

December 21, 2010

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 Proprietary The Dynamical System Scaling (DSS) Methodology

Topical Report (NRC Project No. 0769)

REFERENCE: Letter from NuScale Power, Inc. to U.S. Nuclear Regulatory Commission, "Updated Schedule for

Third Quarter 2010 Pre-Application Submittals (NRC Project No. 0769)," NP-LO-0910-121,

September 23, 2010.

In accordance with the reference letter, NuScale Power, Inc. (NuScale) is submitting a topical report for review and approval under the NRC's licensing topical report program for referencing in future licensing actions. The attached Topical Report provides The Dynamical System Scaling (DSS) Methodology (NP-TR-1010-867-P) issued December 2010.

The Dynamical System Scaling Methodology is a key element in identifying an acceptable methodology for the dynamic scaling of the integral system behavior of the NuScale plant. The development of NuScale's scaling methodology is a long lead activity that is important to ultimately understanding the NuScale system transient characteristics during design basis accidents and operational occurrences. Therefore, NuScale requests that the NRC review this methodology for sufficiency and provide any RAIs by April 30, 2011. Due to the complexity of the methodology contained in the report, NuScale also requests that the NRC schedule a one day closed (proprietary) training session in the February-March 2011 timeframe, for a NuScale presentation on the approach and to facilitate the NRC review. Since this document serves as the described bases for dynamic integral scaling analysis methodology that is generically applicable to any separate effect test or integral effect test program, final NRC approval in a Safety Evaluation Report (SER) is requested by August 1, 2011 to support planned safety analysis code validation efforts.

Enclosure 1 contains NuScale proprietary information as defined by 10 CFR 2.390. NuScale maintains this information in confidence and withholds it from public disclosure. A nonproprietary version of Enclosure 1 will be provided in a separate submittal.

The affidavit contained in Enclosure 2 identifies that the information contained in Enclosure 1 has been handled and classified as proprietary to NuScale. NuScale hereby requests that the information in Enclosure 1 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17.

NP-LO-1110-151 Page 2 of 2 December 21, 2010

If you have any questions, please feel free to contact me at (541) 207-3931 or at ewallace@nuscalepower.com.

Sincerely,

Edward G. Wallace

Senior Vice President, Regulatory Affairs

Enclosures:

- 1. NP-TR-1010-867-P, "The Dynamical System Scaling (DSS) Methodology," Revision 0, NuScale Proprietary Information
- 2. NP-AF-1210-007, Affidavit, December 21, 2010

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

Document components:

- 1. NP-TR-1010-867-P DSS Methodology.pdf, 2,552,706 byte size
- 2. NP-AF-1210-007 Affidavit for DSS Methodology Topical Report.pdf, 1,635,189 byte size