



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

November 21, 2024

EA-24-075

Delson Erb  
Vice President, Operational Support  
Tennessee Valley Authority  
1101 Market Street, LP 4A-C  
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT – FINAL SIGNIFICANCE  
DETERMINATION OF A WHITE FINDING AND NOTICE OF VIOLATION AND  
ASSESSMENT FOLLOWUP LETTER; NRC INSPECTION REPORT  
05000260/2024091

Dear Delson Erb:

This letter provides TVA the final significance determination of the preliminary White finding discussed in U.S. Nuclear Regulatory Commission's (NRC's) inspection report 05000260/2024090, dated September 17, 2024 (Agency Documents Access and Management System (ADAMS) Accession Number ML24255A027). The finding involved a failure to promptly identify and correct a degraded condition with the Unit 2 high pressure coolant injection (HPCI) turbine exhaust inner rupture disc. The NRC concluded that the finding is appropriately characterized as White, a finding of low to moderate safety significance, and it involved a violation of NRC requirements as further described in this letter.

In TVA's letter, Browns Ferry Nuclear Plant, Unit 2 - Response to Apparent Violation in NRC Inspection Report 05000260/2024090, EA-24-075, dated October 25, 2024 (ADAMS Accession Number ML24299A263), TVA provided a response to the NRC staff's preliminary determination regarding the finding. This response indicated that TVA understands and accepts the apparent violation. This response also indicated that TVA's assessment of the significance of this finding was similar to that of NRC.

After considering the information developed during the inspection and the information provided in TVA's letter dated October 25, 2024, the NRC has concluded that the finding is appropriately characterized as White, a finding of low to moderate safety significance. The basis for the significance determination is discussed in detail in NRC inspection report 05000260/2024090, dated September 17, 2024.

TVA have 30 calendar days from the date of this letter to appeal the staff's determination of significance for the identified White finding. Such appeals will be considered to have merit only if they meet the criteria given in the IMC 0609, Attachment 2. An appeal must be sent in writing to the Regional Administrator, Region 2, Marquis One Tower, 245 Peachtree Center Avenue N.E., Suite 1200, Atlanta, GA 30303.

The NRC has also determined that the failure to promptly identify and correct a degraded condition with the Unit 2 HPCI turbine exhaust inner rupture disc was a violation of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion XVI, "Corrective Action," as cited in Enclosure 1, Notice of Violation (Notice). The circumstances surrounding the violation were described in detail in NRC Inspection Report 05000260/2024090 dated September 17, 2024 (ADAMS Accession Number ML24255A027). In accordance with the NRC Enforcement Policy, the Notice is considered an escalated enforcement action because it is associated with a White finding.

The NRC has concluded that the information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance will be achieved was adequately addressed on the docket in Browns Ferry Nuclear Plant, Unit 2 - Response to Apparent Violation in NRC Inspection Report 05000260/2024090, EA-24-075 (ADAMS Accession Number ML24299A263). Therefore, TVA is not required to respond to this letter unless the description therein does not accurately reflect TVA's corrective actions or position.

The NRC has determined that the performance at Browns Ferry Nuclear Plant, Unit 2 would be in the Regulatory Response Column of the Reactor Oversight Process Action Matrix beginning in the third quarter of 2024 (July 1, 2024). Therefore, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure (IP) 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area." This IP is conducted to provide assurance that the root and contributing causes for the performance issues are understood, and to provide assurance that the corrective actions are sufficient to address the root and contributing causes and prevent recurrence. This letter supplements, but does not supersede, the annual assessment letter issued on February 28, 2024 (ADAMS Accession Number ML24052A147).

For administrative purposes, this inspection report is issued as NRC inspection report 05000260/2024091. Accordingly, apparent violation (AV) 05000260/2024090-01 is updated consistent with the regulatory positions described in this letter to notice of violation (NOV) 05000260/2024090-01 in the Mitigating Systems cornerstone with a White safety significance and cross-cutting aspect H.9, "Training."

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice and Procedure," a copy of this letter, its enclosures, and TVA's response, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

To the extent possible, TVA's response (if any) should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Miller", with a horizontal line extending to the right.

