

October 23, 2023

Docket No. 052-050

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
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11555 Rockville Pike  
Rockville, MD 20852-2738

**SUBJECT:** NuScale Power, LLC Submittal of Presentation Materials Entitled “NuScale Reactor Flange Tool Support Design Topical Report, TR-147226-P,” PM-152540, Revision 0 (Open Session)

NuScale Power, LLC (NuScale) has requested a meeting with the NRC technical staff on October 26, 2023, to discuss the NuScale Reactor Flange Tool Support Design.

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 “NuScale Reactor Flange Tool Support Design Topical Report, TR-147226-P.”

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

If you have any questions, please contact Wren Fowler at 541-452-7183 or at [sfowler@nuscalepower.com](mailto:sfowler@nuscalepower.com).

Sincerely,



Thomas Griffith  
Manager, Licensing  
NuScale Power, LLC

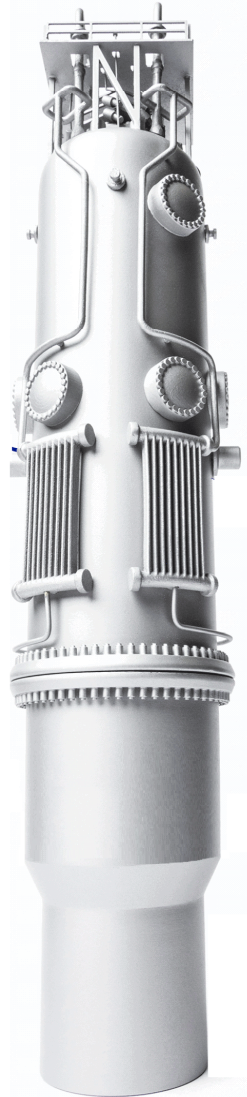
Distribution: Mahmoud Jardaneh, NRC  
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Enclosure 1: “NuScale Reactor Flange Tool Support Design Topical Report, TR-147226-P,” PM-152540, Revision 0 (Open Session)

**Enclosure 1:**

“NuScale Reactor Flange Tool Support Design Topical Report, TR-147226-P,” PM-152540,  
Revision 0 (Open Session)

NuScale Nonproprietary



# Pre-Application Presentation

October 2023

NuScale Reactor Flange Tool  
Support Design Topical Report,  
TR-147226-P

Open Session

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## Acknowledgement and Disclaimer

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## Agenda

- Open Session
  - Purpose
  - Background
  - Topical Report Layout

## Purpose

- Conduct pre-application engagement with NRC on upcoming reactor flange tool topical report
- Pre-application interaction promotes acceptance for review of the topical report by ensuring NRC staff understanding of the design, analysis, desired review schedule, and context of the topical report
- Pre-application engagement gives NRC staff opportunity to provide feedback on content and approach

## Background

- Describes the design and analysis of the reactor flange tool support (RFTS) for the US460 design
- US460 Standard Design Approval Application (SDAA)
  - Final Safety Analysis Report (FSAR) Section 3.8.4
    - Provides high-level description of the reactor flange tool
    - COL Item 3.8-1: “An applicant that references the NuScale Power Plant US460 standard design will provide the design and structural analysis of the reactor flange tool. In addition to analysis of the reactor flange tool, the applicant will provide structural analysis of the fuel in response to external forces when the reactor vessel is located in the reactor flange tool.”
- TR-147226-P provides the content to address the requirements of COL Item 3.8-1
- Topical report generically available for reference by COL applicants



## Topical Report Layout

- Introduction
- Background
- Design Description
- Seismic Analysis
- Fuel Seismic Analysis
- Structural Analysis
- Summary and Conclusions

## Acronyms

SDAA Standard Design Approval Application

SDA Standard Design Approval