

June 28, 2023

Docket Nos.: 50-424

NL-23-0541

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

Vogtle Electric Generating Plant – Unit 1
Inservice Inspection Program Owner's Activity Report for Outage 1R24

Ladies and Gentlemen:

The Vogtle Electric Generating Plant (Vogtle) Unit 1 Owner's Activity Report (OAR-1) for the 1R24 Refueling outage is provided as an Enclosure to this letter, in accordance with ASME Section XI, Article IWA-6200 and ASME Section XI Code Case N-532-5. The OAR-1 Report in the Enclosure includes Table 1, "Items with Flaws or Relevant Conditions that Required Evaluation for Continued Service," which lists evaluations performed for continued service, and Table 2, "Abstract of Repair / Replacement Activities Required for Continued Service," which lists repair/replacement activities.

This report is for the second period of the 4th Inservice Inspection Interval (Interval 4, Period 2, Outage 2).

This letter contains no NRC commitments. If you have any questions, please contact Amy Chamberlain at 205.992.6361.

Respectfully submitted,



Amy Chamberlain
Nuclear Licensing Manager
Southern Nuclear Operating Company

ACC/dsp/cbg

Enclosure: 1R24 Form OAR-1 Owner's Activity Report

cc: Regional Administrator
NRR Project Manager – Vogtle 1 & 2
Senior Resident Inspector – Vogtle 1 & 2
RType: CVC7000

Vogtle Electric Generating Plant – Unit 1
Inservice Inspection Program Owner's Activity Report for Outage 1R24

Enclosure

1R24 Form OAR-1 Owner's Activity Report

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number 1-4-2-2 (Unit 1, 4th Interval, 2nd Period, 2nd Report)

Plant Alvin W. Vogtle Electric Generating Plant

Unit No. 1 Commercial service date May 31, 1987 Refueling outage no. 1R24
(if applicable)

Current inspection interval 4th
(1st, 2nd, 3rd, 4th, other)

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

Edition and Addenda of Section XI applicable to the inspection plans: The 2007 Edition through 2008 Addenda is applicable to the 4th Inspection Interval.

Date and revision of inspection plans: 4th Inspection Interval Inspection Plans - Volume 1- 08/12/2021 (Version 5.0), Volume 3 - 03/04/2022 (Version 7.0), Volume 4 - 1/10/2023 (Version 7.0), and Volume 5 - 8/11/2021 (Version 6.0). 1R24 Outage Plan - 12/13/2022 (Version 1.0) with following Outage Plan Scope Changes: 1R24 Outage Plan Scope Change SC-001 (Version 1) - 03/10/2023, SC-002 (Version 2) -03/18/23 and SC-003 (Version 3.0) -04/12/2023.

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

Code Cases used for inspection and evaluation: N-716-1, N-722-1, N-729-6, N-770-5 and N-532-5
(if applicable, including 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 1R24 conform to the requirements of Section XI.
(refueling outage number)

Signed Ang Dong Plant Support Eng Sr. Mgr Date 6/21/23
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 employed by The Hartford Steam Boiler Inspection and Insurance Company of Hartford, CT, 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.

Jerome Barthelemy Commission NB15817 AI, N, I, R, C
Inspector's Signature (National Board Number and Endorsement)
Date 6/27/23

Table 1
Items with Flaws or Relevant Conditions That Required Evaluation for Continued Service

Examination Category and Item Number	Item Description	Evaluation Description
<p>Examination Category E-A, Item E1.30 – Moisture Barriers</p>	<p>During the IWE liner plate inspection performed per SNC1182134-60 on the area under vessel/reactor cavity, UT readings were performed on 17 locations with the maximum reading of 0.272" and the minimum reading of 0.240" (see Attachment for the reminder results).</p> <p>According to drawings 1X2D01J001 and 1X2D01J005, the liner plate nominal thickness in that area is 0.250". FSAR 3.8.1.6.4 calls out the liner plate having a 1/4-in thick welded steel plate.</p> <p>One UT reading did not meet the criteria of equal/greater than 0.250".</p>	<p>IWE-3122.3: Acceptance by Engineering Evaluation</p> <p>(a) A component who examination detects flaws or areas of degradation that do not meet the acceptance standards of IWE-3500 is acceptable for continued service without a repairs/replacement activity if an engineering evaluation indicates that the flaw or area of degradation is nonstructural in nature or has no unacceptable effect on the structural integrity of the containment. If either the thickness of the base metal in local areas is reduced by no more than 10% of the nominal plate thickness or the reduced thickness can be shown by analysis to satisfy the requirements of the Design Specifications, the component is acceptable by engineering evaluation.</p> <p>a. One UT reading of 0.240" is NOT more than 10% of the nominal plate thickness (0.250") which equates to 4%. This is acceptable per IWE-3122.3.</p> <p>b. General Visual examination was performed in 1R23 (SNC1087043), 1R21 (SNC854285), 1R19 (SNC565724), 1R17 (SNC345607), and 1R16 (1101014101) documenting no noticeable changes in each future outages.</p> <p>c. ILRT was performed in 2017 (SNC345631) with SAT results that containment pressure boundary has no unacceptable effect on the structural integrity of containment and its leak tightness.</p> <p>d. Lastly, the interface between the liner plate and the concrete floor was coated in 1R24 under SNC1304274 to prevent long-term degradation and has been accepted by QC inspector.</p> <p>(b) Based on accepting this engineering evaluation, IWE-3122.3(b) states the area containing flaw or degradation shall be reexamined in accordance with IWE-2420(b), (c), and (d). TE1124261 has been generated to track these actions for future outages.</p>

Table 2
Abstract of Repair / Replacement Activities Required for Continued Service

Code Class	Item Description	Description of Work	Date Completed	Repair / Replacement Plan Number
1	Examination Category B-Q Steam Generator 4 Tubing (11201B6004)	Mechanical plugs were installed in applicable tubes due to degradation detected during eddy current examination.	3/19/2023	SNC1185259
1	1PSV8010C— Replace Inlet Stud Bolt	Replaced inlet Stud Bolt for 1PSV8010C	3/21/2023	SNC1186304
2	1HV3006A-- Performed Weld Repairs to Main Steam SG1 MSIV Upstream	Performed 3/8" fillet weld of the pipe cap (A-105) to the MSIV actuator top plate (SA-182).	3/29/2023	SNC1459236
1	11201U4208 - Seal Weld Body to Bonnet	Performed Seal Weld on body to bonnet on valve 1201U4208 (Both SA-182 material)	3/11/23	SNC1030488
1	11201P6002--Mechanical Seal Replacement--Reactor Coolant Pump #2	Replacement of the #2 and #3 cartridge seals after disassembly of the #2 and #3 cartridge seal assembly which also contain the #2 seal housing bolts which are a pressure retaining components.	3/21/2023	SNC1288690