

June 15, 2023

Docket No. 99902052

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 on Behalf of CFPP LLC Carbon Free Power Project (CFPP) Combined License Application (COLA) Presentation Entitled "Operator Licensing and Cold License Plan," PM-141947-NP, Revision 0
- **REFERENCES:** 1. NuScale Power, LLC Submittal of Carbon Free Power Project (CFPP), Combined License Application (COLA), Presentation Material, Entitled "Follow-up Discussion Regarding NuScale Operator Licensing Training Program Timeline," PM-121919, Revision 0 (ML22230D004)
  - 2. NuScale Power, LLC Submittal on behalf of Carbon Free Power Project, LLC Entitled "Carbon Free Power Project (CFPP) Combined License Application (COLA) Presentation, Operator Licensing and Cold License Plan," PM-130734-NP, Revision 0 (ML22335A558)

NuScale Power, LLC and CFPP LLC have requested a meeting with the NRC technical staff on June 22, 2022, to continue discussion on operator licensing during both cold and hot phases.

This meeting follows previous public meetings between CFPP and the NRC technical staff regarding Operator Licensing on August 31, 2022 (Reference 1), and December 15, 2022 (Reference 2). During the last meeting, the strategy for addressing operator licensing in the CFPP COLA was discussed along with the proposed changes to hot and cold licensing requirements for operator licensing and training programs.

The purpose of this letter is to submit the enclosed "Operator Licensing and Cold License Plan" (Enclosure 1) for the staff's review. This presentation will provide an update on the CFPP COLA strategy for operator licensing, and the status of industry guidance document updates. Additionally, the exemptions needed in the CFPP COLA for operator licensing will be discussed.

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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

- Distribution: Michael Dudek, NRC Omid Tabatabai, NRC Thomas Hayden, NRC
- Enclosure 1: "Operator Licensing and Cold License Plan," PM-141947-NP, Revision 0, nonproprietary



#### Enclosure 1:

"Operator Licensing and Cold License Plan," PM-141947-NP, Revision 0, nonproprietary

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



### **Operator Licensing and Cold License Plan**

June 22, 2023

PM-141947-NP

Revision: 0



**NuScale Nonproprietary** 

### **CFPP** Team

#### Leadership

Scott Head Regulatory Affairs Manager CFPP

Glenn Neises CFPP Owner's Engineer Nuclear Director Burns & McDonnell

Ken Rach CFPP Owner's Engineer MPR

Pete Kissinger Director Nuclear Fleet Operations Strategy & Services Xcel Energy Nuclear Services

Eric Woods COLA Project Manager Fluor

#### Licensing

John Volkoff Manager, Combined License Applications NuScale Power

Susan Baughn Supervisor, Licensing NuScale Power

Beth Brewer Licensing Engineer 4 NuScale Power

Matthew Featherston Nuclear Licensing Lead Fluor

#### **Technical Experts**

Pat Leary (Presenter) Senior Reactor Operator 5 NuScale Power

Doug Bowman Manager, Services NuScale Power



## Agenda

- Purpose
- Industry Guidance Document Update
- CFPP COLA Section 13.2 (Training) Strategy
- CFPP COLA Exemptions
- Questions

### Purpose

- Provide update on changes to hot and cold licensing requirements for operator licensing and training programs
- Provide update on strategy for addressing cold licensing phase in the CFPP COLA
- Discuss exemptions needed for operator licensing in the CFPP COLA



## Industry Guidance Document Update

- NuScale tracking changes to three industry guidance documents to improve alignment to Advanced Nuclear Reactors (ANRs)
- NEI 23-01, "Operator Cold License Training Plan for Advanced Nuclear Reactors"
- ACAD 08-001, "The Process for Initial Accreditation of Training in the Nuclear Power Industry"
- ACAD 10-001, "Guidelines for Initial Training and Qualification of Licensed Operators"



