

August 25, 2016

MEMORANDUM TO: Mark Tonacci, Chief
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors

FROM: Anthony Markley, Senior Project Manager */RA/*
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors

SUBJECT: MEETING SUMMARY CLOSED MEETING WITH NUSCALE
POWER, LLC TO DISCUSS NUSCALE'S DRAFT TOPICAL
REPORT ON NUCLEAR ANALYSIS CODES AND METHODS
(TAC# RN6301)

On July 12, 2016, representatives of the U.S. Nuclear Regulatory Commission (NRC) staff and NuScale Power, LLC (NuScale) held a closed meeting at the NuScale office located at 11333 Woodglen Avenue, Suite 205, Rockville, Maryland, 20852, for the NRC staff to conduct a page-turn evaluation and discuss NRC staff's questions on the draft nuclear analysis codes and methods topical report (TR).

Prior to the page-turn evaluation, NuScale presented its position regarding the NuScale Reload Analysis Methodology, in response to questions received from the NRC technical staff (via email) that are related to the content in design control document Section 4.3. During the reload analysis discussion, NRC staff provided the following feedback:

- The NRC staff asked for the reload methodology or process documented in some way, such as a technical report or TR.
- The NRC staff asked NuScale if a commitment to a process such as a checklist for reload analysis, including definition of limits that would be met by the core design, such that no re-analysis is required, would be made.
- The NRC staff asked if Technical Specifications and the Core Operating Limits Report would be a combined license (COL) item.

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In response to the NRC staff's feedback, NuScale indicated that the reload licensing analysis will not be submitted with the design certification (DC) application. NuScale does not believe that this is required. NuScale intends to make the reload analysis a COL application item, which would be developed independently from the DC application. NuScale plans to document this methodology formally in internal documentation as part of the NuScale Product Realization Project. NuScale expects this methodology will use a checklist or similar mechanism for identifying limits and verifying acceptability of core designs.

The NRC staff reviewed the draft TR and clarified information needed to understand the application of NuScale's TR for review.

During the course of the page-turn the NRC staff discussed and noted the following:

- The NRC staff asked if an audit of the Studsvik manuals in order to address questions on code methodology would be possible. NuScale agreed that could be done.
- The NRC staff asked if an audit of the inputs used for code-to-code comparisons (CASMO5, CMSLINK5, and SIMULATE5) would be possible. NuScale agreed that this could be done.
- The NRC asked how NuScale addresses burnup uncertainty in the TR, and if some portion of the beta uncertainty was to account for burnup uncertainty. NuScale indicated that it would further evaluate and revise information associated with burnup uncertainty.
- The NRC asked how the nuclear reliability factors (NRF) were developed, and specifically how the critical boron concentration NRF was developed. NuScale that it would further evaluate and revise information, if needed.
- The NRC asked how the determination was made that collecting 10 measurements for a parameter would result in statistical significance. Subsequent discussions did not provide further clarification.

The NRC staff indicated that they identified no issues that would negatively impact the acceptance review.

At the conclusion of the meeting, the NRC project manager asked each NRC staff participant if they had any additional questions or concerns. No additional items were identified by the NRC staff. The NuScale licensing staff requested the NRC staff to schedule follow up telephone call meetings to discuss NuScale's proposed resolution to the comments provided during the meeting.

The NRC staff indicated support for the subsequent conference call to discuss efforts to address NRC staff concerns.

With no further discussion, the meeting was adjourned.

M. Tonacci

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The list of meeting attendees is included in the Enclosure. The meeting notice and agenda are available in Agencywide Documents Access and Management System (ADAMS) with Accession No. ML16174A270. ADAMS is the system that provides text and image files of NRC's public documents and can be accessed at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. If you do not have access to ADAMS or have problems accessing the documents located in ADAMS, contact the NRC Public Document Room staff at (800) 397-4209, (301) 415-4737, or pdr@nrc.gov.

Enclosure:
Meeting Attendees

cc: NuScale List Serv

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cc: NuScale List Serv

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DATE	08/23/2016	08/24/2016	08/25/2016	08/25/2016

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**List of Meeting Attendees
July 12, 2016**

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Enclosure