | ISI-I-6-1 | VT-3 |
| H-23-1-80 | SPRING HANGER | F-A | HPCI | ISI-I-23-1 | VT-3 |
| H-23-1-77 | SPRING HANGER | F-A | HPCI | ISI-I-23-1 | VT-3 |
| H-1-1-X8 | ANCHOR | F-A | MS | ISI-I-1-1SH2 | VT-3 |
| H-1-1-HA3 | SPRING HANGER | F-A | MS | ISI-I-1-1SH1 | VT-3 |
| H-13-1-49 | SPRING HANGER | F-A | RCIC | ISI-I-13-1 | VT-3 |
| H-2-1-G1 | GUIDE | F-A | RECIRC | ISI-I-2R-A | VT-3 |
| H-4-1-1 | GUIDE | F-A | RWCU | ISI-I-12-1SH2 | VT-3 |
| H-11-1-24 | GUIDE | F-A | SBLC | ISI-I-11-1 | VT-3 |
| H-1-1-108 | RIGID SUPPORT | F-A-CL | MS | ISI-I-1-1SH2 | VT-3 |

PILGRIM STATION RFO-13 IN-VESSEL VISUAL INSPECTION SCOPE (IVVI)

- 1) Visual examination of the shroud upper ring segment welds to meet BWRVIP-76.
- 2) Visual examination of Core Spray spargers, sparger brackets, and Core Spray piping welds in accordance with BWRVIP-18.
- 3) Visual examinations of access hole cover welds to intent of SIL 462.
- 4) Jet Pumps

Visual examination of 50% of the Jet Pump assemblies to Pilgrim requirements.

The following jet pump examinations will be in accordance with BWRVIP-41:
 - Visual examinations of 5 RS-3 welds.
 - Visual examination of 50% of RS-4, RS-5, RS-8, RS-9 IN-5 MX-1, MX-3 and WD-1.
 - Ultrasonic examination of at least 50% of DF-1, DF-2, DF-3, AD-1, AD-2, and visual of AD-3ab.
- 5) Visual examination of guide tube welds made accessible during the outage in accordance with BWRVIP-47.
- 6) Visual examination of 2 dry tubes in accordance with SIL 409 requirements.
- 7) Visual examination of RPV interior to meet Code category B-N-1 requirements.
- 8) Visual examination of steam dryer drain channels and tack welds in accordance with SIL 474.