



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 9, 2019

MEMORANDUM TO: Andrea D. Veil, Executive Director
Advisory Committee on Reactor Safeguards

FROM: Anna Bradford, Deputy Director **/RA/**
Division of Licensing, Siting,
and Environmental Analysis
Office of New Reactors

SUBJECT: NUSCALE POWER, LLC, DESIGN CERTIFICATION
APPLICATION – PRELIMINARY SAFETY EVALUATION WITH
OPEN ITEMS FOR CHAPTER 15, "TRANSIENT AND ACCIDENT
ANALYSES"

On January 6, 2017¹, NuScale Power, LLC (NuScale) submitted its Design Certification Application (DCA) to the U.S. Nuclear Regulatory Commission (NRC) for review, approval, and granting of standard design certification for the NuScale Standard Plant Design. NuScale's letter is available in the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML17013A229.

The NRC staff's preliminary safety evaluation (SE) with open items (OIs) for Chapter 15, "Transient and Accident Analyses," is based on Chapter 15 of the NuScale DCA, Revision 2. This preliminary SE chapter includes numerous items characterized for the purpose of this SE chapter as Open Items (OIs). However, many of these issues are unresolved without a clearly defined path toward resolution identified at this time and may involve potential legal issues. For this reason, the staff anticipates that NuScale will make revisions throughout this chapter of the application. Accordingly, this preliminary SE chapter, while useful for illuminating the issues unique to the review of transient and accident analysis for the NuScale design, may not reflect the NuScale revised approach and associated NRC review of that revised approach. The staff provided a version of this preliminary SE chapter to support a meeting with the ACRS held on June 19-20, 2019, to discuss key issues related to this chapter and its associated topical reports. It should be noted that this preliminary SE reflects the staff evaluation as of June 18, 2019.

CONTACT: Rani Franovich, NRO/DNRL
301-415-7334

¹ The Design Certification Application was submitted via a transmittal letter dated December 31, 2016.

The NRC staff concludes that the preliminary SE with OIs does not contain any information exempt from public disclosure. However, the NRC will withhold the preliminary SE with OIs from public disclosure for ten business days to allow NuScale the opportunity to verify the staff's conclusion that the preliminary SE with OIs contains no such exempt information. Therefore, the NRC staff requests that the ACRS withhold the preliminary SE with OIs from public disclosure until the information has been released publicly in the Agencywide Documents Access and Management System.

Docket No. 52-048

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PRELIMINARY SAFETY EVALUATION WITH OPEN ITEMS FOR CHAPTER 15,
“TRANSIENT AND ACCIDENT ANALYSES”
DATED: JULY 9, 2019

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ADAMS Accession Nos.:

PKG: ML18201A159

MEMO: ML18201A160

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*via email

NRO-002

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NAME	RFranovich	MMoore	SLee	ABradford
DATE	7/9/2019	6/27/2019	7/9/2019	7/9/2019

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