



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

August 8, 2018

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

SUBJECT: FINAL SAFETY EVALUATION FOR NUSCALE POWER, LLC TOPICAL REPORT-
0116-21012, REVISION 1, "NUSCALE POWER CRITICAL HEAT FLUX
CORRELATIONS"

Dear Mr. Bergman:

By letter dated November 30, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17335A089), NuScale Power, LLC (NuScale), submitted Topical Report (TR)-0116-21012, Revision 1, "Critical Heat Flux Correlations," to the U.S. Nuclear Regulatory Commission (NRC) staff for review. This revision replaced the submittal dated October 5, 2016 (ADAMS Accession No. ML16279A363), "NuScale Power Critical Heat Flux Correlation NSP2." The revised submittal implemented an additional NSP4 critical heat flux (CHF) correlation and incorporated changes associated with NRC requests for additional information (RAIs).

The NRC staff has found that the TR-0116-21012, Revision 1, "Critical Heat Flux Correlations," is acceptable for referencing in licensing applications for the NuScale small modular reactor design to the extent specified and under the conditions and limitations delineated in the enclosed safety evaluation report (SER). The SER defines the basis for acceptance of the TR.

The NRC staff requests that NuScale publish the applicable version(s) of the SER listed above within three months of receipt of this letter. The accepted version of the TR shall incorporate this letter and the enclosed SER and add "-A" (designated accepted) following the report identification number.

Document transmitted herewith
contains sensitive unclassified
information. When separated from
the enclosure, this document is
"DECONTROLLED."

CONTACT: Bruce M. Bavo!, NRO/DLSE
301-415-6715

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If the NRC staff's criteria or regulations change, so that its conclusion that the SER is acceptable is invalidated, NuScale and/or the applicant referencing the SER will be expected to revise and resubmit its respective documentation, or submit justification for continued applicability of the SER without revision of the respective documentation.

Prior to placing the public version of this document in the publicly available records component of NRC's ADAMS, the NRC staff requests that NuScale perform a final review of the SER for proprietary or security related information not previously identified. If you believe that any additional information meets the criteria, please identify such information line by line and define the basis pursuant to the criteria established in Title 10 of the *Code of Federal Regulations*, Part 2, Section 390.

If after a 10-day period, you do not request that all or portions of the SER be withheld from public disclosure, the SER will be made available for public inspection through the publicly available records component of NRC's ADAMS.

If you have any questions or comments concerning this matter, please contact Bruce Baval at 301-415-6715 or via e-mail address at Bruce.Baval@nrc.gov.

Sincerely,

/RA/

Robert Taylor, Director
Division of Licensing, Siting,
and Environmental Analysis
Office of New Reactors

Project No. 0769

Enclosures:

1. CHF SER (Non-Proprietary)
2. CHF SER (Proprietary)

cc: DC NuScale Power, LLC Listserv (w/o Enclosure 2)

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ADAMS Accession Nos.:

Pkg: ML18214A478

Letter: ML18214479

Enclosure No. 1: ML18214A480

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