



December 01, 2022

Docket No. 99902052

U.S. Nuclear Regulatory Commission  
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**SUBJECT:** 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

- REFERENCES:**
1. NuScale Power, LLC Submittal of Presentation Materials Entitled "Follow up Discussion Regarding Changes to NuScale Operator Licensing Training Program Entry Requirements," PM-114472, Revision 0 (ML22056A285)
  2. 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)

NuScale Power, LLC (NuScale) has requested a meeting with the NRC technical staff on December 15, 2022, to discuss Operator Licensing and Cold License Plan.

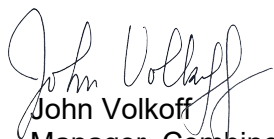
NuScale has had public meetings with the NRC technical staff regarding Operator Licensing on March 23, 2022 (Reference 1) and August 31, 2022 (Reference 2). During these meetings the Operator Training Accreditation Process and Operator Licensing Training Program timeline were discussed.

The purpose of this letter is to submit the enclosed "Carbon Free Power Project (CFPP) Combined License Application (COLA) Presentation, Operator Licensing and Cold License Plan" (Enclosure 1) for the staff's review. This presentation will continue the discussion about the operator licensing path, discuss the strategy for describing the cold licensing phase in the CFPP COLA, and share proposed changes to hot and cold licensing requirements for operator licensing and training programs.

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  
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Greg Cranston, NRC

Enclosure 1: "Carbon Free Power Project (CFPP) Combined License Application (COLA) Presentation, Operator Licensing and Cold License Plan," PM-130734-NP, Revision 0

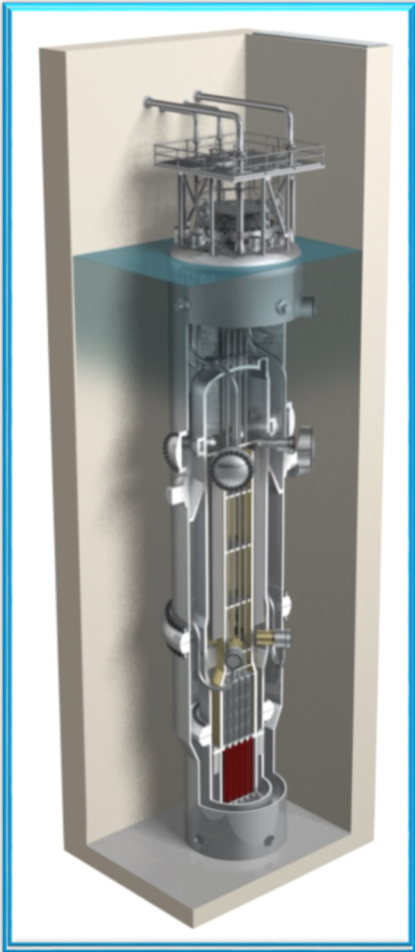


LO-130736

**Enclosure 1:**

Carbon Free Power Project (CFPP) Combined License Application (COLA) Presentation, Operator Licensing and Cold License Plan," PM-130734-NP, Revision 0

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



## Operator Licensing and Cold License Plan

December 15, 2022

# CFPP Team

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## Leadership

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

Scott Head  
*Regulatory Affairs Manager  
CFPP*

Ken Rach  
*CFPP Owner's Engineer  
MPR*

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

Dan Stenger  
*Attorney  
Hogan Lovells US LLP*

## Licensing

John Volkoff  
*Manager, Combined License  
Applications  
NuScale Power*

Susan Baughn  
*Supervisor, Licensing  
NuScale Power*

Beth Brewer  
*Licensing Engineer 3  
NuScale Power*

Matthew Featherston  
*Nuclear Licensing Lead  
Fluor*

Eric Woods  
*COLA Project Manager  
Fluor*

## Technical Experts

Pat Leary (Presenter)  
*Senior Reactor Operator 5  
NuScale Power*

Doug Bowman  
*Supervisor, Plant Operations  
NuScale Power*

# Agenda

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- **Purpose**
- **CFPP COLA Section 13.2 Strategy**
- **Operator Licensing Submittals**
- **Interim Guidance Status**
- **Industry Guidance Document Changes**
- **Questions**

# Purpose

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- **Discuss options for describing cold licensing phase in the CFPP COLA**
- **Check-in on two operator licensing path documents NuScale previously submitted**
  - NuScale operator licensing exam methodology
  - Learning Objective Based Knowledge, Skills and Abilities Catalog
- **Discuss anticipated NRC interim guidance to operator licensing process during cold licensing**
- **Discuss proposed changes to hot and cold licensing requirements for operator licensing and training programs**

