



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

June 29, 2026

EAF-RII-2026-0008

Eric S. Carr
President, Nuclear Operations
and Chief Nuclear Officer
Dominion Energy
5000 Dominion Blvd, Floor: IN-3SE
Glen Allen, VA 23060-6711

SUBJECT: VIRGIL C. SUMMER - FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING, NOTICE OF VIOLATION, AND ASSESSMENT FOLLOWUP LETTER; NRC INSPECTION REPORT 05000395/2026093

Dear Eric S. Carr:

This letter provides the final significance determination for the preliminary White finding discussed in U.S. Nuclear Regulatory Commission's (NRC) inspection report 05000395/2026092, dated March 31, 2026 (accessible in NRC's Agency Documents Access and Management System (ADAMS) via Accession Number ML26082A236). The finding involved a failure to properly pre-plan and perform maintenance on the turbine-driven emergency feedwater (TDEFW) pump governor valve linkage.

In a letter dated May 7, 2026 (ADAMS Accession No. ML26128A211), Dominion Energy South Carolina (DESC) provided a response to the NRC staff's preliminary determination regarding the finding. Your response indicated that DESC's perspective is that the significance of the finding is of [very] low safety significance (GREEN) because the TDEFW pump would have successfully performed its safety function and injected into the steam generators due to steam generator injection conditions that are inherently less challenging to turbine initial speed control than surveillance test conditions. Specifics regarding the NRC's consideration of the information you provided in the May 7, 2026, letter are detailed in Enclosure 2 of this report.

After considering the information developed during the inspection and the additional information provided in your letter dated May 7, 2026, the NRC has concluded that the finding is appropriately characterized as White (low safety significance).

You 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 Inspection Manual Chapter 0609, Attachment 2. An appeal must be sent in writing to the Regional Administrator, Region II, 245 Peachtree Center Avenue N.E., Suite 1200, Atlanta, Georgia 30303-1257.

The NRC has also determined that the failure to properly pre-plan and perform maintenance on the TDEFW pump governor valve linkage is a violation of Technical Specification 6.8.1, "Procedures and Programs," as cited in the enclosed Notice of Violation (Notice). The circumstances surrounding the violation were described in detail in NRC inspection report 05000395/2026092. In accordance with the NRC Enforcement Policy, the Notice is considered escalated enforcement action because it is associated with a White finding.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. If you have additional information that you believe the NRC should consider, you may provide it in your response to the Notice. The NRC review of your response to the Notice will also determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

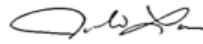
The NRC has determined that the performance at Virgil C. Summer Nuclear Station will remain in the Regulatory Response Column of the Reactor Oversight Process Action Matrix. The White finding documented in this report counts as an action matrix input starting in the fourth quarter of calendar year (CY) 2025 (October 1, 2025). Therefore, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure (IP) 95001, "Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response) Inputs." 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.

Virgil C. Summer Nuclear Station previously entered the Regulatory Response column in the third quarter of CY 2025 due to a White finding documented in NRC inspection report 05000395/2026091 (ADAMS Accession No. ML26054A271), which required a separate IP 95001 supplemental inspection that was successfully completed and exited on June 2, 2026. Virgil C. Summer Nuclear Station will remain in the Regulatory Response Column of the Reactor Oversight Process Action Matrix until the objectives of both IP 95001 supplemental inspections are met and both White findings are closed.

For administrative purposes, this letter and its enclosures are issued as NRC inspection report 05000395/2026093. Accordingly, apparent violation (AV) 05000395/2025004-01 is updated to Notice of Violation (NOV) 05000395/2025004-01 in the Mitigating Systems cornerstone with a White safety significance, consistent with the regulatory positions described in this letter.

In accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding," a copy of this letter, its enclosures, and your 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, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,



Signed by Lara, Julio
on 06/29/26

Julio F. Lara
Acting Regional Administrator
Region II
Office of the Chief Nuclear Reactor Inspector

Docket No. 05000395
License No. NPF-12

Enclosures:

1. Notice of Violation
2. NRC Response to Licensee Supplemental Information

cc w/ encl: Distribution via GovDelivery

NOTICE OF VIOLATION

Dominion Energy South Carolina
Virgil C. Summer Nuclear Station

Docket No.: 05000395
License No.: NPF-12
EAF-RII-2026-0008

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted from November 12, 2025, to March 31, 2026, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Technical Specification 6.8.1, "Procedures and Programs," requires, in part, that written procedures shall be established, implemented, and maintained covering the activities referenced in the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," Revision 2. Section 9 of Regulatory Guide 1.33, "Procedures for Performing Maintenance," requires, in part, that maintenance that can affect the performance of safety-related equipment should be properly pre-planned and performed in accordance with written procedures, documented instructions, or drawings appropriate for the circumstances.

