



March 22, 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) Entitled, "Carbon Free Power Project (CFPP) Regulatory Engagement Plan For Early Construction," PL-135470-P, PL-135470-NP, Revision 0

REFERENCES:

1. U.S. Nuclear Regulatory Commission Summary Of The September 13, 2022, Observation Public Meeting To Discuss The Carbon Free Power Project Plans To Submit A Limited Work Authorization Request In Support Of The Carbon Free Power Project Combined License Application, date September 23, 2022 (ML22264A160)
2. U.S. Nuclear Regulatory Commission Summary Of The January 26, 2023, Observation Public Meeting With The Department Of Energy And Nuscale Power, LLC To Discuss The Carbon Free Power Project Plans For Early Construction Activates At Idaho National Laboratory, dated February 15, 2023 (ML23037A869)

During the pre-application engagement meetings held on September 13, 2022 (Reference 1) and January 26, 2023 (Reference 2), the Carbon Free Power Project (CFPP) presented to the staff, proposed licensing approaches to facilitate early construction activities at the CFPP site. Based on the feedback received from the NRC staff and Department of Energy during and following these meetings, the planned licensing approach will comprise a combination of: (1) an exemption from 10 CFR 50.10(c) as allowed under 10 CFR 50.12; and (2) an LWA requested as the first part of a "phased COLA" in accordance with 10 CFR 50.10(d) and 10 CFR 2.101(a)(9).

The purpose of this letter is to provide information related to the submission of the exemption request and LWA application for the CFPP. Enclosed for the staff's review is the CFPP's regulatory engagement plan for early construction that includes the planned regulatory approach and defines interactions, roles, and responsibilities to enhance communication and reduce regulatory uncertainty.

A proprietary and non-proprietary version are enclosed. An Affidavit is attached to request withholding of the proprietary version.

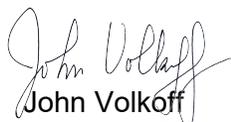
Enclosure 1 is the proprietary version of "Carbon Free Power Project (CFPP) Regulatory Engagement Plan For Early Construction," PL-135470-P, Revision 0. NuScale requests the proprietary version be withheld from public disclosure in accordance with the requirements of 10 CFR § 2.390. The enclosed affidavit (Enclosure 3) supports this request.

Enclosure 2 is the nonproprietary version of the document.

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

If you have any questions, please contact Kyra Perkins at 541-452-7208 or at kperkins@nuscalepower.com.

Sincerely,

A handwritten signature in black ink that reads "John Volkoff". The signature is written in a cursive style with a large initial "J".

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Enclosure 1: "Carbon Free Power Project (CFPP) Regulatory Engagement Plan For Early Construction," PL-135470-P, Revision 0, proprietary version

Enclosure 2: "Carbon Free Power Project (CFPP) Regulatory Engagement Plan For Early Construction," PL-135470-NP, Revision 0, nonproprietary version

Enclosure 3: Affidavit of John Volkoff, AF-135473

Enclosure 1:

“Carbon Free Power Project (CFPP) Regulatory Engagement Plan For Early Construction,”
PL-135470-P, Revision 0, proprietary version

Enclosure 2:

“Carbon Free Power Project (CFPP) Regulatory Engagement Plan For Early Construction,”
PL-135470-NP, Revision 0, nonproprietary version

Carbon Free Power Project (CFPP) Regulatory Engagement Plan For Early Construction

March 2023

Revision 0

NuScale Power, LLC

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1.0 Introduction/Purpose of Regulatory Engagement Plan

This regulatory engagement plan (REP) is a guide to interactions and communication between CFPP LLC and the Nuclear Regulatory Commission (NRC) during the development of an exemption request and a Limited Work Authorization (LWA) application for early (i.e., pre-combined license [COL] issuance) construction activities, at the Carbon Free Power Project (CFPP) site. This plan identifies the planned regulatory approach and defines interactions, roles and responsibilities to enhance communication and reduce regulatory uncertainty. The engagement activities described in this REP are considered part of the overall Combined License Application (COLA) engagement activities described in LO-121350, NuScale Power, LLC Submittal Entitled “Carbon Free Power Project (CFPP) Regulatory Engagement Plan” (Reference 10.2).

NuScale, LLC (NuScale) will serve as the licensing lead for the CFPP LLC exemption request and LWA activities in collaboration with CFPP and Fluor as the point of contact to the NRC. This is consistent with the CFPP LLC letter submitted to the NRC on October 12, 2021 (Reference 10.1), stating NuScale is authorized to act on behalf of CFPP LLC when engaging with the NRC.

