September 25, 2002

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

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT NO. 1 (ANO-1) - REVIEW OF STEAM

GENERATOR INSPECTION RESULTS DURING 1R17 (TAC NO. MB6339)

Dear Mr. Anderson:

Inservice inspections of steam generator (SG) tubes play a vital role in ensuring that adequate structural integrity of the tubes is maintained. As required by the ANO-1 technical specifications, reporting requirements range from submitting a written report prior to resumption of plant operation, describing the investigations conducted to determine cause of the tube degradation and corrective measures taken to prevent recurrence; to submitting a written report within 90 days following completion of the inspection, that provides the complete results of the SG tube inservice inspections.

Telephone conferences will be arranged with members of your staff to discuss the SG tube inspections to be conducted during the upcoming ANO-1 refueling outage (1R17). Enclosed is a list of discussion points to facilitate the telephone conferences. We would like to have the first conference prior to the outage to discuss Item 5. We would like to have the second conference after the majority of the tubes have been inspected, but before the SG inspection activities have been completed. The preferable time would be when the SG inspection is approximately 70% complete and the data has been analyzed. The staff plans to document a brief summary of the conferences as well as any material that you may have provided to the staff in support of the conferences.

This activity has been discussed with Mr. Steve Bennett of your staff. The staff appreciates your support on this matter.

Sincerely,

/RA/

Thomas W. Alexion, Project Manager, Section 1 Project Directorate IV Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-313

Enclosure: As stated

cc w/encl: See next page

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Telephone conferences will be arranged with members of your staff to discuss the SG tube inspections to be conducted during the upcoming ANO-1 refueling outage (1R17). Enclosed is a list of discussion points to facilitate the telephone conferences. We would like to have the first conference prior to the outage to discuss Item 5. We would like to have the second conference after the majority of the tubes have been inspected, but before the SG inspection activities have been completed. The preferable time would be when the SG inspection is approximately 70% complete and the data has been analyzed. The staff plans to document a brief summary of the conferences as well as any material that you may have provided to the staff in support of the conferences.

This activity has been discussed with Mr. Steve Bennett of your staff. The staff appreciates your support on this matter.

Sincerely,

/RA/

Thomas W. Alexion, Project Manager, Section 1

Docket No. 50-313 Project Directorate IV

Enclosure: As stated Division of Licensing Project Management cc w/encl: See next page Office of Nuclear Reactor Regulation

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STEAM GENERATOR (SG) TUBE INSPECTION DISCUSSION POINTS PREPARED BY THE OFFICE OF NUCLEAR REACTOR REGULATION

ENTERGY OPERATIONS, INC.

ARKANSAS NUCLEAR ONE, UNIT NO. 1 (ANO-1)

DOCKET NO. 50-313

The following discussion points have been prepared to facilitate the telephone conferences to be arranged with the licensee to discuss the results of the SG tube inspections to be conducted during the upcoming ANO-1 refueling outage. The first conference is scheduled to occur prior to the outage to discuss Item 5. The second conference is scheduled to occur toward the end of the planned SG tube inspection interval, but before the unit exits its refueling outage.

The staff plans to document a brief summary of the conferences as well as any material that the licensee may have provided to the staff in support of the conferences.

- 1. Discuss whether any primary to secondary leakage existed in this unit prior to shutdown.
- 2. Discuss the results of secondary side pressure tests.
- 3. For each SG, provide a general description of areas examined, including the expansion criteria utilized and type of probe used in each area. Also, be prepared to discuss your inspection of the tube within the tubesheet, particularly the portion of the tube below the expansion/transition region.
- 4. Once Through Steam Generators if you have Babcock and Wilcox (B&W) welded plugs installed in the SGs, be prepared to discuss the actions taken in response to Framatome's notification of the effect of tubesheet hole dilation on the service life of B&W welded plugs.
- 5. Once Through Steam Generators describe your inspection/plugging plans with respect to the industry-identified severed tube issue (Information Notice (IN) 2002-02 and IN 2002-02, Supplement 1).
- 6. Provide a summary of the number of indications identified to date of each degradation mode and SG tube location (e.g., tube support plate, top-of-tubesheet, etc.). Also provide information such as voltages, and estimated depths and lengths of the most significant indications.
- 7. Describe repair/plugging plans for the SG tubes that meet the repair/plugging criteria.
- 8. Discuss the previous history of SG tube inspection results, including any "look backs" performed, specifically for significant indications or indications where look backs are used in support of dispositioning (e.g., manufacturing burnish marks).
- 9. Discuss, in general, new inspection findings (e.g., degradation mode or location of degradation new to this unit).

- 10. If SGs contain Alloy 600 thermally treated tubing, discuss actions taken (if any) based on the recent findings at Seabrook Station?
- 11. Discuss your use or reliance on inspection probes (eddy current or ultrasonic) other than bobbin and typical rotating probes, if applicable.
- 12. Describe in-situ pressure test plans and results, if applicable and available, including tube selection criteria.
- 13. Describe tube pull plans and preliminary results, if applicable and available; include tube selection criteria.
- 14. Discuss the assessment of tube integrity for the previous operating cycle (i.e., condition monitoring).
- 15. Discuss the assessment of tube integrity for next operating cycle (i.e., operational assessment).
- 16. Provide the schedule for SG-related activities during the remainder of the current outage.

Arkansas Nuclear One

CC:

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