

April 27, 2017

Mr. Thomas Bergman
Vice President, Regulatory Affairs
NuScale Power, LLC
1100 Circle Boulevard, Suite 200
Corvallis, OR 97330

SUBJECT: ACCEPTANCE LETTER FOR THE REVIEW OF NUSCALE POWER, LLC
TOPICAL REPORTS TR-0516-49422, "LOSS-OF-COOLANT ACCIDENT
EVALUATION MODEL," REVISION 0, AND TR-0516-49416, "NON-LOSS-OF-
COOLANT ACCIDENT ANALYSIS," REVISION 0 (CAC RN6303, RN6305)

Dear Mr. Bergman:

By letter dated December 30, 2016, NuScale Power, LLC (NuScale) submitted Topical Report (TR) TR-0516-49422, "Loss-of-Coolant Accident Evaluation Model," Revision 0 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17004A202), to the U. S. Nuclear Regulatory Commission (NRC) staff for review. In the December 30, 2016, letter, NuScale requested NRC's review and approval of the loss-of-coolant accident (LOCA) evaluation model described in this report for analyses of design basis LOCA events in the NuScale Power Module.

In addition, by letter dated January 10, 2017, NuScale submitted TR-0516-49416, "Non-Loss-of-Coolant Accident Analysis," Revision 0 (ADAMS Accession No. ML17011A036), to the NRC staff for review. In the January 10, 2017, letter, NuScale requested NRC's review and approval of the NuScale evaluation model used to evaluate the system transient response to non-loss-of-coolant accident (non-LOCA) events.

The purpose of this letter is to inform you that TR-0516-49422 and TR-0516-49416 provide sufficient technical information for the NRC staff to conduct a detailed technical review. If the NRC staff needs additional information to complete its review, it will issue formal requests for additional information (RAI) by separate correspondence.

The NRC staff has begun its detailed review of both TRs and expects to issue RAIs between now and February 1, 2018. If NuScale satisfactorily responds to the RAIs and resolves issues identified during the review process in a timely manner, the NRC staff expects to issue its final safety evaluation report for each TR by February 25, 2019.

Section 170.21 of Title 10 of the *Code of Federal Regulations* requires that TRs are subject to fees based on the full cost of the review. You did not request a fee waiver; therefore, NRC staff hours will be billed accordingly.

The staff estimates that conducting a detailed review of TR-0516-49422 will require approximately 1500 staff-hours, including project management time, and approximately \$520,000 in contractor support. For TR-0516-49422, the staff approximately 1150 staff-hours,

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including project management time, and approximately \$400,000 in contractor support. These estimates are based on RAIs with a 60-day NuScale response time, two meetings between NRC and NuScale to discuss the TR review, one audit, and one presentation to the NRC's Advisory Committee on Reactor Safeguards (ACRS) per each TR. These estimates could change during the detailed review if additional rounds of RAIs are needed or the ACRS declines to review the TR. NuScale will be billed at the current NRC hourly billable rate for the staff's time to conduct this detailed review.

By two separate e-mails dated April 12, 2017, Ms. Stephanie Seely, Licensing Supervisor, agreed to the NRC staff's estimated review hours and proposed review schedules for TR-0516-49422 and TR-0516-49416 (ADAMS Accession Nos. ML17114A334 and ML17114A333, respectively).

If you have any questions, please contact the Project Manager, Rani Franovich, at (301) 415-7646 or Rani.Franovich@nrc.gov.

Sincerely,
/RA/

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

Docket No. 52-048

cc: NuScale DC ListServ

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NRO-002

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