

June 19, 2014

Dr. José N. Reyes, Jr.
Chief Technology Officer
NuScale Power, LLC
1100 NE Circle Blvd., Suite 200
Corvallis, Oregon 97330

SUBJECT: SCHEDULE FOR DESIGN-SPECIFIC REVIEW STANDARD FOR NUSCALE
POWER, LLC

Dear Dr. Reyes:

In NuScale's letter, "NuScale Power Updated Response to Regulatory Information Summary (RIS) 2013-18 for Design Certification Application Submittal Date (NRC Project No. 0769)," dated March 10, 2014 (ML14069A546), you stated that the date for submitting NuScale's design certification application (DCA) will be delayed approximately one year to the second half of calendar year 2016. Subsequently, the U.S. Nuclear Regulatory Commission (NRC) verbally notified NuScale that the date to issue the NRC draft Design Specific Review Standard (DSRS) in the Federal Register for public comment would be delayed approximately one year to mid-2015. On March 21, 2014, NuScale submitted a letter to the NRC, "Design-Specific Review Standard for NuScale Power, LLC" (ML14084A377), essentially requesting that the NRC retain its original date for issuing the draft DSRS and providing the company's rationale for the request.

We have carefully considered NuScale's request that we maintain the original schedule for completing the DSRS despite the significant change in NuScale's application submittal schedule and the associated design changes. It is important to note that new reactor designs are judged against the regulations. While there are requirements in Title 10 of the *Code of Federal Regulations* (CFR) for you to address pertinent NRC guidance in your application, the fact remains that it is the regulations and not the guidance that will govern the acceptability of your design.

The concept of a DSRS was developed by the NRC as one means to improve the efficiency and effectiveness of our reviews and to include a risk-informed aspect in the reviews. The DSRS is a review standard developed for a specific reactor design based on specific design information, and is meant to assist the NRC staff in reviewing the DCA. In general, during pre-application interactions, the potential applicant presents a conceptual design to the staff to identify potential technical or policy challenges that may arise for the design. As the design matures towards near-finality, the staff begins to compare the design against the "Standard Review Plan (SRP) for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition" (NUREG-0800) to determine whether it would be advantageous to create a DSRS. Interactive meetings and discussions with the potential applicant may be held to allow the staff to better understand the plant design and to assist the staff in developing the DSRS. In other words, the details of the design must precede the content of the DSRS.

Once the draft DSRS is completed, it is published in the Federal Register for public comment. The staff incorporates the comments received from the public, as appropriate, and then issues the final DSRS for use by the NRC staff during review of the plant design. The staff will not use the final DSRS until a DCA is docketed. Also, the schedule for issuing the draft DSRS is influenced by the DCA submittal date and NRC resource availability. As stated in Part 2 of the Introduction to NUREG-0800, the NRC goal regarding a DSRS is to issue the draft DSRS about one year prior to the scheduled date of the applicant's DCA submittal. This is to allow for design maturity so that NRC staff has the latest design information when preparing the DSRS. This timing also provides an appropriate balance between addressing a reasonably mature design and giving ample opportunity for stakeholders to comment on the draft, and for the vendor to consider those comments in its application. The use of mature design information across related SRP and DSRS sections, especially for safety and/or risk significant structures, systems, and components is key to producing comprehensive review guidance.

NuScale notes in the letter that it does not believe that any of the design changes that have been made are of a nature that would result in changes to the approaches that would be described in the draft DSRS. Based on the public meeting that was held between NuScale and the NRC staff on May 27, 2014, regarding the proposed design changes, it is not apparent to our technical staff that the recent design changes described during the meeting would not require significant changes to the guidance. Additionally, the fact that the basic NuScale design continues to evolve indicates that the NuScale design maturity has not yet reached the desired balance point described above.

The NRC staff will continue to work with NuScale to address specific policy issues or unique areas for which NuScale would like to obtain an NRC decision prior to DCA submittal, and that may require extensive reviews, exemptions, or rulemaking. Those areas or proposals (such as plant or control room staffing and emergency planning zone sizing) can be submitted in Topical Reports. The NRC would perform an acceptance review on the report and, if found acceptable for review, would develop a Safety Evaluation Report for the submittal.

We appreciate NuScale's willingness and significant efforts to work with the NRC staff during the pre-application period. We will continue to hold pre-application meetings with NuScale on key topics to discuss plant design to facilitate our preparation of the draft DSRS at such time that the staff concludes that NuScale's design has reached sufficient maturity. Should you have any questions regarding this matter, I may be reached at 301-415-0561.

Sincerely,

/RA/

Michael E. Mayfield, Director
Division of Advanced Reactors and Rulemaking
Office of New Reactors

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Michael E. Mayfield, Director
Division of Advanced Reactors and Rulemaking
Office of New Reactors

Project No.: PROJ0769

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