

NuScaleDCRaisPEm Resource

From: Cranston, Gregory
Sent: Tuesday, July 25, 2017 9:46 AM
To: RAI@nuscalepower.com
Cc: NuScaleDCRaisPEm Resource; Lee, Samuel; Chowdhury, Prosanta; Li, Chang; Markley, Anthony; Dias, Antonio
Subject: RE: Request for Additional Information No. 106, RAI 8919 (9.2.7)
Attachments: Request for Additional Information No. 106 (eRAI No. 8919).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.

Gregory Cranston, Senior Project Manager
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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From: Cranston, Gregory

Created By: Gregory.Cranston@nrc.gov

Recipients:

"NuScaleDCRaisPEm Resource" <NuScaleDCRaisPEm.Resource@nrc.gov>

Tracking Status: None

"Lee, Samuel" <Samuel.Lee@nrc.gov>

Tracking Status: None

"Chowdhury, Prosanta" <Prosanta.Chowdhury@nrc.gov>

Tracking Status: None

"Li, Chang" <Chang.Li@nrc.gov>

Tracking Status: None

"Markley, Anthony" <Anthony.Markley@nrc.gov>

Tracking Status: None

"Dias, Antonio" <Antonio.Dias@nrc.gov>

Tracking Status: None

"RAI@nuscalepower.com" <RAI@nuscalepower.com>

Tracking Status: None

Post Office: HQPWMSMRS08.nrc.gov

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Options

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Request for Additional Information No. 106 (eRAI No. 8919)

Issue Date: 07/25/2017

Application Title: NuScale Standard Design Certification - 52-048

Operating Company: NuScale Power, LLC

Docket No. 52-048

Review Section: 09.02.07 - Site Cooling Water System (NuScale SMR design)

Application Section: 9.2

QUESTIONS

09.02.07-3

10 CFR 52.47(a)(2) requires that a standard design certification applicant provide a description and analysis of the structures, systems, and components (SSCs) of the facility, with emphasis upon performance requirements, the bases, with technical justification therefor, upon which these requirements have been established, and the evaluations required to show that safety functions will be accomplished.

10 CFR 52.47(c)(2) requires that a standard design certification of "a nuclear power reactor design that ... uses simplified, inherent, passive, or other innovative means to accomplish its safety functions must provide an essentially complete nuclear power reactor design except for site-specific elements such as the service water intake structure and the ultimate heat sink, and must meet the requirements of 10 CFR 50.43(e)."

FSAR Tier 2, Section 9.2.7.2.1 states that the cooling tower basin is sized to provide for several hours of operation without any makeup water supply. No further information is provided to substantiate such statement.

The applicant is requested to:

- clarify the size of the basin and the duration of the operation without water makeup, and
- identify the source of the makeup water.