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

August 30, 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 AUGUST 2, 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 August 2, 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. Members of the general public did not participate.

The public meeting notice dated August 2, 2018, can be found in the NRC's Agencywide Documents Access and Management Systems under Accession No. ML18212A023. 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 AUGUST 2, 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 30, 2018

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OFFICE	DLSE/LB1:PM	DLSE /LB1:LA	DLSE/RPAC	DNRL/LB1:PM
NAME	GTesfaye	MMoore	SMeighan*	GTesfaye (signed)
DATE	8/28/2018	8/29/2018	8/30/2018	8/30/2018

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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

August 2, 2018

1:00 – 1:15 PM

Introductions and Identification of topics

1:15 – 2:30 PM

Discussion of U.S. Nuclear Regulatory Commission Staff's Questions regarding NuScale Power LLC's Responses to Requests Additional Information 9295, 9255, 9263, and 9267.

2:30 – 2:45 PM

Public Comments/Questions

2:45

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

August 2, 2018

Name	Organization
Getachew Tesfaye	U.S. Nuclear Regulatory Commission (NRC)
Sean Meighan	NRC
Edward Stutzcage	NRC
Ronald LaVera	NRC
Carrie Fosaaen	NuScale Power, LLC (NuScale)
Jon Bristol	NuScale
Jim Osborn	NuScale
Mark Shaver	NuScale

U.S. NUCLEAR REGULATORY COMMISSION

OVERVIEW OF THE AUGUST 2, 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) 9295, 9255, 9263, and 9267.

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

1. RAI No. 9295, Question 12.03-55, "Steam Galleries streaming radiation":

    a. NRC Feedback: In response to this RAI, NuScale indicated that this issue "…will be finalized during a future design phase." In subsequent conversations, NuScale indicated that consideration would be given to including this issue in Table 1.8-1, "Summary of NuScale Certified Design Interfaces with Remainder of Plant." Has NuScale made a determination on inclusion of this item in the list of Design Interfaces? If not, what does NuScale see as path forward/resolution of this item?

    b. Next Step: NuScale understood the NRC staff's question and will submit a supplemantal response that will add a Combined License information item. However, NuScale will not include it in Table 1.8-1 as a design interface requirement. Both NRC and NuScale took action to further review this request. NuScale would consider the matter for major penetrations as reccommeded by the NRC staff but made no commitment.

2. RAI No. 9255, Question 12.02-31, "Inclusion of Transuranic (TRU) nuclides in Airborne Sources":

    a. NRC Staff Feedback: In a follow-up discussions on this issue with a previous NuScale Senior Manager of Regulatory Affairs, it was suggested that inclusion of the limited list of TRUs supplied in the RAI would be considered for inclusion into Section 12.2.2, "Airborne Radioactive Material Sources." Has a decision been made on this item?

    b. Next Step: NuScale will not include the limited list of TRUs supplied in the RAI into Section 12.2.2, "Airborne Radioactive Material Sources." The NRC staff took action to further evaluate this request and take appropriate action.

3. RAI No. 9263, Question 12.02-06, "Low Reactor Coolant System (RCS) flow rate":

    a. NRC Staff Feedback: During a public teleconference conducted on July 19, 2018, the NRC took an action to review interlocks associated with the refueling

bridge. It was determined that there were no interlocks on bridge movement associated with direct dose measurement. The NRC would like to reengage on this RAI, to include discussion on NuScale's ability to meet the ANSI-ANS 57.2 "guideline of ≤ 2.5mr/hr due to pool water activity shortly after disassembly of the nuclear power module (NPM), prior to adequate mixing of refueling pool area.

b. Next Step: NuScale acknowledged that the information regarding the possible provision of interlocks in DCD Chapter 9 associated with restricting the movement of the refueling bridge when dose rates are high was incorrect. However, they retirated that their original response to this RAI where they explained that the post-crud burst cleanup of the primary coolant in the NPM until the projected dose rate at one meter above the ultimate heat sink water is less than 5 mR/hr is consistent with ANSI-ANS guidelines and addresses this issue. The NRC staff took action to further evaluate this request and take appropriate action.

4. RAI 9267, Q12.2-7 and Q12.2-8:

   a. NRC Staff Feedback: Using the information available in the Gaseous and Liquid Effluent (GALE) Audit, the staff attempted to correct the DCD R1 Table 11.1-4 Design Basis Reactor Coolant Activity concentration for the new Design Basis Failed Fuel Fraction (6.6E-4) and the new reactor coolant system mass (103000 lbm). However, the staff calculated activity concentration was greater than the Table 11.1-4, "Primary Coolant Design Basis Source Term," Primary Coolant Concentrations provided in the response to RAI 9270. The change in activity appears to be due to a change to Ub (the name of a user defined variable) that is not understood by the staff. The staff request that NuScale describe the changes made to Ub and the basis for those changes.

   b. Next Step: NuScale understood the NRC staff's question and provided further explanation for their calculation. The NRC staff thanked NuScale for the additional clarification and took action to go back and check their numbers.

5. As a follow-up to the July 26, 2018, meeting, the use of primary coolant average Tritium concentration in RAI 9270, Question 12.02-20 vs peak value was discussed. NuScale agreed to provide a supplemental response to add a foot note that indicates the calculated Peak RCS Tritium concentration.