1.1 Contact Information

The CFPP team points of contact for all correspondence are as follows:

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1.2 Company/Project Structure

UAMPS is a nonprofit, joint-action governmental agency providing energy services to its 46 community-owned power system members located throughout the intermountain western states. UAMPS is working to provide the next generation of nuclear reactors at the Idaho National Laboratory (INL) in eastern Idaho as part of its CFPP.

The CFPP site is located on federal land managed by the Department of Energy (DOE), and site activities and uses are subject to a DOE use permit issued to UAMPS. The use permit and DOE regulations require DOE to review potential environmental impacts per the National Environmental Policy Act (NEPA) prior to commencing preconstruction activities. CFPP LLC will coordinate NEPA review of preconstruction activity activities with the DOE.

The CFPP LLC is an initiative formally launched in 2015 by UAMPS to advance state and national efforts to reduce carbon emissions and increase air quality. CFPP LLC is a wholly-owned subsidiary of UAMPS established to develop, own, and operate the CFPP. This project will provide the CFPP with a combined license application (COLA) for a power generation facility using the NuScale small modular reactor (SMR) technology at the INL site.

Fluor is contracted by CFPP LLC to develop the COLA. Fluor contracted NuScale to:

- (1) Develop a portion of the COLA content, and the infrastructure to be used by the project team to prepare the COLA
- (2) Develop, maintain, and manage the licensing strategy for the CFPP COLA project in collaboration with CFPP and Fluor
- (3) Act as the primary project team point-of-contact (i.e., interface) with NRC staff. Together, UAMPS, CFPP LLC, Fluor and NuScale will function as the Project Management Organization for the CFPP

1.3 Summary of Strategic Project Approach/Goals

The CFPP team is using the combined licensing process in 10 CFR 52, Subpart C (Reference 10.7) to develop and submit a COLA to the NRC for a power generation facility at the INL site, using the NuScale SMR US460 technology (Reference 10.8).

As used herein, the terms “early construction” or “pre-COL construction” refer to site activities that meet the 10 CFR 50.10(a)(1) definition of “construction” and are needed to start prior to the projected issuance of the CFPP COL(s). The impetus for the need for pre-COL start is to maintain the Q4 2029 first reactor module commercial operation date (1st COD) milestone. Pre-COL construction activities require NRC approval in the form

of an LWA or other mechanism per 10 CFR 50.10(c), or an approved exemption from 10 CFR 50.10(c).

The NRC's regulatory processes for LWA and exemption requests include environmental reviews as governed by the National Environmental Policy Act (NEPA), culminating in an Environmental Impact Statement (EIS) and an Environmental Assessment (EA), respectively. For purposes of CFPP project team engagements on these aspects of the NRC's review, the NRC is assumed to be the lead agency with the DOE as the cooperating agency.

CFPP LLC is seeking NRC and DOE approval to start early construction at the CFPP site at INL. Early construction refers to site construction and preconstruction activities needed to start prior to the projected issuance of the CFPP combined license (COL). There will be three parts to this process:

1. A request for the DOE to conduct an environmental review of preconstruction activities in accordance with NEPA and issue an associated NEPA decision document.
2. An exemption request per 10 CFR 50.12 for the installation of tiebacks (rock bolts, as part of worker safety shoring system) in the Reactor Building (RXB) and Radioactive Waste Building (RWB) excavations.
3. An LWA request per 10 CFR 10 CFR 50.10(d) for the balance of early construction activities. The LWA for construction activities include RXB and RWB soft/fractured rock remediation, RXB mud mat installation, and permanent installation of the RXB basemat components (rebar, embeds, etc.) up to but not including concrete placement.

The CFPP site is located on federal land managed by the DOE. Site activities and uses are subject to a DOE use permit issued to UAMPS. The use permit and DOE regulations require DOE to review potential environmental impacts per the NEPA prior to commencing preconstruction activities. CFPP LLC will coordinate NEPA review of preconstruction activity activities with the DOE

The CFPP team will provide early engagement with the NRC and DOE, and quality submittals for timely reviews. Crucial to this process is cooperation between the NRC staff and DOE for the NEPA environmental reviews. The environmental reviews are also key coordination points between the NRC and DOE.

1.4 Background

The NRC completed the review of the design certification application (DCA) for a 12-module NuScale Power Plant (NPP) (160 MWth per module) and issued the final safety evaluation report (FSER) in August 2020 (References 10.8 and 10.9). The FSER represents completion of the technical review and approval of the NPP design. The NRC granted a standard design approval (SDA) for the NuScale DCA design on September 11, 2020 (Reference 10.10). Effective February 21, 2023, the NRC certified the NuScale DCA design [84 FR 23452, May 22, 2019].

