

## NuScaleDCRaisPEm Resource

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**From:** Cranston, Gregory  
**Sent:** Saturday, August 12, 2017 1:21 PM  
**To:** RAI@nuscalepower.com  
**Cc:** NuScaleDCRaisPEm Resource; Lee, Samuel; Chowdhury, Prosanta; Dias, Antonio; Dinh, Thinh; Vera Amadiz, Marieliz  
**Subject:** Request for Additional Information No. 174, RAI 9053 (3.4.1)  
**Attachments:** Request for Additional Information No. 174 (eRAI No. 9053).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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| Request for Additional Information No. 174 (eRAI No. 9053).pdf |             | 30675                  |

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

## **Request for Additional Information No. 174 (eRAI No. 9053)**

Issue Date: 08/12/2017

Application Title: NuScale Standard Design Certification - 52-048

Operating Company: NuScale Power, LLC

Docket No. 52-048

Review Section: 03.04.01 - Internal Flood Protection for Onsite Equipment Failures

Application Section: 3.4

### QUESTIONS

#### 03.04.01-2

10 CFR 52.47(a)(2) requires that a standard design certification applicant provide a description and analysis of the structures, systems, and components (SSCs) of the facility, with emphasis upon performance requirements, the bases, with technical justification therefor, upon which these requirements have been established, and the evaluations required to show that safety functions will be accomplished.

The NuScale internal flooding analysis assumes water flow through pipe ruptures are limited to 40 and 30 minutes in the Reactor Building (RXB) and Control Room Building (CRB), respectively. No basis or justification are provided for these time limits.

The applicant is requested to justify (e.g., limited water volumes or credited actions to isolate line breaks) these time limit assumptions.