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

Shearon Harris Nuclear Power Plant, Unit No. 1
Docket No. 50-400/License No. NPF-63
One-Year Special Report
Steam Generator Tube Inservice Inspection Results

Ladies and Gentlemen:

In accordance with Technical Specification (TS) 4.4.5.5.b of the Harris Nuclear Plant (HNP), Carolina Power and Light Company doing business as Progress Energy Carolinas, Inc., provides the attached Special Report, which transmits the results of the steam generator (SG) tube inservice inspections performed during refueling outage 13 (RFO-13) in the spring 2006.

Attachment 1 provides the required Special Report.

Please refer any question regarding this submittal to me at (919) 362-3137.

Sincerely,

A handwritten signature in black ink, appearing to read "D. H. Corlett", written over a circular scribble.

D. H. Corlett
Supervisor – Licensing/Regulatory Programs
Harris Nuclear Plant

DHC/jpy

Attachment:

1. Summary of the HNP Refueling Outage 13 (RFO-13) Steam Generator (SG) Tube Inservice Inspection Results

c:

Mr. P. B. O'Bryan, NRC Senior Resident Inspector
Ms. L. M. Regner, NRC Project Manager
Dr. W. D. Travers, NRC Regional Administrator

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**Summary of the HNP Refueling Outage 13 (RFO-13) Steam Generator (SG)
Tube Inservice Inspection Results**

Technical Specification 4.4.5.5.b of the Harris Nuclear Plant (HNP) requires that the complete results of the steam generator (SG) tube inservice inspection shall be submitted to the Commission in a Special Report pursuant to Specification 6.9.2 within 12 months following completion of the inspection. This Special Report shall include:

1. Number and extent of tubes inspected,
2. Location and percent of wall-thickness penetration for each indication of an imperfection, and
3. Identification of tubes plugged.

The inservice inspection was performed in Refueling Outage (RFO) Number 13 and completed on April 27, 2006.

1. Number and extent of tubes inspected:

SG "A": Number of tubes available for this inspection - 6,306

Number of Tubes Inspected	Examination Method	Extent of tubes inspected
3,469	Bobbin	Tube end to opposite tube end.
631	Rotating Coil	+/- 2" at the top of the tubesheet around the outer periphery of the tube bundle and the blowdown lane on both the hot leg and cold leg sides (two examinations per tube).
14	Rotating Coil	Tubes in the Row 1 U-bend region from the top support plate, hot leg side, to the top support plate, cold leg side.
8	Rotating Coil	Four (4) tubes examined at the top of the tubesheet region, hot leg side, to bound the wedged foreign object. Three (3) tubes examined at the top of the tubesheet interface, cold leg side, due to bobbin call of distorted tubesheet Indication. One (1) tube examined around the 6 th tube support plate, cold leg side, for a bobbin non-quantifiable indication.

Shearon Harris Nuclear Power Plant, Unit No. 1
Docket No. 50-400/License No. NPF-63
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1. Number and extent of tubes inspected (continued):

SG "B": Number of tubes available for this inspection - 6,306

Number of Tubes Inspected	Examination Method	Extent of tubes inspected
3,468	Bobbin	Tube end to opposite tube end.
630	Rotating Coil	+/- 2" at the top of the tubesheet around the outer periphery of the tube bundle and the blowdown lane on both the hot leg and cold leg sides (two examinations per tube).
14	Rotating Coil	Tubes in the Row 1 U-bend region from the top support plate, hot leg side, to the top support plate, cold leg side.
17	Rotating Coil	<p>10 tubes examined at the top of the tubesheet region, hot leg side, to examine loose parts signals.</p> <p>Three (3) tubes examined at the top of the tubesheet region for distorted tubesheet indications (two (2) on the cold leg side, and one (1) on the hot leg side).</p> <p>One (1) tube examined around the 9th support plate for a distorted dent signal, cold leg side.</p> <p>Two (2) tubes examined for distorted support indication, both on the hot leg with one (1) located at the 3rd tube support plate, and one (1) located at the 8th tube support plate.</p> <p>One (1) tube was examined using a rotating coil exam in a slightly restricted small area of the tube within the tubesheet, cold leg side.</p>

SG "C": Number of tubes available for this inspection - 6,304

Number of Tubes Inspected	Examination Method	Extent of tubes inspected
3,467	Bobbin	Tube end to opposite tube end.
630	Rotating Coil	+/- 2" at the top of the secondary tubesheet, around the outer periphery of the tube bundle and the blowdown lane on both the hot leg and cold leg sides (two examinations per tube).
14	Rotating Coil	Tubes in the Row 1 U-bend region from the top support plate, hot leg side, to the top support plate, cold leg side.
5	Rotating Coil	Special interest exams (dents) located by the 8 th and 9 th tube support plates, two (2) tubes on the hot leg and three (3) tubes on the cold leg side (two examinations per tube).

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Docket No. 50-400/License No. NPF-63
One-Year Special Report
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2. Location and percent of wall-thickness penetration for each indication of an imperfection:

No recordable eddy current testing (ECT) indications with wall-thickness penetration were identified from the results of this tube inspection.

3. Identification of tubes plugged:

SG "A":

One tube plugged (pre-service):
R106C85

Two tubes were plugged due to RFO13 inspections (spring 2006 outage):
R60C45
R59C46

These two tubes were plugged due to a very small foreign object firmly wedged between two tubes at the top of tubesheet. Eddy current did not indicate signs of tube wear on either tube. The tubes were plugged as a conservative measure and the tube legs adjacent to the foreign object were stabilized.

SG "B":

One tube plugged (pre-service):
R114C73

SG "C":

Three tubes plugged (spring 2004 outage):
R01C120
R03C120
R02C121