

August 10, 2016

MEMORANDUM TO: Mark Tonacci, Chief
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors

FROM: Rajender Auluck, Senior Project Manager /RA/
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors

SUBJECT: SUMMARY OF JULY 20, 2016, PUBLIC MEETING WITH NUSCALE
POWER, LLC TO DISCUSS THE DRAFT STANDARD
INSPECTIONS, TESTS, ANALYSIS, ACCEPTANCE CRITERIA
(PROJ0769)

On July 18, 2016, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives from the NuScale Power, LLC (NuScale) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16167A09) to discuss the draft standard inspections, tests, analysis, and acceptance criteria (ITAAC). The meeting was also accessible via telephone conference. The purpose of the meeting was for NuScale to discuss their evaluation of standard ITAAC issued with the NRC letters dated April 8, 2016, and June 21, 2016 (ADAMS Accession Nos. ML16096A121 and ML16160A179, respectively) and their applicability to NuScale's unique small modular reactor (SMR) design.

The NRC staff started the meeting with introductions of all participants and covered the agenda items. The meeting was then turned over to NuScale for their presentation. The NuScale representative started the presentation with an overview of SMR and industry interactions with the NRC staff since 2013 in the area of improved ITAAC for SMRs, mutual agreement and understanding of Tier 1 design description, and ITAAC first principles. The presentation then briefly summarized the seven ITAAC first principles and the top-level design features and performance characteristics as noted in the Nuclear Energy Institute (NEI) document NEI 15-02 issued in May 2015 (ADAMS Accession No. ML15147A670). The NRC has not endorsed NEI 15-02. NuScale stated that out of the 144 NRC proposed standard ITAAC, only 86 are applicable to the NuScale SMR design. For the remaining 58, the NuScale SMR does not have the design features described in those ITAAC. NuScale further stated that of the remaining 86 ITAAC, 57 will be used with the language provided by the NRC, 22 will have some revised text, six of these ITAAC will not be submitted, and NuScale will request exemption for one.

In the next part of the presentation, NuScale discussed and provided additional information on selected ITAAC for which NuScale proposed revised language. The proposed revisions were included in the handout slides for the meeting. NuScale also stated that they are requesting early feedback on several of these proposed changes, especially in the areas of radiation protection, qualification, and mechanical.

The NRC staff provided their initial feedback on most of these proposed changes and also stated that several of these require further internal review and may need further discussions with NuScale. The NRC staff will be prepared to provide additional comments during the upcoming readiness review meetings or earlier, if possible. The NRC staff also noted that these ITAAC were discussed at several public meetings with NEI prior to their issuance on April 8, 2016.

The meeting ended with an overall summary of the discussions. No commitments or decisions were made and there were no comments from the public. The meeting agenda and list of meeting attendees are included in Enclosures 1 and 2. The meeting handouts are available in ADAMS with Accession Nos. ML16193A048 and ML16195A391. Please direct any inquiries to Dr. Rajender Auluck, P. E. at (301) 415-1025, or email at rajender.auluck@nrc.gov.

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Project No.: PROJ0769

Enclosures:

1. Meeting Agenda
2. Meeting Attendees

cc: NuScale Listserv

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ADAMS Accession Nos.: ML16216A178 *via email NRC-001

OFFICE	NRO/DNRL/LB1:PM	NRO/DNRL/LB1:LA	NRO/DNRL/LB1:PM	NRO/DNRL/LB1:BC
NAME	RAuluck*	MBrown*	GCranston*	MTonacci*with/edits
DATE	08/04/2016	08/04/2016	08/08/2016	08/10/2016

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MEETING AGENDA

July 20, 2016

8:30 am – 8:45 am	Introductions
8:45 am – 9:15 am	Overview of NuScale Power, LLC, evaluation of NRC April 8, 2016, inspections, tests, analysis, and acceptance criteria (ITAAC) letter
9:15 am – 10:30 am	Electrical, Hazard Barrier, and Instrumentation and Control ITAAC
10:30 am – 10:45 am	Break
10:45 am – 12:00 pm	Mechanical ITAAC
12:00 pm – 1:00 pm	Lunch
1:00 pm – 1:30 pm	Mechanical ITAAC (continued)
1:30 pm – 2:00 pm	Qualification ITAAC
2:00 pm – 3:00 pm	Radiation Protection ITAAC
3:00 pm – 3:15 pm	Break
3:15pm – 4:00 pm	Structural ITAAC
4:00 pm – 4:15 pm	Summary and Conclusions
4:15 pm – 4:30 pm	Public Comments/Questions

NuScale Power LLC
Inspections, Tests, Analysis, and Acceptance Criteria
July 20, 2016

Name	Organization	
Rajender Auluck	NRC/NRO/Division of New Reactor Licensing	
Tony Lentz	NuScale Power LLC	
Steven Mirsky	NuScale Power LLC	
Carl Markert	NuScale Power LLC	
Carl Dumsday	NuScale Power LLC	
Greg Halron	First Energy	
Steven Unikewicz	NuScale Power LLC	
Steve Frantz	MLB	
Steve Kline	Bechtel	
Nick Hansing	NRC/NRO	
Nicholas McMurray	NRC/NRO	
Chris Welch	NRC/NRO	
Anne-Marie Grady	NRC/NRO	
Marc Nichol	NEI	
Tom Faz	Fluor	
Dave Robillard	PSEG	
Larry Burkhart	NRC/NRO	
Marieliz Vera	NRC/NRO	
Alissa Neuhausen	NRC/NRO	
Russ Bell	NEI	

Name	Organization	
Joe Ashcraft	NRC/NRO	
Ron LaVora	NRC/NRO	
Prosanta Chowdhury	NRC/NRO	
David Curtis	NRC/NRO	
Jinsuo Nei	NRC/NRO	
Rani Franovich	NRC/NRO	
Antonio Dias	NRC/NRO	
Chang-Yang Li	NRC/NRO	
Swagata Som	NRC/NRR	
Tung Truong	NRC/NRO	
Paul Pieringer	NRC/NRO	
Mike Jung	NRC/NRO	
Greg Cranston	NRC/NRO	
Ata Istar	NRC/NRO	
John Budzynski	NRC/NRO	
Surinder Arora	NRC/NRO	
Sunwoo Park	NRC/NRO	
Sujit Samaddar	NRC/NRO	
Robert Vettori	NRC/NRO	
Dinesh Taneja	NRC/NRO	
Joe Colaccino	NRC/NRO	

Name	Organization	
Tim Lupold	NRC/NRO	
Hien Le	NRC/NRO	
Ian Cozens	NRC/NRO	
Paul Hernandez	NRC/NRO	
David Swank	Energy Northwest	
Rob Burg	EPM, Inc.	
Steven Pope	NuScale Power LLC	
Ted Rampton	UAMPS	
Mason Baker	UAMPS	
Ann N. Hove	NRC/OGC	
Alex Burja	NRC/NRO	
Luis Betancourt	NRC/NRO	