NuScaleTRRaisPEm Resource

From: Cranston, Gregory
Sent: Friday, June 23, 2017 5:41 PM
To: RAI@nuscalepower.com
Cc: NuScaleTRRaisPEm Resource; Lee, Samuel; Skarda, Raymond; Karas, Rebecca; Schmidt, Jeffrey; Chowdhury, Prosanta; Bavol, Bruce
Subject: Topical Report (TR-0516-49417-P) - Request for Additional Information Letter No. 8867 (eRAI No. 8867)
Attachments: Request for Additional Information No. 8867 (eRAI No. 8867).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: 26

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Subject: Topical Report (TR-0516-49417-P) - Request for Additional Information Letter No. 8867 (eRAI No. 8867)
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From: Cranston, Gregory

Created By: Gregory.Cranston@nrc.gov

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Request for Additional Information No. 8867 (eRAI No. 8867)

Issue Date: 06/23/2017
Application Title: NuScale Topical Report
Operating Company: NuScale
Docket No. PROJ0769
Review Section: 01 - Introduction and Interfaces
Application Section: 01

QUESTIONS

01-10

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 SRP 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.

Section 8.0, “Stability Demonstration within Allowable Conditions and Settings,” of the topical report, TR-0516-49417-P, states that the stability at BOC and EOC conditions are verified, but it is not clear from the TR what is specifically verified, or if this verification is cycle-specific.

In order to make an affirmative finding associated with the above regulatory requirement important to safety, NRC staff requests NuScale to describe how stability is verified at BOC and EOC conditions, and confirm if verifications are performed on a cycle-specific basis.