GE VERNOVA
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GE Vernova Hitachi Nuclear Energy

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NRC Docket No: 99900003

September 22, 2025

ATTN: Document Control Desk

Ms. Kerri A. Kavanagh
Chief, Quality Assurance and Vendor Inspection Branch
Division of Reactor Oversight
Office of Nuclear Reactor Regulation
US Nuclear Regulatory Commission

Subject: Reply to a Notice of Nonconformance

References: 1) NRC Inspection Report 99900003/2025-201 (July 24, 2025)

By letter dated July 24, 2025, GE Vernova Hitachi Nuclear Energy (GVH) received NRC Inspection Report No. 99900003/2025-201 containing two (2) nonconformances designated 99900003/2025-201-01 and 99900003/2025-201-02. As stated in that report, the NRC inspection team determined that GVH was not fully implementing its QA program in the areas of test control and control of nonconforming items.

The enclosure to this letter, details the GVH investigation to identify the reason for the noncompliance, corrective actions taken and corrective actions planned to prevent reoccurrence. Please contact Stan Griffin at 910-616-4019 for any questions.

Sincerely,

Phillip D. Ollis, Manager
Facility Licensing

Enclosures:
1. Detailed Response to Inspection Report Nonconformance 99900003/2025-201-01
2. Detailed Response to Inspection Report Nonconformance 99900003/2025-201-02

cc: VanCleve, Curtis, GVH
Griffin, Stanley, GVH
Gerdes, Mark, GVH

Detailed Response to Inspection Report Nonconformance 99900003/2025-201-01

On July 24, 2025, GE Vernova Hitachi Nuclear Energy (GVH) received Nuclear Regulatory Commission (NRC) Inspection Report 99900003/2025-201, Notice of Nonconformance 99900003/2025-201-01 stemming from the NRC inspection of GE Hitachi Nuclear Energy Americas conducted June 2 through 6, 2025. The nonconformance is stated as follows:

> *Criterion XI, "Test Control," of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Title 10 of the Code of Federal Regulations (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," states, in part, that "A test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents."*
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> *Paragraph 5.3.5 of Quality Control Test Instruction (QCTI) No. 715, "Cylinder, Tube & Flange, Drawing 919D258 All Groups," Revision 14, dated January 22, 2020, states that "After holding pressure for 10 minutes, check for leakages at all exposed surfaces with special attention to the following areas: [.1] The two plug-to-flange welds on the OD [outside diameter] of the flange." In addition, paragraph 3.5 of QCTI-715 states that "All hydrostatic tests shall be performed using site demineralized water. Conductivity is to be monitored and is not to exceed 3 micromho/cm max. Verify conductivity meter before and after testing."*
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> *Subparagraph NB-6224, "Examination for Leakage After Application of Pressure," of Section III, "Rules for Construction of Nuclear Facility Components," of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, 2015 Edition, states, in part, that "Following the application of the hydrostatic test pressure for the required time (see NB-6223), all joints, connections, and regions of high stress, such as regions around openings and thickness transition sections, shall be examined for leakage."*
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> *Contrary to the above, as of June 6, 2025, GEH failed to ensure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is performed in accordance with written procedures. Specifically, after performing the hydrostatic pressure test on four cylinder and tube flange assemblies, the GEH inspector: (1) did not examine for leakage the two plug welds on each of the four cylinder tube and flange assemblies; and (2) did not verify the conductivity of the demineralized water after the hydrostatic pressure test was completed.*

The reasons for this nonconformance related to the hydrostatic testing of cylinder and tube flange assemblies in accordance with Quality Control Test Instruction (QCTI) No. 715, “Cylinder, Tube & Flange, Drawing 919D258 All Groups,” Revision 14, dated January 22, 2020, were:

1) the procedure, QCTI 715, did not contain clear instructions for the performance of all testing verification activities, and

2) the configuration of the test stand does not provide easy access for the testing verification activities.

In QCTI 715, the water conductivity check was in the General Requirements section and not integrated into the step-by-step test operations portion of the test instruction, creating a human performance trap, where the conductivity check could be overlooked.

The test stand configuration and location of the conductivity meter makes it difficult to access the conductivity meter to visually verify the reading leading to the inspector reliance on the conductivity meter audible alarms.

The test stand configuration also places the tube to flange weld and plug welds at a position that makes it difficult for the inspector to visually confirm no leaks exist.

The corrective actions that have been taken and results achieved:

Provided additional test stand platform to facilitate access to verify no leaks at welds.

Performed analysis of demineralized water to confirm conformance to specifications.

