



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

June 14, 2006

Michael A. Balduzzi
Site Vice President

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

Response to NRC Request for Additional Information Regarding
Technical Specification Changes to Revise Reactor Coolant Leakage
Detection System Instrumentation (TAC No. MC7255)

REFERENCE: 1. NRC Letter, 1.06.071, NRC Request for Additional Information
Regarding Technical Specification Changes to Revise Reactor
Coolant Leakage Detection System Instrumentation (TAC No.
MC7255), dated May 18, 2006.

LETTER NUMBER: 2.06.053

Dear Sir or Madam:

By Reference 1, the NRC requested additional information regarding proposed Technical Specification changes to revise reactor coolant leakage detection system instrumentation. Entergy has evaluated the request and the response is provided in Attachment 1.

This letter contains no commitments.

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

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 14~~th~~ day of JUNE 2006.

Sincerely,

Michael A. Balduzzi

ERS/dm

Attachment: 1. Entergy Response to NRC Request for Additional Information Regarding
Technical Specification Changes to Revise Reactor Coolant Leakage
Detection System Instrumentation. (2 pages)

ADD 1

Entergy Nuclear Operations, Inc
Pilgrim Nuclear Station

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cc: Mr. James Shea, Project Manager
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**Entergy Response to NRC Request for Additional Information
Regarding Technical Specification Changes to Revise Reactor Coolant
Leakage Detection System Instrumentation**

Pilgrim Leakage Detection Instrumentation Requirements & Actions

NRC RAI 1

The proposed Pilgrim Technical Specification (TS) changes to the reactor coolant system (RCS) leakage detection instrumentation would remove the operability requirements of the drywell equipment drain sump from TS 3.6.C.2.a.1 and TS 3.6.C.2.b.1. Please explain how the total leakage limits as specified in TS 3.6.C.1.a.3 would be verified during plant operation.

Entergy Response

Pilgrim will continue to verify that total leakage is within limits using the same methods as currently used. This change seeks to remove the operability requirements for the drywell equipment drain sump from Technical Specifications. The drywell equipment drain sump associated pumps and instrumentation will continue to be used in conjunction with the drywell floor drain sump associated pumps and instrumentation to verify total leakage is within limits during plant operation.

NRC RAI 2

The proposed revised Pilgrim TSs allow for an outage time of 30 days for the drywell floor drain sump. Please explain how TS 4.6.C.1 would verify the requirements of TS 3.6.C.1.a while the drywell floor drain sump is inoperable.

Entergy Response

Pilgrim will use manual leak rate determination methods consistent with position (3) described in NRC Generic Letter (GL) 88-01, Supplement 1. GL 88-01 Supplement 1 provides the staff position concerning an acceptable allowed out of service time for the drywell floor drain sump. Position (3) discusses that leakage can be determined by measuring the differences in sump level during the 30 day period when the drain sump monitoring system is inoperable. This method is valid for Pilgrim because sump volume is known and has installed instrumentation that can be used to determine sump level for use in calculating leakage rates. In fact, at very low leakage rates, indicative of a well maintained RCS, this is in effect the method that must be used for determining leakage rates because even with the sump operable, there can be insufficient liquid in the floor drain sump to operate the pumps every 8 hours.

**Entergy Response to NRC Request for Additional Information
Regarding Technical Specification Changes to Revise Reactor Coolant
Leakage Detection System Instrumentation**

RCS Proposed Leakage Actions

The NRC Standard Technical Specifications (STS) Surveillance Requirement (SR) 3.4.4.1 states the following, "Verify RCS unidentified and total LEAKAGE and unidentified LEAKAGE increase are within limits [every 8 hours]." The proposed Pilgrim SR 4.6.C.1 consists of the following statement, "Demonstrate drywell leakage is within the limits specified in 3.6.C.1 at least once every 8 hours." It is not clear to the staff that the proposed Pilgrim SR is consistent with the STS.

NRC RAI 3

Provide clarification on how the proposed Pilgrim SR 4.6.C.1 is equivalent to STS SR 3.4.4.1.

Entergy Response

Although the wording of SR 3.6.C.1 in Pilgrim's Custom Technical Specifications is different in this case than the corresponding wording of STS SR 3.4.4.1, comparison reveals that the two SRs are equivalent. While the STS SR 3.4.4.1 identifies by name each type of leakage to be verified, Pilgrim SR 4.6.C.1 explicitly calls out "the limits specified in 3.6.C.1" which are the same as those called out in STS SR 3.4.4.1 by name. In this regard the two SRs are equivalent, although they are expressed differently.

NRC RAI 4

With the dry well sump monitoring system inoperable, how can you demonstrate that total leakage and the unidentified leakage increase are within the TS specified limits?

Entergy Response

As discussed in the response to RAI#2 above, Pilgrim will use manual leak rate determination methods consistent with position (3) described in NRC Generic Letter (GL) 88-01, Supplement 1. GL 88-01 Supplement 1 provides the staff position concerning an acceptable allowed out of service time for the drywell floor drain sump. Position (3) discusses that leakage can be determined by measuring the differences in sump level during the 30 day period when the drain sump monitoring system is inoperable. This method is valid for Pilgrim because sump volume is known and has installed instrumentation that can be used to determine sump level for use in calculating leakage rates. In fact, at very low leakage rates, indicative of a well maintained RCS, this is in effect the method that must be used for determining leakage rates because even with the sump operable, there can be insufficient liquid in the floor drain sump to operate the pumps every 8 hours.