



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

August 25, 2022

MEMORANDUM TO: Scott W. Moore, Executive Director  
Advisory Committee on Reactor Safeguards

FROM: Brian W. Smith, Director **/RA/**  
Division of New and Renewed Licenses  
Office of Nuclear Reactor Regulation

SUBJECT: NUSCALE POWER, LLC, SAFETY EVALUATION REPORT FOR  
LICENSING TOPICAL REPORT: TR 108553, REVISION 0,  
"FRAMATOME FUEL AND STRUCTURAL RESPONSE  
METHODOLOGIES APPLICABILITY TO NUSCALE"

By letter dated November 30, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21334A334), NuScale Power, LLC (NuScale), submitted licensing Topical Report (TR) - 108553, Revision 0, "Framatome Fuel and Structural Response Methodologies Applicability to NuScale: Supplement 1 to TR-0116-20825-P-A, Revision 1 and Supplement 1 to TR 0716 50351-P-A, Revision 1" to the U.S. Nuclear Regulatory Commission (NRC or the Commission). NuScale requested that the NRC review and approve their proposed bases for an extension to the range of applicability for the fuel analysis and structural response methodologies approved in TR-0116-20825-P-A, Revision 1, "Applicability of AREVA Fuel Methodology for the NuScale Design," (ML18040B306) and TR-0716-50351-P-A, Revision 1, "NuScale Applicability of AREVA Method for the Evaluation of Fuel Assembly Structural Response to Externally Applied Forces," (ML19353A883) to the operating domain of the NuScale Power Module at a higher-rated power level.

Based on its review of NuScale's TR, the NRC staff prepared a TR Safety Evaluation (ADAMS Accession No. ML22210A064). The SE ADAMS accession number is being provided to ACRS to support a briefing by the NRC staff if requested by the Committee.

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

Docket No. 99902078

CONTACT: Getachew Tesfaye, NRR/DNRL  
301-415-8013

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DATED: August 25, 2022

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**ADAMS Accession Nos.:**

**PKG: ML22210A063**

**MEMO: ML22223A048**

**SER (Non-public): ML22210A064**

**\*via email**

**NRR-043**

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