

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 29, 2022

MEMORANDUM TO: Michael I. Dudek, Chief

New Reactor Licensing Branch

Division of New and Renewed Licenses Office of Nuclear Reactor Regulation

FROM: Ricky A. Vivanco, Project Manager.../RA/

New Reactor Licensing Branch

Division of New and Renewed Licenses Office of Nuclear Reactor Regulation

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION SUMMARY OF

THE MARCH 23, 2022, OBSERVATION PUBLIC MEETING TO DISCUSS NUSCALE POWER, LLC'S OPERATOR TRAINING

**ACCREDITATION PROCESS** 

The U.S. Nuclear Regulatory Commission (NRC) held an observation public meeting on March 23, 2022, as a follow-up to the November 9, 2021, observation meeting (Agencywide Documents Access and Management System (ADAMS) Accession No ML21313A179) where NuScale Power, LLC (NuScale) informed the NRC staff that they are working with the Institute of Nuclear Power Operations (INPO) staff to develop a vendor-accredited training program that could be used by a facility licensee to provide qualified personnel to operate the facility. During the November 9, 2021, meeting, NuScale indicated that education and experience requirements for operators of a NuScale facility could be reduced relative to current requirements for licensed operators at power reactors. The NRC staff requested this follow-up meeting to better understand the reason for this change and whether the proposed approach will be consistent with Commission policies for education and experience. Members of the general public participated via bridgeline during the meeting.

The public meeting notice dated March 23, 2022, was posted on the NRC public Web site, and can be found in the NRC's ADAMS under Accession No. ML22081A170. Information related to NuScale presentation can be found under ADAMS Accession No. ML22056A285.

CONTACTS: Ricky Vivanco, NRR/DNRL Getachew Tesfaye, NRR/DNRL

301-415-0021 301-415-8013

M. Dudek 2

Enclosed are the meeting agenda (Enclosure 1), list of participants (Enclosure 2), and overview (Enclosure 3).

Docket No. 99902078

#### Enclosures:

- Meeting Agenda
   List of Attendees
- 3. Meeting Overview

cc w/encl.: DC NuScale Power

M. Dudek 3

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION SUMMARY OF THE

MARCH 23, 2022, OBSERVATION PUBLIC MEETING TO DISCUSS NUSCALE POWER, LLC'S OPERATOR TRAINING ACCEREDITATION

PROCESS: MARCH 29, 2022

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ADAMS Accession No: ML22088A126 \*via email NRR-106

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NAME	RVivanco	SGreen*	GTesfaye*	RVivanco*
DATE	03/28/22	03/29/22	03/29/22	03/29/22

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# U.S. NUCLEAR REGULATORY COMMISSION SUMMARY OF THE MARCH 23, 2022, OBSERVATION PUBLIC MEETING TO DISCUSS NUSCALE POWER, LLC'S OPERATOR

### TRAINING ACCEREDITATION PROCESS

#### **MEETING AGENDA**

#### March 23, 2022

Time	Topic	Speaker
1:00 – 1:05 PM	Introductions and Opening Remarks	All
1:05 - 1:50 PM	Discussion of NuScale's operator training accreditation process	NRC/NuScale/INPO
1:50 - 2:00 PM	Questions from the public	NRC/Public
2:00 PM	Adjourn	

# U.S. NUCLEAR REGULATORY COMMISSION SUMMARY OF THE MARCH 23, 2022, OBSERVATION PUBLIC MEETING TO DISCUSS NUSCALE POWER, LLC'S OPERATOR TRAINING ACCEREDITATION PROCESS

#### LIST OF ATTENDEES

#### March 23, 2022

Name	Organization	
Ricky Vivanco	NRC	
Getachew Tesfaye	NRC	
Jesse Seymour	NRC	
Maurin Scheetz	NRC	
Lauren Nist	NRC	
Bruce Bavol	NRC	
Brian Tindell	NRC	
Patrick Leary	NuScale	
Mark Chitty	NuScale	
Doug Bowman	NuScale	
Tim Tovar	NuScale	
Beth Brewer	NuScale	
Hayley Keppen	NuScale	
Andy Pullman	INPO	
Lois Jordan	INPO	
Henry Butterworth	Xcel Energy	
Mike Montecalvo	TerraPower	
Ken Rach	MPR Associates	

