



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, DC 20555 - 0001**

June 27, 2019

Ms. Margaret M. Doane  
Executive Director for Operations  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT:     RESPONSE TO CHAPTER 2, "SITE CHARACTERISTICS AND SITE PARAMETERS," AND CHAPTER 17, "QUALITY ASSURANCE AND RELIABILITY ASSURANCE," OF THE U.S. NUCLEAR REGULATORY COMMISSION STAFF'S SAFETY EVALUATION REPORT WITH OPEN ITEMS RELATED TO THE CERTIFICATION OF THE NUSCALE POWER, LLC, SMALL MODULAR REACTOR**

Dear Ms. Doane:

During the 664<sup>th</sup> meeting of the Advisory Committee on Reactor Safeguards, June 5-7, 2019, we reviewed the staff's April 17, 2019, letter regarding disposition of Conclusion 4 in our February 21, 2019, Interim Letter concerning Chapter 2, "Site Characteristics and Site Parameters," and Chapter 17, "Quality Assurance and Reliability Assurance," of the safety evaluation report with open items associated with the NuScale design certification application.

The Committee's interim letter included a recommendation that the applicant's Open Design Items (ODIs) for structures, systems and components covered by Chapter 17 requirements needed to be identified for eventual closure. The April 17, 2019, response to this recommendation from the Director of the Office of New Reactors described the role of the quality assurance program in assuring closure and concluded that further identification of ODIs was not necessary. Within the context of the NuScale review, ODIs are unverified design assumptions.

The Committee requested an informational meeting with the staff to better understand the generic process for ensuring subsequent closure of the set of unverified design assumptions that remain open at the time of design certification and are important to the finding of reasonable assurance of adequate protection. This set may or may not be within the scope of the quality assurance program described in Chapter 17 and represent only a small portion of what NuScale identifies as ODIs. This informational meeting was held with the Committee on June 6, 2019.

Based on the information provided by the staff during the meeting, the staff's review process prior to design certification should identify those unverified design assumptions that are important to the reasonable assurance finding. This will help ensure that required closure prior to operability of the affected structure, system or component is identified and included as part of

the design certification licensing basis. It is important that this process is not limited to items covered by the quality assurance program.

We appreciate the responsiveness of staff to our questions concerning their review process.

Sincerely,

**/RA/**

Peter C. Riccardella  
Chairman

**REFERENCES:**

1. Advisory Committee on Reactor Safeguards, "Interim Letter: Chapter 2 and 17 of the NRC Staff's Safety Evaluation Report with Open Items Related to the Certification of the NuScale Small Modular Reactor," February 21, 2019 (ML19052A046).
2. U.S. Nuclear Regulatory Commission, "NRO Response to ACRS Letter on Safety Evaluation of the NuScale Power LLC, Chapter 2 and 17," April 17, 2019 (ML19072A215).

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