



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

August 1, 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 JULY 3, 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 July 3, 2018, to discuss responses to the NRC staff requests for additional information associated with the NuScale Power, LLC (NuScale) design certification application. Participants included personnel from NuScale and a member of the general public.

The public meeting notice dated July 3, 2018, can be found in the NRC's Agencywide Documents Access and Management Systems under Accession No. ML18183A003. 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

SUBJECT: SUMMARY OF THE JULY 3, 2018, CATEGORY 1 PUBLIC TELECONFERENCE
TO DISCUSS NUSCALE POWER, LLC RESPONSES TO REQUESTS FOR
ADDITIONAL INFORMATION ASSOCIATED WITH THE NUSCALE DESIGN
CERTIFICATION APPLICATION
DATED: AUGUST 1, 2018

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OFFICE	DLSE/LB1:PM	DLSE /LB1:LA	DLSE/PPAC	DLSE/LB1:PM
NAME	GTesfaye	MMoore	RLavera*	GTesfaye (signed)
DATE	07/27/2018	07/30/2018	07/31/2018	08/01/2018

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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

July 3, 2018

2:30 – 2:35 PM

Introductions and Identification of topics

2:35 – 3:50 PM

Discussion of U.S. Nuclear Regulatory Commission Staff's Questions regarding NuScale Power LLC's Responses to Requests for Additional Information 9266 and 9263.

3:50 – 4:00 PM

Public Comments/Questions

4:00 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

July 3, 2018

Name	Organization
Getachew Tesfaye	U.S. Nuclear Regulatory Commission (NRC)
Ronald LaVera	NRC
Michael Dudek	NRC
Sean Meighan	NRC
Carrie Fosaaen	NuScale Power, LLC (NuScale)
Jim Osborn	NuScale
Karl Gross	NuScale
Scott Harris	NuScale
Mark Shaver	NuScale
Jim Osborn	NuScale
Sara Fields	Member of the public

U.S. NUCLEAR REGULATORY COMMISSION

OVERVIEW OF THE JULY 3, 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) 9266 and 9263.

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

1. RAI No. 9266, Questions 12.02-12 and 12.02-13, Reactor Building airborne tritium:
 - a. NRC Feedback: In RAI 9266, dated January 8, 2018, the NRC staff identified that NuScale Design Control Document (DCD) Tier 2 Revision 0, Subsections 12.2.2.1, "Reactor Building Atmosphere," 9.4.2, "Reactor Building and Spent Fuel Pool Area Ventilation System," and the supporting information do not contain the information necessary for the staff to perform their evaluation of airborne activity in the Reactor Building.
 - In NuScale's response it is stated,

[t]he calculated airborne activity in the airspace above the reactor pool water is based on an evaporation rate from the reactor pool while the pool water temperature is at the design basis temperature for the Reactor Building heating Heating, ventilation, and air conditioning (HVAC) Reactor Building ventilation system (RBVS), which is 100°F.

The technical specification limit for the pool water temperature is 140 degrees Fahrenheit (F). The NRC staff would like to understand the reason for the use of 100°F versus 140°F for pool temperature.

- The calculated RVBS air velocity over the pool is 30 feet per minute (ft/min). The NRC would request an understanding of the design features provided for maintaining the required air flow rate over the pool.
- Please provide rationale for the use of the following values in equation provided in response to this RAI.

p_w = saturation vapor pressure of water (@ 100 F) = 1.93 in Hg (0.949 in wg).

p_a = saturation pressure at room air dew point = 0.547 in Hg (0.27 in wg).

V = air velocity over water surface = 30 ft/min.

- Can NuScale provide the airborne equilibrium value for tritium with technical specification bounding conditions for pool temperature and air RXB air temperature?
- b. Next Step: NuScale understood the NRC staff's question and agreed to provide supplemental response to RAI 9266 with Final Safety Analysis Report (FSAR) mark up.
2. RAI No. 9263, Question 12.02-06, Low Reactor Coolant System (RCS) flow rate:
- a. NRC Staff Feedback: In RAI 9263 dated January 8, 2018, the NRC staff looked to understand how the DCD addresses the potential radiological impacts during crud burst of low flow RCS.
- Provide information on how the application factored in and addressed the aspects of design as it related to mitigation of larger than expected crud bursts due to low flow RCS.
 - Address any impacts to Table 12.2-33, "Reactor Building Airborne Concentrations," as a result of potential increase in radionuclide in the pool water.
 - Address how NuScale intends to ensure adequate mixing during peak crud burst to ensure representative RCS sample is obtained to calculate dose rate from the pool.
 - Address potential need to update DCD section 12.2 to include adjustment factors for lack of forced flow RCS mixing.
- b. Next Step: After some discussion, the NRC staff agreed to reevaluate the response and engage NuScale at a later date if needed.