

NuScaleDCRaisPEm Resource

From: Chowdhury, Prosanta
Sent: Tuesday, April 10, 2018 4:48 PM
To: Request for Additional Information
Cc: Lee, Samuel; Cranston, Gregory; Kent, Lauren; Scheetz, Maurin; NuScaleDCRaisPEm Resource
Subject: Request for Additional Information No. 413 eRAI No. 9432 (13.05.02.01)
Attachments: Request for Additional Information No. 413 (eRAI No. 9432).pdf

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

Please submit your technically correct and complete 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.

Prosanta Chowdhury, Project Manager
Licensing Branch 1 (NuScale)
Division of New Reactor Licensing
Office of New Reactors
U.S. Nuclear Regulatory Commission
301-415-1647

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From: Chowdhury, Prosanta

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Options

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Request for Additional Information No. 413 (eRAI NO. 9432)

Issue Date: 04/10/2018

Application Title: NuScale Standard Design Certification - 52-048

Operating Company: NuScale Power, LLC

Docket No. 52-048

Review Section: 13.05.02.01 - Operating and Emergency Operating Procedures

Application Section: SRP 13.5.2.1

QUESTIONS

13.05.02.01-6

REGULATORY BASIS REQUIREMENTS

Title 10 of the *Code of Federal Regulations* (10 CFR) Section 52.47(a)(8) requires an applicant for a design certification to provide an FSAR (Final Safety Analysis Report) which includes the information necessary to demonstrate compliance with any technically relevant portions of the Three Mile Island requirements set forth in 10 CFR 50.34(f), with certain exceptions. Section 10 CFR 50.34(f)(2)(ii) requires an applicant to "Establish a program, to begin during construction and follow into operation, for integrating and expanding current efforts to improve plant procedures. The scope of the program shall include emergency procedures, ... "

TMI Action Plan Item I.C.1, a Post-TMI requirement approved by the Commission for implementation, requires the preparation of emergency procedure technical guidelines for development of the Emergency Operating Procedures (EOPs). Preparation of the technical guidelines is conducted in accordance with NUREG-0737, "Clarification of TMI Action Plan Requirements," and NUREG-0737, Supplement 1, "Requirements for Emergency Response Capability," which also specify submittal of the technical guidelines to the NRC for review and approval.

Meeting the requirements of TMI Action Plan Item I.C.1 as prescribed in NUREG-0737, Section I.C.1, and Supplement 1 to NUREG-0737, Section 7, is acceptance criteria in SRP 13.5.2.1, "Operating and Emergency Operating Procedures." Design-specific Generic Technical Guidelines (GTGs), otherwise referred to as the Emergency Operating Guidelines (EOGs), will be used by COL applicants to develop their Plant-Specific Technical Guidelines (P-STGs), from which their EOPs will be developed, and are the responsibility of the DC applicant.

By letter dated November 30, 2017 (ADAMS Accession No. ML17334B822) NuScale submitted technical report TR-1117-57216, "NuScale Generic Technical Guidelines," for docketing.

ISSUE

The Core Heat Removal (CHR) Safety Function flowchart in Section 5.3 of the NuScale GTGs depicts the logic and specifies the operator actions necessary to assess and maintain the CHR Safety Function. The operator actions identified in the NuScale GTGs include verifying the automatic actuation of Engineered Safety Feature (ESF) Actuation System functions. []

¶ For consistency with the other “Operator Actions” specified in the Critical Safety Function (CSF) flowcharts for a failed ESF Actuation, the local action from outside the control room should also be included in the HP-3 decision point block on the CHR flowchart.

INFORMATION NEEDED

NRC staff requests that NuScale: (1) explain why the local action to de-energize the pressurizer heaters has been excluded from the HP-3 decision point block, when other local actions have been consistently identified throughout the CSF flowcharts, and (2) make any necessary changes to technical report TR-1117-57216 to ensure the completeness and accuracy of the NuScale GTGs.