Contrary to the above, since 2017, the licensee failed to pre-plan or perform preventive maintenance on the Unit 1 turbine-driven emergency feedwater (TDEFW) pump governor valve linkage using written procedures, documented instructions, or drawings appropriate for the circumstances, which affected the performance of this safety-related equipment. Specifically, since the last governor valve maintenance in 2017, the licensee did not schedule maintenance activities to implement procedural steps that could identify degradation of the governor valve linkage, such as excessive play or worn subcomponents. As a result, degradation of the governor valve linkage progressed over time and remained undetected until it caused sufficient binding to trigger an overspeed trip of the TDEFW pump during a surveillance test on November 12, 2025.

This violation is associated with a White significance determination process finding.

Pursuant to the provisions of 10 CFR 2.201, Dominion Energy South Carolina is hereby required to submit a written statement or explanation 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 (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation; EAF-RII-2026-0008" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of the Chief Nuclear Reactor Inspector, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your 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, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

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

Dated this 29th day of June 2026

NRC RESPONSE TO LICENSEE SUPPLEMENTAL INFORMATION

In their letter dated May 7, 2026 (ADAMS Accession No. ML26128A211), Dominion Energy South Carolina (DESC) provided supplemental information in response to the NRC's preliminary significance determination regarding the degraded turbine-driven emergency feedwater (TDEFW) pump governor valve linkage at Virgil C. Summer Nuclear Station. DESC's position, in part, was that the degraded linkage would not have prevented the TDEFW pump from performing its safety function during a steam generator (SG) injection event because the conditions for SG injection were inherently less challenging than those during surveillance test procedures (STP).

The NRC staff conducted a thorough review of DESC's submittal, including the transient analyses, operational data, and engineering positions. The NRC's assessment is outlined below and represents an overall summary of the key points outlined in DESC's extensive supplemental information.

1. Transient Modeling

DESC provided transient modeling comparing STP and SG injection scenarios. The analysis showed a 400 RPM margin from overspeed in SG injection and posited that slower acceleration during SG injection would allow more time for the governor to control speed, reducing overspeed risk.

NRC Assessment:

The NRC noted that the analysis ended during the portion of the transient when steam pressure was still rapidly rising and did not demonstrate the governor's ability to arrest acceleration and avoid overspeed throughout the full event. Additionally, the governor valve positions used in the modeling were manually imposed and were not directly determined from the degraded governor's actual behavior during an SG injection event. The NRC observed that the model showed a delay in reaching peak speed, not a reduction in the magnitude of the peak speed which was a key parameter necessary for overspeed protection. The NRC concluded that the analysis did not provide sufficient technical basis to demonstrate that the TDEFW pump would perform its intended safety function under SG injection conditions.

2. Margins

DESC presented calculated differences in power, governor valve travel, and other parameters between STP and SG injection conditions as evidence of safety margin and concluded that the less demanding conditions of SG injection would avoid an overspeed trip of the pump.

NRC Assessment:

The NRC observed that this information better represented differences in operational parameters, not design safety margins. The small differences in governor valve travel (e.g., 0.030 inches at approximately a 1.4x power increase) was not physically meaningful in the context of a demonstrated loss of pump function. Managing power change under these conditions requires a highly sensitive and reliable control system. It was not clear that this level of reliability could be achieved with governor linkage degradation given the occurrence of overspeed during testing.

3. Historical Injection Event

DESC cited a successful SG injection event in October 2025 as evidence that the TDEFW pump would have performed adequately in its degraded state.

NRC Assessment:

There was no instrumented plant data available to verify governor performance or actual overspeed margin during the October event. The NRC noted that the extent and progression of governor linkage degradation at the time was uncertain. Additionally, a single success did not establish confidence in reliable function given repeated overspeed failures soon after. The NRC concluded that the successful October 2025 TDEFW pump operation did not support a conclusion that the pump was functional during the exposure period that was used for significance determination.

4. Conclusion

After comprehensive review, the NRC determined that DESC's supplemental information did not provide sufficient objective evidence to conclude that the degraded TDEFW pump governor valve linkage could perform its safety function under SG injection conditions. The NRC concluded that the degraded TDEFW pump governor valve linkage rendered the pump non-functional. Accordingly, the finding was appropriately characterized as White, consistent with the NRC's Significance Determination Process for a finding of low safety significance.