The CFPP is now pursuing NRC approval to construct and operate an NPP comprised of six integrated pressurized water reactors rated for 250 MWt (77 MWe) per module. The CFPP plant is based on the design described in a NuScale SDA application (SDAA) submitted at the end of 2022 (NuScale US460 SDAA, Docket No. 52-050). The US460 SDAA is a standalone document including all of the needed elements from the DCA and new elements driven by the increase in power from 160 MWth to 250 MWth. The SDAA is currently undergoing NRC review.

“Preconstruction” refers to site activities that per 10 CFR 50.10(a)(2) are not considered to be “construction” as defined in 10 CFR 50.10(a)(1). As such, preconstruction activities may be undertaken without a COL or other NRC licensing action that otherwise would be required under 10 CFR 50.10(c). The CFPP site is located on federal land managed by the DOE, and site activities and uses are subject to a DOE use permit issued to UAMPS. The use permit and DOE regulations require DOE to review potential environmental impacts per the NEPA prior to commencing preconstruction activities. CFPP LLC will coordinate NEPA review of preconstruction activity activities with the DOE. As discussed during a January 26, 2023, public meeting between the CFPP COLA project team, the NRC, and the DOE (Reference 10.15), the DOE is assumed to be the responsible agency for preconstruction activities and will develop a NEPA document and associated NEPA decision document as a basis for authorizing preconstruction, including excavation. CFPP LLC will be the engagement lead and primary interface with DOE on matters pertaining to the preconstruction NEPA document.

1.5 REP Approach

This REP is based on Nuclear Energy Institute (NEI) 18-06, Guidelines for Development of a Regulatory Engagement Plan (Reference 10.11).

This REP is a living document. This REP will be updated as necessary, as plans evolve. The CFPP team maintains this REP, and will solicit input from the NRC staff for consideration and inclusion into the REP.

This REP describes and documents agreement between the CFPP team and the NRC staff regarding licensing approach, resolution of issues, schedule expectations, and interaction protocols.

2.0 Technology Summary

The NuScale Power Module™ (NPM) includes the nuclear reactor, steam generators, pressurizer, and containment in an integral package eliminating reactor coolant pumps and large bore pipes. The NPM is passively safe, relying upon the natural physics of convection, conduction, and gravity (natural circulation) to cool the reactor during normal operation, shutdown, and emergency core cooling conditions. Each NPM produces 77 MWe and is factory built. Each NPM is installed below grade on-site, in a seismically-robust building, in a steel-lined reactor pool.

3.0 Regulatory Strategy

3.1 Application Type

CFPP LLC intends to seek NRC authorization for CFPP early construction using a combination of: (1) an exemption from 10 CFR 50.10(c) as allowed under 10 CFR 50.12; and (2) an LWA requested as the first part of a “phased COLA” in accordance with 10 CFR 50.10(d) and 10 CFR 2.101(a)(9).

The NRC regulatory processes for an exemption request and an LWA include environmental reviews as governed by the NEPA. For purposes of CFPP project team engagements on these aspects of the NRC review, the NRC is assumed to be the lead agency with the DOE as the cooperating agency.

3.1.1 DOE Preconstruction Activities

- Establish storm water mitigation measures, including manholes/piping
- Site Preparation – excavation/grading/ripping blasting for site leveling, ditches and utility trenches, site access/haul roads, and install underground piping/electrical
- Establish temporary utilities/services to site (e.g., electrical power, communications, water supply, sanitary, etc.)
- Conduct ripping/blasting/excavation for site leveling, ditches and utility trenches
- Excavation for Turbine Island structures, RXB, RWB, and Control Building (not including RXB/RWB tieback installation)
- Stripping/stockpiling/grading of excavated overburden/aggregates
- Establish rock crushing facilities
- Establish concrete batch plant
- Establish temporary mud mats and pre-tie base mat rebar for construction
- Construction of badging, training, “administrative/office, and warehouse use” site structures/facilities

3.1.2 Exemption Request Scope

- Permanent RXB and RWB excavation wall shoring system (for worker safety)
 - Installation of structural tiebacks (i.e., rock bolts)
 - Installation of fibermesh/shotcrete

3.1.3 Limited Work Authorization

The LWA request will be submitted as the first part of a partial (also termed a “two-part” or “phased”) CFPP COLA in accordance with 10 CFR 2.101(a)(9) and 10 CFR 50.10(d)(2). As such, the LWA request will be limited to the information required by 10 CFR 2.101(a)(9)(i) – i.e., the information required by 10 CFR 50.33(a) through (f)

and 10 CFR 50.10(d)(2) and (d)(3). As required by 10 CFR 2.101(a)(9)(ii), the second part of the CFPP COLA will contain the remaining information required by 10 CFR 52, Subpart C, and other applicable NRC regulations to be included in a COLA. The second part of the CFPP COLA is scheduled to be submitted to the NRC in January 2024.