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## OBSERVATION PUBLIC MEETING TO DISCUSS NUSCALE POWER, LLC'S OPERATOR

#### TRAINING ACCEREDITATION PROCESS

#### March 23, 2022

The U.S. Nuclear Regulatory Commission (NRC) held an observation public meeting on March 23, 2022, as a follow-up to the November 9, 2021, observation meeting (Agencywide Documents Access and Management System (ADAMS) Accession No ML21313A179) where NuScale Power, LLC (NuScale) informed the NRC staff that they are working with the Institute of Nuclear Power Operations (INPO) staff to develop a vendor-accredited training program that could be used by a facility licensee to provide qualified personnel to operate the facility. During the November 9, 2021, meeting, NuScale indicated that education and experience requirements for operators of a NuScale facility could be reduced relative to current requirements for licensed operators at power reactors. The NRC staff requested this follow-up meeting to better understand the reason for reducing education and experience requirements and whether the proposed approach will be consistent with Commission policies for education and experience. There were no questions posed from the public attendees.

Information related to NuScale presentation can be found under ADAMS Accession No. ML22056A285.

#### Outcomes:

- 1. NuScale discussed their reason for proposing a reduction in the education requirement for degreed senior reactor operator (SRO) candidates from a 4-year engineering degree to a 2-year technical associate degree. NuScale's basis for this change is that while engineering programs vary widely from university to university, the first two years of a 4-year engineering degree program are very similar in courses and this coursework is a suitable prerequisite to enter the SRO training program. The first two years of a 4-year engineering degree could be achieved via a 2-year associate degree program in a technical area. NuScale added that technical associate degree programs specially designed for nuclear plant operators already exist and are very relevant for the type of experience needed for an SRO candidate. In either case, NuScale explained that the engineering expertise essential to the SRO role, as documented in NUREG-0737, "Clarification of TMI Action Plan Requirements," is included in their SRO training program.
- 2. The staff asked NuScale what would be considered a technical degree as described by the proposed education requirement. The staff expressed concern that irrelevant coursework or technical degrees could be used to qualify a candidate for SRO training. NuScale explained that the new National Academy for Nuclear Academy document (ACAD) requirements could describe the specific technical degree requirements. NuScale added that it is already a practice at operating reactors in the U.S. to evaluate a candidate's degree to determine if their coursework is suitable for entry into an SRO training program, in accordance with the instructions in ACAD 10-001. NuScale would draft the new ACAD requirements using similar instructions to align with current practices and requirements.

- 3. NuScale explained that diversity in the education and experience of control room crews would still be consistent with Commission policy. They discussed that the proposed change would expand the field of candidates more broadly and make it possible for individuals with experience in the operation of coal and other types of non-nuclear power plants to be eligible for SRO training.
- 4. The staff discussed that NUREG-0737, which NuScale used as their guidance for the proposed education and experience requirements, may not be the most relevant reference when discussing this topic. The staff explained that the August 1989, "Commission Policy Statement on Education for Senior Reactor Operators and Shift Supervisors at Nuclear Power Plants," [https://www.nrc.gov/reading-rm/doc-collections/commission/policy/54fr33639.pdf] is a more updated policy statement regarding SRO education and experience. The staff discussed that if the proposed education and experience requirements do not satisfy this policy statement, it may be prudent for the staff to inform the Commission.
- 5. The staff questioned whether NuScale considered any impact to the education and experience requirements delineated in NuScale's recently approved Topical Report (TR) for Control Room staffing. NuScale stated that they did not consider how conditions of the TR would change for SRO applicants without 4-year degrees. NuScale added, however, that they believe the proposed education and experience requirements are comparable to current requirements in ACAD-10-001 which was referenced in the TR.
- The staff asked if NuScale had any validation or other testing experience using crews
  with SROs that had technical associate degrees. NuScale stated that they had not
  specifically included personnel in their simulator runs that met the proposed minimum
  requirement.