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May 20, 2022

Ms. Stephanie Coffin
Chair, Committee to Review Generic Requirements
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: May 13, 2022, Public Meeting on Draft Regulatory Issue Summary "Operational Leakage," 87 Fed. Reg. 2361 (Jan. 14, 2022) (Docket ID NRC-2021-0173)

Project Number: 689

Dear Ms. Coffin:

On behalf of its members, the Nuclear Energy Institute (NEI)¹ is writing to express our appreciation for the opportunity to discuss the above-referenced draft Regulatory Issue Summary (RIS) during the May 13, 2022, public meeting with the Committee to Review Generic Requirements (CRGR). As has been the case in the past, we found the interaction with the CRGR to be worthwhile and engaging.

As discussed during the public meeting, NEI and our members agree that when operational leakage is identified, the impact on Technical Specification (TS) operability must be evaluated. We also agree that the methods provided in Section XI of the ASME Code, as well as NRC-approved Code Cases, are one valuable tool that licensees may use to assess the structural integrity of Class 2 or 3 components experiencing operational leakage, and that such assessments can be used as part of broader operability determinations for structures, systems, and components (SSCs) that are required to be operable by the TS.² These Code methods may even be preferred by licensees in some circumstances.

We disagree, however, that the methods provided in Section XI are the only methods available to licensees, without prior NRC approval. There are no legally binding requirements in Section XI of the ASME BPV Code,

¹ The Nuclear Energy Institute (NEI) is responsible for establishing unified policy on behalf of its members relating to matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect and engineering firms, fuel cycle facilities, nuclear materials licensees, and other organizations involved in the nuclear energy industry.

² The TS prohibits operational leakage in the reactor coolant system pressure boundary, which includes ASME Class 1 SSCs. Thus, operational leakage in Class 1 SSCs is generally prohibited by the TS and prescribed TS actions must be followed when such leakage is discovered. The arguments in these comments are limited to Class 2 and 3 SSCs, which do not constitute the reactor coolant system pressure boundary.

10 CFR 50.55a, or the TS that require the exclusive use of Section XI flaw acceptance, evaluation, and corrective action methods to make an operability determination in response to operational leakage in Class 2 and 3 components.

Much of the discussion during the public meeting was understandably devoted to whether the draft RIS constitutes a change in the NRC's position on this issue. This focus is understandable because such considerations are typically an important part of evaluating claims that an unanalyzed backfit is resulting from a valid, yet new or different, interpretation of an unchanged legally binding requirement.³ But, as discussed in our March 15 comments and during the public meeting, that is not our primary argument here. Instead, our primary concern with the draft RIS is that it is using mandatory language to describe a new requirement and one that the agency has not previously imposed via a notice and comment rulemaking, or other appropriate process (*e.g.*, issuance of orders).⁴

Specifically, the draft RIS asserts that the "NRC staff seeks to clarify that 10 CFR 50.55a(g) includes regulatory requirements that apply to operational leakage" and that 10 CFR 50.55a(g)(4) provides the regulatory basis for this position.⁵ But the plain language of paragraph (g)(4) does not support the position communicated in the draft RIS. Rather, paragraph (g)(4) simply communicates that licensees must implement an inservice inspection program in accordance with the requirements "set forth in Section XI editions and addenda of the ASME BPV Code" that are in effect prior to the first inspection interval, and then which subsequently become effective throughout the service life of a facility (*i.e.*, editions and addenda which are effective prior to the inception of each future inspection interval).⁶

The concept communicated in paragraph (g)(4) – *i.e.*, that future revisions of the inservice inspection standard in Section XI would be incorporated-by-reference and applied "throughout the service life" of a facility – does not transform the scope of that standard to apply outside of the inservice inspection program examinations and tests. The plain language of (g)(4) simply does not support the interpretation communicated in the draft RIS. Prior NRC statements that rely upon 10 CFR 50.55a(g)(4) to expand the applicability of Section XI to operational leakage are substantively invalid.

Thus, the draft RIS does not merely clarify or interpret existing NRC regulations or other legally binding requirements. Instead, the RIS effectively amends 10 CFR 50.55a to create and impose a new requirement. In addition to violating the Administrative Procedure Act, this effective amendment of 10 CFR 50.55a would

³ See 10 CFR 50.109(a)(1).

