



William D. Gunter
Nuclear Support Services Manager
Harris Nuclear Plant
5413 Shearon Harris Rd
New Hill, NC 27562-9300

984 229-2088

January 26, 2023
Serial: RA-23-0011

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

10 CFR 50.55a

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

Subject: Shearon Harris Nuclear Power Plant, Unit 1 – End of Cycle 24 (H1R24) Inservice
Inspection Program Owner's Activity Report

Ladies and Gentlemen:

Pursuant to the reporting requirements of Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, as amended by ASME Code Case N-532-5, Duke Energy Progress, LLC (Duke Energy), hereby submits the Owner's Activity Report for the Shearon Harris Nuclear Power Plant, Unit 1, refueling outage H1R24.

This letter contains no new or revised regulatory commitments.

Should you have any questions concerning this letter, or require additional information, please contact Ryan Treadway, Director – Nuclear Fleet Licensing, at 980-373-5873.

Sincerely,

A handwritten signature in black ink, appearing to read 'William D. Gunter', with a long horizontal flourish extending to the right.

William D. Gunter

Enclosure: Cycle 24 Owner's Activity Report

cc: P. Boguszewski, NRC Sr. Resident Inspector, HNP
M. Mahoney, NRC Project Manager, HNP
L. Dudes, NRC Regional Administrator, Region II

U.S. Nuclear Regulatory Commission
Serial: RA-23-0011, Enclosure

ENCLOSURE

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

CYCLE 24 OWNER'S ACTIVITY REPORT
(5 PAGES PLUS COVER)

DUKE ENERGY

**INSERVICE INSPECTION SUMMARY REPORT
REFUELING OUTAGE
H1R24 (Outage 4)**

Location: 5413 Shearon Harris Road, New Hill, NC 27562

NRC Docket No. 50-400 / Renewed License No. NPF-63

Commercial Service Date: May 2, 1987

***Owner: Duke Energy
526 South Church St.
Charlotte, NC 28201-1006***

Revision 0

<i>Originated By:</i>	<div style="display: flex; justify-content: space-between;"><div style="text-align: center;"><small>Digitally signed by E50268 (342024) Date: 2023.01.12 16:13:57 -05'00'</small> <i>Angela Staller</i></div><div style="text-align: center;"><small>Digitally signed by KASull1 (524967) Date: 2023.01.17 11:59:43 -05'00'</small> <i>Kaitlyn Sullivan</i></div></div> <p style="text-align: center;">Angela Staller (All Sections except Table 2) Kaitlyn Sullivan (Table 2 Only)</p>	<i>Date</i> _____
<i>Checked By:</i>	<div style="display: flex; justify-content: space-between;"><div style="text-align: center;"><small>Digitally signed by E50268 (342024) Date: 2023.01.12 16:15:13 -05'00'</small> <i>Angela Staller</i></div><div style="text-align: center;"><small>Digitally signed by KASull1 (524967) Date: 2023.01.17 12:00:00 -05'00'</small> <i>Kaitlyn Sullivan</i></div></div> <p style="text-align: center;">Angela Staller (Table 2 Only) Kaitlyn Sullivan (All Sections except Table 2)</p>	<i>Date</i> _____
<i>Approved By:</i>	<div style="text-align: center;"><small>Digitally signed by MAP9681 (102140) Date: 2023.01.17 12:52:29 -05'00'</small> <i>MAP9681 (102140)</i></div>	<i>Date</i> _____

Mark Pyne

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number RA-23-0011

Plant Shearon Harris Nuclear Plant, 5413 Shearon Harris Road, New Hill, NC 27562

Unit No. 1 Commercial service date May 2, 1987 Refueling outage no. H1R24
(if applicable)

Current inspection interval Fourth Inspection Interval (ISI), Third Inspection Interval (Containment ISI)
(1st, 2nd, 3rd, 4th, other)

Current inspection period Second Inspection Period
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans ASME Section XI 2007 Edition through 2008 Addenda, 2017 Edition (See Attachment 1)

Date and revision of inspection plans See Attachment 1

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans Same as above

Code Cases Available for Use:
N-513-3, N-513-4, N-532-5, N-586-1, N-600, N-613-1, N-613-2, N-638-6,
N-639, N-643-2, N-648-1, N-648-2, N-651, N-705, N-716-1, N-722-1, N-
729-6, N-731, N-735, N-747, N-765, N-770-5, N-775, N-776, N-798, N-
800, N-805, N-845
Code Cases used for inspection and evaluation: 800, N-805, N-845
(if applicable, include cases modified by Case N-532 and later revisions)

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of H1R24 conform to the requirements of Section XI.
(refueling outage number)

Signed Angela Staller Digitally signed by E50268 (342024) Date: 2023.01.12 16:16:10 -05'00' Angela Staller, ISI Program Owner Date _____
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by Bureau Veritas Inspection and Insurance Company have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage, or a loss of any kind arising from or connected with this inspection.

