



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

June 20, 2018

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

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

SUBJECT: SUMMARY OF THE MAY 22, 2018, CATEGORY 1 PUBLIC
TELECONFERENCE TO DISCUSS NUSCALE POWER, LLC
RESPONSES TO REQUESTS FOR ADDITIONAL
INFORMATION ASSOCIATED WITH THE NUSCALE DESIGN
CERTIFICATION APPLICATION

The U.S. Nuclear Regulatory Commission (NRC) held a Category 1 public teleconference on May 22, 2018, to discuss responses to the NRC staff requests for additional information (RAI) associated with the NuScale Power, LLC (NuScale) design certification application. Participants included personnel from NuScale. No members of the general public participated via bridgeline during the meeting.

The public meeting notice dated May 22, 2018, can be found in the NRC's Agencywide Documents Access and Management Systems under Accession No. ML18117A330. This meeting notice was also posted on the NRC public website.

Enclosed is the meeting agenda (Enclosure 1), list of participants (Enclosure 2), and overview (Enclosure 3).

Docket No. 52-048

Enclosures:

1. Meeting Agenda
2. List of Attendees
3. Meeting Overview

cc w/encl.: DC NuScale Power, LLC Listserv

CONTACT: Getachew Tesfaye NRO/DLSE
301-415-8013

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 TO DISCUSS NUSCALE POWER, LLC RESPONSES TO REQUESTS FOR
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 DATED: June 20, 2018

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OFFICE	DLSE/LB1:PM	DLSE /LB1:LA	DLSE/RPAC	DNRL/LB1:PM
NAME	GTesfaye	MBrown	MDudek	GTesfaye (signed)
DATE	6/17 /2018	6/18/2018	6/20/2018	6/20/2018

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U.S. NUCLEAR REGULATORY COMMISSION
CATEGORY 1 PUBLIC TELECONFERENCE TO DISCUSS NUSCALE POWER, LLC
RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION ASSOCIATED WITH THE
NUSCALE DESIGN CERTIFICATION APPLICATION

MEETING AGENDA

MAY 22, 2018

11:00 - 11:05 AM

Meeting Introductions

11:05 - 12:45 PM

Discussion of U.S. Nuclear Regulatory Commission Staff's Questions regarding NuScale Power LLC's Responses to Requests Additional Information 9245, 9285, 9292, 9284, and 9278.

12:45 – 12:55 PM

Public Comments/Questions

12:50 – 01:00 PM

Public interaction

01:00 PM

Meeting Closure

U.S. NUCLEAR REGULATORY COMMISSION

CATEGORY 1 PUBLIC TELECONFERENCE TO DISCUSS NUSCALE POWER, LLC
RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION ASSOCIATED WITH THE
NUSCALE DESIGN CERTIFICATION APPLICATION

LIST OF ATTENDEES

May 22, 2018

Name	Organization
Getachew Tesfaye	U.S. Nuclear Regulatory Commission (NRC)
Yeshnik, Andrew	NRC
Hernandez, Raul	NRC
Lavera, Ronald	NRC
Meighan, Sean	NRC
Dudek, Michael	NRC
Williams, Stephen	NRC
Lee, Samuel	NRC
Markley, Anthony	NRC
Istar, Ata	NRC
Gran, Zachary	NRC
Roche-Rivera, Robert	NRC
Gary Becker	NuScale Power, LLC (NuScale)
Rick Biasca	NuScale
Christian Lobscheid	NuScale
Scott Harris	NuScale
Derek Noel	NuScale
Greg Myers	NuScale
Jim Osborn	NuScale
Pat Conley	NuScale
Lee Dougherty	NuScale
Steve Mirsky	NuScale

U.S. NUCLEAR REGULATORY COMMISSION
OVERVIEW OF THE MAY 22, 2018, TELECONFERENCE TO DISCUSS THE NUSCALE
POWER, LLC RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION
ASSOCIATED WITH THE NUSCALE DESIGN CERTIFICATION APPLICATION

The purpose of this teleconference was to discuss the results of the U.S. Nuclear Regulatory Commission (NRC) staff's review of NuScale Power LLC's (NuScale) Responses to Requests for Additional Information (RAI) 9245, 9285, 9292, 9284, and 9278.

The following is the summary of NRC staff feedback and agreed upon next steps for the resolution of the remaining issues.

1. RAI 9245, Question 12.03-7
 - a. NRC Staff Feedback: One of the original questions posed by NRC staff was to ask how non-safety related components located inside of the containment vessel (CNV) but outside of the reactor vessel are evaluated as it relates to the requirements of the EQ program. NuScale's response did provide an answer to the specific examples provided in the background to the RAI. The response also addressed how DCD Sections 6.2.2 and 6.3 describe that the qualification program should address potential debris generating non-safety related SSCs inside of containment. However, the NRC staff is seeking information that verifies that the NuScale design performs EQ analysis for all non-safety related components located inside of the CNV but outside of the reactor vessel to ensure that these components would not suffer degradation under accident conditions that could impact safety related functions, such as but not limited to debris generation.

The NRC staff has been unable to determine if there are discussions of other non-safety related components similar to the examples provided. The NRC staff is looking for information in DCD Section 3.11 that discusses if the EQ program would require testing or analysis for other non-safety related components that are not discussed in this response.
 - b. Next Step: NuScale understood the NRC staff's question and agreed to provide supplemental response.
2. RAI 9245, Question 12.03-8
 - a. NRC Staff Feedback: The response does not appear to address the question asked regarding high cobalt wear products resulting from flexure of the control rod drive shaft. NuScale's response does detail how the control rods have their flexure limited using the control rod assembly (CRA) cards. However, it is not

clear to the NRC staff how the flexure of the control rod drive shaft itself is controlled. The NRC staff seeks to gain clarity as to whether it is NuScale's intent that the flexure of the control rod drive shaft is limited by the control rod's CRA card? The NRC staff continues to have concerns given the length of the control rod drive shaft is now longer than what has been seen in past designs.

- b. Next Step: NuScale understood the NRC staff's question and agreed to provide supplemental response.
3. RAI 9285, Question 12.03-41
- a. NRC Staff Feedback: The response provided by NuScale seems reasonable; however, the staff needs additional clarification related to air sparging operations for the phase separator tank (PST). It would appear that there would be only the 1 valve of separation when these operations would occur since the valves leading to the sides of the PST would be opened during this operation.
 - b. Next Step: NuScale understood the NRC staff's question and agreed to provide supplemental response.

4. RAI 9292

This RAI was not discussed during the teleconference. The NRC staff informed NuScale that it was considering a regulatory audit to clarify and address the remaining unresolved issues.

5. RAI-9284 – Smooth Surfaces:

- a. Staff Feedback: In response to NuScale's comment regarding the American Society of Mechanical Engineers (ASME) specification for a smooth surface, and their belief that the proposed specification represented a mirror finish, the NRC staff reviewed the ASME code and determined that: 1) the section of the ASME code referenced by NuScale only ensured the surface was smooth enough to be able to perform ultrasonic inspections and 2) the NRC staff notes that a No. 4 surface finish [identified in the reference Electric Power Research Institute (EPRI) document] is much coarser than an No. 8 (ASME "Mirror") finish. Guidance regarding "acceptable smoothness" is provided through operating experience identified in the referenced EPRI document submitted by industry to the NRC staff.
- b. Next Step: The NRC project manager will provide NuScale docketed example of specification for the surface finish that were provided by other applicant for design certification.

6. RAI 9278, Regarding deletion of Question 12.3-38

The NRC staff found NuScale's response acceptable. After verification, the NRC staff will change the status of this RAI to resolved closed.