July 2, 1999

Mr. D. N. Morey
Vice President - Farley Project
Southern Nuclear Operating
Company, Inc.
Post Office Box 1295
Birmingham, Alabama 35201-1295

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 1 RE: REQUEST FOR ADDITIONAL INFORMATION — CYCLE 16 EXTENSION REQUEST (TAC NO. MA5356)

Dear Mr. Morey:

Your April 30, 1999, letter requested an amendment to the Farley Nuclear Plant (FNP), Unit 1, Facility Operating License No. NPF-2. The amendment would allow you to operate FNP, Unit 1, for cycle 16 based on the risk-informed probability of steam generator tube rupture and nominal accident-induced primary-to-secondary leakage in the event of a steam line break. We need additional information, as discussed in the Enclosure, in order to complete our review of your request. Please send us this information within 30 days of the date of this letter. I discussed this request with Mark Ajluni on July 1, 1999, and we mutually established this response date. Please call me at (301) 415-1423 if you need to revise the date.

Sincerely,
Original signed by:

L. Mark Padovan, Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-348

Enclosure: Request for Additional Information

cc w/encl: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001
July 2, 1999

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Southern Nuclear Operating
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Post Office Box 1295
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Division of Licensing Project Management
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Enclosure: Request for Additional Information

cc w/encl: See next page

Joseph M. Farley Nuclear Plant

cc:

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Resident Inspector
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Rebecca V. Badham
SAER Supervisor
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P. O. Box 470
Ashford, Alabama 36312

REQUEST FOR ADDITIONAL INFORMATION

CYCLE 16 EXTENSION REQUEST

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 1

1. Please submit a list of all confirmed freespan tube flaws identified in the outage with their corresponding voltages and phase angle measurements recorded using a bobbin coil probe. In addition, please submit bobbin coil eddy current data (Eddynet format) for a sample of at least 20 tubes removed from service for freespan cracking in the end-of-cycle (EOC)-15 outage. Provide data for each tube obtained in the EOC-14 and EOC-15 refueling outages. Include with the tube data the calibration standard data appropriate for each indication(s) to permit proper set-up of the equipment. List the true depths of the reflectors for each calibration standard included on the data disk.

   Please send the eddy current data disk and calibration standard information to the following address:

   Caius V. Dodd
   11740 Williamsburg Drive, N.
   Knoxville, TN 37922-3818

   You should send the list of all indications found in the Cycle 15 refueling outage to NRR.

2. Nondestructive examination (NDE) sizing uncertainties in Table 5-4 appear to have been developed using two analysts (i.e., D4536 and D9999). However, the majority of the calls considered for sizing were from one of the two analysts. The predominant use of one eddy current analyst may bias the results in that uncertainty distributions will be specific to the particular analyst. Describe how the use of a limited number of data analysts in the sizing uncertainty assessment permits an accurate prediction of the EOC-16 flaw distribution.

3. Some flaws identified in the destructive examination were excluded from the development of the probability of detection (POD) curves due to close proximity to other cracks (e.g., R25C51 - 4, 5, 6). In other cases (e.g., R25C51 - 9 and 2), two closed spaced cracks were retained for the development of the POD correlation. We are concerned that including closely spaced cracks in the POD correlation does not provide a representative correlation because each crack may not be detected independently. Describe the steps taken to ensure that each flaw considered for the POD correlations was detected independent of one another. Discuss whether detection calls were from the original field analyses completed prior to selecting tubes from removal of the steam generator.

Enclosure