

May 9, 2000

Mr. Craig G. Anderson
Vice President, Operations ANO
Entergy Operations, Inc.
1448 S. R. 333
Russellville, AR 72801

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON REPLACEMENT STEAM
GENERATOR INSPECTION REQUIREMENTS - ARKANSAS NUCLEAR ONE,
UNIT 2 (TAC NO. MA6341)

Dear Mr. Anderson:

By letter dated August 18, 1999, you submitted proposed changes to the Technical Specifications (TSs) associated with the steam generator surveillance requirements at Arkansas Nuclear One, Unit 2. The proposed TS changes include removing the requirements associated with tube sleeving and repair limits, modifying the preservice and inservice inspection requirements, and changing the inspection interval and reporting requirements. The proposed TS changes are needed to support replacement of the existing steam generators during refueling outage 2R14, which is currently scheduled to begin on September 15, 2000.

The Nuclear Regulatory Commission staff has reviewed the information provided in the August 18, 1999, letter. In order for the staff to complete its evaluation, the staff requires a response to the enclosed request for additional information (RAI).

The contents of this RAI has been discussed with Mr. Dennis Boyd of your staff, and a response time frame of early July was agreed to. The staff appreciates your efforts in regard to this matter.

If for any reason this date becomes unreasonable, please contact me at your earliest opportunity.

Sincerely,

/RAI/

Thomas W. Alexion, Project Manager
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-368

cc: See next page

Enclosure: RAI

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Enclosure: RAI

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REQUEST FOR ADDITIONAL INFORMATION
REGARDING PROPOSED AMENDMENT TO TECHNICAL SPECIFICATIONS
ON STEAM GENERATOR INSPECTION REQUIREMENTS
ENTERGY OPERATIONS, INC.
ARKANSAS NUCLEAR ONE, UNIT 2
DOCKET NO. 50-368

1. In the August 18, 1999, amendment request, Entergy Operations, Inc. (the licensee) stated that an analysis per Regulatory Guide (RG) 1.121, "Bases for Plugging Degraded PWR [pressurized water reactor] Steam Generator Tubes," will be performed to establish the minimum acceptable wall thickness and the unacceptable defects for the replacement steam generator tubes. Although the licensee indicated which analytical codes and the loading combinations that would be used, the licensee had not completed the analysis, and thus, did not provide a summary of the analysis as recommended by RG 1.121. Therefore, the staff requests that the licensee provide a summary of their analysis to support the proposed minimum wall thickness and plugging criteria.
2. The licensee stated that it will be using techniques for flaw detection and sizing as outlined in the Electric Power Research Institute (EPRI) report TR-107569, Vol. 1, Rev. 5, "PWR Steam Generator Examination Guidelines." Surveillance Requirement (SR) 4.4.5.4.a.10 defines the preservice inspection as an inspection of the full length of each tube in the steam generator performed by eddy current techniques. Since the current SRs define tube inspection as an inspection from the hot-leg tube end, around the U-bend, to the top cold-leg support, provide a discussion of the scope and techniques for the first inservice inspection and whether the licensee will be following the EPRI guideline recommending a 100 percent full-length (end-to-end) inspection and an inspection of all plugs, if any.
3. In SR 4.4.5.3.a the licensee proposed that wear degradation not be included in the criteria for determining the tube inspection condition result as applied to allowing an extension of the surveillance interval. Since wear is the most probable degradation mechanism to be experienced in the early inspections, the staff requests that this proposed change be deleted.
4. The licensee has proposed to delete wastage as one of the mechanisms in its definition of degradation in SR 4.4.5.4.a.3. Although it is less likely to occur, it remains as a type of degradation that should be included. The staff requests that this proposed change be deleted.

Arkansas Nuclear One

cc:

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& Chief Operating Officer
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