

## NuScaleDCRaisPEm Resource

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**From:** Cranston, Gregory  
**Sent:** Saturday, August 05, 2017 12:42 PM  
**To:** RAI@nuscalepower.com  
**Cc:** NuScaleDCRaisPEm Resource; Lee, Samuel; Chowdhury, Prosanta; Bauer, Laurel; Graizer, Vladimir; Vera Amadiz, Marieliz  
**Subject:** RE: Request for Additional Information No. 142, RAI 8927 (3.7.4)  
**Attachments:** Request for Additional Information No. 142 (eRAI No. 8927).pdf

Attached please find NRC staff's request for additional information 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.

Gregory Cranston, Senior Project Manager  
Licensing Branch 1 (NuScale)  
Division of New Reactor Licensing  
Office of New Reactors  
U.S. Nuclear Regulatory Commission  
301-415-0546

**Hearing Identifier:** NuScale\_SMR\_DC\_RAI\_Public  
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## **Request for Additional Information No. 142 (eRAI No. 8927)**

Issue Date: 08/05/2017

Application Title: NuScale Standard Design Certification - 52-048

Operating Company: NuScale Power, LLC

Docket No. 52-048

Review Section: 03.07.04 - Seismic Instrumentation

Application Section: 3.7

### **QUESTIONS**

03.07.04-1

Section 3.7.4.2 states that seismic sensors will be located in the Reactor (RXB) and the Control (CRB) buildings at locations that have been modeled as mass points in the building dynamic analysis so that the measured motion can be directly compared with the design spectra. In addition, Section 3.7.4 states that the exact sensor locations are site-specific and will be provided by the COL applicant as part of the response to COL Item 3.7-1.

In order for the NRC staff to determine if the site, RXB, and CRB are adequately instrumented with seismic monitors in accordance with Appendix S to 10 CFR Part 50, provide justification for deferring the sensor locations to the COL applicant. In addition, since NuScale is not placing seismic instrumentation inside containment because the instruments would be flooded as part of the refueling process, provide the locations of the mass points within the RXB and CRB that will be instrumented with seismic monitors.