



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

October 20, 2014

EA-14-092

Mr. David Heacock
President and Chief Nuclear Officer
Dominion Resources
Millstone Power Station
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

**SUBJECT: FINAL SIGNIFICANCE DETERMINATION FOR A WHITE FINDING WITH
ASSESSMENT FOLLOW-UP AND NOTICE OF VIOLATION [NRC INSPECTION
REPORT NO. 05000423/2014012] – MILLSTONE POWER STATION, UNIT 3**

Dear Mr. Heacock:

This letter provides you the final significance determination for the preliminary White finding discussed in the U.S. Nuclear Regulatory Commission (NRC) letter dated August 28, 2014, and enclosed Inspection Report No. 05000423/2014008 (ML14240A051)¹. This letter also transmits the follow-up NRC assessment of Dominion Nuclear Connecticut, Inc.'s (Dominion's) performance at the Millstone Power Station Unit 3 (Millstone 3), which supplements the NRC mid-cycle assessment letter issued on September 2, 2014 (ML14241A020).

The finding was identified through an NRC Special Inspection conducted at Millstone to review multiple failures of the Millstone 3 turbine-driven auxiliary feedwater (TDAFW) pump. The finding, which is described in detail in Inspection Report No. 05000423/2014008, involved the failure by Dominion to promptly identify and correct a condition adverse to quality concerning the TDAFW pump. Specifically, in spite of the TDAFW pump experiencing three overspeed trips from August 2013 through February 2014, Dominion did not identify that the pump was operating in an adverse configuration due to the installation of an incorrect cam follower bearing within the turbine control valve linkage. This discrepant condition rendered the TDAFW pump inoperable for periods of time exceeding the limiting condition for operation specified in Millstone 3 Technical Specification (TS) 3.7.1.2.

Dominion restored compliance by removing the TDAFW pump from service on February 3, 2014 and replacing the bearing with the correct part. Separately, the NRC notes that, on July 15 and September 10, 2014, the Millstone 3 TDAFW pump failed to pass quarterly surveillance tests.

¹ Designation in parentheses refers to an Agency-wide Documents Access and Management System (ADAMS) accession number. Documents referenced in this letter are publicly-available using the accession number in ADAMS.

On September 15, 2014, the NRC concluded that the issue met the criteria specified in NRC Inspection Manual Chapter 0309, "Reactive Inspection Decision Basis for Reactors," and warranted a separate NRC Special Inspection to review the continued problems with this pump. That inspection is currently in progress, and the results will be issued within 45 days of its completion.

The August 28, 2014, NRC letter included an offer for Dominion to attend a regulatory conference or reply in writing to provide its position on the facts and assumptions the NRC used to arrive at the finding and its safety significance. In a September 8, 2014, telephone conversation, Stephen Scace, Millstone Site Vice President, informed Ray McKinley, Chief, NRC Region I, Division of Reactor Projects, Branch 5 that Dominion did not contest the characterization of the risk significance of this finding and declined the opportunity to discuss this issue in a regulatory conference or to provide a written response. Therefore, based on the information developed during the inspection, the NRC has concluded that the finding is appropriately characterized as White, a finding of low to moderate safety significance. According to NRC Inspection Manual Chapter (IMC) 0609, appeal rights only apply to those licensees that have either attended a regulatory conference or submitted a written response to the preliminary determination letter.

As a result of this White finding in the Mitigating Systems Cornerstone, the NRC has assessed Millstone 3 to be in the Regulatory Response column of the NRC Action Matrix, retroactive to the second calendar quarter of 2014. Therefore, we plan to conduct a supplemental inspection using Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," when Dominion staff notify us of their readiness for this inspection. This inspection is conducted to provide assurance that the root cause and contributing causes of any performance issues are understood, the extent of condition is identified, and the corrective actions are sufficient to prevent recurrence.

The NRC has also determined that, as described in NRC Inspection Report No. 05000423/2014008, the finding involved a violation of Title 10 of the *Code of Federal Regulations* (10 CFR) 50, Appendix B, Criterion XVI, "Corrective Action," and resulted in a violation of TS 3.7.1.2. Because the TS violation was caused by the violation of 10 CFR 50, Appendix B, Criterion XVI, the violations are cited together in the enclosed Notice of Violation (Notice). In accordance with the NRC Enforcement Policy, the Notice is considered an 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.

D. Heacock

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In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made available electronically for public inspection in the NRC Public Document Room located at NRC Headquarters in Rockville, MD, and from the NRC's Agency-wide Documents Access and Management 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.

Should you have any questions regarding this matter, please contact Mr. Ray McKinley at (610) 337-5150.

Sincerely,

/RA/

David C. Lew
Acting Regional Administrator

Docket No. 50-423
License No. NPF-49

Enclosure: As stated

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NAME	B Bickett/ BAB*	K Hanley via email	L Casey via email		D Lew/
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* See previous concurrence page

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NOTICE OF VIOLATION

Dominion Nuclear Connecticut, Inc.
Millstone Power Station

Docket No. 50-423
License No. NPF-49
EA-14-092

During an NRC Special Inspection conducted from February 3 through July 21, 2014, which included on-site inspection and in-office review of documents, and for which an inspection exit was conducted on July 21, 2014, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," 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 non-conformances are promptly identified and corrected.

Millstone Unit 3 Technical Specification (TS) 3.7.1.2.b, "Auxiliary Feedwater System," requires that at least three independent steam generator auxiliary feedwater pumps and associated flow paths be OPERABLE with one steam turbine-driven auxiliary feedwater pump capable of being powered from an OPERABLE steam supply system. The TS is applicable in Modes 1, 2 and 3.

Millstone Unit 3 TS Limiting Condition for Operation Action Statement 3.7.1.2(c) states that, with one turbine-driven auxiliary feedwater pump inoperable, restore the affected equipment to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 12 hours.

Contrary to the above, from August 11, 2013, to February 3, 2014, measures established by Dominion Nuclear Connecticut, Inc. (Dominion) were not sufficient to assure that a condition adverse to quality involving Millstone 3 turbine-driven auxiliary feedwater (TDAFW) pump was promptly identified and corrected. Specifically, in spite of the TDAFW pump experiencing three overspeed trips during this timeframe, Dominion did not identify that the pump was operating in an adverse configuration due to the installation, on May 12, 2013, of an inappropriate cam follower bearing within the turbine control valve linkage. This discrepant condition rendered the TDAFW pump inoperable for periods of time exceeding the limiting condition for operation specified in Millstone 3 Technical Specification (TS) 3.7.1.2.

This violation is associated with a White Significance Determination Process finding.

Pursuant to the provisions of 10 CFR 2.201, Dominion 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 I, 2100 Renaissance Boulevard, King of Prussia, PA 19406, and a copy to the NRC Resident Inspector at Millstone, 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; EA-14-092" 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 must follow the handling requirements provided below and 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.

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 20th day of October, 2014.