



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

August 22, 2018

MEMORANDUM TO: Samuel S. Lee, Chief
Licensing Branch 1
Division of Licensing, Siting,
and Environmental Analysis
Office of New Reactors

FROM: Omid Tabatabai, Senior Project Manager /RA/
Licensing Branch 1
Division of Licensing, Siting,
and Environmental Analysis
Office of New Reactors

SUBJECT: SUMMARY OF THE JULY 25, 2018, PUBLIC MEETING WITH
NUSCALE POWER, LLC, TO DISCUSS U.S. NUCLEAR
REGULATORY COMMISSION STAFF'S REQUEST FOR
ADDITIONAL INFORMATION 9474 AND CONTAINMENT
INTEGRATED LEAKAGE RATE TESTING

On July 25, 2018, representatives of the U.S. Nuclear Regulatory Commission (NRC) and NuScale Power, LLC (NuScale) held a public teleconference meeting to discuss NuScale's plans for responding to the staff's request for additional information (RAI) 9474, and its exemption request from the requirements of Title 10 of the *Code of Federal Regulations*, Part 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors."

Enclosure 1 captures the summary of the topics discussed during the teleconference. The agenda and list of meeting attendees are included in Enclosures 2 and 3, respectively. The meeting notice for this meeting is available in the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML18191A782. NuScale's presentation slides are available in ADAMS under Accession No. ML18220A872.

Docket No. 52-048

Enclosures:

1. Meeting Summary
2. Agenda
3. Attendees

CONTACT: Omid Tabatabai, NRO/DLSE
301-415-6616

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 DATED: August 22, 2018

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U.S. NUCLEAR REGULATORY COMMISSION
SUMMARY OF THE JULY 25, 2018, PUBLIC MEETING WITH
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STAFF'S REQUEST FOR ADDITIONAL INFORMATION 9474 AND CONTAINMENT
INTEGRATED LEAKAGE RATE TESTING

During this videoconference meeting between the U.S. Nuclear Regulatory Commission (NRC) and NuScale Power, LLC (NuScale), the NRC staff requested that NuScale describe the refueling sequence and when the required in-service inspection (ISI), in-service testing (IST), and Title 10 of the *Code of Federal Regulations*, Part 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors," Types B and C testing inspections, in accordance with the American Society for Mechanical Engineers (ASME) Code, would be performed. The NRC staff was particularly interested in the following information:

- Location of tests or inspections – operating bay, dry dock, or refueling pool;
- The condition of the containment vessel (CNV) – assembled or disassembled;
- Location of Type B tests – as-found and as-left;
- Location of Type C tests – as-found and as-left;
- Location of ASME Section XI inspections of bolted flanges – main CNV flange, other flanges;
- Location of inspection of O-rings – all flanges;
- Location of ASME XI weld inspections; and
- Any special tools required to perform the inspections.

NuScale agreed to provide the following information in their response to Request for Additional Information (RAI) 9474:

1. The description of the fully assembled containment vessel (CNV) for their proposed preservice pressure test. This test would be in addition to the ASME Code factory hydrotest. This would include: Type B flanges bolted shut with design O-rings, design bolt preload, design flange covers; and hydro test at design pressure, for which the acceptance criterion is no visible leakage anywhere, including mechanical joints. This preservice pressure test would be an inspection, test, analysis, and acceptance criteria (ITAAC). NuScale will add this to the Exemption Request No. 7.
2. The contact flange gap analysis would be based on design flange bolt preload values. If this analysis results in any flanges with gaps, the corresponding leakage(s) would be calculated and totaled, as requested in Question 6.2.6-26.

3. The design flange bolt preload values would be confirmed by the combined license (COL) applicant in the ASME Code calculation. NuScale has agreed to provide a description of the process for revising affected documents (design certification document (DCD), contact flange bolt calculations, etc.) if the conforming ASME Code calculation resulted in changes to the CNV design, including flange bolt preloads or materials.
4. NuScale will analyze the impact of the CNV movement operations on the leak tight integrity of the Type B flanges.

The NRC staff informed NuScale that they plan on following up with NuScale regarding verification of the integrity of the threaded fasteners. In an email from Mr. Marty Bryan, dated August 14, 2018, NuScale informed the NRC staff that the response to RAI 9474 is expected to be submitted on August 31, 2018.

U.S. NUCLEAR REGULATORY COMMISSION

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**DISCUSS U.S. NUCLEAR REGULATORY COMMISSION STAFF'S REQUEST FOR
ADDITIONAL INFORMATION (RAI) 9474 AND CONTAINMENT INTEGRATED LEAKAGE**

RATE TESTING

MEETING AGENDA

2:00 – 2:10 pm	Meeting Introductions
2:10 – 2:30 pm	Discussion of RAI 9474
2:30 – 2:50 pm	Refueling Sequence Animation
3:20 – 3:30 pm	Public Comments

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LIST OF ATTENDEES

NuScale Power, LLC

Steve Pope
Marty Bryan
Greg Myers
Ed Heald
Scott Harris
Gary McGee
Corrie Nichol
Jennie Wike

U.S. Nuclear Regulatory Commission Staff

Omid Tabatabai
Jason Haug
Clint Ashley
Sam Lee
Kevin Coyne
Diane Jackson
Anne-Marie Grady
Nicholas McMurray
Greg Cranston
Rob Taylor