



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

April 17, 2014

Vice President, Operations  
Arkansas Nuclear One  
Entergy Operations, Inc.  
1448 S.R. 333  
Russellville, AR 72802

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT 2 – UPCOMING STEAM GENERATOR  
TUBE INSERVICE INSPECTION (TAC NO. MF3897)

Dear Sir or Madam:

Inservice inspections of steam generator (SG) tubes play a vital role in assuring SG tube integrity. Based on a discussion with Mr. Robert Clark of your staff on April 10, 2014, a telephone conference call has been tentatively arranged for Thursday, May 22, 2014, with members of your staff to discuss the ongoing results of the SG tube inspections to be conducted during the upcoming refueling outage for Arkansas Nuclear One, Unit 2. This call will occur after the majority of the tubes have been inspected, but before the SG inspection activities have been completed. Enclosed is a list of discussion points to facilitate this call.

The U.S. Nuclear Regulatory Commission (NRC) staff will document a summary of the conference call, including any material that you provide to the NRC staff in support of the call.

If you have any questions, please contact me at (301) 415-2833 or by e-mail at [Peter.Bamford@nrc.gov](mailto:Peter.Bamford@nrc.gov).

Sincerely,

A handwritten signature in black ink, reading "Peter Bamford", is written over a large, stylized, handwritten "D" that serves as a background for the signature.

Peter J. Bamford, Project Manager  
Plant Licensing Branch IV-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-368

Enclosure:  
List of Discussion Points

cc w/encl: Distribution via Listserv

## STEAM GENERATOR TUBE INSPECTION DISCUSSION POINTS

ENTERGY OPERATIONS, INC.

ARKANSAS NUCLEAR ONE, UNIT 2

DOCKET NO. 50-368

The following discussion points have been prepared to facilitate the conference call arranged with the licensee to discuss the results of the steam generator (SG) tube inspections to be conducted during the upcoming spring 2014 refueling outage at Arkansas Nuclear One, Unit 2. This conference call is scheduled to occur towards the end of the planned SG tube inspections, but before the inspections and repairs are completed.

The U.S. Nuclear Regulatory Commission staff plans to document a summary of the conference call, as well as any material that is provided in support of the call.

1. Please discuss any trends in the amount of primary-to-secondary leakage observed during the recently completed cycle.
2. Please discuss whether any secondary side pressure tests were performed during the outage and the associated results.
3. Please discuss any exceptions taken to the industry guidelines.
4. For each SG, please provide a description of the inspections performed including the areas examined and the probes used (e.g., dents/dings, sleeves, expansion-transition, U-bends with a rotating probe), the scope of the inspection (e.g., 100 percent of dents/dings greater than 5 volts and a 20 percent sample between 2 and 5 volts), and the expansion criteria.
5. For each area examined (e.g., tube supports, dent/dings, sleeves, etc.), please provide a summary of the number of indications identified to date for each degradation mode (e.g., number of circumferential primary water stress-corrosion cracking (PWSCC) indications at the expansion transition). For the most significant indications in each area, provide an estimate of the severity of the indication (e.g., provide the voltage, depth, and length of the indication). In particular, address whether tube integrity (structural and accident-induced leakage integrity) was maintained during the previous operating cycle. In addition, discuss whether any location exhibited a degradation mode that had not previously been observed at this location at this unit (e.g., observed circumferential PWSCC at the expansion transition for the first time at this unit).
6. Please describe repair/plugging plans.
7. Please describe in-situ pressure test and tube pull plans and results (as applicable and if available).

Enclosure

8. Please discuss the following regarding loose parts:
  - what inspections are performed to detect loose parts;
  - a description of any loose parts detected and their location within the SG (including the source or nature of the loose part, if known);
  - if the loose parts were removed from the SG; and
  - indications of tube damage associated with the loose parts.
9. Please discuss the scope and results of any secondary side inspection and maintenance activities (e.g., in-bundle visual inspections, feed-ring inspections, sludge lancing, assessing deposit loading, etc.).
10. Please discuss any unexpected or unusual results.
11. Please provide the schedule for SG-related activities during the remainder of the current outage.

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Sincerely,

/RA/

Peter J. Bamford, Project Manager  
Plant Licensing Branch IV-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-368

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List of Discussion Points

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DATE	4/15/14	4/15/14	4/16/14	4/17/14	4/17/14

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