RAIO-0617-54402

June 07, 2017

Docket No. 52-048

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

SUBJECT: NuScale Power, LLC Response to NRC Request for Additional Information No. 01 (eRAI No. 8738) on the NuScale Design Certification Application

REFERENCE: U.S. Nuclear Regulatory Commission, "Request for Additional Information No. 01 (eRAI No. 8738)," dated April 11, 2017

The purpose of this letter is to provide the NuScale Power, LLC (NuScale) response to the referenced NRC Request for Additional Information (RAI).

The Enclosure to this letter contains NuScale's response to the following RAI Question from NRC eRAI No. 8738:

- 13.05.02.01-1

This letter and the enclosed response make no new regulatory commitments and no revisions to any existing regulatory commitments.

If you have any questions on this response, please contact Steven Mirsky at 240-833-3001 or at smirsky@nuscalepower.com.

Sincerely,

Zackary W. Rad
Director, Regulatory Affairs
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Enclosure 1: NuScale Response to NRC Request for Additional Information eRAI No. 8738

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Enclosure 1:

NuScale Response to NRC Request for Additional Information eRAI No. 8738

Response to Request for Additional Information
Docket No. 52-048

eRAI No.: 8738
Date of RAI Issue: 04/11/2017

NRC Question No.: 13.05.02.01-1

REGULATORY BASIS REQUIREMENTS

TMI Action Plan Item I.C.1, a Post-TMI requirement approved by the Commission for implementation, requires the preparation of emergency procedure technical guidelines for development of the Emergency Operating Procedures (EOPs). Preparation of the technical guidelines is conducted in accordance with NUREG-0737, "Clarification of TMI Action Plan Requirements," and NUREG-0737, Supplement 1, "Requirements for Emergency Response Capability," which also specify submittal of the technical guidelines to the NRC for review and approval.

Meeting the requirements of TMI Action Plan Item I.C.1 as prescibed in NUREG-0737, Section I.C.1, and Supplement 1 to NUREG-0737, Section 7, is acceptance criteria in SRP 13.5.2.1, "Operating and Emergency Operating Procedures." Design-specific Generic Technical Guidelines (GTGs), otherwise referred to as the Emergency Operating Guidelines (EOGs), will be used by COL applicants to develop their Plant-Specific Technical Guidelines (P-STGs), from which their EOPs will be developed, and are the responsibility of the DC applicant.

The P-STGs may be based on either of the following GTG options:

a. ***NuScale design-specific GTGs, the development of which has no basis in any of the previously reviewed and approved owners group GTGs.*** NuScale would provide the supporting analyses used in the developmental process (e.g., best estimate analyses for the operational transients and accidents that were used for the NuScale

GTGs; analyses that identify operator tasks, and information and control needs; engineering evaluations; etc.).

b. ***NuScale design-specific GTGs that are derived from one of the previously reviewed and approved owners group GTGs (i.e., Westinghouse, Combustion Engineering, Babcock and Wilcox, General Electric).*** NuScale would identify significant safety deviations from the approved owner's group GTGs (including identification of additional equipment beyond that identified in the GTGs), and provide the supporting analyses (e.g., best estimate analyses for the operational transients and accidents that were used for the NuScale GTGs; analyses that identify operator tasks, and information and control needs; engineering evaluations; etc.) necessary to technically justify the adequacy of each deviation.

ISSUE

NuScale DCD Section 13.5 does not include NuScale design-specific GTGs.

INFORMATION NEEDED

Provide NuScale design-specific GTGs prepared in accordance with the prescribed guidance in NUREG-0737, Section I.C.1, and Supplement 1 to NUREG-0737, Section 7, along with the necessary supporting analyses.

NuScale Response:

The NuScale design-specific Generic Technical Guidelines are based on Option A as described in RAI Question 13.05.02.01-1. COL item 13.5-2 has been updated in FSAR Section 13.5 per the attached markup. The NuScale Generic Technical Guidelines document has been made available for NRC review on the NuScale electronic reading room.

Impact on DCA:
FSAR Section 13.5 has been revised as described in the response above and as shown in the markups provided in this response.

13.5 Plant Procedures

Administrative and operating procedures are utilized by the operating organization (plant staff) to ensure that routine operating, off-normal, and emergency activities are conducted in a safe manner.

13.5.1 Administrative Procedures

COL Item 13.5-1: A COL applicant that references the NuScale Power Plant design certification will describe the site-specific procedures that provide administrative control for activities that are important for the safe operation of the facility consistent with the guidance provided in RG 1.33, Revision 3.

13.5.2 Operating and Maintenance Procedures

13.5.2.1 Operating and Emergency Operating Procedures

RAI 13.05.02.01-1

COL Item 13.5-2: A COL applicant that references the NuScale Power Plant design certification will describe the site-specific procedures that licensed operators perform in the control room including normal operating procedures, abnormal operating procedures, and emergency operating procedures (EOPs), and describe the classification system for these types of procedures and general format and content for each classification.

The COL applicant is to provide a program for developing and implementing EOPs including target dates for completion and submittal to the NRC (as required) of program elements.

The COL applicant will reference the generic technical guidance when developing the plant-specific technical guidelines.

13.5.2.2 Maintenance and Other Operating Procedures

COL Item 13.5-3: A COL applicant that references the NuScale Power Plant design certification will describe the site-specific program for developing maintenance and other operating procedures, including the classification system, objectives, and organizational responsibility for the following types of procedures:

- plant radiation protection procedures
- emergency preparedness procedures
- instrument calibration and test procedures
- chemical-radiochemical control procedures
- radioactive waste management procedures
- maintenance and modification procedures
- material control procedures

- plant security procedures