From: "Sanchez, Edward" <esanch1@entergy.com>
To: "Denise A. Lamoureux" <dmarrie@entergy.com>,"Perry Buckberg" <PHB1@nrc.gov>
Date: 8/23/2007 2:06:00 PM
Subject: Entergy Letter transmitting response for Pilgrim LRA commitment 47

Perry,

Attached for your use is a PDF copy of Entergy's response to LRA commitment 47 (to submit to the NRC by September 15, 2007 an action plan to improve benchmarking data to support approval of new P-T curves for Pilgrim.) Original is being put in US mail.

Regards,
Ed Sanchez
Pilgrim Licensing

Hearing Identifier: PilgrimRenewalNonPublic
Email Number: 26

Mail Envelope Properties (46E50485.HQGWDO01.TWGWPO03.200.200000C.1.127666.1)

Subject: Entergy Letter transmitting response for Pilgrim LRA commitment 47
Creation Date: 8/23/2007 2:06:00 PM
From: "Sanchez, Edward" <esanch1@entergy.com>

Created By: esanch1@entergy.com

Recipients
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"Perry Buckberg" <PHB1@nrc.gov>

Post Office	**Route**
TWGWPO03.HQGWDO01	nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	311	8/23/2007 2:06:00 PM
LRA commitment 47 response.pdf	254634	9/10/2007 8:47:01 AM
Mime.822	351215	9/10/2007 8:47:01 AM

Options
Priority: Standard
Reply Requested: No
Return Notification: None
None

Concealed Subject: No
Security: Standard

Entergy

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

Stephen J. Bethay
Director, Nuclear Assessment

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

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

License Renewal Application Commitment 47 Response

REFERENCES:
1. Entergy Letter, License Renewal Application, dated January 25, 2006 (TAC MC9669)
2. Entergy Letter, Proposed Change to the Applicability of Pilgrim's Pressure-Temperature Curves, dated January 15, 2007
3. Entergy Letter, License Renewal Application Amendment 16, dated May 1, 2007.

LETTER NUMBER: 2.07.069

Dear Sir or Madam:

In Reference 1, Entergy Nuclear Operations, Inc. applied for renewal of the Pilgrim Nuclear Power Station operating license.

In Reference 2, Entergy made a commitment to submit to the NRC an action plan to improve benchmarking data to support approval of new P-T curves beyond cycle 18 for Pilgrim. This commitment was reaffirmed in Reference 3 as part of License Renewal Application Amendment 16. Attachment A provides the action plan to address this commitment.

This letter contains no new commitments.

Please contact Mr. Bryan Ford, (508) 830-8403, if you have questions regarding this subject.

Sincerely,

Stephen J. Bethay
Director, Nuclear Safety Assessment

ERS/dl

Attachment A: Action Plan to Improve Benchmarking Data

cc: with Attachments

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cc: without Attachments

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ATTACHMENT A to Letter 2.07.069
(1 page)

Action Plan to Improve Benchmarking Data

By letter dated January 15, 2007, Entergy made a commitment to submit to the NRC an action plan to improve benchmarking data to support approval of new P-T curves for Pilgrim Station for operation beyond cycle 18. In addition, the draft Safety Evaluation Report for Pilgrim's license renewal application issued in March 2007 contained Open Item (OI) 4.2 related to neutron fluence calculations necessary to support new Pressure-Temperature (P-T) curves for Pilgrim Station beyond cycle 18. By letter dated May 1, 2007 Entergy submitted license renewal application amendment 16 which contained a response to address OI 4.2 that included commitment #47 to submit to the NRC an action plan to improve benchmarking data to support approval of new P-T curves for Pilgrim Station.

The benchmarking validation of the RAMA fluence calculation is ongoing for the Pilgrim reactor vessel and internals. Uncertainties between the calculated and measured results from the dosimetry are still being examined to determine a possible cause for the discrepancy. The following is the current action plan that Entergy is pursuing to resolve the issue.

- Perform a sensitivity study based on the fact that most of the core power history is from dosimetry that was removed from the Pilgrim vessel during refueling outage (RFO) 4. Entergy will further review the power history developed at Pilgrim Station and determine, based on the sensitivity study, if adjustments to the power history are warranted.

- Determine whether it would be useful to analyze jet pump swing gate samples that were removed from the Pilgrim vessel during RFO 16 in 2007 to obtain fluence information to validate the RFO 4 dosimetry.

- Review data from a similar BWR-3 to determine if this data can be used to improve the Pilgrim calculated to measured (C/M) bias or provide additional benchmarking information.

- The copper flux wires from the RFO 4 capsule pull were recently retested and results were similar to the original measurements. Entergy has also independently reviewed and validated the dosimetry counting methods used by the contracted vendor. They are considered to be accurate and correct.

- Research to confirm as-built vessel dimensions of the dosimetry location.

- Evaluate the removal of dosimetry from a surveillance capsule in the Pilgrim vessel during RFO 17 scheduled for the spring of 2009, if the C/M bias is not adequately resolved by the preceding actions. This dosimetry would then be used to obtain the full fluence history for use in developing new P-T curves.

- Consider contracting an independent vendor to model the vessel and perform a fluence calculation as a verification of the current results.

This letter meets the commitment made by Entergy in the two letters referenced above and will allow for successful resolution of the data benchmarking issue to support the development of new P-T curves for Pilgrim.