

March 14, 2019 Docket No. 52-048

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk One White Flint North 11555 Rockville Pike Rockville, MD 20852-2738

SUBJECT: NuScale Power, LLC Submittal of Resolution Plans for Module Protection System

Actuation Logic Changes Related to Initiation of Decay Heat Removal System and

Emergency Core Cooling System

REFERENCES: 1. Summary of the February 19, 2019, Public Meeting with NuScale Power, LLC, to Discuss NuScale Power LLC's Design Changes to the Decay Heat Removal

System and Emergency Core Cooling System Actuation Logic (ML19056A289)

2. Letter from NuScale Power, LLC to Nuclear Regulatory Commission, "NuScale Power, LLC Submittal of the NuScale Standard Plant Design Certification

Application, Revision 2," dated October 30, 2018 (ML18311A006)

During a February 19, 2019 public teleconference (Reference 1) with Sam Lee, Omid Tabatabai and other members of the NRC Staff, NuScale Power, LLC (NuScale) discussed a proposed path forward for resolution of certain follow-up items from the discussion of NuScale's design changes to the decay heat removal system and emergency core cooling system actuation logic presented in Reference 2. As a result of this discussion, NuScale submits the proposed closure plan for these changes to the plant design (see Attachment 1).

This letter makes no regulatory commitments and no revisions to any existing regulatory commitments.

If you have any questions, please feel free to contact Ms. Carrie Fosaaen at 541-452-7126 or at cfosaaen@nuscalepower.com

Sincerely,

Zackary W. Rad

Director, Regulatory Affairs NuScale Power, LLC

Distribution: Samuel Lee, NRC, OWFN-8H12

Gregory Cranston, NRC, OWFN-8H12 Omid Tabatabai, NRC, OWFN-8H12

Attachment 1: "NuScale Closure Plan for Module Protection System (MPS) Actuation Logic Changes

Related to Initiation of Decay Heat Removal System (DHRS) and Emergency Core

Cooling System (ECCS)"



NuScale Closure Plan for Module Protection System (MPS) Actuation Logic Changes Related to Initiation of Decay Heat Removal System (DHRS) and Emergency Core Cooling System (ECCS)

March 19, 2019

Overview

The plant safety system actuation logic provided by the MPS is being revised to support operational ease during startup of a reactor. Additionally, an uncredited ECCS initiation signal is being modified so that it will provide Type B post-accident parameter indication only.

Description of Changes

- The existing DHRS actuation logic will be divided into two distinct initiations.
 - o Isolation of the secondary system steam generators by closure of steam and feedwater valves.
 - o Decay Heat Removal initiation by opening of the DHRS valves.
- Removal of uncredited ECCS actuation on low reactor pressure vessel level.
- Reanalysis of transients and accidents affected by the initiation logic changes.
- Revision of relevant FSAR Tier 1 and Tier 2 sections, and Technical Specifications to reflect the modified design.

Implementation Process and Progress

#	Task	Predecessor Activities	Forecast Completion	Status
1	Completed design work and design reviews		2/20/19	Completed
2	Modify engineering design documents	1	3/14/19	Forecast
3	Complete confirmatory transient and accident re-analyses	1, 2	7/9/19	
Submit changes to the NRC for consideration				
4	FSAR and Technical Specifications	2	4/15/19	
5	Advanced Sensor Topical Report	2	5/15/19	
6	Instrument Setpoint Methodology Topical Report	2	5/15/19	
7	Chapter 15 Update Submission	3	7/31/19	