# CFPP COLA Section 13.2 Strategy

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- **Plans for addressing operator licensing in Chapter 13.2, Training Program Description**
- COL content in recent new nuclear plant utilized NEI 06-13A, “Template for an Industry Training Program Description”
  - Entire document was completely incorporated by reference
  - Included all training programs required by 10 CFR 50.120 (All required Systematic Approach to Training (SAT) based programs), and 10 CFR 55.4 (Licensed Operators)
  - For operator licensing the guidance also included both hot and cold licensing guidance



# CFPP COLA Section 13.2 Strategy

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- **NEI Guidance**

- Evolutions in plant design and operator staffing no longer align with last revision to NEI 06-13A
- A revision to NEI guidance is in progress by a joint working group
- Improved alignment to Advanced Design Reactors (ADRs)
- Likely to become stand-alone guidance that only covers cold licensing phase
  - Hot licensing will be covered in ACAD 10-001

- **CFPP COLA**

- NEI 06-13A revision may not be ready for incorporation into CFPP COLA
- Current strategy is to develop CFPP COLA with “stand-alone” description of cold license path
  - May be replaced by incorporating by reference new guidance, when available

# Operator Licensing Submittals

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- **Status of NuScale Operator License Path Submittals**
  - Operator Exam Methodology
    - Submitted LO-0620-68757 on July 13, 2020
    - Methodology will not change with new SDA
  - Learning Objective Based Knowledge, Skills and Abilities Catalog
    - Put into controlled reading room on September 10, 2020 (Draft SMR LOB K and A Section 1, Section 2)
    - Will be updated in 2023 to reflect SDA US460 changes
    - Change summary can be made available to facilitate review
- **Discuss review timeline and workflow**
  - Letter submitted (LO-130735) requesting review of the catalog by 1<sup>st</sup> Qtr 2025 and exam methodology by 1<sup>st</sup> Qtr 2026

# Interim Guidance Status

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- **NuScale has been tracking and participating in draft 10 CFR 53 rulemaking discussion for Advanced Design Reactors**
- The 10 CFR 53 rulemaking is not anticipated to be complete prior to the CFPP COLA submittal
- **During previous discussions it was identified that interim guidance for operator licensing process during plant construction phase may become available**

# Interim Guidance Status

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- **Additional rulemaking is scheduled to remove the need for exemptions for operator licensing at plants under construction**
- FRN Jan 2021, Alignment of Licensing Process and Lessons Learned from New Reactor Licensing, docket 2009-0196
- Possible revision to SRP Chapter 13.2.1
- **Current strategy is to develop the CFPP COLA with necessary exemptions, then remove the exemptions once the rulemaking is completed**
- **Is there any update to this information available?**

# Industry Guidance Document Changes

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- **NuScale seeking changes to three industry guidance documents to improve alignment to ADRs**
- NEI 06-13A, “Template for an Industry Training Program Description”
- ACAD 08-01, “The Process for Initial Accreditation of Training in the Nuclear Power Industry”
- ACAD 10-001, “Guidelines for Initial Training and Qualification of Licensed Operators”

# Industry Guidance Document Changes

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- **NEI 06-13A, “Template for an Industry Training Program Description”**
  - New document to provide specific guidance for ADR operator licensing during cold licensing phase
    - Eliminate hot license training program descriptions
    - Hot licensing will be covered in ACAD 10-001
  - Add specific definition for ADRs
  - Revise the Crew Cumulative Nuclear Power Plant Experience requirements to meet smaller crew sizes
  - Create a path for direct SRO using Associates Degree
  - Revise the standard to include flowcharts to establish eligibility, to better align with other industry guidance

# Industry Guidance Document Changes

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- **ACAD 08-01, “The Process for Initial Accreditation of Training in the Nuclear Power Industry”**
  - Direct accreditation of a vendor training program
  - Otherwise, largely unchanged

# Industry Guidance Document Changes

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- **ACAD 10-001, “Guidelines for Initial Training and Qualification of Licensed Operators”**
- Specific guidance for ADR operator license during hot licensing phase
  - Add a specific definition for Advanced Design Reactors
- Revised education and experience requirements for eligibility for ADRs
  - Create a path for direct SRO using Associates Degree
- Also elimination of cold license/construction phase training program description
  - Cold licensing will be covered in new NEI document



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# Questions?

# Acronyms

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ADR	Advanced Design Reactors
CFPP	Carbon Free Power Project
COLA	Combined License Application
FRN	Federal Register Notice
INPO	Institute of Nuclear Power Operations
LOB	Learning Objective Based
NEI	Nuclear Energy Institute
NRC	The U.S. Nuclear Regulatory Commission
SAT	Systematic Approach to Training
SDA	Standard Design Approval
SMR	Small Modular Reactor
SRO	Senior Reactor Operator
SRP	Standard Review Plan