

## NuScaleDCRaisPEm Resource

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**From:** Chowdhury, Prosanta  
**Sent:** Tuesday, May 1, 2018 4:24 PM  
**To:** Request for Additional Information  
**Cc:** Lee, Samuel; Cranston, Gregory; Franovich, Rani; Karas, Rebecca; Schmidt, Jeffrey; NuScaleDCRaisPEm Resource  
**Subject:** Request for Additional Information No. 454 eRAI No. 9499 (15)  
**Attachments:** Request for Additional Information No. 454 (eRAI No. 9499).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.

Prosanta Chowdhury, Project Manager  
Licensing Branch 1 (NuScale)  
Division of New Reactor Licensing  
Office of New Reactors  
U.S. Nuclear Regulatory Commission  
301-415-1647

**Hearing Identifier:** NuScale\_SMR\_DC\_RAI\_Public  
**Email Number:** 485

**Mail Envelope Properties** (BN7PR09MB2609F8895F28710CEC50E9949E810)

**Subject:** Request for Additional Information No. 454 eRAI No. 9499 (15)  
**Sent Date:** 5/1/2018 4:24:04 PM  
**Received Date:** 5/1/2018 4:24:07 PM  
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**Post Office:** BN7PR09MB2609.namprd09.prod.outlook.com

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	556	5/1/2018 4:24:07 PM
Request for Additional Information No. 454 (eRAI No. 9499).pdf		11743

**Options**

**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

## **Request for Additional Information No. 454 (eRAI No. 9499)**

Issue Date: 05/01/2018

Application Title: NuScale Standard Design Certification - 52-048

Operating Company: NuScale Power, LLC

Docket No. 52-048

Review Section: 15 - Introduction - Transient and Accident Analyses

Application Section:

### QUESTIONS

15-11

10 CFR Part 52.47(a)(3) requires an applicant for a design certification to provide the principal design criteria (PDC) for the facility and the design bases and the relation of the design bases to these principal design criteria. In addition, 10 CFR 52.47(a)(3) notes that Appendix A to 10 CFR part 50, general design criteria (GDC), provides guidance to applicants in establishing principal design criteria. In Final Safety Analysis Report (FSAR) Tier 2, Section 3.1, "Conformance with U.S. Nuclear Regulatory Commission General Design Criteria," the applicant describes how NuScale meets the intent of the GDCs or has developed PDC to address the specific design of the NuScale Power Plant pressurized water reactor.

The applicant has also provided a description of a small subset of the design criteria in Section 15.0.0.3, "Licensing Methodology," stating that these criteria were used in developing the conditions and assumptions for the Chapter 15 safety analysis. However, the staff notes that while some applicable GDCs are listed, a number of GDCs are not listed. Examples include GDCs 10, 15, 20, 25 and 28.

To enable the NRC staff to make a safety finding for FSAR Section 15, the staff is requesting the applicant to provide additional information regarding the intent of Section 15.0.0.3 or, if necessary, revise this section to clearly indicate the relationship between this section, Section 3.1, and the Chapter 15 analyses.