# **CFPP COLA Section 13.2 Strategy**

- NEI Guidance
- NEI 23-01 replaces NEI 06-13A for ANRs
  - Has been issued and is with staff for review
  - Covers cold licensing phase
  - Hot licensing will be covered in ACAD 10-001

#### CFPP COLA

- NEI 23-01 will not be approved in time to use in the CFPP COLA
- Section 13.2 will have stand-alone description of the cold license path
  - Aligns with NEI 23-01 with one difference



# **CFPP COLA Section 13.2 Strategy**

### INPO Guidance

- ACAD 08-001, "The Process for Initial Accreditation of Training in the Nuclear Power Industry"
  - Allows NuScale to be directly accredited for any plant that uses the NuScale training program
  - INPO internal review underway

#### • CFPP COLA

- CFPP COLA written to allow for NuScale direct accreditation or for CFPP accreditation
- Intent is for NuScale to become directly accredited and CFPP would fall under the NuScale Training Academy



7 PM-141947-NP Revision: 0

# **CFPP COLA Section 13.2 Strategy**

### INPO Guidance

- ACAD 10-001, "Guidelines for Initial Training and Qualification of Licensed Operators"
  - Will apply to future NuScale hot licensing
  - Update proposed to create new sections for ANRs (NuScale)

### CFPP COLA

- Not anticipated that ACAD 10-001 changes will be approved in time to use in the CFPP COLA
- Section 13.2 will have stand-alone description of the hot license path



- Current strategy is to develop the CFPP COLA with necessary exemptions, then remove the exemptions once not required
- CFPP COLA exemptions will address four subject areas

#### Control Room Staffing

- This exemption will allow use of the NuScale Control Room Staffing Plan, TR-0420-69456, to set minimum control room staffing (previously NRC approved)
- Regulations addressed by this exemption
  - 10 CFR 50.54(m)(2)(i): Minimum licensed operator staffing requirements
  - 10 CFR 50.120: Training and qualification of nuclear power plant personnel; which requires a program for training and qualifying plant personnel, including the STA position



- Alternate methods for plant walk-through
  - This exemption will allow use of alternate methods to perform the plant walk-through part of the exam while the facility is still under construction
  - Regulations addressed by this exemption
    - 10 CFR 55.45(b): Operating test location requirements
    - NUREG-1021, Section 3.2: Developing Job Performance Measures
  - NUREG-1021, Section 3.7: Alternatives for In-Plant Job Performance Measures at Plants Under Construction
- Modeled after AP1000 exemption for cold license plan



- Use of CAS for Significant Control Manipulations
- This exemption will allow use of a CAS for performing the necessary control manipulations instead of PRS
- Regulation addressed by this exemption
  - 10 CFR 55.31(a)(5): Requires an applicant for an operator or senior operator license to provide evidence that the applicant, as a trainee, has successfully manipulated the controls of either the facility for which the license is sought or a plant-referenced simulator that meets the requirements of 10 CFR 55.46(c)
- Modeled after AP1000 exemption for cold license plan



- Exemption allowing alternate exam methodology
- This exemption will allow use of the alternate exam methodology previously submitted
- Regulations addressed by this exemption
  - 10 CFR 55.40(a) and (b): NUREG-1021 written and operating test requirements
  - Specific NUREG-1021 guidance for Written, Walk-through, and Simulator Demonstrative exam sections
- Alternate exam methodology submitted to NRC in July of 2020 (ML20195A587)
  - Alternate methodology impacted by other exemption areas
- NuScale has formally requested review by the first quarter of 2026 (ML22335A489)



## **Questions?**

**NuScale Nonproprietary** 

### Acronyms

- ANR Advanced Nuclear Reactor
- CAS Commission-Approved Simulator
- CFPP Carbon Free Power Project
- COLA Combined License Application
- INPO Institute of Nuclear Power Operations
- NEI Nuclear Energy Institute
- NRC Nuclear Regulatory Commission
- PRS Plant-Referenced Simulator
- STA Shift Technical Advisor