

August 22, 2017

Ms. Jennie Wike
Manager, Licensing
NuScale Power, LLC
1100 Circle Boulevard, Suite 200
Corvallis, OR 97330

SUBJECT: STAFF'S REVISION 2 TO THE SAFETY EVALUATION REPORT FOR REVISION 1 OF THE NUSCALE TOPICAL REPORT, "SAFETY CLASSIFICATION OF PASSIVE NUCLEAR POWER PLANT ELECTRICAL SYSTEMS," (PROJECT 0769)

Dear Ms. Wike:

The purpose of this letter is to provide you with an update regarding the status of the staff's progress in completing its safety evaluation report (SER) for Revision 1 of the NuScale Power, LLC (NuScale) Topical Report (TR), "Safety Classification of Passive Nuclear Power Plant Electrical Systems."

As you are aware, on July 12, 2017, the U.S. Nuclear Regulatory Commission (NRC) staff presented Revision 1 of its SER to the NRC Advisory Committee on Reactor Safeguards (ACRS) Full Committee. On July 26, 2017, the ACRS members communicated the results of their independent evaluation of NuScale's topical report and staff's SER in a letter to the NRC Executive Director for Operations (Agencywide Document Access and Management System (ADAMS) Accession No. ML17205A380.) In this letter, the ACRS made two recommendations for the staff to consider before finalizing the SER.

In Recommendation 1, the ACRS stated that Revision 1 to the topical report is acceptable for use as a reference document only for the NuScale plant electrical systems design, and not generically applicable. ACRS Recommendation 2 stated that the staff should place an additional condition in the SER to require applicants apply the provisions of the Table 3-2 in the topical report to any nonsafety alternate current or direct current power supplies that support (1) operation of risk-significant systems or components or (2) performance of risk-significant human actions that are identified in the site-specific probabilistic risk assessment.

The staff is currently preparing a formal response to the ACRS letter. The staff believes incorporating ACRS Recommendation 1 would result in modification of Section 4.0 of the SER, "Conditions and Limitations," specifically, Condition 4.5. In Revision 1 of the SER, which staff presented to the ACRS Full Committee, Condition 4.5 was stated as:

Demonstrate that system(s) necessary to retain reactor coolant within the RCPB are designed with sufficient reliability such that a DBE that removes the RCPB as a fission product barrier does not occur with the frequency of an AOO. Alternatively, an applicant or licensee referencing the TR may provide justification, for NRC review, that this condition is not applicable to their design.

J. Wike

-2-

To incorporate ACRS Recommendation 1, the staff plans to modify Condition 4.5 in the SER by deleting the sentence, "Alternatively, an applicant or licensee referencing the TR may provide justification, for NRC review, that this condition is not applicable to their design." The staff had originally included this sentence in Condition 4.5 for the benefit of future applicants with passive designs that may be different from the NuScale's design and for the plant designs for which the staff does not have detailed information. Since the staff plans to approve NuScale's topical report only for the NuScale design, the staff believes the second sentence in Condition 4.5 is no longer needed.

If you would like to engage the staff in a public meeting to discuss any impact resulting from this change, please contact as soon as possible Mr. Omid Tabatabai, Senior Project Manager, at (301) 415-6616.

Sincerely,

/RA/

Samuel Lee, Chief
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors

Project No.: 0769

cc: NuScale Power LLC Listserv

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