

January 28, 2014

Dr. José N. Reyes, Jr.  
Vice President, Regulatory Affairs (Acting)  
NuScale Power, LLC  
1100 NE Circle Blvd., Suite 200  
Corvallis, Oregon 97330

SUBJECT: AUDIT PLAN TO REVIEW NUSCALE SMALL MODULAR REACTOR DESIGN DATA AND SPECIFICATIONS TO ASSIST NRC STAFF IN PREPARING DESIGN SPECIFIC REVIEW STANDARDS FROM JANUARY 1, 2014 TO MARCH 31, 2014.

Dear Dr. Reyes:

During the period from January 1, 2014, to March 31, 2013, U.S. Nuclear Regulatory Commission (NRC) staff plans to periodically review documents located at the NuScale local office located at 11333 Woodglen Drive, Rockville, MD, 20852. Review of these documents will not be used to reach a regulatory decision but to assist in developing the Design Specific Review Standards (DSRS) that assist the NRC staff in reviewing the design when submitted to the NRC for review. Enclosed is an audit plan pertaining to this audit.

Should you have any questions regarding this matter, I may be reached at 301-415-1560.

Sincerely,

*/RA/*

Gregory V. Cranston, Acting Branch Chief  
Small Modular Reactor Licensing Branch 2  
Division of Advanced Reactors and Rulemaking  
Office of New Reactors

Enclosure: Audit Plan

Project No.: PROJ0769

Dr. José N. Reyes, Jr.  
Vice President, Regulatory Affairs (Acting)  
NuScale Power, LLC  
1100 NE Circle Blvd., Suite 200  
Corvallis, Oregon 97330

SUBJECT: AUDIT PLAN TO REVIEW NUSCALE SMALL MODULAR REACTOR DESIGN  
DATA AND SPECIFICATIONS TO ASSIST NRC STAFF IN PREPARING  
DESIGN SPECIFIC REVIEW STANDARDS

Dear Dr. Reyes:

During the period from January 1, 2014, to March 31, 2014, U.S. Nuclear Regulatory Commission (NRC) staff plans to periodically review documents located at the NuScale local office located at 11333 Woodglen Drive, Rockville, MD, 20852. Review of these documents will not be used to reach a regulatory decision but to assist in developing the Design Specific Review Standards (DSRS) that assist the NRC staff in reviewing the design when submitted to the NRC for review. Enclosed is an audit plan pertaining to this audit.

Should you have any questions regarding this matter, I may be reached at 301-415-1560.

Sincerely,

*/RA/*

Gregory V. Cranston, Acting Branch Chief  
Small Modular Reactor Licensing Branch 2  
Division of Advanced Reactors and Rulemaking  
Office of New Reactors

Enclosure: Audit Plan

Project No.: PROJ0769

DISTRIBUTION:  
PUBLIC

<b>ADAMS ACCESSION NO.: ML14028A456</b>		*via email	<b>NRO-002</b>
OFFICE	PM:NRO/DARR/SMRLB2	PM:NRO/DARR/SMRLB2	BC:NRO/DARR/SMRLB2
NAME	SShaikh	GCranston	ABradford GCranston for
DATE	1/28/2014	1/28/2014	1/28/2014

**OFFICIAL RECORD ONLY**

## AUDIT PLAN TO REVIEW NUSCALE SMALL MODULAR REACTOR SYSTEM DESCRIPTIONS AND FUNCTIONAL DIAGRAMS

### **A. Background**

NuScale has provided draft sets of systems descriptions and functional diagrams for selected systems of their small modular reactor (SMR) at their local office in Rockville, MD. These are identified below.

The purpose of this audit is to review internal NuScale draft documentation of their SMR design to allow Office of New Reactors (NRO) technical staff to gain a better understanding of the SMR design during the pre-application phase of activities. This will assist the NRO staff in the development of the NuScale DSRS. The DSRS will be used to facilitate review of the NuScale design when NuScale submits their application. During the audit and interactions with the applicant, there may be NRC requests for information developed, which may be part of future formal correspondence.

### **B. Regulatory Audit Bases**

Per Office Instruction NRO-REG-108, a regulatory audit is a planned, license or regulation-related activity that includes the examination and evaluation of primarily non-docketed information. A regulatory audit is conducted with the intent to gain understanding, to verify information, and/or to identify information that will require docketing to support the basis of the licensing or regulatory decision.

### **C. Regulatory Audit Scope or Methodology**

The audit will be an ongoing activity during the period from January 1, 2014, to March 31, 2014, to allow NRO technical staff, on an as needed basis, to go to the local NuScale office to review the documents listed in the table below. The specific audits will be scheduled and coordinated through the NRO NuScale Project Manager and NRO project management will be represented at each audit session. The audit will be conducted in several phases and each audit phase is expected to be a few hours.

### **D. Information and Other Material Necessary for the Regulatory Audit**

The audit scope and agenda define documentation that is required for the staff to complete the audit. In addition, the staff requests the availability of the documents described below.

1. Reactor Module Mechanical Interface
2. Reactor Module Assembly
3. Containment Module
4. Liquid Radwaste Management P&ID
5. Gaseous Radwaste Management P&ID
6. Solid Waste Management P&ID
7. Decay Heat Removal System P&ID
8. Normal Control Room HVAC P&ID
9. Reactor Building HVAC P&ID
10. Reactor Component Cooling Water System P&ID
11. Condensate and Feedwater System P&ID
12. Condensate Polishing Regeneration System P&ID
13. Condensate Polishing System P&ID
14. Circulating Water System P&ID
15. Fire Protection System P&ID

**E. Special Requests**

The NRC requests that NuScale provide a working space for the duration of the audit at the NuScale Rockville Office.

**F. Audit Team**

The audit team will consist of one or more NRO technical staff and an NRO Project Manager.

**G. Logistics**

Date: January 1, 2014, to March 31, 2014 (Multiple, non-consecutive dates)  
Time: To be determined on a case by case basis.  
Location: NuScale Offices, Rockville, Maryland  
Point-of-Contact: Steve Mirsky, NuScale Power.  
Gregory Cranston, NRC

**H. Deliverables**

Within 90 days of completion of the final phase of the audit, the audit team will generate an internal audit results summary report (ARSR). The ARSR will document any information required for the NRO staff to support completion of the NuScale DSRS. Though proprietary information will be reviewed, the NRO staff will generate a non-proprietary audit summary. This summary will provide a list of documents audited by the audit team.