

November 14, 2017

MEMORANDUM TO: Samuel S. Lee, Chief
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors

FROM: Marieliz Vera, Project Manager */RAI/*
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors

SUBJECT: SUMMARY OF THE OCTOBER 10, 2017, CATEGORY 1 PUBLIC
TELECONFERENCE WITH NUSCALE POWER, LLC IN
RESPONSE TO REQUESTS FOR ADDITIONAL INFORMATION
RELATED TO EMERGENCY PLANNING ZONE
METHODOLOGY TOPICAL REPORT, AND SEISMIC
INSTRUMENTATION

The U.S. Nuclear Regulatory Commission (NRC) staff held a Category 1 public teleconference with NuScale Power, LLC's (NuScale) on October 10, 2017, to discuss NuScale's response to Request for Additional Information (RAI) No. 8712 related to NuScale Topical Report (TR) TR-0915-17772, "Methodology for Establishing the Technical Basis for Plume Exposure Emergency Planning Zones at NuScale Small Modular Reactor Plant Sites," Revision 0, and RAI No. 8927 related to Design Certification Application Chapter 3, Section 3.7.4, "Seismic Instrumentation." Participants included NRC staff and personnel from NuScale. There were no members of the public on this teleconference meeting.

The public meeting notice can be found in the NRC's Agencywide Documents Access and Management Systems under Accession No. ML17283A056. This meeting notice was also posted on the NRC public website.

The meeting agenda and list of participants can be found in Enclosures 1 and 2, respectively. The technical issues discussed are included in Enclosure 3.

CONTACT: Marieliz Vera, NRO/DNRL
301-415-5861

Summary:

The purpose of the first part of this teleconference was to discuss the evaluation of the NuScale response to RAI 8712 related to NuScale TR-0915-17772, and RAI 8937 related to DCA Chapter 3, Section 3.7.4, "Seismic Instrumentation."

The NRC staff discussed the evaluation of the NuScale response to RAI 8712, and in particular, Question 01.05-28. The meeting was partially closed for discussion of proprietary information.

In RAI 8712, Question 01.05-28, the NRC staff asked NuScale to provide a description of the specific criteria for judging the adequacy of defense-in-depth, and to provide a clear and complete clarification of the proper interpretation of this criterion.

The revised structured decision process proposed in the response to RAI 8712, Question 01.05-28, includes a qualitative criterion and a quantitative criterion, for evaluating the adequacy of the provisions for defense-in-depth applicable to candidate accident sequences for inclusion in the risk-informed evaluation of Emergency Planning Zone (EPZ) size.

During the meeting, which was a follow-up of the first such mostly closed meeting on September 5, 2017, involving the same RAI response, the NRC staff shared with NuScale additional insights gained from reviewing the RAI 8712 response. The NRC staff expressed concern related to assigning subjective numeric values and weighting factors to attributes. The staff and the applicant discussed various options for relating the attributes to the quantitative criteria in the TR such that potential users would have unambiguous understanding in utilizing/applying these criteria.

Additional detailed discussion, which involved significant portions of proprietary information, was conducted in the closed portion of this meeting.

The NuScale staff understood the NRC staff's comments and expectations, and plans to update the TR in response.

During the second part of this teleconference, the NRC staff discussed evaluation of NuScale response to RAI 8927 with set of questions related to the response (enclosure 3). The NRC staff mention American National Standard (ANS)-2.2-2016, "Earthquake Instrumentation for Nuclear Power Plants," and Regulatory Guide 1.12, Revision 3, "Nuclear Power Plant Instrumentation for Earthquakes" (first released by the NRC for public comments as a draft DG-1332 in September 2016, ADAMS Accession No. ML16104A220) as guidance they can use. NuScale asked the NRC staff to submit a follow up RAI with the questions discussed in the public meeting.

No members of the public participated in this teleconference meeting.

Docket No. 52-048

Enclosure:

1. Meeting Agenda
2. List of Attendees
3. Comments presented by the NRC staff regarding RAI 8927

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

SUBJECT: SUMMARY OF THE OCTOBER 10, 2017, CATEGORY 1 PUBLIC TELECONFERENCE WITH NUSCALE POWER, LLC IN RESPONSE TO REQUESTS FOR ADDITIONAL INFORMATION RELATED TO EMERGENCY PLANNING ZONE METHODOLOGY TOPICAL REPORT, AND SEISMIC INSTRUMENTATION
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U.S. NUCLEAR REGULATORY COMMISSION
CATEGORY 1 PUBLIC TELECONFERENCE WITH NUSCALE POWER, LLC
IN RESPONSE TO REQUESTS FOR ADDITIONAL INFORMATION RELATED TO
EMERGENCY PLANNING ZONE METHODOLOGY TOPICAL REPORT, AND SEISMIC
INSTRUMENTATION

October 10, 2017

1:00 p.m. – 3:00 p.m.

AGENDA

PUBLIC MEETING	
1:00-1:10	Introductions and identification of topics
1:10-1:30	NuScale Power, LLC response to request for additional information (RAI) 8712 discussion
1:30-1:45	Public comments
1:45-2:30	Closed Portion
2:30-3:00	NuScale response to RAI 8927 discussion
3:00-3:15	Public comments

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LIST OF ATTENDEES

October 10, 2017

NAME	AFFILIATION
Prosanta Chowdhury	U.S. Nuclear regulatory Commission (NRC)
Mark Caruso	NRC
Jeremiah Doyle	NuScale Power, LLC (NuScale)
Cindy Williams	NuScale
Bill Galyean	NuScale
Sarah Bristol	NuScale
Luke McSweeney	NuScale
Steve Mirsky	NuScale
Dave Leaver	NuScale
Marieliz Vera	NRC
Vladimir Graizer	NRC
Michael Dudek	NRC
Weijun Wang	NRC
Marty Bryan	NuScale
Kyra Perkins	NuScale
Josh Parker	NuScale
Nicholas Brown	NuScale

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Comments presented by NRC staff regarding RAI 8927

October 10, 2017

1. Absence of downhole instrument. How free field on the surface can be compared to the input at the depth of 86' below the grade?
2. It is not clear why these locations were chosen, especially in RXB? Why El. 75' and not El. 100' that corresponds to the grade level and is the same elevation as the sensor in CRB?
3. The RXB is a relatively long (~350 ft) structure with a non-uniform weight distribution. In such cases ANS 2.2 recommends two or three sensors at the basemat level at different ends of the structure to catch differential/rocking motion.
4. There are no Figures clarifying were the Grid Lines mentioned in the response are.