

## NuScaleDCRaisPEm Resource

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**From:** Cranston, Gregory  
**Sent:** Wednesday, August 02, 2017 1:11 PM  
**To:** RAI@nuscalepower.com  
**Cc:** NuScaleDCRaisPEm Resource; Lee, Samuel; Chowdhury, Prosanta; Dias, Antonio; Travis, Boyce; Baval, Bruce  
**Subject:** RE: Request for Additional Information No. 120, RAI 9020 (5.4.4)  
**Attachments:** Request for Additional Information No. 120 (eRAI No. 9020).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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**From:** Cranston, Gregory

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**Options**

**Priority:** Standard

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## **Request for Additional Information No. 120 (eRAI No. 9020)**

Issue Date: 08/02/2017

Application Title: NuScale Standard Design Certification - 52-048

Operating Company: NuScale Power, LLC

Docket No. 52-048

Review Section: 05.04.12 - Reactor Coolant System High Point Vents

Application Section: 5.4.4

### **QUESTIONS**

#### **05.04.12-1**

10 CFR 50.34(f)(2)(vi) requires, in part, that a design provide the capability of high point venting of non-condensable gases from the reactor coolant system, and other systems that may be required to maintain adequate core cooling. NuScale has requested an exemption from 10 CFR 50.34(f)(2)(vi). In order to make a finding on the exemption, staff needs sufficient information to ensure that core cooling capability is not inhibited by the presence of non-condensable gases.

TR-0916-51299-P, the Long-Term Cooling Methodology technical report, makes an assumption related to non-condensable gases that is substantially larger than what could be initially present in containment in order to account for gases present in the RCS. It is not clear to the NRC staff why that quantity is limiting. The applicant is requested to provide a statement clarifying why such assumption is bounding.