Nonconformance has been communicated to the inspectors with emphasis on procedure adherence for verification of no leaks at welds and conductivity checks.

The common practice that set-up, pressurization, and leak checks are performed by inspectors prior to arrival/witness of the ANI to ensure that test system and CTF leaks do not exist, or are resolved, prior to conducting the "formal" testing provides additional assurance that no leaks exist.

The conductivity meter audible alarms for out of specification conditions also provide additional assurance that the testing is performed with acceptable demineralized water.

The corrective actions that will be taken to avoid further noncompliance:

Enhancements to the test stand configuration are being made to improve ergonomics and accessibility to facilitate test verification activities.

QCTI 715 is being revised to integrate the conductivity check into the operational step-by-step portion of the instruction, and to incorporate test stand configuration enhancements.

These actions are expected to be completed by November 21, 2025.

With the described actions above, GVH considers the noted nonconformance to be adequately addressed.

Detailed Response to Inspection Report Nonconformance 99900003/2025-201-02

On July 24, 2025, GE Vernova Hitachi Nuclear Energy (GVH) received Nuclear Regulatory Commission (NRC) Inspection Report 99900003/2025-201, Notice of Nonconformance 99900003/2025-201-02 stemming from the NRC inspection of GE Hitachi Nuclear Energy Americas conducted June 2 through 6, 2025. The nonconformance is stated as follows:

> *Criterion XV, "Nonconforming Materials, Parts, or Components," of Appendix B to 10 CFR Part 50, states that "Measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation. These measures shall include, as appropriate, procedures for identification, documentation, segregation, disposition, and notification to affected organizations. Nonconforming items shall be reviewed and accepted, rejected, repaired or reworked in accordance with documented procedures."*
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> *Section 4.2.14 of procedure No. CP-15-300, "Material Review Board," Revision 1, dated August 21, 2018, states, in part, that "If there is a pending disposition situation, and a [Material Review Board] member determines that further processing or information is needed before a final disposition can be made, then document any of the following special instructions on the nonconformance record: how far to process, what dimensions to hold, what inspection results are required, other pertinent information."*
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> *Section 4 of procedure No. CP-15-100, "Control of Nonconforming Items," Revision 5, dated October 28, 2024, states, in part, that "All nonconforming items must be reviewed and accepted, or dispositioned as: rejected, repaired, reworked, scrapped, or used-as-is in accordance with established procedures." Section 4.2.2 of CP-15-100 also states, in part, that "All tags and/or the use of markings must be legible and not be detrimental to the item or its packaging." In addition, Section 4.3.3 of CP-15-100 states, in part, that "During periods of disposition activities, Quality shall maintain status and control of all nonconforming items."*
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> *Contrary to the above, as of July 2, 2025, GEH failed to review and accept, reject, repair, or rework nonconforming items in accordance with documented procedures. The NRC inspection team identified 186 nonconformance reports (NCRs) that remain open without a documented disposition. The oldest NCR that remains open without any documented disposition is from August 10, 2023. Specifically, for the limited sample reviewed, (1) GEH could not locate a collet finger associated with NCR No. S-1054; and (2) GEH could not confirm that a retainer (NCR No. S-1007) and a spacer (NCR No. S-1031) were associated with these NCR Nos. because the serial numbers that provide traceability were not legible.*

The reasons for this nonconformance related to timely disposition of nonconforming material were:

1) lack of a defined, controlled area to segregate nonconforming material,

2) procedures did not provide clear direction for movement and control of nonconforming material, and

3) inadequate processes to track aging Nonconformance Reports (NCRs)

The corrective actions that have been taken and results achieved:

A Material Review Board (MRB) area was identified for segregation of nonconforming material with a physical barrier (fence) and controlled access to authorized individuals.

A Temporary Operating Instruction (TOI), TOI-51091, was created to control and log the flow of nonconforming material into and out of the MRB area.

Verified NCR S-1007, S-1031, and S-1054 applicable components have not been transacted against in the Oracle EAM system or applied to any assembly or part supply work orders since initiation of the NCRs.

The corrective actions that will be taken to avoid further noncompliance:

Procedures WI-15-100-01, SCO Nonconforming Material Control, and WI-08-104-02, Conditional Material Release, are being revised to clarify the handling, processing, and dispositioning of nonconforming material, including abnormal conditions such as system outages and conditional releases.

GVH Services Component Operation (SCO) production management is incorporating daily review of NCRs to establish priority and monitor aging NCRs to insure timely disposition of nonconforming material.

These actions are expected to be completed by November 7, 2025.

With the described actions above, GVH considers the noted nonconformance to be adequately addressed.