

August 11, 2022

Docket No. 99902078

U.S. Nuclear Regulatory Commission
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SUBJECT: NuScale Power, LLC Submittal of Presentation Materials Entitled "Non-LOCA Topical Report Pre-Application Meeting," PM-120824, Revision 0 (Open Session)

NuScale Power, LLC (NuScale) has requested a meeting with the NRC technical staff on August 24, 2022, to discuss the Non-LOCA Topical Report.

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 nonproprietary version of the presentation entitled "Non-LOCA Topical Report Pre-Application Meeting."

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

If you have any questions, please contact Thomas Griffith at 541-452-7813 or tgriffith@nuscalepower.com.

Sincerely,



Mark W. Shaver
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Enclosure: "Non-LOCA Topical Report Pre-Application Meeting," PM-120824, Revision 0 (Open Session)

Enclosure:

“Non-LOCA Topical Report Pre-Application Meeting,” PM-120824, Revision 0 (Open Session)

NuScale Nonproprietary

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Non-LOCA Topical Report Pre-Application Meeting (Open Session)

August 24, 2022

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Acknowledgement and Disclaimer

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Agenda

- Purpose
- Power Uprate and Design Changes
 - Design change impacts to non-LOCA
 - Sample non-LOCA transient results
- Steam Generator-Decay Heat Removal System Capability
 - NIST-2 testing and validation
- Event Specific Analysis Changes
- Non-LOCA Topical Report Format
- Interface with Other SDAA Safety Analysis Topical Reports
- Re-evaluation of SER Conditions/Limitations

Purpose

- NRC Staff engagement provides opportunity for NuScale to share overview and context of:
 - Key design changes implemented between the Design Certification Application (DCA) [US600] design and the design for the Standard Design Approval Application (SDAA) [US460]
 - Preliminary identification of design change impacts to Chapter 15 safety analysis event progressions, phenomena, evaluation models (EM), and Non-LOCA Topical Report
 - NuScale's plan to integrate effects of design changes, EM impacts into Non-LOCA Topical Report
- Pre-application meeting is intended to promote acceptance of upcoming Non-LOCA Topical Report submittal, and ultimately the SDAA, on first submittal, by ensuring NRC staff reviewer understanding of design and testing changes since the DCA submittal

Terminology note: DCA design was the US600 plant, which included the 160 MWt core operated in the NPM-160 module. SDAA design is the US460 plant, which includes the 250 MWt core operating in the NPM-20 module.

Acronyms

DCA	Design Certification Application
EM	Evaluation Model
LOCA	Loss-of-Coolant Accident
LTR	Licensing Topical Report
NIST	NuScale Integral System Test Facility
NPM	Nuclear Power Module
SDAA	Standard Design Approval Application
SER	Safety Evaluation Report