CARBON FREE
POWER PROJECT
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LO-141696

June 09, 2023

Docket No. 99902052

U.S. Nuclear Regulatory Commission
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SUBJECT: NuScale Power, LLC Submittal on Behalf of CFPP LLC Carbon Free Power Project (CFPP) Combined License Application (COLA) Presentation Entitled "CFPP Multi-Module License Structure," PM-141695-NP, Revision 0

REFERENCE: CFPP LLC letter entitled, "License Structure for the Carbon Free Power Project Multi-Module NuScale Power Plant," dated May 24, 2023.

On May 24, 2023, the Carbon Free Power Project (CFPP) transmitted a letter (Reference) informing the NRC Staff of the license structure that will be requested for the multi-module CFPP small modular reactor (SMR) nuclear power plant.

This letter transmits the presentation material for the NRC public meeting to be held on June 15, 2023. The purpose of this presentation is to discuss the license structure that will be requested for the CFPP. In addition, this presentation will provide an opportunity for discussion and feedback related to the CFPP license structure selection.

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

If you have any questions, please contact Susan Baughn at 541-452-7319 or at sbaughn@nuscalepower.com.

Sincerely,

John Volkoff
Manager, Combined License Applications
NuScale Power, LLC
COLA Support on behalf of CFPP LLC

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Enclosure 1: “CFPP Multi-Module License Structure”, PM-141695-NP, Revision 0, nonproprietary

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"CFPP Multi-Module License Structure," PM-141695-NP, Revision 0, nonproprietary

Carbon Free Power Project (CFPP) Combined License Application (COLA) Presentation

CFPP Multi-Module License Structure

June 15, 2023

CFPP Team

Leadership

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Project Director
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Agenda

- Purpose / Objective
- Background
- Commission Papers
- Selection – CFPP License Structure
- Areas of Consideration
- Questions

Purpose / Objective

- **Provide the NRC with an overview of the CFPP license structure**
  - CFPP submitted “License Structure for the Carbon Free Power Project Multi-Module NuScale Power Plant,” on May 24, 2023 (ML23144A247)
- **Address Staff questions and allow Staff to provide feedback on the CFPP license structure**
- **Identify areas for follow-up discussion**

Background

- **CFPP COLA**
  - First license application for a multi-module small modular reactor (SMR) nuclear power plant to undergo NRC licensing review
  - NuScale design: co-location of six reactors (i.e., NuScale Power Modules [NPMs]) within a common reactor building with other shared support features
- **License structure history**
  - Multi-module facilities raise the issue of how best to structure the license(s)
    - How many licenses
    - How to address shared structures, systems, and components (common SSC)

Commission Papers

- **SECY-10-0034, "Potential Policy, Licensing, and Key Technical Issues for Small Modular Nuclear Reactor Designs"**
  - NRC Staff identified the structure of a license for multi-module SMRs as a potential policy issue
  - Staff focused on the effective duration of the license "particularly when one module can begin operation while other modules are being built and installed"

Commission Papers

- **SECY-11-0079, "License Structure for Multi-Module Facilities Related to Small Modular Nuclear Power Reactors"**
  - Staff proposed several license structure alternatives:
    - Single facility license
    - Master facility license and individual reactor module licenses
    - Individual reactor module licenses, with two variations for addressing common SSC
  - NRC Staff tentatively recommended individual reactor module licenses as the preferred approach
    - Did not exclude any of the options

Commission Papers

- **SECY-14-0095, "Status of the Office of New Reactors Readiness to Review Small Modular Reactor Applications"**
  - Identified need for an applicant to identify a preferred license structure
    - Once identified, Staff could proceed to finalize the licensing approach
  - CFPP letter and this meeting intended to allow NRC Staff to proceed prior to COLA review

Selection – CFPP License Structure

- **License structure for CFPP**
  - Separate COL for each module with common SSC addressed in license appendix incorporated into each COL
    - Similar to Alternative 3b in SECY-11-0079
- **Basis**
  - Will ensure full license duration for each module
  - Lower risk and regulatory burden

Areas of Consideration

- **CFPP identified several areas for further consideration in Staff's finalization of the license structure and contents:**
  - Format and content of the Common SSC Appendix
    - Operational programs – included in the NPM-1 license only?
  - Common inspections, tests, analyses, and acceptance criteria (ITAAC)
    - CFPP COL ITAAC will include ITAAC associated with common SSC and activities that support multiple NPMs
    - Separate COLs for each NPM allow these common ITAAC to be clearly assigned to the lead module's license
  - Others?

Questions?

Acronyms

ACR	Acronym
CFPP	Carbon Free Power Project
COL	Combined License
COLA	Combined License Application
ITAAC	Inspections, Tests, Analyses, and Acceptance Criteria
NPM	NuScale Power Module
NRC	Nuclear Regulatory Commission
SECY	Secretary of the Commission papers known as SECY-papers
SMR	Small Modular Reactor
SSC	Structures, Systems, and Components