

## Comment Response Matrix Chapter 12

<b>Comment #</b> <i>(Affiliation: NuScale Power, LLC)</i>	<b>DSRS Section</b>	<b>Paragraph, Item, or Page</b>	<b>Comment / Basis</b>	<b>Commenter Recommendation</b>	<b>NRC Staff Technical Resolution</b>
497	12.2, p.5 12.3- 12.4, p.12	Throughout documents.	The NuScale does not include a Steam Generator Blowdown System.	NuScale recommends deleting this item.	In DSRS 12.2 Page 12.2-5 Item 29, and DSRS 12.3-12.4 Page 12.3-12.4-12 Item 53, Added "or the equivalent NuScale system". The staff understands that NuScale does not intend to have a "Formal" Steam Generator Blow Down System. However, some system will need to be present to control SG chemistry during normal and AOO conditions. These criteria will apply to that system.
498	12.2	II. Acceptance Criteria; Requirements; #7 (page 12.2-6)	The requirement sentence includes two verbs ("estimate" and "calculate").	NuScale recommends deleting the word "calculate".	In DSRS Section 12.2, the staff changed "estimate" to "calculate", consistent with the current version of the SRP.
499	12.3- 12.4, p. 4, p.14, p. 21,p. 23	Throughout documents.	There are no radiation monitors inside of containment. Containment radiation monitors will not provide input to any safety related functions in the MPS or PPS. Furthermore, containment radiation monitors are presently not selected as a PAM variable.	A waiver/exemption from the requirement to have in-containment radiation monitoring is required.	The staff will review the DCA application to see how the design features meet the requirements in 10 CFR 50.34(f)(2)(xvii) and 10 CFR 50 Appendix E Section (VI)(2)(a)(i)(5). Alternatively, if NuScale chooses to request an exemption from these regulations, the staff will review the exemption request.

<b>Comment #</b> <i>(Affiliation: NuScale Power, LLC)</i>	<b>DSRS Section</b>	<b>Paragraph, Item, or Page</b>	<b>Comment / Basis</b>	<b>Commenter Recommendation</b>	<b>NRC Staff Technical Resolution</b>
			See EC- E022-2311, Section 3.1.13		
500	12.3-12.4, Page 25	Technical Rationale 8. Compliance with the requirements of 10 CFR Part 50, Appendix E, Section VI.2(a)(i), ensures the provision of accurate and timely data to needed to determine core and coolant system conditions well enough to assess the extent or likelihood of core damage and to determine the conditions inside the	Paragraph contains extra "to"	NuScale recommends deletion of extra "to"	Staff agrees with the suggestion and has clarified the text in DSRS section 12.3-12.4.

<b>Comment #</b> <i>(Affiliation: NuScale Power, LLC)</i>	<b>DSRS Section</b>	<b>Paragraph, Item, or Page</b>	<b>Comment / Basis</b>	<b>Commenter Recommendation</b>	<b>NRC Staff Technical Resolution</b>
		containment building well enough to assess the likelihood and consequence of its failure.			
501	12.3-12.4, Page 25	Technical Rationale 8. Compliance with the requirements of 10 CFR Part 50, Appendix E, Section VI.2(a)(i), ensures the provision of accurate and timely data to needed to determine core and coolant system conditions well enough to assess the extent or likelihood of core	NuScale does not have a containment building. The reactors have individual containment vessels.	NuScale recommends the NRC replace "building" with "vessels"	Staff agrees with the suggestion and has clarified the text.

<b>Comment #</b> <i>(Affiliation: NuScale Power, LLC)</i>	<b>DSRS Section</b>	<b>Paragraph, Item, or Page</b>	<b>Comment / Basis</b>	<b>Commenter Recommendation</b>	<b>NRC Staff Technical Resolution</b>
		damage and to determine the conditions inside the containment building well enough to assess the likelihood and consequence of its failure.			
502	12.3-12.4, Page 29	The primary shielding for fission neutrons and gammas from the operating reactors is provided by the common containment , refueling and spent fuel pool.	The containment vessels do not provide shielding. The reactors also have individual containment vessel	NuScale recommends the NRC rewrites sentence: The primary shielding for fission neutrons and gammas from the operating reactors is provided by the reactor pool.	The staff intent is to emphasize to the reviewer, the connected nature of the water in the pools providing shielding. DSRS Section 12.3-12.4 Page 12.3-12.4-31 Item 6, was changed to: “The primary shielding for fission neutrons and gammas from the operating reactors is provided by the reactor pool, which is common for containment vessel cooling, refueling and spent fuel pools.”
503	12.3-12.4, page 8	Review Interfaces 21. Section 6.2.2, “Containme	The NuScale design does not have a containment heat removal system.	NuScale recommends deletion of this paragraph	The staff disagrees. The reactor pool, and the secondary side decay heat removal systems are both part of the containment heat removal systems.

<b>Comment #</b> <i>(Affiliation: NuScale Power, LLC)</i>	<b>DSRS Section</b>	<b>Paragraph, Item, or Page</b>	<b>Comment / Basis</b>	<b>Commenter Recommendation</b>	<b>NRC Staff Technical Resolution</b>
		nt Heat Removal Systems,” as it relates to the Design features provided: to minimize ORE due to operation, inspection and containment heat removal SSCs; to maintain ORE to personnel accessing containment ALARA; and to control radiation exposure in order to maintain the qualification of mechanical, electrical, and electronic equipment.			

<b>Comment #</b> <i>(Affiliation: NuScale Power, LLC)</i>	<b>DSRS Section</b>	<b>Paragraph, Item, or Page</b>	<b>Comment / Basis</b>	<b>Commenter Recommendation</b>	<b>NRC Staff Technical Resolution</b>
504	12.5	DSRS Section III, #4, Page 12.5-20	This item (4) "Using the guidance contained in RGs 1.8 and 8.8, ...RGs 1.8 and 8.8." is identical to item 3.	NuScale recommends deletion of item 4	The staff agrees. Paragraph 4, in DSRS section 12.5 Section III, which was a duplicate of Paragraph 3 in that same section, has been deleted.
505	12.5	DSRS Section III, #10, Page 12.5-20	The second sentence references 10 CFR 20.1501 (b) for calibration performance and frequencies. Section (b) addresses contamination surveys. Section c addresses calibration. See Notes	Change reference to 10 CFR 20.1501 "c"	Changed the reference to 1501(c), where it occurred in reference to calibration, within DSRS 12.5