



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

June 12, 2018

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

FROM: Omid Tabatabai, Senior Project Manager */RA/*  
Licensing Branch 1  
Division of Licensing, Sitting, and Environmental Assessment  
Office of New Reactors

SUBJECT: SUMMARY OF THE MARCH 7, 2018, PUBLIC MEETING WITH  
NUSCALE POWER, LLC, TO DISCUSS THE U.S. NUCLEAR  
REGULATORY COMMISSION STAFF QUESTIONS RELATED  
TO INITIAL TEST PROGRAM

On March 7, 2018, representatives of the U.S. Nuclear Regulatory Commission (NRC) and NuScale Power, LLC (NuScale) held a public teleconference meeting to discuss the NRC staff's questions related to NuScale's approach to initial test program, as described in Section 14.2, "Initial Plant Test Program" of NuScale design certification application.

Enclosure 1 captures the summary of the topics discussed during the teleconference. The agenda and list of meeting attendees are included in Enclosures 2 and 3, respectively. The meeting notice for this meeting is available in the Agencywide Documents Access and Management System under Accession No. ML18066A242.

Docket No. 52-048

Enclosures:

1. Meeting Summary
2. Agenda
3. Attendees

CONTACT: Omid Tabatabai, NRO/DNRL  
301-415-6616

SUBJECT: SUMMARY OF THE MARCH 7, 2018, PUBLIC MEETING WITH NUSCALE  
 POWER, LLC, TO DISCUSS THE U.S. NUCLEAR REGULATORY COMMISSION  
 STAFF QUESTIONS RELATED TO INITIAL TEST PROGRAM  
 DATED: June 12, 2018

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\*via email

NRC-001

OFFICE	NRO/DNRL/LB1:PM	NRO/DNRL/LB1:LA*	NRO/DCIP/QVIB2:BC*	NRO/DNRL/LB1:PM
NAME	OTabatabai	SGreen	KKavanagh	OTabatabai
DATE	3/12/2018	6/12/2018	3/19/2018	3/19/2018

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**U.S. NUCLEAR REGULATORY COMMISSION**  
**SUMMARY OF THE MARCH 7, 2018, TELECONFERENCE WITH NUSCALE POWER, LLC**  
**TO DISCUSS STAFF’S QUESTIONS RELATED TO NUSCALE’S APPROACH TO INITIAL**  
**PLANT TEST PROGRAM**

The following table captures the summary of discussions, specifically, staff’s questions and NuScale’s response.

<b>Item No.</b>	<b>Staff’s Comment</b>	<b>Status</b>
1	Provide an overview of the NuScale initial test program (ITP) approach to testing and the graded approach to preoperational testing (see Section 14.2.3.2, “Graded Approach to Testing.”)	This item has been identified as out of scope per the new review approach regarding the NuScale Power, LLC (NuScale), initial test program (ITP). For more details see memoranda, “Proposed Pilot Approach for the NuScale Power, LLC, Initial Test Program Review,” dated March 7, 2018 (ADAMS Accession No. ML18060A298). Therefore, this item will not be required for review at the design certification stage. No further actions are needed.  <b>Status: Unresolved/Closed</b>
2	What is the NuScale approach for the individual test methods? For example, which ITP tests are required to be tested only from the main control room (MCR) (e.g., visual observation), remote shutdown station (RSS), and/or local control panels?	The applicant agreed to remove references of the Remote Shutdown station and/or local control panels in the individual test methods.  <b>Status: Resolved / Confirmatory Item</b>
3	Last bullet under objectives of Section 14.2.2, “Summary of Initial Test Program and Objectives,” states,  complete and document the ITP testing required to satisfy preoperational and startup testing requirements and Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) testing requirements.  Does this imply that the ITP testing satisfies Inspections,	The applicant agreed to include a new subsection in FSAR Section 14.2 to describe the relationship between the preoperational tests and ITAAC.  <b>Status: Resolved / Confirmatory Item</b>

