



Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
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March 7, 2008

Stephen J. Bethay
Director, Nuclear Assessment

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

Pilgrim Modification of Core Shroud Stabilizer Assemblies Pursuant
to 10 CFR 50.55a(a)(3)(i) Implementation Plan (TAC NO. MD4918)

LETTER NUMBER: 2.08.013

Dear Sir or Madam:

Entergy requested NRC authorization under the provisions of 10 CFR 50.55a(a)(3)(i) for a pre-emptive modification of the upper supports of the previously NRC approved core shroud tie rod stabilizer assemblies during refueling outage (RFO) 16 (Reference 2). Entergy implemented the proposed pre-emptive modifications to the tie rods at the 45° and 225° azimuthal locations during RFO-16, and postponed modifications to the tie rods at the 135° and 315° azimuthal locations for RFO-17 due to difficulties encountered with the tooling.

NRC approved for one cycle ending with RFO-17 (Reference 1) the hybrid combination of un-modified upper support assemblies at the 135° and 315° azimuthal locations and modified upper support assemblies with torsional arm bolt clamps on the tie rods at the 45° and 225° azimuthal locations, as described in References 2, 3, 4, 5, 6, and 7.

This letter provides Entergy's plans to complete the modifications to the un-modified tie rods at the 135° and 315° azimuthal locations, as follows.

- During RFO-17, Entergy plans to modify the upper support assemblies and install torsional arm bolt clamps on the tie rods at the 135° and 315° azimuthal locations; such that all four tie rod assemblies will be identical as described in References 2 and 7. Inspections and installation will be completed as described in References 2 through 7.
- As a contingency, in the event Entergy experiences difficulties with the tooling to loosen the upper support assemblies of either or both tie rods at the 135° and 315° azimuthal locations, Entergy plans to remove the tie rod assembly by cutting the rod using Electrical Discharge Machining (EDM). The applicable tie rod assembly would then be replaced in its entirety. The replacement lower tie rod and lower spring assembly will be functionally identical to the existing design, but may include some stress reduction design enhancements. The modified tie rod assembly would include the modified upper support assemblies and torsional arm bolt clamps as described in References 2 through 7. This tie rod configuration would be consistent with the tie rod configuration at the 45° and 225° azimuthal locations modified during RFO-16.

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- In either case, if Entergy succeeds in the modification of the upper support assemblies with the torsional arm bolt clamps or the installation of the contingency tie rod(s), the configuration of the four tie rod assemblies would be functionally identical to each other, as described in Reference 2 and 7. The stresses and the loads of the four tie rods would be within the design requirements discussed in References 2 to 7. This configuration as described in Reference 2 would remain in full compliance with the requirements of 10 CFR 50.55a(a)(3)(i).

This submittal along with the referenced documents contain the basis for concluding that the modifications of 45° and 225° core shroud stabilizer assemblies made during RFO16 and the proposed modifications of the stabilizer assemblies or the installation of modified tie rods in the 135° and 315° locations provide an acceptable level of quality and safety for continuous safe operation.

Entergy will plan to submit any additional information as it becomes available either prior to or during RFO-17. Entergy believes that NRC authorization to use this proposed alternative is not required as a result of the NRC Safety Evaluation previously issued (Reference 1).

There are no new commitments contained in this letter.

If you have any questions or require additional information, please contact Mr. Joseph Lynch, Licensing Manager, at (508) 830-8403.

Sincerely,



Stephen J. Bethay
Director, Nuclear Safety Assurance

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REFERENCES:

1. NRC Safety Evaluation, Pilgrim Nuclear Power Station-Relief Request for the Reactor Core Shroud Stabilizer Assemblies (TAC No. MD4918), dated September 27, 2007.
2. Entergy Letter No. 2.07.016, Request for Authorization Under the Provision of 10 CFR 50.55a(a)(3)(i) for Modification of the Core Shroud Stabilizer Assemblies, dated March 22, 2007.
3. Entergy Letter No. 2.07.035, Pilgrim Repair of the Core Shroud Stabilizer Assemblies - Torsion Arm Clamp Stress Evaluation Report, dated April 10, 2007.
4. Entergy Letter No. 2.07.039, Response to NRC Request for Additional Information Related to Repair of the Core Shroud Stabilizer Assemblies, dated April 20, 2007.
5. Entergy Letter No. 2.07.041, Revision to Entergy Response to NRC Request for Additional Information Related to Repair of the Core Shroud Stabilizer Assemblies, dated April 24, 2007.
6. Entergy Letter No. 2.07.042, Revised Request for Authorization Under the Provision of 10 CFR 50.55a(a)(3)(i) for Modification of the Core Shroud Stabilizer Assemblies, dated April 29, 2007.
7. Entergy Letter No. 2.07.045, Additional Information Concerning Revised Request for Authorization Under the Provision of 10 CFR 50.55a(a)(3)(i) for Modification of Core Shroud Stabilizer Assemblies (TAC No. MD4918), dated May 3, 2007.
8. NRC Safety Evaluation Regarding Pilgrim Nuclear Power Station Core Shroud Repair (TAC No. M91305), dated May 12, 1995.

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