

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

November 12, 2008

Mr. Charles Pardee Chief Nuclear Officer AmerGen Energy Company, LLC 200 Exelon Way, KSA 3-N Kennett Square, PA 19348

# SUBJECT: THREE MILE ISLAND NUCLEAR STATION, UNIT 1 - REQUEST FOR ADDITIONAL INFORMATION REGARDING REVIEW OF STEAM GENERATOR TUBE INSPECTION REPORT FOR THE 2007 OUTAGE (TAC NO. MD8268)

Dear Mr. Pardee:

By letter dated February 14, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML080650174), AmerGen Energy Company, LLC submitted information summarizing the results of the 2007 steam generator tube inspections at Three Mile Island, Unit 1.

The Nuclear Regulatory Commission staff has been reviewing the submittal and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information. The questions were sent via electronic transmission on October 21, 2008, to Mr. Thomas Loomis of your staff. The draft questions were sent to ensure that the questions were understandable, the regulatory basis for the questions was clear, and to determine if the information was previously docketed. The questions were discussed with Ms. Wendi Croft of your staff on November 4, 2008, and no further clarifications to the questions were deemed necessary. It was agreed that your response would be provided within 30 days of the date of this letter.

Please contact me at 301-415-2833, if you have any questions.

Sincerely,

Pater Bamfor

Peter Bamford, Project Manager Plant Licensing Branch I-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-289

Enclosure: As stated

cc: Distribution via Listserv

# **REQUEST FOR ADDITIONAL INFORMATION**

### THREE MILE ISLAND, UNIT 1

### 2007 STEAM GENERATOR TUBE INSPECTIONS

#### DOCKET NO. 50-289

By letter dated February 14, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML080650174), AmerGen Energy Company, LLC, submitted information summarizing the results of the 2007 steam generator (SG) tube inspections at Three Mile Island, Unit 1. In addition to these reports, the U.S. Nuclear Regulatory Commission (NRC) staff summarized additional information concerning the 2007 SG tube inspections at Three Mile Island, Unit 1, in a letter dated January 27, 2008 (ADAMS Accession No ML080160563).

In order for the NRC staff to complete its review of the portions of the above-mentioned documents pertaining to steam generator tube integrity, the NRC staff requests responses to the following questions.

- 1. Please confirm that all detected crack-like indications were plugged (except for those that were determined to be acceptable for service based on an NRC-approved alternate tube repair criteria).
- 2. It was indicated that the bobbin coil probe was used to inspect for tube-to-tube wear. Please discuss if any tube-to-tube wear was observed. If any was observed, discuss the size of these indications, how these indications were dispositioned, and the basis for leaving them in service (if applicable).
- 3. Please discuss whether any degradation of your tube supports was detected. If so, discuss the extent and the basis for dispositioning this degradation.
- 4. Please discuss the results of your visual and eddy current inspection of the plugs (including the thimble plugs).
- 5. Please discuss whether any of the volumetric intergranular attack indications were excluded from your growth analysis because they were outliers. If any data were excluded, please discuss the number of data points excluded and the growth rate for these data points. In addition, please discuss how the 2007 results compare to prior outages.
- 6. On page 15 of Enclosure 1 to your February 14, 2008, letter, you indicated that 13,819 inservice tubes in steam generator A and 14,607 inservice tubes in steam generator B were repaired by kinetic expansion. These numbers do not match those on page 18 or Table 2-1. Please clarify.
- 7. Other than postulated leakage from flaws in the kinetically expanded region of the tubing, please discuss the source and nature of any other sources of primary-to-secondary leakage that were detected during the 2007 outage.

- 8. Please discuss whether any indications were detected at dented locations. If so, please discuss the nature and size of the indication and the size of the dent. If any indications were found in dents whose voltage was near the threshold value for performing rotating probe examinations, please provide the basis for why no sample expansion was necessary.
- 9. During the 2005 outage, approximately 1200 inside diameter intergranular attack indications were detected in steam generator A. During the 2007 inspection, only 1119 indications were used in the growth assessment. Please discuss this apparent discrepancy in the number of data points (e.g., were some indications not detected during the 2007 outage?).
- 10. Please discuss whether any indications were detected in the sleeves or in the lower tubesheet crevice. If any indications were detected, please discuss the nature of the indications.

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ADAMS Accession Number: ML083100731	*concurrence via memo

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