Miller, Mark signing on behalf  
of Dudes, Laura  
on 11/21/24

Laura A. Dudes  
Regional Administrator

Docket No. 05000260  
License No. DPR-52

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: BROWNS FERRY NUCLEAR PLANT – FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING AND NOTICE OF VIOLATION AND ASSESSMENT FOLLOWUP LETTER; NRC INSPECTION REPORT 05000260/2024091 DATED NOVEMBER 21, 2024

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## NOTICE OF VIOLATION

Tennessee Valley Authority

Docket No.: 05000260

Browns Ferry Nuclear Plant

License No.: DPR-52  
EA-24-075

During an NRC inspection conducted from March 19, 2024, to September 9, 2024, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Title 10 of the Code of Federal Regulations (10 CFR), Part 50, Appendix B, Criterion XVI requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected.

TVA-NQA-PLN89-A, Nuclear Quality Assurance Plan (NQAP), Revision 39, Section 10.2.2 states, in part, that TVA Nuclear and onsite non-nuclear service organizations performing quality-related activities at nuclear facilities shall promptly identify and resolve conditions adverse to quality.

NPG-SPP-22.300, Corrective Action Program, Revision 23, Section 5 defines that a condition adverse to quality is a condition associated with a structure, system, component or program that is in-scope of the NQAP. The Unit 2 high pressure coolant injection (HPCI) inner rupture disc, 2-RPD-073-0729, is a safety-related component and is in the scope of the NQAP.

Browns Ferry Nuclear Plant, Unit 2 Technical Specification (TS) Limiting Condition of Operation (LCO) 3.5.1, requires, in part, that the HPCI system shall be operable while in Mode 1, 2, and 3, except when the reactor steam dome pressure is less than or equal to 150 psig. If the HPCI system is inoperable in an applicable Mode, TS 3.5.1, Condition C, requires restoring the system to operable status within 14 days or in accordance with the Risk Informed Completion Time Program. If the required actions for Condition C are not met within the established completion time, Condition G requires the unit to be in Mode 3 within 12 hours and to reduce reactor steam dome pressure to less than or equal to 150 psig within 36 hours.

Browns Ferry Nuclear Plant, Unit 2 TS Section 3.0.4, requires, in part, that when an LCO is not met, entry into a mode or other specified condition in the Applicability shall only be made when the associated actions to be entered permit continued operation in the mode or other specified condition in the Applicability for an unlimited period of time.

Enclosure

Contrary to the above, on December 17, 2021, the licensee failed to establish measures to assure that a condition adverse to quality associated with 2-RPD-073-0729, the Unit 2 HPCI pump turbine exhaust inner rupture disc, was promptly identified and corrected. Specifically, the licensee failed to identify and correct the damage done to the 2-RPD-073-0729 rupture disc as a result of a steam exhaust line pressurization event on December 15, 2021. This damage rendered the Unit 2 HPCI system incapable of performing its intended safety function as reflected by the rupture disc failure on March 19, 2024, during a routine surveillance test. Because the licensee did not recognize the inoperability of the HPCI system due to the pressurization event, they failed to declare the HPCI system inoperable and complete the required actions in TS 3.5.1, Conditions C and G, within the established completion times, and the required actions of TS LCO 3.0.4.

This violation is associated with a White finding.

The NRC has concluded that the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance will be achieved was adequately addressed on the docket in Browns Ferry Nuclear Plant, Unit 2 - Response to Apparent Violation in NRC Inspection Report 05000260/2024090, EA-24-075 (ADAMS Accession Number ML24299A263). Therefore, TVA is not required to respond to this letter unless the description therein does not accurately reflect TVA's corrective actions or position. However, TVA is required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect TVA's corrective actions or position. In that case, or if TVA chooses to respond, clearly mark the response as a "Reply to a Notice of Violation" and include the EA number. Send TVA's response to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation. In accordance with 10 CFR 2.390(b)(1)(ii), the NRC is waiving the affidavit requirements of this response.

If TVA contests this enforcement action, TVA should also provide a copy of the response, with the basis for TVA's denial, to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

If TVA chooses to respond, the response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

In accordance with 10 CFR 19.11, TVA may be required to post this Notice within two working days of receipt.

Dated this 21<sup>st</sup> November 2024