

May 21, 2013

U.S. Nuclear Regulatory Commission  
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**SUBJECT:** NuScale Power, LLC, Response to Notice of Violation – NRC Inspection Report No. 99901418/2013-201 and Notice of Violation

**REFERENCES:** Nuclear Regulatory Commission Inspection Report No. 99901418/2013-201 and Notice of Violation, April 18, 2013

NuScale Power, LLC (NuScale) hereby submits its response to NRC Inspection Report 99901418/2013-201 and Notice of Violation received electronically on April 22, 2013. The enclosed response addresses the Notice of Violation 99901418/2013-201-01 in accordance with the directions provided in the Inspection Report.

NuScale acknowledges and does not contest the Notice of Violation. NuScale appreciates the thorough inspection of the NuScale implementation of quality assurance processes and procedures for testing activities performed at Stern Laboratories in Hamilton, Canada, in support of the NuScale design certification effort. NuScale continues to work toward completion of the required actions as documented in the enclosure.

If you have any questions, please do not hesitate to contact me at (503) 360-0540 or ewallace@nuscalepower.com.

Sincerely,



Edward G. Wallace  
Vice President, Regulatory Affairs

Enclosure: NuScale Power Response to Notice of Violation (NRC Inspection Report No. 99901418/2013-201)

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**NUSCALE POWER, LLC RESPONSE TO  
NRC NOTICE OF VIOLATION 99901418/2013-201-01**

**Content of the NOV**

Criterion VII, "Control of Purchased Material, Equipment, and Services," of Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Title 10 of the Code of Federal Regulations (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," states in part that, "Measures shall be established to assure that purchased material, equipment, and services, whether purchased directly or through contractors and subcontractors, conform to the procurement documents. These measures shall include provisions, as appropriate for source evaluation and selection, objective evidence of quality furnished by the contractor or subcontractor, inspection at the contractor or subcontractor source, and examination of products upon delivery. Documentary evidence that material and equipment conform to the procurement requirements shall be available."

NuScale Quality Management Plan, NP-PL-0200-200, Revision 1, dated February 2013, Section 2.7.1, states in part that, "Prospective suppliers of safety-related items and services are evaluated to assure that only qualified suppliers are used. Qualified suppliers are audited on a triennial basis."

Stern's Quality Procedure QP-02-03, "Qualification and Certification of Quality Audit Personnel," Revision 0, dated November 2012, Section 3.4 states that "the Lead Auditor shall participate in a minimum of five quality assurance audits within three years prior to the date of qualification. One of these shall be to the requirements of 10 CFR Part 50 Appendix B, ASME NQA-1, or other nuclear related quality system standard and have performed within a year prior to qualification."

Contrary to the above, as of March 8, 2013, NuScale failed to provide objective evidence of quality furnished by the contractor that was evaluated to ensure that only qualified suppliers are used. Specifically:

1. NuScale failed to provide objective evidence that Stern complied with procurement requirements prior to allowing Stern to initiate the testing services as required by NP-PL-0200-200. The NuScale audit report of Stern did not provide the scope of the review for any of the criteria; did not identify the parameters of the audit; and did not provide any information or conclusion verifying that Criterion XI, "Test Control," and Criterion XII, "Control of Measuring & Test Equipment," of Appendix B to 10 CFR Part 50 were audited adequately.
2. NuScale, which has the overall responsibility for the quality of CHF testing, failed to provide objective evidence that Stern's lead auditor met the qualification requirements of Stern's procedure QP-02-03 prior of [sic] conducting an internal audit and commercial-grade surveys.

NuScale Power does not contest the violation.

**1. The Reason for the Violation (reason for the violation, or, if contested, the basis for disputing the violation or severity level)**

NuScale has identified two factors that contributed to the examples cited in the violation, both of which are related to the execution of the supplier evaluation and qualification process used for the procurement of the subject test program. The factors identified are

- a. NuScale contracted a third-party to conduct the supplier audit of Stern in February 2012. At the time of the NRC inspection, NuScale provided the NRC with an audit summary report issued in March 2012, which was the same report NuScale provided to Stern upon completion of the audit. The audit summary report did not include all the supporting audit

documentation that was available in the full supplier audit package, as it is not standard NuScale protocol to provide this to suppliers; however, this should have been provided to the NRC. The supporting audit documentation provides a description of the parameters of the audit and criteria audited. However, this documentation does not include adequate objective evidence of the evaluation of Criteria XI and XII as NuScale did not fully specify the scope of the audit. NuScale did not review all objective evidence prior to initiating safety-related test activities.

- b. The February 2012 supplier audit did identify deficiencies with Stern's lead auditor qualification process, but NuScale did not verify the adequacy of the associated corrective actions prior to the initiation of safety-related test activities.

These issues were the result of procedural weaknesses within NuScale's supplier quality program related to management of third-party auditors and audit finding closure.

**2. Corrective Actions Completed (corrective action steps that have been taken and the result achieved)**

NuScale has completed a revision to the Test Control procedure, NP-EP-1102-267, incorporating additional checks to ensure that the supplier qualification is complete prior to beginning safety-related test activities. NuScale test engineers have completed a review of the updated procedure as part of each individual's training plan.

Subsequent to the NRC inspection, NuScale verified that Stern has taken steps to ensure qualified lead auditors are used for all audits and commercial grade surveys in compliance with their procedures to support safety-related test activities. NuScale verified that Stern has completed additional training to clarify their requirements regarding the need to use a qualified lead auditor to conduct commercial grade surveys. NuScale has verified that Stern has contracted an independent, qualified lead auditor to perform these functions.

**3. Corrective Actions to Prevent Recurrence (corrective steps that will be taken to avoid further violations)**

NuScale has identified the following corrective actions to prevent recurrence.

- a. Revise Supplier Qualification and Evaluation, NP-QP-0703-235, and Procurement of Items and Services, NP-QP-0702-256, to
  - i. improve procedural guidance for the management of qualified suppliers, including the identification, application, and release of restrictions for suppliers.
  - ii. clarify procedural guidance on the use and management of third-party quality assurance auditors, including scope clarity, documentation, and closure.
- b. Conduct training on the revised procedures.
- c. Perform an extent-of-condition evaluation on similar supplier audits for testing services to identify any programmatic weaknesses in NuScale's supplier qualification program.

**4. Date Full Compliance Will Be Achieved**

- a. The revision of Procurement of Items and Services, NP-QP-0702-256, will be complete by July 19, 2013.
- b. The revision of Supplier Qualification and Evaluation, NP-QP-0703-235, will be complete by July 19, 2013.
- c. Training to the revised procedures will be complete by August 23, 2013.
- d. An extent-of-condition evaluation on similar, completed supplier audits for testing services, including the initiation of additional actions as necessary, will be complete by July 31, 2013.
- e. NuScale quality assurance verification of closure on all items will be complete by September 23, 2013.