

March 19, 2018

Dr. Michael L. Corradini, Chairman
Advisory Committee on Reactor Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: RESPONSE TO THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS' LETTER, DATED FEBRUARY 21, 2018, ON NUSCALE POWER EXEMPTION REQUEST FROM GENERAL DESIGN CRITERION 27, "COMBINED REACTIVITY CONTROL SYSTEM CAPABILITY"

Dear Dr. Corradini:

I am responding to your letter dated February 21, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18052A532), in which you provided comments from the Advisory Committee on Reactor Safeguards (ACRS or Committee) on the draft Commission paper, "NuScale Power Exemption Request from Title 10 of the *Code of Federal Regulations* Part 50, Appendix A, General Design Criterion 27, 'Combined Reactivity Control Systems Capability'" (ADAMS Accession No. ML17339A773). The ACRS offered the following conclusion and recommendation related to the U.S. Nuclear Regulatory Commission (NRC) staff's proposed approach and criteria for evaluating the exemption request:

The proposed criteria, which the staff will use to determine the acceptability of NuScale's GDC 27 exemption request, are reasonable provided the following recommendations and enhancements outlined in this letter report are addressed:

1. Evaluate the overall risk and not just the frequency of the challenge.
2. Risk considerations should be based on the facility rather than an individual module.

The NRC staff appreciates the insights provided by the ACRS in the letter and has revised the Commission paper to address the recommendations. The revised paper includes an added criterion to ensure that the applicant's analyses and related NRC staff assessments of the design certification application include a confirmation that the design basis event scenarios involving recriticality do not contribute significantly to the overall risks associated with the proposed multi-module facility.

M. Corradini

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The NRC staff appreciates ACRS's efforts on this matter. We thank the ACRS for its valuable input and look forward to working with the Committee in the future.

Sincerely,

/RA/

Victor M. McCree
Executive Director
for Operations

cc: Chairman Svinicki
Commissioner Baran
Commissioner Burns
SECY

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