

September 23, 2021

Docket No. 99902078

U.S. Nuclear Regulatory Commission
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SUBJECT: NuScale Power, LLC Submittal of Presentation Materials Entitled “SDAA Pre-Application Presentation: NuScale SDAA Topical Report – Treatment of DC Power in Safety Analysis (Open Session),” PM-106639, Revision 0

NuScale Power, LLC (NuScale) has requested a meeting with the NRC technical staff on September 29, 2021, to discuss the NuScale topical report “Treatment of DC Power in Safety Analysis.” The purpose of this submittal is to provide presentation materials to the NRC for use during this meeting.

The enclosure to this letter is the presentation entitled “SDAA Pre-Application Presentation: NuScale SDAA Topical Report – Treatment of DC Power in Safety Analysis (Open Session).”

This letter makes no regulatory commitments and no revisions to any existing regulatory commitments.

If you have any questions, please contact Rebecca Norris at 541-452-7539 or at RNorris@nuscalepower.com.

Sincerely,



Mark W. Shaver
Manager, Licensing
NuScale Power, LLC

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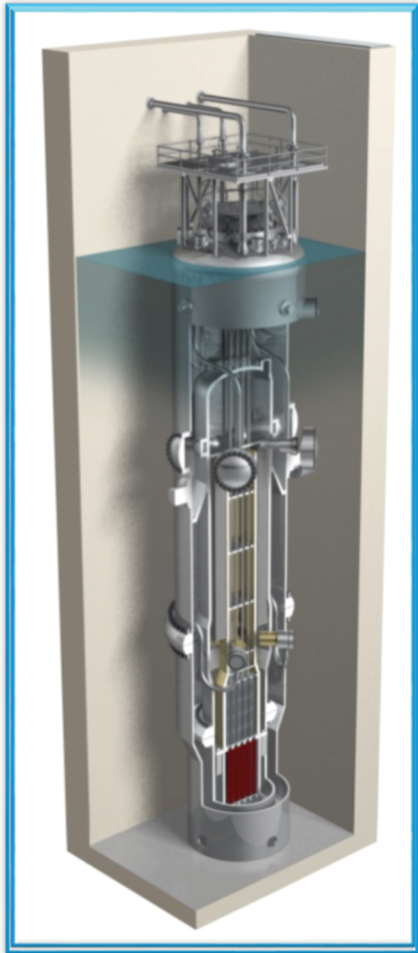
Enclosure: “SDAA Pre-Application Presentation: NuScale SDAA Topical Report – Treatment of DC Power in Safety Analysis (Open Session),” PM-106639

Enclosure:

“SDAA Pre-Application Presentation: NuScale SDAA Topical Report – Treatment of DC Power in Safety Analysis (Open Session),” PM-106639

SDAA Pre-Application Presentation

NuScale SDAA Topical Report Treatment of DC Power in Safety Analysis



September 29, 2021
(Open Session)

Presenters

Kristopher Cummings
Licensing Engineer

Meghan McCloskey
Thermal Hydraulic Engineer

Ben Bristol
Supervisor, System Thermal Hydraulics

Introductions & Opening Remarks

Meeting Purpose

- Pre-application engagement for topical report “Treatment of DC Power in Safety Analysis”, estimated submittal in May 2022 as communicated by letters dated June 17, 2021 and August 3, 2021.
- Provide NRC management and staff with a high-level overview of approach for treatment of electrical power supply in the SDAA Ch. 15 safety analysis.
- Solicit preliminary NRC staff feedback on proposed approach in future topical report submittal.

Overview

- NuScale is implementing a modified approach to the treatment of DC power supply in Ch. 15 design-basis events for the upcoming Standard Design Approval Application (SDAA).
 - Modified approach leverages the augmented quality DC power system design to eliminate event progressions with coincident loss of DC and AC power following turbine trip.
 - Treatment is consistent with identified design failure modes.
 - No change to loss of AC power timing assumptions.
- NuScale plans to use the topical report process to submit the identified approach for approval before implementation in the upcoming SDAA.

Acronyms

AC – alternating current

DC – direct current

NRC – Nuclear Regulatory Commission

SDAA – Standard Design Approval Application

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