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10 CFR 50.54f

Docket Nos .: 50-348 50-364

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555

> Joseph M. Farley Nuclear Plant Response To Request for Additional Information Regarding Generic Letter 97-05, Steam Generator Tube Inspection Techniques

Ladies and Gentleme.

Southern Nuclear Ope. ating Company (SNC) received a request dated August 20, 1998, for additional information (RAI) regarding our response to Generic Letter (GL) 97-05. The SNC response to the RAI is attached.

Respectfully submitted,

Dave Morey Sworn to and subscribed before me this 12 day of Oct 1998

Notary Public Dow My Commission Expires: Movember 1, 2001

EWC/maf rai9705.doc

Attachment

Mr. L. A. Reyes, Region II Administrator cc: Mr. J. I. Zimmerman, NRR Project Manager Mr. T. P. Johnson, Plant Sr. Resident Inspector

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# ATTACHMENT

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SNC RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION, DATED AUGUST 20, 1998, REGARDING GENERIC LETTER 97-05 SNC Response to NRC Request For Additional Information Related to Generic Letter 97-05, "Steam Generator Tube Inspection Techniques," Joseph M. Farley Nuclear Plant, Units 1 and 2

## 1. Question:

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Discuss the qualification that enables the differentiation between MBMs and other volumetric forms of tube degradation (e.g., intergranular attack), or provide evidence from pulled tubes or industry experience that supports your practice of characterizing MBMs through eddy current inspection techniques.

#### **Response:**

### The practice described below is the current policy for disposition of MBMs:

The Farley practice with respect to disposition of MBM signals does not rely on a specific ability to discriminate among the forms of volumetric wall loss. The identification of a signal as a possible flaw by bobbin screening is based upon phase analysis, using ASME standards to establish the range of phase angle shift attributable to possible flaw content. MBMs identified from bobbin data normally have flaw phase angles that correlate to less than 10 %.

Bobbin signals identified as possible MBMs are examined with a rotating probe. If a volumetric indication (VOL) is observed, the indication is subjected to historic bobbin data review. If the normalized amplitude and phase angle of the bobbin lissajous trace are not significantly changed from the "baseline" values, the MBM designation is confirmed and the tube need not be repaired. If significant increase in bobbin amplitude or depth derived from phase angle relative to the baseline bobbin result is observed, then the possibility exists that active degradation has occurred at this location, and the tube is repaired or removed from service. The verification that there has been no change in the indication from baseline serves as a basis to ensure MBMs can be differentiated from other forms of volumetric degradation.

MPMs examined with rotating coils do not usually present discrete flaw characteristics. The presence of crack-like characteristics, confirmed by rotating coil examination, together with significant amplitude or depth increase by the historical bobbin review, is cause for repair of the tube.

## 2. Question:

State in your response whether it is the practice at Farley to review preservice or the most recent inspection data to determine if indications were evident in the past.

#### **Response:**

For bobbin examination, the reference or "baseline" condition to which the signal is compared is taken from the earliest useful inspection archive. These data are from the 1985 (Unit 1) and 1986 (Unit 2) inspections.