

April 15, 2020

Project No. 99902078

U.S. Nuclear Regulatory Commission  
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Rockville, MD 20852-2738

**SUBJECT:** NuScale Power, LLC Submittal of Presentation Materials Entitled "NRC Presentation: NuScale Power, LLC, Standard Design Approval Application Significance Review Process," PM-0420-69680, Revision 0

NuScale Power, LLC (NuScale) has requested a meeting with the NRC technical staff on April 21, 2020, to discuss the NuScale significance review process applied to the Standard Design Approval Application (SDAA).

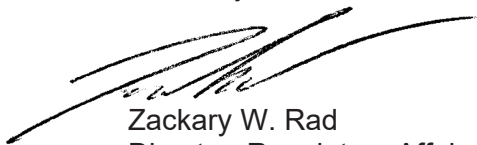
The NuScale significance review will highlight changes in the SDAA to assist the NRC in resource planning and provide a more focused and efficient review process.

The enclosure to this letter is the nonproprietary presentation entitled "NRC Presentation: NuScale Power, LLC, Standard Design Approval Application Significance Review Process," PM-0420-69680, Revision 0.

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

If you have any questions, please contact Rebecca Norris at 541-602-1260 or at [RNorris@nuscalepower.com](mailto:RNorris@nuscalepower.com).

Sincerely,



Zackary W. Rad  
Director, Regulatory Affairs  
NuScale Power, LLC

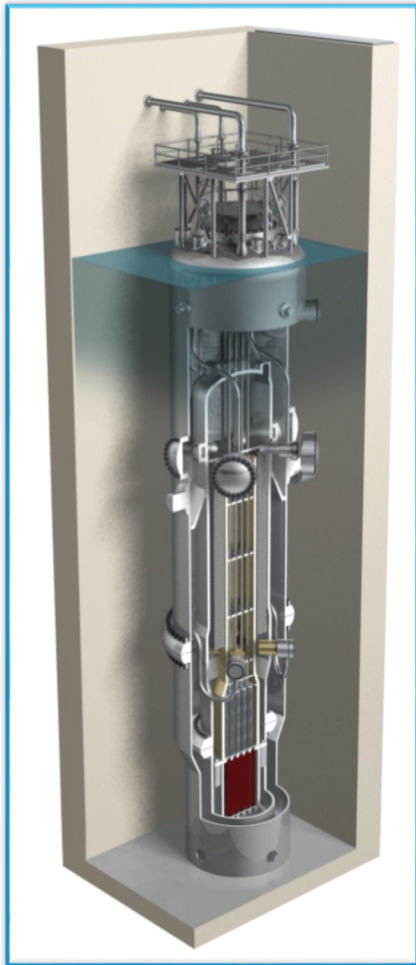
Distribution: Gregory Cranston, NRC, OWFN-8H12  
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Enclosure: "NRC Presentation: NuScale Power, LLC, Standard Design Approval Application Significance Review Process," PM-0420-69680, Revision 0

**Enclosure:**

“NRC Presentation: NuScale Power, LLC, Standard Design Approval Application Significance Review Process,” PM-0420-69680, Revision 0

# NRC Presentation



## NuScale Power, LLC, Standard Design Approval Application Significance Review Process

April 21, 2020

# Presenters

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**Rebecca Norris**  
Licensing Supervisor

**John Fields**  
Licensing Project Manager

**Karl Gross**  
Licensing Engineer

# Agenda

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## Public Session

- Standard Design Approval (SDA) application overview
- Scope and purpose of significance review process

## Proprietary Session

- Significance review process overview
- Significance review criteria
- Expert panel description
- Examples
- Conclusions

# Significance Review Process

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## Scope:

- Changes to sections of the SDA application FSAR will have significance reviews performed

## Purpose:

- Identify changes from the NRC-approved DCA FSAR
- Enhance understanding of scope of changes
- Identify more significant changes
- Provide input for NRC resource and planning
  - Significance review identification can provide input to NRC resource planning and scheduling by highlighting significant changes
- Improved efficiency in review process

# Significance Review Process

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## Standard Design Approval Application

- Incorporates design changes to:
  - Increase power level
  - Improve plant safety
  - Improve constructability, cost and efficiency
- All changes from the approved DCA FSAR are identified
- Changes are additionally categorized as significant or not significant to facilitate a more efficient review

# Significance Review Process

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## Significance Review Process Overview

- Uses NRC criteria from the following guidance documents
  - Regulatory Guide 1.187, “Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments,” Revision 1, May 2019.
  - NEI 96-07, “Guidelines for 10 CFR 50.59 Evaluations,” Revision 1, November 2000.
  - Appendix C, NEI 96-07, “Guideline for Implementation of Change Processes for New Nuclear Power Plants Licensed Under 10 CFR Part 52,” Revision 0 – Corrected, March 2014.
  - Appendix D, NEI 96-07, “Supplemental Guidance for Application of 10 CFR 50.59 to Digital Modifications,” Revision 0, November 2018.
  - NEI “10 CFR 50.59 Resource Manual,” Revision 1, October 2001.



# Acronyms

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AC – alternating current

BDBE – Beyond Design Basis Event

CFR – Code of Federal Regulations

COL – combined license

COLR – Core Operating Limits Report

DCA – Design Certification Application

FSAR – Final Safety Analysis Report

kV – kilovolts

MWt – Megawatts thermal

NEI – Nuclear Energy Institute

NRC – Nuclear Regulatory Commission

psia – pounds per square inch absolute

RAI – request for additional information

RPV – Reactor Pressure Vessel

RTP – Reactor Thermal Power

SDA – Standard Design Approval

TS – Technical Specifications

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