



March 13, 2018

Docket No. 52-048

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

SUBJECT: NuScale Power, LLC Supplemental Response to NRC Request for Additional Information No. 239 (eRAI No. 9075) on the NuScale Design Certification Application

REFERENCES: 1. U.S. Nuclear Regulatory Commission, "Request for Additional Information No. 239 (eRAI No. 9075)," dated September 27, 2017
2. NuScale Power, LLC Response to NRC "Request for Additional Information No. 239 (eRAI No.9075)," dated November 22, 2017

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

The Enclosure to this letter contains NuScale's supplemental response to the following RAI Question from NRC eRAI No. 9075:

- 10.03-1

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 Carrie Fosaaen at 541-452-7126 or at cfosaaen@nuscalepower.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Zackary W. Rad".

Zackary W. Rad
Director, Regulatory Affairs
NuScale Power, LLC

Distribution: Samuel Lee, NRC, OWFN-8G9A
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Enclosure 1: NuScale Supplemental Response to NRC Request for Additional Information eRAI No. 9075



Enclosure 1:

NuScale Supplemental Response to NRC Request for Additional Information eRAI No. 9075

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

eRAI No.: 9075

Date of RAI Issue: 09/27/2017

NRC Question No.: 10.03-1

10 CFR 52.47(b)(1) requires that a DC application contain the proposed inspections, tests, analyses, and acceptance criteria (ITAAC) that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, a plant that incorporates the design certification is built and will operate in accordance with the design certification, the provisions of the Atomic Energy Act, and the NRC's regulations. In addition, RG 1.206, Appendix C.II.1-A, Section I provides guidance on fluid system design descriptions the staff expects to be included in FSAR, Tier 1.

NuScale FSAR Tier 1, Section 1.0, states this section contains design descriptions. The staff reviewed information (minimal information in tabular form) on main steam valves, and main steam pressure instruments; however, the staff could not find any top-level design description for the main steam piping systems, or any discussion on how the plant transports steam from the steam generators to the turbine. The main steam system as defined in NuScale DSRS 10.3 performs both safety-related and nonsafety-related functions, a top-level description of the whole fluid system (i.e. outlet of the steam generator to the turbine) should be included in Tier 1, per RG 1.206.

Therefore, the applicant is requested to provide a top-level design description of the NuScale main steam piping systems consistent with RG 1.206, Appendix C.II.1-A, Section I.

NuScale Response:

NuScale's initial response to this question referenced a non-existent figure. The second to the last sentence in the last paragraph of NuScale's response to this question read as follows:

"The system description also referenced Tier 1 Figure 1-3 which identifies the NPM system boundaries and Tier 1 Table 2.1-1 which describes the system piping contained in the NPM boundary."

The sentence should have read:



The system description also referenced Tier 1 Figure 2.1-1 which identifies the NPM system boundaries and Tier 1 Table 2.1-1 which describes the system piping contained in the NPM boundary."

This aligns with the information contained in the opening paragraph of Tier 1, Chapter 2, Section 2.1.1, "System Description."

This response supplements NuScale's initial response to this question submitted by letter dated November 22, 2017, "NuScale Power, LLC Response to NRC Request for Additional information No. 239 (eRAI No. 9075) on the NuScale Design Certification Application."

Impact on DCA:

There are no impacts to the DCA as a result of this response.