

NuScaleDCRaisPEm Resource

From: Cranston, Gregory
Sent: Thursday, August 03, 2017 11:25 AM
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Subject: Request for Additional Information No. 127, RAI 8909 (17.04)
Attachments: Request for Additional Information No. 127 (eRAI No. 8909).pdf

Attached please find NRC staff's request for additional information concerning review of the NuScale Design Certification Application.

Please submit your technically correct and complete response within 60 days of the date of this RAI to the NRC Document Control Desk.

If you have any questions, please contact me.

Thank you.

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Licensing Branch 1 (NuScale)
Division of New Reactor Licensing
Office of New Reactors
U.S. Nuclear Regulatory Commission
301-415-0546

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Request for Additional Information No. 127 (eRAI No. 8909)

Issue Date: 08/03/2017

Application Title: NuScale Standard Design Certification - 52-048

Operating Company: NuScale Power, LLC

Docket No. 52-048

Review Section: 17.04 - Reliability Assurance Program (RAP)

Application Section:

QUESTIONS

17.04-3

Section II.A.5 of Standard Review Plan (SRP) Section 17.4, "Reliability Assurance Program" lists the following acceptance criterion for an application:

"The application should contain a comprehensive list of RAP [structures, systems and components]SSCs, within the scope of the [design certification] DC application, based on the methodology that meets acceptance criterion A.3 of this SRP section."

The staff has reviewed the list of risk significant SSCs provided in Table 17.4-1 of the final safety analysis report (FSAR). The staff has compared the information in Table 17.4-1 of the FSAR with the list of risk significant SSCs contained in Table 19.1-20 of the FSAR, "Listing of Candidate Risk Significant Structures, Systems, and Components - (Full Power, Single Module) Level 1 Probabilistic Risk Assessment", and observed that although the combustion turbine generator (CTG) is identified as a candidate risk significant SSC in Table 19.1-20 of the FSAR. It is not included as a risk significant SSC in Table 17.4-1 in the FSAR. In addition, the following statement, indicating that the combustion gas turbine should be considered risk significant, is made in section 19.1.7 of the FSAR.

"There are no additional module-specific components that are found to be risk significant in the multiple module PRA than are identified as risk significant in the single module PRA. The site AC power sources, i.e., the shared backup diesel and CTG, are risk significant because of the importance of the site-wide LOOP initiator".

In light of the inconsistencies described above, please explain why the CTG is not included as a risk significant SSC in Table 17.4-1 of the FSAR.