



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

May 8, 2024

MEMORANDUM TO: Mahmoud Jardaneh, 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 APRIL 11, 2024, OBSERVATION PUBLIC MEETING ON
THE STATUS OF NUSCALE'S US460 STANDARD DESIGN
APPROVAL APPLICATION

The U.S. Nuclear Regulatory Commission (NRC) held an observation public meeting on April 11, 2024, to discuss topics related to NuScale Power, LLC's (NuScale) US460 Standard Design Approval application (SDAA) available in the NRC's Agencywide Documents Access and Management Systems (ADAMS) Package Accession No. ML23306A033. This meeting was part of a periodic NRC and NuScale management engagement to discuss the status of the application, technical topics of interest, project processes and workflows. The meeting consisted of open and closed portions.

During the open portion of the meeting, the NRC staff gave an overview of the current status of the NuScale application review. The staff discussed the progress of the ongoing audit for Phase A of the safety review. The staff noted completion of the following SDAA review phases:

- Phase A (Advanced Safety Evaluation Report (ASER) without open items) - Chapters 2, 7, 9, 10, 11, 12, 13, 17 (except 17.4), and 18.
- Phase B (ASER review (technical editing), Legal and Management concurrence) - Chapters 2, 10, 11, 13, and 17 (except 17.4)
- Phase C (ACRS Review of ASER) - Chapters 2, 10, 11, 13, and 17 (except 17.4)

The staff also discussed the current status of the High Impact Technical Issues (HITIs). The staff noted that the main issues associated with the following two HITIs have been resolved and removed from the list:

- HITI-4: A containment vessel material change for the lower containment vessel (CNV) shell above the reactor pressure vessel (RPV) flange elevation, the lower flange, upper flange, upper shell, and top head (i.e., a change from low alloy steel to martensitic stainless steel).

- HITI-5: A lower RPV material change (i.e., a change from low alloy steel to austenitic stainless steel).

The staff identified the following two new HITIs which have been added to the list:

- HITI-9: Upper-to-lower RPV flange bolted joint shear loading that result from differential thermal expansion
- HITI-10: Loss of Coolant Accident outside containment at the connection between any of the four CVCS containment nozzle safe-end welds and associated CIVs

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The staff also presented the statuses of the eight Licensing Topical Reports (LTRs) submitted in the pre-application phase and the four LTRs submitted with the SDAA. The review of all eight of the LTRs submitted in the pre-application phase are completed. The four LTRs that were submitted at same time as the SDAA are being reviewed concurrently with the SDAA's safety review. Additionally, NuScale has submitted two generic LTRs and plans to submit two more generic LTRs to support future licensing applications. The presentation material for the open portion of the meeting can be found in ML24099A032 (nonproprietary).

The closed portion of the meeting was held to discuss proprietary items.

The public meeting notice dated April 11, 2024, was posted on the NRC public website, and can be found under ML24101A270. The enclosure to this summary provides a list of the meeting participants.

Docket Nos. 99902078 and 05200050

Enclosure:
List of Attendees

cc w/encl.: NuScale Power, LLC Listserv

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 DATED: MAY 8, 2024

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ADAMS Accession No.:

Pkg: ML24127A161

Memo: ML24127A162

Action Items: ML24127A163 (Proprietary)

Slides: ML24099A032 (Nonproprietary)

Slides: ML24099A031 (Proprietary)

***via email**

NRR-106

OFFICE	NRR/DNRL/NRLB: PM	NRR/DNRL/NLIB: LA	NRR/DNRL/NRLB: PM
NAME	RVivanco	SGreen	GTesfaye
DATE	5/06/24	5/07/24	5/07/24
OFFICE	NRR/DNRL/NRLB: BC	NRR/DNRL/NRLB: PM	
NAME	MJardaneh	RVivanco	
DATE	5/07/24	5/08/24	

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U.S. NUCLEAR REGULATORY COMMISSION SUMMARY OF THE APRIL 11, 2024,
OBSERVATION PUBLIC MEETING ON THE STATUS OF NUSCALE’S US460 STANDARD
DESIGN APPROVAL APPLICATION

LIST OF ATTENDEES

April 11, 2024

Name	Organization
Andrea Kock	U.S. Nuclear Regulatory Commission (NRC)
Rob Taylor	NRC
Mahmoud Jardaneh	NRC
Getachew Tesfaye	NRC
Brian Smith	NRC
Joe Donoghue	NRC
Tania Martinez Navedo	NRC
Samuel Lee	NRC
Michael Franovich	NRC
Joe Colaccino	NRC
Carrie Fosaaen	NuScale
Mark Shaver	NuScale
Tom Griffith	NuScale
Robert Gamble	NuScale
Gary Becker	NuScale
Melissa Bates	U.S. Department of Energy (DOE)