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Docket Nos.: 50-425

NL-15-1636

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Vogtle Electric Generating Plant, Unit 2
Response to Request for Additional information on Fall 2014
Steam Generator Tube Inspections (TAC NO. MF6052)

Ladies and Gentlemen:

By letter dated April 2, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML15092A834), Southern Nuclear Operating Company, Inc. (SNC) submitted a steam generator tube inspection report performed during the seventeenth refueling outage (2R17) at Vogtle Electric Generating Plant (VEGP), Unit 2. The Nuclear Regulatory Commission (NRC) issued a request for additional information via a letter dated July 30, 2015 (ADAMS Accession Number ML15196A548). The enclosure to this letter contains the SNC responses to that request.

This letter contains no NRC commitments. If you have any questions, please contact Ken McElroy at (205) 992-7369.

Mr. C. R. Pierce states he is Regulatory Affairs Director of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and, to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

C. R. Pierce
Regulatory Affairs Director
CRP/EGA



Sworn to and subscribed before me this 28th day of August, 2015.

Notary Public

My commission expires: 1-2-2018

Enclosure:

SNC Response to Request for Additional Information for Vogtle 2R17 Steam
Generator Tube Inspection Report

cc: Southern Nuclear Operating Company

Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer
Mr. D. R. Madison, Vice President – Fleet Operations
Mr. M. D. Meier, Vice President – Regulatory Affairs
Mr. B. K. Taber, Vice President – Vogtle 1 & 2
Mr. B. J. Adams, Vice President – Engineering
Mr. G.W. Gunn, Regulatory Affairs Manager – Vogtle 1 & 2
RType: CVC7000

U. S. Nuclear Regulatory Commission

Mr. V. M. McCree, Regional Administrator
Mr. L. D. Wert, Regional Administrator (Acting)
Mr. R. E. Martin, NRR Senior Project Manager – Vogtle 1 & 2
Mr. L. M. Cain, Senior Resident Inspector – Vogtle 1 & 2

**Vogtle Electric Generating Plant, Unit 2
Response to Request for Additional information on Fall 2014
Steam Generator Tube Inspections (TAC NO. MF6052)**

Enclosure

**SNC Response to Request for Additional Information for
Vogtle 2R17 Steam Generator Tube Inspection Report**

Enclosure to NL-15-1636**SNC Response to Request for Additional Information for
Vogtle 2R17 Steam Generator Tube Inspection Report****NRC RAI No. 1**

On page E-9 of the inspection report, in the section on SG Channel Head Primary Side Bowl Inspection, it is stated, "Satisfactory inspection results were observed in all SGs; no unacceptable degradation was found." Please clarify if any degradation was observed in the SG Channel Head Bowl. If so, please discuss the location, severity, and cause of degradation.

SNC Response to RAI No. 1

No degradation was observed during visual inspections of the Steam Generator (SG) channel head primary side bowl in any of the four steam generators.

NRC RAI No. 2

On page E-8 of the inspection report, a list of indications of tube wear and wall loss from secondary side cleaning is provided. Based on a review of this data and prior inspection reports, it appears that one indication in SG 1 row 1, column 78 (R1C78) is new. Please confirm.

Also, the indication in the tube in SG 4 R42C93 was reported in the RFO 13 inspection report (ADAMS Accession No. ML090990606) and in your letter dated February 23, 2015 (ADAMS Accession No. ML 15054A536), but not in the RFO 17 inspection report (ADAMS Accession No. ML15092A834). It appears that this indication has been reclassified as wear attributed to a loose part (similar to SG 4 R12C57). Please confirm.

SNC Response to RAI No. 2

The tube SG1 Row 1 Column 78 has three wear indications in the 9 inch to 12 inch elevation range above the tubesheet. Two of these indications are on the hot leg side and one on the cold leg side. An eddy current data history review of the three indications on this tube is provided below and shows that these indications are not new.

SG	Row	Col	Outage % TW			Elevation	Probe
			2R17	2R15	2R13		
1	1	78	17	17	19	TSH +9.63	RPC
1	1	78	12	12	13	TSH +11.44	RPC
1	1	78	28	28	29	TSC +11.63	RPC

Correct, the wear indication in tube SG4 Row 42 Column 93 was reclassified as attributable to a loose part based on the character of the eddy current response and elevation of the indication just above the tubesheet. This indication will continue to be monitored in-service.

NRC RAI No. 3

Please confirm that there were 81 anti-vibration bar (AVB) wear indications in 52 tubes in SG 1 and 197 AVB wear indications in 115 tubes in SG 4.

SNC Response to RAI No. 3

These numbers of anti-vibration wear indications and number of affected tubes are correct.

Enclosure to NL-15-1636

**SNC Response to Request for Additional Information for
Vogtle 2R17 Steam Generator Tube Inspection Report**

NRC RAI No. 4

The NRC staff identified several possible discrepancies for the reported numbers of possible loose part (PLP) indications in Table 1 of the inspection reports for RFO 15, RFO 16, and RFO 17. Please clarify the number of indications in the following tubes.

- a. For the tube at R49C86 in SG 1:
 - i. 2 indications are reported in RFO 15,
 - ii. 1 indication is reported in RFO 16, and
 - iii. 2 indications are reported in RFO 17.
- b. For the tube at R48C86 in SG 1:
 - i. 3 indications are reported for RFO 15,
 - ii. 2 indications are reported for RFO 16, and
 - iii. 3 indications are reported for RFO 17.
- c. For the tube at R32C49 in SG 2:
 - i. 2 indications are reported for RFO 16 and
 - ii. 1 indication is reported for RFO 17.

Please also confirm that there are currently no PLP indications in the tubes at R28C91 and R29C91, since there was an indication reported in each tube for RFO 15, but no indications reported for RFO 16 and RFO 17.

SNC Response to RAI No. 4

A review of the numbers of PLP indications is discussed below. The bobbin inspections are alternated between two SGs at Vogtle Unit 2. Steam Generators 1 and 4 were bobbin inspected at 2R15 and 2R17 and Steam Generators 2 and 3 were bobbin inspected during 2R16. A PLP indication can be reported from bobbin and/or rotating pancake coil (RPC) inspections.

- a. For the tube at R49C86 in SG 1
 - i. Correct, one indication from bobbin and one from RPC.
 - ii. Correct, one indication from RPC.
 - iii. Correct, one indication from bobbin and one from RPC.
- b. For the tube at R48C86 in SG 1:
 - i. Correct, one indication from bobbin and two from RPC.
 - ii. Correct, two indications from RPC.
 - iii. Correct, one indication from bobbin and two from RPC.
- c. For the tube at R32C49 in SG 2:
 - i. Correct, one indication from bobbin and one from RPC.
 - ii. Correct, one indication from RPC.

There are currently no PLP indications in tubes R28C91 and R29C91. Visual inspection of these locations was last performed during RFO15 and no foreign objects were observed. Subsequent RPC testing during refueling outage 16 resulted in no PLP indication response at these same locations.