



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 24, 2023

Maria Korsnick
Nuclear Energy Institute
1201 F Street, NW, Suite 1100
Washington, DC 20004

Dear Maria Korsnick:

I am responding to your April 4, 2023, letter to Chair Hanson that expressed your dissatisfaction with the U.S. Nuclear Regulatory Commission (NRC) staff's response¹ to your December 12, 2022, letter to the NRC's General Counsel. In your letter you raised concerns about the NRC's lack of transparency regarding the basis for its longstanding position on operational leakage that was reiterated in Regulatory Issue Summary (RIS) 2022-02, "Operational Leakage."² You also raise concerns about the "substantive validity" of the NRC's interpretation of its regulations and guidance.

The NRC's interpretation of 10 C.F.R. 50.55a(g)(4) is clear and consistent with the plain language of the regulations. The NRC staff has clearly and consistently articulated the agency's regulatory position since the issuance of Generic Letter (GL) 90-05, "Guidance for Performing Temporary Non-Code Repair of American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 Piping." Further, the basis for this position has also been effectively communicated. Specifically, the plain language of Title 10 of the Code of Federal Regulations (10 CFR) Section 50.55a(g)(4) mandates the use of ASME Boiler and Pressure Vessel (BPV) Code, Section XI, (or an approved code case) "[t]hroughout the service life of a boiling or pressurized water-cooled nuclear power facility." The NRC interprets this to mean that systems, structures, and components (SSCs) subject to 10 CFR 50.55a(g) are not, at any time during the service life of the licensee facility, permitted to deviate from the applicable Section XI requirements (or an approved code case), without relief, an approved alternative, or an exemption. In the more than three decades since GL 90-05 was issued, there have been numerous public meetings, documents and written correspondence, discussing this position and its basis. As such, we do not agree that the NRC's interpretation of its regulations is inconsistent with their plain language or that there is (or has been) a lack of regulatory transparency regarding this matter.

Operational leakage is defined as leakage through a flaw in the pressure retaining boundary of an ASME BPV Code Class 1, 2, or 3 SSC discovered during the operational life of a nuclear power plant outside an ASME BPV Code required pressure test. As such, operational leakage, when it occurs, represents a deviation from the 10 CFR 50.55a(g)(4) requirement discussed above. Technical Specifications (TS) protect the health and safety of the public by imposing limits, operating conditions, and other requirements. They define the limits of plant operation to ensure the plant is operated within the boundaries established by the Final Safety Analysis Report. For SSCs covered by TS, the operability requirements established by the governing limiting conditions for operations assume that the SSCs maintain structural integrity. Thus, a challenge to the structural integrity of a TS SSC (i.e., an SSC exhibiting operational leakage) is a challenge to its operability and potentially its ability to carry out its specified safety function.

¹ Letter from A. Veil to E. Ginsberg dated March 16, 2023, (Agencywide Document Access and Management System Accession No. ML23044A398)

² ADAMS Accession No. ML22167A002

Simply put, the NRC's regulatory position on operational leakage is in the interrelationship between 10 CFR 50.55a and the TS that require a licensee to ensure operability (including structural integrity) of facility SSCs. TS also establish the allowable period for a licensee to restore the structural integrity (i.e., restore compliance with 10 CFR 50.55a(g)) of SSCs rendered inoperable due to operational leakage. As discussed in RIS 2022-02, for ASME BPV Code Class 2 and 3 SSCs, licensees are permitted to evaluate the location of the flaw to determine if the leakage affects the structural integrity of the associated SSC governed by TS. For instance, if the licensee identifies leakage from a drain line, of which the complete failure would not affect operability of any system (e.g., complete failure will not result in loss of adequate flow in the main system, will not result in room flooding that could result in loss of a specified safety function, etc.), then the requirements discussed in the RIS would not apply.

As stated above, 10 CFR 50.55a and the TS establish the structural integrity requirements for Class 1, 2, and 3 SSCs; the NRC has documented this longstanding regulatory position in generic communications, correspondence, and NRC inspector guidance at least since the issuance of GL 90-05. The NRC position on the implementation of 10 CFR 50.55a for operational leakage has also been documented in multiple regulatory actions completed to grant relief requests to licensees (per GL 90-05), where appropriate, and in enforcement actions taken when these regulatory requirements were not met. Agency guidance documents for both NRC inspectors and operating reactor licensees have consistently articulated this position, most recently in the staff's response to public comments on the draft RIS³.

Additionally, nuclear power plant licensees authorized to implement 10 CFR 50.69, "Risk informed categorization and treatment of structures, systems and components for nuclear power reactors," have additional flexibility with regard to operational leakage in Risk Informed Safety Class (RISC)-3 or RISC-4 categorized components that are classified as ASME BPV Code Class 2 and 3 and are still required to be operable by plant TS but can be treated in accordance with the licensee's approved 10 CFR 50.69 requirements.

The NRC established its operational leakage requirements through rulemaking after carefully analyzing applicable technical and legal principles and considering public comments, and the staff has clearly and consistently conveyed its interpretation of those requirements for more than three decades, including during the preparation of pre-decisional draft NRC documents prior to their issuance, and in response to your correspondence. As you noted in your April 4, 2023, letter, following the NRC and industry presentations to the Committee to Review Generic Requirements (CRGR), the CRGR also concluded that the NRC staff had demonstrated consistent interpretation of the operational leakage requirements through its licensing, inspection, and ASME Code-related activities⁴, and that, contrary to NEI's assertions, RIS 2022-02 is not a new position nor a backfit, but rather an affirmation of a longstanding agency practice.

³ Analysis of Public Comments on Draft NRC Regulatory Issue Summary 2021-XX "Operational Leakage" (ADAMS Accession No. ML22167A003)

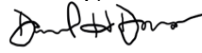
⁴ Committee to Review Generic Requirements: Minutes of Meeting No. 460, 461 and 462. (ADAMS Accession No. ML22256A171)

M. Korsnick

- 3 -

I appreciate you sharing your concerns and hope that this letter helps clarify the agency position as well as available means to apply risk insights in implementation, as appropriate.

Respectfully,



Signed by Dorman, Dan
on 07/24/23

Daniel H. Dorman
Executive Director