From: Bavol, Bruce
Sent: Wednesday, March 30, 2022 6:59 AM
To: NuScale-SDA-720RAIsPEm Resource
Subject: Final Request for Information eRAI 9899 (Non-Proprietary)
Attachments: Final Request for Information eRAI 9899 (Non-Proprietary).pdf

Good Morning,

Attached please find NRC staff's request for additional information (RAI 9899) concerning the review of Licensing Topical Report TR-107522-P Rev 0, "Applicability Range Extension of NSP4 Critical Heat Flux Correlation," (Agencywide Documents Access and Management System [ADAMS] Accession Nos. ML21309A755 [proprietary] and ML21309A754 [nonproprietary]).

Please submit your technically correct and complete response by the agreed upon date to the NRC Document Control Desk.

If you have any questions, please feel free to contact me at 301-415-6715.

Thank you,

Bruce M. Bavol

Project Manager
Office of Nuclear Reactor Regulation
DNRL/NRLB

Docket No.: 99902078

Hearing Identifier: NuScale_SDA720_RAI_Public
Email Number: 6

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Subject: Final Request for Information eRAI 9899 (Non-Proprietary)
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MESSAGE	748	3/30/2022 6:59:32 AM
Final Request for Information eRAI 9899 (Non-Proprietary).pdf	25594	

Options
Priority: Normal
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:

Request for Additional Information 0004 (eRAI No. 9899)

Issue Date: 03/14/2022

Application Title: Pre-Application Activities for NuScale SDA Application

Operating Company: NuScale

Docket No. 99902078

Review Section: NTR - NuScale Topical Report for SDA (Critical Heat Flux Correlation)

Application Section: TR-107522, Revision 0

NTR-01

Regulatory Basis:
Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52, Section 47 and Section 79 require a final safety analysis report (FSAR) to analyze the design and performance of the structures, systems, and components (SSCs). Safety evaluations, performed to support the FSAR, include accident analyses to demonstrate that specified acceptable fuel design limits (SAFDLs) are not exceeded during normal operation, including the effects of anticipated operational occurrences (AOOs).

GDC 10, *Reactor design*, which requires that the reactor core and associated coolant, control, and protection systems be designed with appropriate margin to assure that SAFDLs are not exceeded during any condition of normal operation, including the effects of AOOs.

Issue:
In Supplement 1 to TR-0116-21012-P-A, Revision 1, NuScale provided NSP4 predictions for {{ }}.

Request:
{{ }} in the same format as "Appendix A to Topical Report Entitled "Applicability Range Extension of NSP4 Critical Heat Flux Correlation: Supplement 1 to TR-0116-21012-P-A, Revision 1," TR-107522-P, Revision 0.

NTR-02

Regulatory Basis:
Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52, Section 47 and Section 79 require a final safety analysis report (FSAR) to analyze the design and performance of the structures, systems, and components (SSCs). Safety evaluations, performed to support the FSAR, include accident analyses to demonstrate that specified acceptable fuel design limits (SAFDLs) are not exceeded during normal operation, including the effects of anticipated operational occurrences (AOOs).

GDC 10, *Reactor design*, which requires that the reactor core and associated coolant, control, and protection systems be designed with appropriate margin to assure that SAFDLs are not exceeded during any condition of normal operation, including the effects of AOOs.

Issue:

In their February 18, 2022, submittal of supplement information, "CHF Topical Supplement, February 3, 2022, Clarification Call Summary", NuScale {{

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Request:
{{

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