NuScaleDCRaisPEm Resource

From: Cranston, Gregory
Sent: Friday, June 02, 2017 5:09 PM
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Cc: NuScaleDCRaisPEm Resource; Lee, Samuel; Chowdhury, Prosanta; Dias, Antonio; Bavol, Bruce; Li, Chang
Subject: Request for Additional Information No. 48, RAI 8842
Attachments: Request for Additional Information No. 48 (eRAI No. 8842).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. 48 (eRAI No. 8842)

Issue Date: 06/02/2017
Application Title: NuScale Standard Design Certification - 52-048
Operating Company: NuScale Power, LLC
Docket No. 52-048
Review Section: 05.02.05 - Reactor Coolant Pressure Boundary Leakage Detection
Application Section: 5.2

QUESTIONS

05.02.05-3

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.

RG 1.45, Regulatory Position C.3.3 provides guidance on the leakage monitoring systems in the main control room by stating:

> "The plant should provide output and alarms from leakage monitoring systems in the main control room. Procedures for converting the instrument output to a leakage rate should be readily available to the operators. (Alternatively, these procedures could be part of a computer program so that the operators have a real-time indication of the leakage rate as determined from the output of these monitors.)"

FSAR Tier 2 does not contain the level of information indicated by RG 1.45, Regulatory Position C.3.3.

The applicant is requested to provide the following information:

a) Clarify how NuScale would conform to the above guidance relating to control room instrumentation, and

b) Include a COL information item requiring COL applicants to develop appropriate procedures for leakage monitoring.