Elmostafa Elkouri EELKOUR (365010) Digitally signed by EELKOUR (365010) Date: 2023.01.18 09:51:13 -05'00' Commissions NB #13930, NC# 1600 A.N.I.C.
Inspector's Signature National Board, State, Province, and Endorsements

Attachment 1

Shearon Harris Unit 1 Refueling Outage 24, Inservice Inspection Report

The Shearon Harris Nuclear Power Plant, Unit 1, Fourth Ten-Year Interval Inservice Inspection (ISI) Plan and Third Ten-Year Containment Inservice Inspection (CISI) Plan complies with 10CFR50.55a(g), which implements, by reference, the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 2007 Edition through 2008 Addenda. The 2017 Edition of Section XI is also applicable for IWA-4340, IWA-4540(b), IWA-5120, IWA-5213, IWA-5241, IWA-5242 and IWA-5250 in accordance with three RIS letters, ADAMS Accession Numbers ML21113A013, ML20300A206 and ML21029A335.

This summary report is submitted pursuant to the reporting requirements of ASME Section XI as amended by ASME Code Case N-532-5, "Repair/Replacement Activity Documentation Requirements and Inservice Inspection Summary Report Preparation and Submission Section XI, Division 1".

Refueling Outage 24 (H1R24) is the second of three outages of the second period in the fourth inspection interval for the ISI and Pressure Testing programs, and the first of two outages of the second period in the third inspection interval for the Containment ISI program. See the table below for the dates and revisions of the inservice inspection plans.

Document Title	Document Number and Revision	Date of Issue
Fourth Interval Inservice Inspection Plan and Third Interval Containment Inservice Plan	HNP-PM4-002, Rev. 3	November 17, 2021
Fourth Interval Inservice Inspection Schedule and Third Interval Containment Inservice Inspection Schedule	HNP-PM4-003, Rev. 3	November 17, 2021
Fourth Interval Inservice Inspection Pressure Test Plan and Schedule	HNP-PM4-005, Rev. 2	November 17, 2021
Augmented Inservice Inspection (AISI) Plan and Schedule – 4 th Inservice Inspection Interval	HNP-PM-4-007, Rev. 5	November 23, 2021

**TABLE 1
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR
CONTINUED SERVICE**

Examination Category and Item Number	Item Description	Evaluation Description
F-A/F1.20A	Support AF-H-0330	The hanger was misaligned by 4 degrees based on the design drawing. An engineering evaluation was performed, and the support was determined to be acceptable in its as found condition. Reference NCR 2446094.
F-A/F1.40	Support II-SG-001SGB-H-007	Gouge marks were noted on the support clamp. An engineering evaluation was performed, and the support was determined to be acceptable in its as found condition. Reference NCR 2446168.
F-A/F1.30C	Support MS-H-0175	The variable spring was found to be 1/8" out of the hot setting tolerance based on the design drawing. An engineering evaluation was performed, and the support was found to be acceptable in its as found condition. Reference NCR 2444510.
E-A/E1.30	Containment Moisture Barrier Quadrant 180 to 270 degrees	Several areas of the moisture barrier were found with lack of adhesion at 240 degrees azimuth on the vertical wall of the sump. An engineering evaluation was performed, and the areas were repaired during the outage. Reference NCR 2444889.
E-A/E1.30	Containment Moisture Barrier Quadrant 0 to 90 degrees	Areas of the moisture barrier were found to be missing at 0 degrees azimuth. An engineering evaluation was performed, and the area was repaired during the outage. Reference NCR 2444889.
C-H/C7.10	Boric acid residue found during the performance of EST-340, pressure test of the Train "B" Containment Spray System	Relevant conditions identified in NCR 2426272 were evaluated by Engineering and found to be acceptable.
C-H/C7.10	Boric acid residue found during the performance of EST-366, pressure test of the CVCS Letdown System	Relevant conditions identified in NCR 2420576 were evaluated by Engineering and found to be acceptable.
C-H/C7.10	Boric acid residue found during the performance of EST-371, pressure test of the High Head Safety Injection System	Relevant conditions identified in NCR 2445068 were evaluated by Engineering and found to be acceptable.
C-H/C7.10	Boric acid residue found during the performance of EST-385, pressure test of the Chemical and Volume Control System (Outside Containment)	Relevant conditions identified in NCR 2436181 were evaluated by Engineering and found to be acceptable.

TABLE 2

ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE

Code Class	Item Description	Description of Work	Date Completed	Repair / Replacement Plan Number
3	3SW2-1464SB-1	3SW2-1464SB-1, PERMANENT REPAIR	06/30/2022	20534080-01
3	3SW2-951SA-1	M, 3SW30-25SA-1, EC-421701, PERFORM PERMANENT REPAIR OF PIPING	10/16/2022	20561824-08
2	1RH-HXB	M, B-RHR HX, REPLACE PIPE PLUG TO CORRECT LEAKAGE	10/26/2022	20566001-02