



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

September 24, 2018

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

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

SUBJECT: SUMMARY OF THE SEPTEMBER 11, 2018, CATEGORY 1  
PUBLIC TELECONFERENCE WITH NUSCALE POWER, LLC  
DESIGN CERTIFICATION APPLICATION FINAL SAFETY  
ANALYSIS REPORT, TIER 2, SECTION 3.9.6, "FUNCTIONAL  
DESIGN, QUALIFICATION, AND INSERVICE TESTING  
PROGRAMS FOR PUMPS, VALVES, AND DYNAMIC  
RESTRAINTS"

The U.S. Nuclear Regulatory Commission (NRC) held a Category 1 public teleconference on September 11, 2018, to discuss Final Safety Analysis Report (FSAR) Tier 2, Chapter 3, "Design of Structures, Systems, Components and Equipment," Section 3.9.6, "Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves, and Dynamic Restraints," of the NuScale Power, LLC (NuScale) Design Certification. 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 under Accession No. ML18254A056. 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.

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

**Summary:**

The purpose of this meeting was to discuss the boron effects evaluation during the emergency core cooling system (ECCS) valve design demonstration testing.

The NRC staff discussed that the design demonstration testing of the safety features for the ECCS valves to support the NuScale Design Certification should demonstrate that boron deposits resulting from flashing of the reactor coolant in the ECCS valve main control chamber, inadvertent actuation block (IAB) valve, and associated tubing will not adversely affect the performance of the IAB valve (a) to close and seal in a timely manner to prevent the main valve from opening prematurely; and (b) to open at the proper differential pressure between the reactor coolant system and the containment vessel to allow the pressure in the main control chamber to be reduced such that the main valve will fully open in a timely manner.

Also, the ECCS valve design demonstration testing should demonstrate that the portions of the ECCS valve system in low temperature areas (such as the trip valves and associated tubing in the reactor pool) will not be adversely impacted by boron precipitation that could result in inadequate blowdown of the tubing that interferes with the proper performance of the ECCS valve system (including the IAB valve, main control chamber, trip valve, and tubing) to prevent premature opening of the main valve and to allow timely opening of the main valve.

NuScale intends to submit a letter describing its plans for the design demonstration testing of the ECCS valves.

Docket No. 52-048

**Enclosures:**

1. Meeting Agenda
2. List of Attendees

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

SUBJECT: SUMMARY OF THE SEPTEMBER 11, 2018, CATEGORY 1 PUBLIC TELECONFERENCE WITH NUSCALE POWER, LLC DESIGN CERTIFICATION APPLICATION FINAL SAFETY ANALYSIS REPORT, TIER 2, SECTION 3.9.6, "FUNCTIONAL DESIGN, QUALIFICATION, AND INSERVICE TESTING PROGRAMS FOR PUMPS, VALVES, AND DYNAMIC RESTRAINTS"  
 DATE: September 24, 2018

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<b>DATE</b>	09/17/2018	09/19/2018	09/24/2018

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**U.S. NUCLEAR REGULATORY COMMISSION**

**CATEGORY 1 PUBLIC TELECONFERENCE WITH NUSCALE POWER, LLC**  
**DESIGN CERTIFICATION APPLICATION FINAL SAFETY ANALYSIS REPORT, TIER 2,**  
**SECTION 3.9.6, “FUNCTIONAL DESIGN, QUALIFICATION, AND INSERVICE TESTING**  
**PROGRAMS FOR PUMPS, VALVES, AND DYNAMIC RESTRAINTS”**

**September 11, 2018**

**11:00 a.m. – 12:00 p.m.**

**AGENDA**

<b>Public Meeting</b>	
11:00-11:10am	Welcome and Introductions
11:10-11:45am	Technical discussion
11:45-12:00pm	Public – Questions and Comments

**U.S. NUCLEAR REGULATORY COMMISSION**

**CATEGORY 1 PUBLIC TELECONFERENCE WITH NUSCALE POWER, LLC**

**DESIGN CERTIFICATION APPLICATION FINAL SAFETY ANALYSIS REPORT, TIER 2,**

**SECTION 3.9.6, "FUNCTIONAL DESIGN, QUALIFICATION, AND INSERVICE TESTING**

**PROGRAMS FOR PUMPS, VALVES, AND DYNAMIC RESTRAINTS"**

**LIST OF ATTENDEES**

**September 11, 2018**

<b>NAME</b>	<b>AFFILIATION</b>
Marieliz Vera	U.S. Nuclear regulatory Commission (NRC)
Timothy Lupold	NRC
Thomas Scarbrough	NRC
Ryan Nolan	NRC
Marty Bryan	NuScale Power, LLC (NuScale)
Zack Houghton	NuScale
Paul Infanger	NuScale
Daniel Lassiter	NuScale
Colin Sexton	NuScale
Greg Myers	NuScale
Sarah Fields	Public