

NuScaleDCRaisPEm Resource

From: Cranston, Gregory
Sent: Friday, May 26, 2017 4:06 PM
To: RAI@nuscalepower.com
Cc: NuScaleDCRaisPEm Resource; Lee, Samuel; Chowdhury, Prosanta; Karas, Rebecca; Thurston, Carl
Subject: Request for Additional Information No. 35, RAI 8786
Attachments: Request for Additional Information No. 35 (eRAI No. 8786).pdf

Attached please find NRC staff's request for additional information concerning review of the NuScale Design Certification Application.

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.

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

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Request for Additional Information No. 35 (eRAI No. 8786)

Issue Date: 05/26/2017

Application Title: NuScale Standard Design Certification - 52-048

Operating Company: NuScale Power, LLC

Docket No. 52-048

Review Section: 15.06.05 - Loss of Coolant Accidents Resulting From Spectrum of Postulated Piping
Breaks Within the Reactor Coolant Pressure Boundary

Application Section: 15.6

QUESTIONS

15.06.05-2

10 CFR Part 50 Appendix K, I.C.1 - *Break Characteristics and Flow*, requires that a spectrum of possible pipe breaks be considered in the analyses of loss-of-coolant accidents (LOCAs). Section 15.6.5 of the NuScale Design Specific Review Standard states that, "a spectrum of LOCA break sized is to be evaluated and the limiting break identified through sufficient analyses ..." The applicant indicates in Section 15.6.5.1 of the Final Safety Analysis Report (FSAR) that a spectrum of break sizes were analyzed. However, the input parameters, initial conditions, and results from the analyses for the spectrum of breaks are not presented in the FSAR. NRC staff relies upon the docketed input parameters, initial conditions, and results from the spectrum of break sizes to establish a finding that the limiting pipe break has been identified and evaluated. Accordingly, NRC staff requests that NuScale update Section 15.6.5 of the FSAR to include a summary of the input parameters, initial conditions, and results from the spectrum of pipe breaks considered in the analyses of LOCA.