From: <u>Taylor, Robert</u>
To: <u>Sunseri, Matthew</u>

Cc: Moore, Scott; Nieh, Ho; Bradford, Anna; Caldwell, Bob; Dudek, Michael; Donoghue, Joseph; Patton, Rebecca;

Snodderly, Michael; McCoppin, Michael; Burkhart, Larry; De Messieres, Candace; Betancourt, Luis; Chen, Lin;

Mitchell, Recasha

Subject: RESPONSE: SAFETY EVALUATION OF THE NUSCALE POWER, CHAPTER 15, "TRANSIENT AND ACCIDENT

ANALYSIS" - OPEN ITEM CLOSURE AND AREA OF FOCUS REVIEWS - RETURN TO CRITICALITY AND BORON

DISTRIBUTION

Date: Friday, May 22, 2020 12:26:06 PM

Dear Chairman Sunseri:

Thank you for the letter, dated April 29, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20115E403), regarding the Advisory Committee on Reactor Safeguards' (ACRS or the Committee) review of the U.S. Nuclear Regulatory Commission (NRC) NuScale Power, LLC., (NuScale) Chapter 15, "Transient and Accident Analyses," of the staff's safety evaluation (SE) report without open items and with a focus on the review of return to criticality and boron distribution areas. I appreciate the time and effort that the ACRS has devoted to this important subject, as reflected in the meeting held with the ACRS Full Committee on April 8-10, 2020.

The letter contained the following two conclusions and recommendations:

- 1. We concur with the staff's conclusions in Chapter 15 of their Advanced SE Report: all open items, including those unresolved from the earlier SE, have been resolved. However, a new issue related to boron redistribution remains open.
- 2. Major conclusions from our focus areas are the following:
 - Return to Criticality The low risk of event sequences associated with return to criticality makes the General Design Criterion (GDC) 27 exemption acceptable.
 - Boron Redistribution The issue remains open. The Applicant and the staff are working on its resolution. We will review the final staff evaluation.

The NRC staff appreciates the ACRS's review and recommendation and will continue to work towards issuing a Chapter 15 Phase 6 safety evaluation report upon evaluating the additional changes resulting from the boron redistribution issue. We understand your identified concerns and will continue to coordinate with the committee with follow-up briefings that have been scheduled (i.e., NuScale will brief ACRS on the recent design changes regarding boron redistribution on June 3, 2020 and NRC staff will brief ACRS in July 2020).

Best regards, Rob

Robert M. 7aylor

Deputy Office Director for New Reactors Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission (office) 301-415-1270