



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

May 10, 2019

Dr. Peter Riccardella, Chairman
Advisory Committee on Reactor Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: CHAPTERS 9, 10, 11, 12, AND 16 OF THE U.S. NUCLEAR REGULATORY COMMISSION STAFF'S SAFETY EVALUATION REPORT WITH OPEN ITEMS RELATED TO THE REVIEW OF THE DESIGN CERTIFICATION APPLICATION FOR THE NUSCALE POWER, LLC SMALL MODULAR REACTOR

Dear Dr. Riccardella:

Thank you for your letter, dated April 17, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19109A129), about the Advisory Committee on Reactor Safeguards (ACRS or the Committee) review of the safety evaluation report (SER) with open items for the NuScale Power, LLC, design certification application (DCA). The specific chapters reviewed are Chapter 9, "Auxiliary Systems"; Chapter 10, "Steam and Power Conversion System"; Chapter 11, "Radioactive Waste Management"; Chapter 12, "Radiation Protection"; and Chapter 16, "Technical Specifications." I appreciate the time and effort the ACRS has devoted to these important subjects, as reflected in meetings held with the ACRS Subcommittee for NuScale on March 20-21, 2019, and the ACRS Full Committee on April 4, 2019.

Your letter contained two conclusions and recommendations, as shown below with NRC staff responses:

Conclusion and Recommendation 1:

There are potentially risk-significant items in the NuScale design that are not yet fully developed. For these items, requirements should be included in the DCA to ensure that the licensed NuScale plant will perform as credited.

Staff Response: As staff continues to engage the applicant to resolve the remaining open items in the subject chapters and the unresolved review issues in other chapters, the staff believes that we are on the path forward to address all regulatory requirements and risk-significant items for the NuScale design. As NuScale addresses the open items identified by the staff, we expect further enhancement of the DCA descriptions of these areas, consistent with the objectives of the design certification process.

Conclusion and Recommendation 2:

We have not identified any additional major issues at this time for Chapters 9, 10, 11, 12, and 16.

Staff Response: The NRC staff agrees with Conclusion and Recommendation 2. The staff plans to close the remaining open items and submit an advanced SER for Committee review by the end of the Phase 4 review.

The NRC staff appreciates your review of this SER and looks forward to future interactions with the Committee as part of its NuScale review activities.

Sincerely,

/RA/

Frederick D. Brown, Director
Office of New Reactors

Docket No.: 52-048

cc: Chairman Svinicki
Commissioner Baran
Commissioner Caputo
Commissioner Wright
SECY

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