



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

July 28, 2020

MEMORANDUM TO: Michael I. Dudek, Chief  
New Reactor Licensing Branch  
Division of New and Renewed Licenses  
Office of Nuclear Reactor Regulation

FROM: Bruce M. Baval, Project Manager **/RA/**  
New Reactor Licensing Branch  
Division of New and Renewed Licenses  
Office of Nuclear Reactor Regulation

SUBJECT: AUDIT SUMMARY FOR THE REGULATORY AUDIT OF  
THE NUSCALE POWER, LLC, DESIGN CERTIFICATION  
APPLICATION, EMERGENCY CORE COOLING SYSTEM  
BORON REDISTRIBUTION ISSUE AND APPLICABLE  
DESIGN CHANGES

The U.S. Nuclear Regulatory Commission (NRC) staff conducted an audit initiated on March 4, 2020, and ending on June 26, 2020, to review a NuScale Power, LLC (NuScale), design change associated with an instrumentation and controls setpoints and/or logic to address an issue related to boron redistribution that was identified in their design certification application. The design change also addressed an associated return to power analyses associated with Section 15.0.6 of the NuScale design. The audit took place via the Electronic Reading Room, through video teleconferences, and with meetings at the NRC's offices in Rockville, Maryland.

The enclosed audit summary describes the actions performed, the content of the review, the audit participants, and the audit's observations.

Docket No. 52-048

Enclosures:

1. Audit Summary – (Non-Proprietary)
2. Audit Summary – (Proprietary)

cc w/encl.: DC NuScale Power, LLC, Listserv (w/o Enclosure 2)

CONTACT: Bruce M. Baval, NRR/DNRL  
301-415-6715

SUBJECT: AUDIT SUMMARY FOR THE REGULATORY AUDIT OF THE NUSCALE POWER, LLC, DESIGN CERTIFICATION APPLICATION, EMERGENCY CORE COOLING SYSTEM BORON REDISTRIBUTION ISSUE AND APPLICABLE DESIGN CHANGES DATED: JULY 28, 2020

**DISTRIBUTION:**

PUBLIC  
 BBavol, NRR  
 MDudek, NRR  
 MJohnson, NRR  
 CSmith, NRR  
 MDudek, NRR  
 RPatton, NRR  
 ABuford, NRR  
 SRosenberg, NRR  
 VCusumano, NRR  
 JJohnston, NRR  
 SKrepel, NRR  
 RidsNrrDnrl  
 RidsNrrDss  
 RidsEdoMailCenter  
 RidsAcrcMailCenter  
 RidsOgcMailCenter  
 RidsNrrMailCenter

**ADAMS Accession Nos.:****Pkg: ML20160A224****Letter: ML20160A247****Enclosure No. 1: ML20160A250****Enclosure No. 2: ML20160A248****\*via email****NRR-106**

<b>OFFICE</b>	NRR/DNRL/NRLB:PM	NRR/DNRL/NRLB:LA	NRR/DNRL/NRLB:BC
<b>NAME</b>	BBavol	CSmith*	MDudek*
<b>DATE</b>	07/16/2020	07/17/2020	07/16/2020
<b>OFFICE</b>	NRR/DEX/EMIB:BC	NRR/DRA/APLC:BC	NRR/DSS/SNRB:BC
<b>NAME</b>	ABuford*	SRosenberg*	RPatton*
<b>DATE</b>	07/14/2020	07/16/2020	07/16/2020
<b>OFFICE</b>	NRR/DSS/STSB:BC	NRR/DEX/EICA:BC	NRR/DSS/SNSB:BC
<b>NAME</b>	VCusumano*	JJohnston*	SKrepel*
<b>DATE</b>	07/10/2020	07/14/2020	07/16/2020

**OFFICIAL RECORD COPY**