	Tests, Analyses, and Acceptance Criteria (ITAAC) testing requirements? Several ITP testing imply that ITAAC satisfies portions of ITP.	
4	<p>What I&amp;C platforms/networks are needed to be operational to perform the ITP? For example, starting with Table 14.2-1: Spent Fuel Pool Cooling System Test # 1,” discuss the following:</p> <ul style="list-style-type: none"> <li>• Is the MCR required to be fully operational prior to performing any ITP tests?</li> <li>• Is making the MCR operational part of an ITP test? If so, which ITP test? If not, which ITAAC.</li> </ul>	<p>This item has been identified as out of scope per the new review approach regarding the NuScale ITP. For more details see memoranda, “Proposed Pilot Approach for the NuScale Power, LLC, Initial Test Program Review,” dated March 7, 2018 (ADAMS Accession No. ML18060A298). Therefore, this item will not be required for review at the design certification stage. No further actions are needed.</p> <p><b>Status: Unresolved/Closed</b></p>
5	<p>As it pertains to question # 1 (shown above), discuss how the interfaces between different workstations in the MCR and RSS will be tested.</p>	<p>This item has been identified as out of scope per the new review approach regarding the NuScale ITP. For more details see memoranda, “Proposed Pilot Approach for the NuScale Power, LLC, Initial Test Program Review,” dated March 7, 2018 (ADAMS Accession No. ML18060A298). Therefore, this item will not be required for review at the design certification stage. No further actions are needed.</p> <p><b>Status: Unresolved/Closed</b></p>
6	<p>On the premise that the factory acceptance testing (FAT) would satisfy the logic for the I&amp;C platforms, does this include FAT for the nonsafety-related platforms? If not, will there be a FAT for nonsafety-related platforms?</p>	<p>The applicant agreed to include a new subsection in FSAR Section 14.2 to describe the overlap of testing concepts for the nonsafety-related platforms</p> <p><b>Status: Resolved / Confirmatory Item</b></p>

7	<p>FSAR Table 1.9-2, "Conformance with Regulatory Guides," includes an identification and description of deviations from the guidance in the NRC Regulatory Guides, as well as suitable justifications for any alternative approaches proposed. This table identifies deviations for Regulatory Guide 1.68, "Initial Test Programs for Water-Cooled Nuclear Power Plants," Revision 4. Describe the deviations in FSAR Section 14.2, "Initial Test Program.</p>	<p>The applicant agreed to include a statement in FSAR Section 14.2.7 to describe the deviations from Regulatory Guide 1.68 and the new review approach for the NuScale ITP.</p> <p><b>Status: Resolved / Confirmatory Item</b></p>
8	<p>Are all plant controllers and indications available in the Module Control System (see Table 14.2-61, "Module Control System Test # 61")? Are the indications monitored in the main control room identical to the remote shutdown station (RSS) (e.g., Test 1, component level test vi)? If not, what signals are designed to be displayed in the RSS?"</p>	<p>This item has been identified as out of scope per the new review approach regarding the NuScale ITP. For more details see memoranda, "Proposed Pilot Approach for the NuScale Power, LLC, Initial Test Program Review," dated March 7, 2018 (ADAMS Accession No. ML18060A298). Therefore, this item will not be required for review at the design certification stage. No further actions are needed.</p> <p><b>Status: Unresolved/Closed</b></p>

**U.S. NUCLEAR REGULATORY COMMISSION**  
**SUMMARY OF THE March 7, 2018, TELECONFERENCE**

**WITH NUSCALE POWER, LLC**

**MEETING AGENDA**

Time	Topic	Lead
1:00 – 1:10 pm	Meeting Introductions	NRC/NuScale
1:10 – 2:45 pm	Discussion of Staff's Questions	NRC/NuScale
2:45 – 2:50 pm	Public Comments/Questions	Public
2:50 – 3:00 pm	Meeting Conclusion	NRC/NuScale

**U.S. NUCLEAR REGULATORY COMMISSION**  
**SUMMARY OF THE March 6, 2018, TELECONFERENCE**  
**WITH NUSCALE POWER, LLC**

**LIST OF ATTENDEES**

**NuScale Power, LLC**

Carl Dumsday  
Brian Arnholt  
Steve Pope  
Ken Langdon  
Rufino Ayala  
Dustin Greenwood

**U.S. Nuclear Regulatory Commission Staff**

Omid Tabatabai  
Luis Betancourt  
Kerri Kavanagh  
Aaron Armstrong  
Paul Prescott  
Dinesh Taneja  
Joseph Ashcraft  
Taylor Lamb  
Olivia Makula  
Demetrius Murray

**Members of the Public**

Sarah Fields, Uranium Watch