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November 12, 2012

Cindy Bladey, Chief, Rules, Announcements, and Directives Branch  
Office of Administration, Mail Stop: TWB-05-B01M  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

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**SUBJECT: NuScale Power, LLC (NuScale) comments on NRC Draft Standard Review Plan 19.3, "Proposed Revision Treatment of Non-Safety Systems for Passive Advanced Light Water Reactors." Docket ID NRC-2012-0237.**

In a Federal Register Notice dated October 12, 2012, the U.S. Nuclear Regulatory Commission (NRC or The Commission) solicited public comment on a proposed new section of NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition." The proposed new section of the Standard Review Plan (SRP) is Section 19.3, "Regulatory Treatment of Non-Safety Systems (RTNSS) for Passive Advanced Light Water Reactors." NuScale's comments are provided in Attachment 1 of this letter.

Sincerely,

Douglas A. Neve

for Edward G. Wallace  
Vice President, Regulatory Affairs

cc: Amy E. Cabbage, NRO

Attachment:  
NuScale Comments on NRC Draft Standard Review Plan 19.3

SUPSI Review Complete  
Template = ADM-013

E-RIDS = ADM-03  
Call = A. Cabbage (rec)

NuScale Comments on NRC Draft Standard Review Plan 19.3

Section Title/Location	Page	Comment	Proposed Change
Area of Review	19.3-3	<p>SRP 19.3 uses the terms large release frequency (LRF) and large early release frequency (LERF). Usage of LRF and LERF should be made consistent with Option 2C of SECY-12-0081.</p> <p><u>Discussion:</u> Option 2C of SECY-12-0081 recommended "Transition from LRF to LERF at or before initial fuel load; discontinue regulatory use of LRF (and CCFP) thereafter." The Commission approved the staff's Option 2C in a letter dated October 22, 2012.</p>	<p>RTNSS criterion C should use LERF as a criterion.</p> <p>"C. SSC functions relied on under power-operating and shutdown conditions to meet the Commission's safety goal guidelines of a core damage frequency (CDF) of less than <math>1 \times 10^{-4}</math> each reactor year and a large early release frequency (LERF) of less than <math>1 \times 10^{-6}</math> each reactor year."</p>
"Area of Review – Identification of SSCs in the Scope of the RTNSS Program"	19.3-2 and 19.3-3	<p>The draft SRP discusses Structures, Systems and Components (SSC) functions relied on under power-operating and shutdown conditions to meet the safety goals of CDF and LRF. However, it does not specify the scope of the PRA to be utilized for this analysis with respect to operating modes and internal/external events.</p>	<p>The SRP should address the scope used to support the safety goals, including operating modes and internal/external events.</p>
"Area of Review – Identification of SSCs in the Scope of the RTNSS Program," Item 4	19.3-10	<p>SRP 19.3 uses the terms large release frequency (LRF) and large early release frequency (LERF). Usage of LRF and LERF should be made consistent with Option 2C of SECY-12-0081.</p>	<p>Item 4 should read.</p> <p>"The PRA and Severe Accident staff reviews the results of the focused PRA sensitivity studies and confirms that non-safety-related design features or functional capabilities with mitigation capability sufficient to reduce the CDF or LERF below the NRC safety goals when credited in the focused PRA have been identified as risk-significant and included in the scope of the RTNSS program (RTNSS "C")."</p>
"Area of Review – Identification of SSCs in	19.3-11	<p>Item 5c. discusses the safety goals and refers to LRF.</p>	<p>Item 5c. should be changed to read "Does the initiating event significantly</p>

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the Scope of the RTNSS Program"			affect the CDF and the <u>LERF</u> ?"
"Area of Review – Regulatory Treatment of SSCs in the RTNSS Program"	19.3-12	Change reference to "LERF" from "LRF"	"1. The staff reviews the results of the focused PRA sensitivity studies and confirms that the applicant has included requirements in the TSs, in accordance with 10 CFR 50.36(c)(2)(ii)(D), for non-safety-related design features or functional capabilities with mitigation capability sufficient to reduce the CDF or <u>LERF</u> below the NRC safety goals when credited in the focused PRA."
Area of Review	19.3-2 2 <sup>nd</sup> para. 19.3-3, item 3 19.3-8 19.3-9	The SRP discusses RTNSS "A" thru "E." The SRP states that programmatic treatment of these SSCs is discussed in the appropriate SRP sections. In particular, various sections of the SRP address determinations about whether SSCs belong in the Reliability Assessment Program.	The SRP should clarify how functional requirements for RTNSS SSC will be treated consistently within SRP sections listed in Appendix A. Only functional requirements relevant to RTNSS SSCs should be applied.
"Area of Review – Augmented Design Standards" under the heading Acceptance Criteria	19.3-7	The SRP states "1. Safety functions required in the post 72-hour period following an accident can be accomplished with onsite equipment and supplies."  It does not specify how long the safety functions are required after the 72 hours.	"1. The staff will verify that the applicant has met the following acceptance criterion: Safety functions <i>required</i> in the post 72-hour period <u>up to seven days</u> following an accident can be accomplished with onsite equipment and supplies."
"Area of Review – Identification of SSCs in the Scope of the RTNSS Program"	19.3-7	Criterion 2 states, "...the non-safety-related equipment that is relied upon to ensure that these safety functions are successful in the <i>72-hour period up to seven days following an accident</i> [emphasis added] (RTNSS B SSCs).	
"Area of Review – Augmented Design Standards"	19.3-12	However, the SRP also states that "1. The staff reviews the applicant's determination of safety functions that must be satisfied to maintain the plant in a safe stable shutdown condition in the period between three and seven days following an accident and the methods for achieving those safety functions."	

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SRP Section entitled "Area of Review – Identification of SSCs in the Scope of the RTNSS Program"	19.3-11	Item 7b. the number should be 0.1 and not 10 and should be consistent by referring to early containment failure.	Change item 7b. to read "The conditional containment <u>early</u> failure probability determined from the Level II PRA is less than or equal to <del>10</del> 0.1."