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

10 CFR 50.4

Shearon Harris Nuclear Power Plant (HNP), Unit 1
Docket No. 50-400/Renewed License No. NPF-63

Subject: 180-Day Steam Generator Tube Inspection Report

Ladies and Gentlemen:

In accordance with Harris Nuclear Plant (HNP) Technical Specifications (TS), Duke Energy Progress, Inc., submits the attached 180-Day Steam Generator Inspection Report for HNP. This report has been prepared in accordance with TS 6.9.1.7, Steam Generator Tube Inspection Report, and provides the complete results of HNP's Refueling Outage No. 19.

This letter contains no new regulatory commitments.

Please address any comments or questions regarding this matter to John Caves at 919-362-2406.

Sincerely,

Sean O'Connor

Enclosure: 180-Day Steam Generator Tube Inspection Report

cc: Mr. J. D. Austin, NRC Sr. Resident Inspector, HNP
Ms. M. Barillas, NRC Project Manager, HNP
Mr. V. M. McCree, NRC Regional Administrator, Region II

HNP-15-088

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-400/RENEWED LICENSE NO. NPF-63

Enclosure

180-Day Steam Generator Tube Inspection Report
(5 pages including cover)

Harris Nuclear Plant HNP1 RFO119 Steam Generator Tube Inspection Report

Pursuant to Harris technical specification 6.9.1.7 the following information is provided:

a. The scope of inspections performed on each SG

For all three steam generators: Full length bobbin probe inspections of all tubes. Top of the tubesheet array probe inspections around the periphery extending five tubes into the bundle.

b. Degradation mechanisms found

Degradation found included tube support plate (TSP) wear

c. Non-destructive examination techniques utilized for each degradation mechanism

The Non-destructive examination techniques utilized bobbin coil and array probes for the detection of wear. The array probe was utilized to characterize wear indications.

d. Location, orientation (if linear), and measured sizes (if available) of service induced indications

The complete listing for service-induced indications is attached.

Tubes with tube support plate wear
SG 1A - 0 tubes /0 indications
SG 1B - 1 tube /1 indication
SG 1C -1 tube/1 indication
Total - 2 tubes/2 indications

No other indications of wear were reported

e. Number of tubes plugged during the inspection outage for each active degradation mechanism

No tubes were plugged.

f. The total number and percentage of tubes plugged to date

*Steam Generator**	*A*	*B*	*C*	*Total*
Plugs present prior to RFO119	*5*	*4*	*3*	*12*
Plugs added in RFO119	*0*	*0*	*0*	*0*
Total Plugs	*5*	*4*	*3*	*12*
% Plugged	*0.08*	*0.06*	*0.05*	*0.06*

** There are 6307 tubes per generator.*

g. The results of condition monitoring, including the results of tube pulls and in-situ pressure testing.

The cumulative EFPY for RFO116 was 8.16, RFO117 was 9.59, RFO118 was 10.95 and RFO119 was 12.22.

As of RFO119, the Harris Unit 1 steam generators had operated 10.94 EFPY since the first in-service inspection after replacement. In total, the Harris Unit 1 steam generators had operated 12.22 EFPY since replacement.

Condition monitoring was met for the tube support plate degradation. All structural performance criteria were met with more than adequate margin projected through the next planned inspection at RFO122.

No degradation was detected in the plug visual or bowl cladding inspections.

No in-situ tests or tube pulls were performed.

FOSAR was performed at the top of tubesheet in all three steam generators. No new foreign objects were discovered. Two legacy parts were confirmed in the same location as the last inspection. They were evaluated and left in service.

Sludge lancing was performed in all three steam generators. A total of sixty -five (65) pounds of sludge was removed from all three steam generators. Twenty two (22) pounds of sludge was removed from the SG A. Eighteen (18) pounds of sludge was removed from SG B . Twenty-five (25) pounds of sludge was removed from SG C.

A steam drum, sludge collector and top of the tube bundle visual inspection was performed in SG B, no degradation was detected.

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	UTIL1	UTIL2
58	131	.10	143	PCT	12	P5	05C	.59		TEC	TEH	.560	NBAUC	5	H	13	WAR	
58	131	.30	131	PCT	11	P33	05C	.40		05C	05C	.560	ZYAXP	54	C	7	WAR	

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | IDX | UTIL1 | UTIL2 |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	UTIL1	UTIL2
1	138	.28	133	PCT	17	P5	08H	.39		09H	TEH	.560	NBAUL	7	H	8	WAR	
1	138	.39	84	PCT	12	P18	08H	.80		08H	08H	.560	ZYAXP	12	H	7	WAR	

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | IDX | UTIL1 | UTIL2 |