



Docket No. 52-048

Enclosures:

1. Summary of the October 17, 2017,  
Teleconference Between the NRC  
Staff and NuScale
2. Agenda
3. Attendee List

SUBJECT: SUMMARY OF THE OCTOBER 17, 2017, PUBLIC TELECONFERENCE  
 MEETING WITH NUSCALE POWER, LLC, TO DISCUSS THE NUSCALE  
 RESPONSE TO REQUESTS FOR ADDITIONAL INFORMATION NOS. 8809, 8811,  
 8812, AND 8916 (CACS NOS. RA9008 AND RA9018)  
 DATED: 12/18/2017

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NRC-001

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NAME	A. Markley	R. Franovich*	M. Moore*	D. Jackson*
DATE	11/14/2017	12/13/2017	11/15/2017	12/13/2017
OFFICE	NRO/DSRA/SPRA: BC	NRO/DSRA/SPSB: BC	NRO/DNRL/LB1: PM	
NAME	M. Hayes*	A. Dias*	G. Cranston*	
DATE	12/14/2017	12/11/2017	12/15/2017	

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**U.S. NUCLEAR REGULATORY COMMISSION**  
**SUMMARY OF THE OCTOBER 17, 2017, TELECONFERENCE BETWEEN**  
**AND NUSCALE POWER, LLC**

**TOPIC 1:**

**NuScale Power, LLC Response to RAI No. 8916**

The U.S. Nuclear Regulatory Commission (NRC) staff sought clarifications on the term “cold shutdown” as applied to NuScale Power, LLC, (NuScale). NuScale indicated that this term did not apply to the NuScale design. The shutdown NuScale reactor can sit and cool without operator intervention so that cooldown will occur without the use of the containment evacuation and flooding system. The NRC staff indicated that it would reconsider this information. During the phone call, the applicant agreed to voluntarily update RAI response providing systems other than containment flood and drain system (CFDS) that can bring reactor to cold shutdown. The NRC staff also sought clarification on the power and cooling for the containment evacuation system (CES) vacuum pumps and the function of service air. NuScale indicated the vacuum pumps were electric powered and cooled by the reactor closed cooling water system. Service air was used to purge the vacuum pumps and was not described in the Final Safety Analysis Report (FSAR) because it was not safety related.

**TOPIC 2:**

**NuScale Response to RAI No. 8809**

The NRC staff discussed NuScale’s response to Request for Additional Information (RAI) No. 8809, Question 19-9 requesting information on the omission of loss of the non-safety related CES as a potential initiating event for evaluation in the Regulatory Treatment of Non-Safety Related Systems program. This system is operating during module operation to keep the containment at a vacuum. NuScale plans to submit a revised response with this evaluation and a link to the response to NRC question 06.02.01-2 which clarifies that maximum three psia initial containment vessel pressure is allowed by the containment leakage Technical Specification (TS). No estimated submittal date was given.

**NuScale Response to RAI No. 8812**

The NRC staff discussed NuScale’s response to RAI 8812, Question 19-15, regarding the assumed non-condensable quality of 90 percent air at one psia in comparison to the response to NRC question 06.02.01-2, which clarifies that maximum three psia initial containment vessel pressure is allowed by the containment leakage TS. NuScale responded that given the efficiency of core heat removal via the passive decay heat removal system (DHRS), a higher non-condensable gas content in the containment during DHRS operation does not significantly affect the peak pressure in the reactor pressure vessel (RPV). NuScale also explained how higher non-condensable gas content in the containment is beneficial with respect to RPV level

following initiation of emergency core cooling. No changes are needed to the RAI response, which included revisions to FSAR Tables 19.1-11 and 19.1-12 on phenomena affecting passive system reliability performance.

**TOPIC 3:**

**NuScale Response to RAI No. 8811**

The NRC staff indicated that NuScale had relied upon an error in Regulatory Guide (RG) 1.189, "Fire Protection For Nuclear Power Plants," Regulatory Position 3.2.1, "Fire Protection Water Supply," NuScale strongly believed that it had followed the existing guidance in the existing RG and noted that the RG had been reviewed in 2014. That 2014 review noted that no changes to the RG were necessary. The NRC staff explained that there were several options available to address its concerns. NuScale indicate that it would discuss these options with its management.

## **MEETING AGENDA**

Tuesday, October 17, 2017

<b>TIME</b>	<b>TOPIC</b>	<b>SPEAKER</b>
1:30 pm – 2:00 pm	NuScale Response to RAI 8916	NRC/NuScale
2:00 pm – 2:30 pm	NuScale Response to eRAIs 8809 and 8812	NRC/NuScale
2:30 pm – 3:00 pm	NuScale Response to RAI 8811	NRC/NuScale
2:00, 2:30 and 3:00	Public Comments	Public
3:00 pm	Meeting Conclusion	NRC/NuScale

**U.S. NUCLEAR REGULATORY COMMISSION**

**MEETING ATTENDANCE**

**LIST OF MEETING ATTENDEES**

**October 17, 2017**

<b>APPLICANT</b>	<b>NuScale Power, LLC</b>
<b>DATE</b>	<b>October 17, 2017</b>
<b>LOCATION</b>	<b>Conference Rooms O-9B6; O-12B4 One White Flint Rockville, MD</b>
<b><u>NAME (PLEASE PRINT)</u></b>	<b><u>ORGANIZATION</u></b>
<b>RAI 8916</b>	
Diane Jackson	NRC
Jeff Schmidt	NRC
Anthony Markley	NRC
Karl Gross	NuScale
Jennie Wike	NuScale
Carrie Fosaaen	NuScale
Gary Becker	NuScale
Scott Harris	NuScale
Mark Paul	NuScale
<b>RAIs 8809 and 8812</b>	
Marie Pohida	NRC
Rani Franovich	NRC
Anthony Markley	NRC
Sarah Bristol	NuScale
Grant Buster	NuScale
Bill Galyean	NuScale
Karl Gross	NuScale
Greg Myers	NuScale
Cindy Williams	NuScale
<b>RAI 8811</b>	
John Monninger	NRC
Antonio Dias	NRC
Robert Vettori	NRC

Thinh Dinh	NRC
Samuel Lee	NRC
John Fields	NuScale
Ed Siener	NuScale
Carrie Fosaaen	NuScale
Jennie Wike	NuScale
Gary Becker	NuScale