



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

March 2, 2018

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

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

SUBJECT: SUMMARY OF THE NOVEMBER 28, 2017, CATEGORY 1
PUBLIC TELECONFERENCE WITH NUSCALE POWER, LLC
DESIGN CERTIFICATION APPLICATION REQUEST FOR
ADDITIONAL INFORMATION RESPONSES NOS. 8938, 8836,
9187, AND 8820

The U.S. Nuclear Regulatory Commission (NRC) held a Category 1 public teleconference on November 28, 2017, to discuss the responses to NuScale Power, LLC (NuScale) Design Certification, Request for Additional Information (RAI) Nos. 8938, 8836, 9187, and 8820, regarding Final Safety Analysis Report Tier 2, Chapter 3, "Design of Structures, Systems, Components and Equipment." Participants included personnel from NuScale and members of the public.

The public meeting notice can be found in the Agencywide Documents Access and Management Systems (ADAMS) under Accession No. ML17319A168. 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. Some of the technical issues discussed are included in Enclosure 3.

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

Summary:

The purpose of this meeting was to discuss the RAI No. 8938 response (ADAMS Accession No. ML17219A087), and to discuss the path forward for the milestones regarding RAI Nos. 8836, 9187, and 8820 (ADAMS Accession Nos. ML17153A065, ML17307A102, and ML17153A377, respectively). The NRC staff discussed the feedback for RAI 8938 and the comments presented by the NRC staff (Enclosure 3) with NuScale personnel. The response to comments 3.12-3 and 3.12-2 will be addressed by NuScale by supplementing the RAI response.

For RAI 8820, NuScale discussed the schedule for the design of the emergency core cooling system (ECCS) valves, completion of the Failure Modes and Effects Analysis (FMEA), development of testing plans, and performance of the design tests for the ECCS valves. Also, NuScale discussed the schedule regarding when the documents for the ECCS valves will be available for audit.

For RAI 9187, NuScale notified the NRC that the configuration of the reactor vent valves (RVVs) and reactor recirculation valves (RRVs) have changed from a welded connection to a bolted connection. NRC staff requested NuScale provide a rapid response to RAI 9187, officially informing the NRC of the change to a bolted connection. The NRC staff indicated that a follow-up RAI with concerns related to the bolted connection will be sent to request information that NuScale can address in their design.

For RAI 8836, NuScale indicated that an integral shield restraint (ISR) will not be used in the design, with several different approaches being evaluated by NuScale depending the break location. Once NuScale makes decisions, they will reconfirm or revise RAI due dates. With that information NRC staff will assess the impact to the internal schedule of the review.

No comments from members of the public were received.

Docket No. 52-048

Enclosures:

1. Meeting Agenda
2. List of Attendees
3. Comments presented by NRC staff

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

SUBJECT: SUMMARY OF THE NOVEMBER 28, 2017, CATEGORY 1 PUBLIC
TELECONFERENCE WITH NUSCALE POWER, LLC DESIGN CERTIFICATION
APPLICATION REQUEST FOR ADDITIONAL INFORMATION RESPONSES
NOS. 8938, 8836, 9187, AND 8820
DATE: **3/01/2018**

DISTRIBUTION:

PUBLIC

Reading File

MVera, NRO

MMoore, NRO

TScarbrough, NRO

YLi, NRO

TLupold, NRO

RHernandez, NRO

ATsirigotis, NRO

RidsOgcMailCenter

RidsAcrsAcnwMailCenter

RidsNroDnrl

ADAMS Accession No.: ML18044A908***via email****NRC002**

OFFICE	NRO/DNRL/LB1: PM	NRO/DNRL/LB1: LA	NRO/DNRL/LB1: PM
NAME	MVera	MMoore	MVera
DATE	2/08/2018	2/27/2018	3/01/2018

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION
CATEGORY 1 PUBLIC TELECONFERENCE WITH NUSCALE POWER, LLC
DESIGN CERTIFICATION APPLICATION RESPONSES TO REQUEST FOR
ADDITIONAL INFORMATION NOS. 8938, 8836, 9187, AND 8820

November 28, 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 response to request for additional information (RAI) 8712 discussion
1:30-1:45	Discussion of the RAIs 8836, 9187, and 8820
1:45-2:30	Public comments
2:45-3:00	Closed portion

U.S. NUCLEAR REGULATORY COMMISSION

CATEGORY 1 PUBLIC TELECONFERENCE WITH NUSCALE POWER, LLC

DESIGN CERTIFICATION APPLICATION RESPONSES TO REQUEST FOR

ADDITIONAL INFORMATION NOS. 8938, 8836, 9187, AND 8820

LIST OF ATTENDEES

November 28, 2017

NAME	AFFILIATION
Marieliz Vera	U.S. Nuclear regulatory Commission (NRC)
Thomas Scarbrough	NRC
Yueh-Li Li	NRC
Timothy Lupold	NRC
Raul Hernandez	NRC
Alexander Tsirigotis	NRC
Marty Bryan	NuScale Power, LLC (NuScale)
Greg Myers	NuScale
Zack Houghton	NuScale
Colin Sexton	NuScale
Tamas Liskai	NuScale
Wayne Massie	NuScale
JJ Arthur	NuScale
Connie Kanas Joki	NuScale
Pat Davis	Public
Sarah Fields	Public

U.S. NUCLEAR REGULATORY COMMISSION
CATEGORY 1 PUBLIC TELECONFERENCE WITH NUSCALE POWER, LLC
DESIGN CERTIFICATION APPLICATION RESPONSES TO REQUEST FOR
ADDITIONAL INFORMATION NOS. 8938, 8836, 9187, AND 8820

Request Additional for Information 3.12-2:

Response evaluation, the response for Request No. 1 states that:

Consideration of frictional forces for the design of pipe supports is limited to loading from deadweight/buoyancy loads, thermal expansion loads, and anchor or support movement (due to temperature or pressure) loads.

Issue: The response for Request No. 1 failed to include friction forces resulting from **all piping signed non-reversing loads**, such as those from relief/safety valve discharging to an open system. These loads do not change sign for a significant portion of their duration and need to be considered. The response also failed to provide a justification for excluding these loads, as requested by the request additional for information (RAI).

RAI 3.12-3:

Response evaluation, the response is adequate with a minor issue; Final Safety Analysis Report markup states:

A nominal cold condition gap of 1/16th inch is included radially for all pipe supports, except where the gap is required to be less because the support is designed to bear piping deadweight.

The NRC staff notes that for deadweight supports unless zero clearance is specified, **less than 1/16th** is interpreted that some clearance less than 1/16th is allowed, in which case the pipe is not resting on its deadweight support. Therefore, it would be more appropriate to state something similar to the following:

A nominal cold condition gap of 1/16th inch is included radially for all pipe supports, except for deadweight supports. For deadweight supports the pipe is required to be in contact with the support in the direction of gravity.