

## NuScaleDCRaisPEm Resource

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**From:** Cranston, Gregory  
**Sent:** Thursday, August 10, 2017 4:16 PM  
**To:** RAI@nuscalepower.com  
**Cc:** NuScaleDCRaisPEm Resource; Lee, Samuel; Chowdhury, Prosanta; Jung, Ian; Halverson, Derek; Tabatabai, Omid  
**Subject:** Request for Additional Information No. 122, RAI 9008 (7.02)  
**Attachments:** Request for Additional Information No. 122 (eRAI No. 9008).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  
**Email Number:** 183

**Mail Envelope Properties** (0c293860a8a140d9a57021e253fdc8af)

**Subject:** Request for Additional Information No. 122, RAI 9008 (7.02)  
**Sent Date:** 8/10/2017 4:15:38 PM  
**Received Date:** 8/10/2017 4:15:41 PM  
**From:** Cranston, Gregory

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**Post Office:** HQPWMSMRS08.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	560	8/10/2017 4:15:41 PM
Request for Additional Information No. 122 (eRAI No. 9008).pdf		78758

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

## Request for Additional Information No. 122 (eRAI No. 9008)

Issue Date: 08/10/2017

Application Title: NuScale Standard Design Certification - 52-048

Operating Company: NuScale Power, LLC

Docket No. 52-048

Review Section: 07.02.DSRS - System Characteristics

Application Section: NuScale DCD, Part 2 – Tier 2, Section 7.2.8, “Auxiliary Features”

### QUESTIONS

#### 07.02.DSRS-4

Title 10 of the *Code of Federal Regulations* Section 50.55a(h)(3) requires compliance to IEEE Std. 603-1991. IEEE Std. 603-1991, Clause 5.12, "Auxiliary Features," states that: (1) auxiliary supporting features shall meet all requirements of this standard, and (2) other auxiliary features that perform a function that is not required for the safety systems to accomplish their safety functions, and are part of the safety system by association, shall be designed to meet those criteria necessary to ensure that these components, equipment, and systems do not degrade the safety systems below an acceptable level.

NuScale Design Control Document (DCD), Part 2 – Tier 2, Section 7.2.8, “Auxiliary Features,” indicates systems that are included as auxiliary features. All of these features are designated as safety-related and are part of the safety I&C system. The staff finds that additional information is necessary to evaluate conformance to IEEE Std. 603-1991, Clause 5.12 regarding the auxiliary features that are designed to not affect the module protection system (MPS) and the Neutron Monitoring System in accomplishing their safety functions. Specifically, the staff requests the applicant to provide a comprehensive list of :

1. auxiliary supporting features of the MPS/NMS, and
2. other auxiliary features that perform a function that is not required for the safety systems to accomplish their safety functions.

In addition, describe how those other auxiliary features do not affect the MPS/NMS in accomplishing their safety functions.