



Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
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Director, Nuclear Assessment

October 10, 2007

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

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

Notification For Information Only - Deviation from BWRVIP-76 Inspection
Scope and Disposition of Deviation

REFERENCES: 1. BWRVIP-76, "BWR Core Shroud Inspection and Flaw Evaluation
Guidelines".

LETTER NUMBER: 2.07.080

Dear Sir or Madam:

Entergy hereby informs the NRC of a specific deviation from the inspection guidelines described in BWRVIP-76, in accordance with BWRVIP-94, Rev. 1.

This deviation is due to the inaccessibility of two vertical welds in the Pilgrim reactor vessel core shroud wall. Inspections were performed during refueling outage (RFO) 16 per the guidance provided in BWRVIP-76, to meet the "Inspection Strategy for Welds in Repaired Shroud" (BWRVIP-76, Section 3).

Inspection results of core shroud vertical welds V30 and V31 indicated that these two welds did not meet the guidelines of BWRVIP-76, Section 3, Figure 3-2 and the Pilgrim-specific procedure. The BWRVIP-76 guidelines provide Option A and Option B. Option A requires inspection of at least 50% of the accessible portions of the vertical weld and Option B requires inspection of intersecting horizontal welds for minimum of 10" at both sides of the vertical weld with no crack indications. Additionally, the camera angle to the examination surface is to be no greater than 60° to the normal (perpendicular), or less than 30° to the surface. Contributing factors for not meeting the guidelines include:

- The installed shroud repair tie-rods system prevented access for weld visual inspections of welds V30 and V31 in RFO15. These welds are difficult to access for visual inspection on the shroud outside surface due to the tight space created by the jet pump diffuser sections and the tie-rod lower stabilizer and spring assembly. These welds are also inaccessible for visual and UT inspections on the shroud inside surface because they are below the core plate and would require disassembly of the fuel support casting and CRD guide tube to gain access for inspection.

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- Tie-rod/jet pump/shroud configuration limited the camera angle for the inspection of the intersecting horizontal welds, thus exceeding requirements per procedure (RFO16).

Technical Justification for Deviation:

BWRVIP-76 provides the inspection requirements for shroud vertical welds. A previous Technical Justification addressed the examination/deferral of several core shroud welds, including V30 and V31. Only these welds, (V30 and V31) still require further inspection deferral. The basis for acceptance of the deferral is that all other vertical welds, including the design reliant top guide support ring radial welds, have been examined with no relevant indications (NRI) noted. Furthermore, belt-line welds V15, V16, V17, and V18 were examined in RFO16 by UT with NRI noted. Welds V7 and V8 were able to be visually inspected in RFO16 during the replacement of the upper sections at tie-rods at 45° and 225°, with NRI noted. This disposition should have no impact on meeting the intent of BWRVIP-76 as Option A ("Sampling of Vertical Welds"), which states that "If the observed cracking in the first 50% of the welds exceeds 20% of the inspected length, then all remaining vertical welds shall be inspected during the same outage". Note that vertical weld inspections to-date (RFO16) amount to approximately 75% with NRI noted. Therefore it would be reasonable to conclude that on a percent basis the intent of BWRVIP-76 has been met with no observed cracking noted. A recent accessibility study by GE has confirmed that there is access to approximately 80% of welds V30 & V31 with their newer shroud UT tooling.

Time Frame the Deviation will be in Effect:

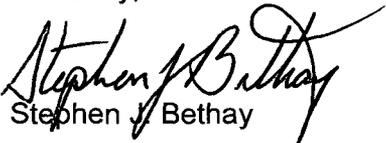
This disposition will remain in effect through RFO17 (2009) when inspections with the new tooling are planned to be performed to meet the above guidance.

This deviation is classified as "NEEDED" within the scope of BWRVIP-76. No response from the NRC is required.

There are no commitments made in this letter.

If you have any questions or require additional information, please contact me at 508 830-7800.

Sincerely,


Stephen J. Bethay

WGL/dl

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