

NuScaleDCRaisPEm Resource

From: Cranston, Gregory
Sent: Friday, August 3, 2018 1:55 PM
To: Request for Additional Information
Cc: Lee, Samuel; Ashley, Clinton; Le, Hien; Tabatabai, Omid; Chowdhury, Prosanta; NuScaleDCRaisPEm Resource
Subject: Request for Additional Information No. 496 eRAI No. 9571 (14.3.7)
Attachments: Request for Additional Information No. 496 (eRAI 9571).pdf

Attached please find NRC staff's request for additional information (RAI) concerning review of the NuScale Design Certification Application.

Please submit your technically correct and complete response within 60 days of the date of this RAI to the NRC Document Control Desk.

If you have any questions, please contact me.

Thank you.

Hearing Identifier: NuScale_SMR_DC_RAI_Public
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Subject: Request for Additional Information No. 496 eRAI No. 9571 (14.3.7)
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From: Cranston, Gregory

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Request for Additional Information No. 496 (eRAI 9571)

Issue Date: 08/03/2018

Application Title: NuScale Standard Design Certification - 52-048

Operating Company: NuScale Power, LLC

Docket No. 52-048

Review Section: 14.03.07 - Plant Systems - Inspections, Tests, Analyses, and Acceptance Criteria

Application Section: FSAR Tier 1, Sections 2.1 and 3.10

QUESTIONS

14.03.07-1

This is a follow-up on the NuScale's response dated February 5, 2018 and its supplement dated June 14, 2018, to RAI 9128, Question 19-37.

During the review of the RAI 9128 responses, the staff noted inconsistencies associated with identification of Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) associated with the Containment System (CNTS) and the Reactor Building Crane.

Specifically, FSAR Tier 1, Section 2.1, "NuScale Power Module," states, in part, the following:

The NPM performs the following nonsafety-related, risk-significant function that is verified by Inspections, Tests, Analyses, and Acceptance Criteria:

- The CNTS supports the RXB crane by providing lifting attachment points that the RXB crane can connect to so that the NPM can be lifted.

However, the staff could not find ITAAC requirements specified for the containment lifting attachment points in FSAR Tier 1, Table 2.1-4, "NuScale Power Module Inspections, Tests, Analyses, and Acceptance Criteria."

Similarly, FSAR Tier 1, Section 3.10, "Reactor Building Crane," states, in part, the following:

The scope of this section is the Reactor Building crane (RBC). The RBC is a bridge crane that rides on rails anchored to the Reactor Building. The bridge crane can travel the length of the reactor pool, refueling pool, and the dry dock. The RBC is nonsafety-related and supports up to 12 NuScale Power Modules (NPMs). The Reactor Building houses all RBC equipment.

The RBC includes the following:

- RBC with auxiliary hoist
- below-the-hook lifting devices, including the module lifting adapter and the wet hoist.

The RBC performs the following risk-significant system function that is verified by Inspections, Tests, Analyses, and Acceptance Criteria:

- The RBC supports the NuScale Power Module by providing structural support and mobility while moving from refueling, inspection and operating bay.

However, the staff could not find ITAAC requirements specified for the MLA in FSAR Tier 1, Table 3.10-1, "Reactor Building Crane Inspections, Tests, Analyses, and Acceptance Criteria."

Therefore, NuScale is requested to add ITAAC requirements for the containment lifting attachment points in FSAR Tier 1, Table 2.1-4 and the MLA in FSAR Tier 1, Table 3.10-1. Also, as part of the response to this request, NuScale should include any applicable changes to the FSAR Tier 2 information (e.g., Chapter 14) that are used to support these new requirements.

