

July 31, 2012

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

**SUBJECT: NuScale Power Submittal of "Gap Analysis Summary Report"  
(NRC Project No. 0769)**

This letter forwards to the Nuclear Regulatory Commission (NRC) the results of a regulatory gap analysis performed by NuScale Power, LLC (NuScale) as part of pre-application activities in preparation for submitting its application for standard design certification pursuant to 10 CFR 52, Subpart B. The gap analysis results are provided in Enclosure 1, Gap Analysis Summary Report, of this letter. Supplemental detailed documentation of the gap analysis assessments supporting the enclosed results is available for NRC review in the NuScale electronic reading room. NuScale believes that the regulatory gap analysis results, with any revisions to reflect the NRC's final determinations on applicability and gap dispositions, represent appropriate information supporting development of a design-specific review standard to be used by the NRC in its review of the NuScale application for design certification.

The primary objective of the NuScale regulatory gap analysis was to identify existing light-water reactor-based regulations and guidance that are not technically relevant and thus would be inappropriate to apply to the NuScale design due to features specific to the NuScale advanced reactor plant.

The enclosed Gap Analysis Summary Report describes the process used to determine the extent to which regulations and guidance should apply to the NuScale advanced reactor plant design. Significant results presented in the report include:

1. a list of regulations determined to be not relevant and thus would be inappropriate to apply, either in whole or in part, to the NuScale advanced reactor plant design, with proposed resolution for each.
2. a proposed disposition of each Standard Review Plan (SRP; NUREG-0800) section, including branch technical positions and interim staff guidance, with respect to how the section should be applied as part of a NuScale design-specific review standard.

The completion of the NuScale regulatory gap analysis represents a major milestone in the pre-application phase of the NuScale design certification effort. The results summarized in the enclosed report provide a strong foundation to facilitate deliberations between NuScale and NRC during pre-application activities. Specifically, as part of further pre-application activities, NuScale will seek to reach consensus with the NRC on the: (1) applicability of the regulatory framework as assessed in this gap analysis; and (2) the disposition of "regulatory gaps."

Finally, it is emphasized that the results of the NuScale regulatory gap analysis reflect existing knowledge based on the current stage of engineering design and, as such, represent NuScale's best-effort assessment of applicability and relevance of current LWR-based requirements and guidance to the NuScale reactor plant design. As the ongoing engineering design effort progresses in support of the NuScale application for design certification, the relevance of all or portions of the requirements and guidance considered in this gap analysis may warrant reconsideration.

If you have any questions, please contact me at (541) 207-3931 or at [ewallace@nuscalepower.com](mailto:ewallace@nuscalepower.com) or Doug Neve at (541) 360 0535 or at [dneve@nuscalepower.com](mailto:dneve@nuscalepower.com).

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Wallace', with a long horizontal flourish extending to the right.

Edward G. Wallace  
Vice President, Regulatory Affairs

Enclosure 1: NP-RP-0612-023, "Gap Analysis Summary Report," nonproprietary

cc: Michael Mayfield, NRC TWFN-6 E04  
Stuart Magruder, NRC, TWFN-9 F27  
Greg Cranston, NRC, TWFN-9 F27