⁴ See "Industry Comments on Draft Regulatory Issue Summary, 'Operational Leakage,' 87 Fed. Reg. 2361 (Jan. 14, 2022) (Docket ID NRC-021-0173)," Attachment at pgs. 1-14 ("NEI Comment Letter"); NEI Slides "Industry Perspectives on Draft Operational Leakage Regulatory Issue Summary," May 13, 2022, at slides 4-9.

⁵ "NRC Regulatory Issue Summary 2021-XX Operational Leakage," Jan. 6, 2022, at pgs. 2, 3 ("Draft RIS").

⁶ This reading of paragraph (g)(4) is also consistent with the regulatory history of the inservice inspection and testing requirements. NEI Comment Letter, Attachment at pgs. 8-9.

require changes to the procedures necessary to operate commercial power reactors and would meet the definition of backfitting provided in section 50.109(a)(1).⁷

Stated differently, the most concerning position communicated in the draft RIS is the statement that Section XI methods are the exclusive, mandatory methods available to licensees to assess the operability of Class 2 and 3 SSCs that are experiencing operational leakage. Using mandatory language to communicate this position to all power reactor licensees via a generic communication imposes a requirement that is not found in Section XI or 10 CFR 50.55a and will limit the use of alternative methods that are otherwise available to licensees in performing real-time operability determinations.

For example, there are situations that could trigger the operability determination process that are simply not addressed by Section XI methods and criteria. In such situations, licensees should have the ability to exercise engineering judgement and use technically sound methods to evaluate operability, even if such methods have not been previously approved by the NRC. This practice is consistent with the NRC's general guidance on the performance of operability determinations (*i.e.*, guidance that is not specific to the context of operational leakage).⁸ Of course, the NRC may review those operability determinations via the inspection process.

In addition to our primary concern with the mandatory nature of the draft RIS (despite the lack of an underlying legally binding requirement), we also don't believe the NRC's position on the applicability of Section XI to operational leakage has been clear and unambiguous over time. For example, the nine-year exchange (2006-2015) between ASME and NRC concluded with NRC acknowledging that Section XI "does not provide requirements, other than for repair/replacement activities, when a leak is found at a time not associated with a code required pressure test."⁹ Thus, the NRC concluded that it would "evaluate the necessity of additional regulatory activities to address operational leakage."¹⁰ These statements, coupled with the fact that the NRC was considering amending paragraph (g)(4) to impose the requirement discussed in the draft RIS as recently as early last year,¹¹ are inconsistent with the claim that the NRC's position on this issue has been clear for decades. We note that the exchange between ASME and NRC discussed in our comment letter and during the public meeting is not explained or even mentioned in the draft RIS.

Indeed, if the agency's position on this issue had been clear for decades, then there would be no need to issue a generic communication like the draft RIS – the stated objective of which is to address "potential

⁷ The NRC's backfitting rule at 10 CFR 50.109 covers situations where a modification or addition to procedures required to operate a plant result from either: (1) a "new or amended provision in the Commission's regulations," or (2) the imposition of an interpretation that is new or different from a previous staff position.

⁸ "Inspection Manual Chapter 0326: Operability Determinations," Oct. 1, 2019, at pg. 14.

⁹ Letter to R. Hill (ASME) from B.E. Thomas (NRC), July 14, 2015.

¹⁰ *Id.*

¹¹ See Letter from J. Uhle (NEI) to R.M. Taylor, "Backfit Concerns with Proposed 10 CFR 50.55a Condition on Operational Leakage," Jan. 28, 2021.

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confusion between the NRC requirements and ASME Code interpretations"¹² and to "clarify the requirements to address operational leakage."¹³

We appreciate the opportunity to present our views to the CRGR on this important issue. Please to not hesitate to contact Tom Basso at tbb@nei.org if you have any questions about our position or if we can provide any additional information.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jennifer Uhle".

Jennifer Uhle

cc: Craig Erlanger, NSIR, NRC
Andrea Kock, NRR, NRC
Robert Lewis, NMSS, NRC
Raymond Lorson, RI, NRC
Susan Vrahoretis, OGC, NRC

¹² Draft RIS, at pg. 3.

¹³ *Id.* at pg. 1.