

October 29, 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 Human Factors Engineering Analysis Phase Implementation Plan -

Non-Proprietary (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 is submitting the enclosed Human Factors Engineering Analysis Phase Implementation Plan. This document is the second in a series of Human Factors Engineering (HFE) submittals and provides the HFE Analysis Phase Implementation Plan (NP-TR-0910-812-NP R0 HFE Analysis Phase Implementation Plan) for NRC staff review. It includes implementation plans for five technical elements as specified in Sections 3.3, 4.3, 5.3, 6.3 and 7.3 of NUREG-0711, Rev. 2. These technical elements are Operating Experience Review (OER); Functional Requirements Analysis and Function Allocation (FRA&FA); Task Analysis (TA); Staffing and Qualification (S&Q); and Human Reliability Analysis (HRA).

This HFE Analysis Phase Implementation Plan is a key element in the ongoing NuScale design process including main control room, instrumentation and control systems, refueling, and concept of operations. In addition, future pre-application NuScale submittals (e.g., Human System Interface Implementation Plan and Procedure Development Implementation Plan) are dependent on NRC review and feedback on this plan. The development of NuScale's HFE program is a long lead activity that has been recognized by the NRC as an important contribution to NRC's understanding of the NuScale design. This element of the NuScale HFE program constitutes an important building block of the substantial foundation for an intended exemption request to control room staffing requirements in 10 CFR 50.54(m). Therefore, NuScale requests that the NRC review this plan for sufficiency and conformity to NUREG 0711 Revision 2 requirements and provide any RAIs by January 31, 2011. Since this plan is intended to be a complete document that serves as the described bases for HFE analysis phase work, final NRC approval is requested or some equivalent result consistent with efficient and effective pre-application engagement for a design certification.

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

Sincerely,

Edward G. Wallace

Senior Vice President, Regulatory Affairs

CC:

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Document components: NP-PL-0910-812-NP HFE Analysis Phase Implementation Plan.pdf, 628,906 byte size