

July 19, 2022

Docket No. 99902078

U.S. Nuclear Regulatory Commission  
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**SUBJECT:** NuScale Power, LLC Submittal of Presentation Materials Entitled "LOCA Topical Report Pre-Application Meeting," PM-120102, Revision 0 (Open Session)

NuScale Power, LLC (NuScale) has requested a meeting with the NRC technical staff on July 28, 2022, to discuss the (LOCA) Loss-of-Coolant Accident 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 "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](mailto:tgriffith@nuscalepower.com).

Sincerely,



Mark W. Shaver  
Manager, Licensing  
NuScale Power, LLC

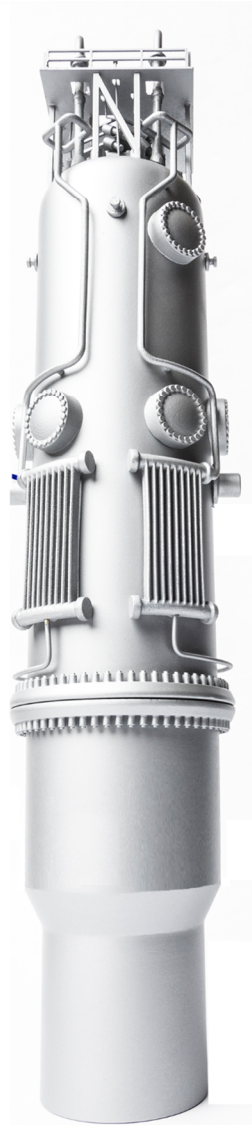
Distribution: Michael Dudek, NRC  
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Enclosure 1: "LOCA Topical Report Pre-Application Meeting," PM-120102, Revision 0 (Open Session)

**Enclosure:**

“LOCA Topical Report Pre-Application Meeting,” PM-120102, Revision 0 (Open Session)

NuScale Nonproprietary



# LOCA Topical Report Pre-Application Meeting

(Open Session)

July 28, 2022

Pravin Sawant – Supervisor, Code Validation

Megan McCloskey – Thermal Hydraulics

Thomas Griffith – Supervisor, Licensing

Paul Infanger – Licensing

## Acknowledgement and Disclaimer

This material is based upon work supported by the Department of Energy under Award Number DE-NE0008928.

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## Agenda

- Purpose
- Power Uprate and Design Changes
  - Overview
  - Operating Conditions
  - Module Protection System (MPS)
  - Emergency Core Cooling System (ECCS)
  - Containment (CNV)
- Standard Design Approval Application (SDAA) Safety Analysis Topical Reports
- Design Change Impacts
- Loss-of-Coolant Accident (LOCA) Topical Report
- Summary

## Purpose

- NRC Staff engagement provides opportunity for NuScale to share overview and context of:
  - Key design changes implemented between the Design Certification application (DCA) (NPM-160) design and design for Standard Design Approval application (SDAA) (NPM-20)
  - Preliminary identification of design change impacts to Chapter 15 safety analysis event progressions, phenomena, evaluation models (EM), and LOCA Topical Report
  - NuScale's plan to integrate effects of design changes, EM impacts into LOCA Topical Report
- Pre-application meeting is intended to promote acceptance of upcoming 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 (US600 plant) referred to as NPM-160 module.  
SDAA design (US460 plant) includes the CORE250B core design operated in the NPM-20 module.