

## NuScaleTRRaisPEm Resource

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**From:** Cranston, Gregory  
**Sent:** Friday, June 30, 2017 2:35 PM  
**To:** RAI@nuclepower.com  
**Cc:** NuScaleTRRaisPEm Resource; Lee, Samuel; Skarda, Raymond; Karas, Rebecca; Schmidt, Jeffrey; Chowdhury, Prosanta; Bovol, Bruce  
**Subject:** RE: Topical Report (TR-0516-49417-P) - Request for Additional Information Letter No. 8871 (eRAI No. 8871)  
**Attachments:** Request for Additional Information No. 8871 (eRAI No. 8871).pdf

Attached please find NRC staff's request for additional information concerning review of the NuScale Topical Report.

Please submit your 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.

**Hearing Identifier:** NuScale\_SMR\_DC\_TR\_Public  
**Email Number:** 32

**Mail Envelope Properties** (51cdc151efac48f38d201ee89d6fc813)

**Subject:** RE: Topical Report (TR-0516-49417-P) - Request for Additional Information  
Letter No. 8871 (eRAI No. 8871)  
**Sent Date:** 6/30/2017 2:34:41 PM  
**Received Date:** 6/30/2017 2:34:43 PM  
**From:** Cranston, Gregory

**Created By:** Gregory.Cranston@nrc.gov

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Request for Additional Information No. 8871 (eRAI No. 8871).pdf			85018

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

## **Request for Additional Information No. 8871 (eRAI No. 8871)**

Issue Date: 06/30/2017

Application Title: NuScale Topical Report

Operating Company: NuScale

Docket No. PROJ0769

Review Section: 01 - Introduction and Interfaces

Application Section: 1

### QUESTIONS

01-15

In accordance with 10 CFR 50 Appendix A GDC 10, "Reactor design," the reactor core and associated coolant, control, and protection systems shall be designed with appropriate margin to assure that specified acceptable fuel design limits are not exceeded during any condition of normal operation, including the effects of anticipated operational occurrences. The Standard Review Plan 15.0.2 acceptance criteria with respect to evaluation models specifies that the chosen mathematical models and the numerical solution of those models must be able to predict the important physical phenomena reasonably well from both qualitative and quantitative points of view.

Bullet 8 of Section 5.2, "Assumptions and Limitations," and Section 5.5.4, "Ambient Heat Losses," of topical report, TR-0516-49417-P, refer to ambient heat losses. It is not clear what the basis for the ambient heat losses are or how the model was qualified for production analysis.

In order to make an affirmative finding associated with the above regulatory requirement important to safety, NRC staff requests NuScale to describe how ambient heat losses are modeled for licensing calculations and justify any assumptions regarding ambient heat losses.