3.1.3.1 LWA Activity Scope

1. RXB/RWB soft/fractured rock remediation to include appropriate over-excavation and placement of one or more of the following:
 - Granular backfill
 - Interstitial grouting of rock fractures
 - Low strength concrete (i.e., flowable fill)
2. Installation of RXB mud mat and vapor barrier
3. Installation of RXB permanent base mat components (e.g., rebar, embeds, conduit, etc.) up to but not including concrete placement

3.1.3.2 LWA request

The LWA request is planned to include a summary description of: (1) the CFPP nuclear power plant and site; (2) the reason the LWA is needed, including the specific site construction activities requiring the LWA; and (3) the CFPP construction plan specific to the activities within the scope of this LWA request. The following minimum LWA request content required by 10 CFR 2.101(a)(9)(i) will be provided as part of the LWA application:

- Company and financial qualification information required by 10 CFR 50.33(a) through (f)
- LWA Safety Analysis Report required by 10 CFR 52.79 and 10 CFR 50.10(d)(3)(i)
- LWA Environmental Report in accordance with 10 CFR 51.49(b) and 10 CFR 50.10(d)(3)(ii)
- LWA Redress Plan in accordance with 10 CFR 50.10(d)(3)(iii)
- LWA Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)

Additional detail of the planned LWA request structure and content is reflected in the following preliminary outline, which is subject to change as the LWA application development progresses.

Application
1.0 Introduction
2.0 Summary Description of the CFPP Nuclear Power Plant and Site
3.0 Basis of Need for Limited Work Authorization
4.0 LWA Construction Plan – Description of Activities, Sequences, Etc.
5.0 Corporate and Financial Qualification Information
6.0 LWA Safety Analysis Report

7.0 LWA Environmental Report
8.0 LWA Redress Plan
9.0 LWA Inspections, Tests, Analyses, and Acceptance Criteria
10.0 Conclusions

LWA Enclosure 1, Applicant Corporate and Financial Information [10 CFR 50.33(a) through (f)]
1.0, Applicant Corporate and Business Information
1.1, Organization and Management
1.1.1, CFPP LLC
1.1.2, Utah Associated Municipal Power Systems
1.2, Requested Licenses and Authorized Uses
1.3, Financial Qualifications
1.3.1, CFPP LLC’s Financial Relationship with Others
13.2, Capability to Meet Financial Commitments
1.3.3, Estimated CFPP Costs and Funding
2.0 References

LWA Enclosure 2, Safety Analysis Report [10 CFR 52.79 and 10 CFR 50.10(d)(3)(i)]
SAR Chapter 2, Site Characteristics and Site Parameters
SAR Section 2.5, Geology, Seismology, and Geotechnical Engineering
SAR Section 2.5.1, Basic Geologic and Seismic Information
SAR Section 2.5.2, Vibratory Ground Motion
SAR Section 2.5.3, Surface Deformation (excluding Volcanic Hazards)
SAR Section 2.5.4, Stability of Subsurface Materials and Foundations
SAR Section 2.5.5, Stability of Slopes
SAR Chapter 3, Design of Structures, Systems, Components, and Equipment
SAR Section 3.2, Classification of Structures, Systems, and Components
SAR Section 3.2.1, Seismic Classification
SAR Section 3.2.3, References
SAR Section 3.7, Seismic Design
SAR Section 3.7.1, Seismic Design Parameters
SAR Section 3.7.2, Seismic System Analysis
SAR Section 3.8, Design of Category I Structures
SAR Section 3.8.4, Other Seismic Category I Structures
SAR Section 3.8.5, Foundations
SAR Appendix 3B, Design Reports and Critical Section Details

LWA Enclosure 3, Environmental Report [10 CFR 51.49(b) and 10 CFR 50.10(d)(3)(ii)]
ER Chapter 1, Introduction
ER Section 1.1, Plant Owner and Reactor Type
ER Section 1.2, Description of the Proposed Action and the Purpose and Need
ER Section 1.3, Planned Activities and Schedule
ER Section 1.4, Status of Compliance
ER Chapter 2, The Proposed Site and the Affected Environment
ER Section 2.1, Land Use
ER Section 2.2, Water Resources
ER Section 2.3, Ecological Resources
ER Section 2.4, Socioeconomics
ER Section 2.5, Environmental Justice
ER Section 2.6, Historic and Cultural Resources
ER Section 2.7, Air Resources

LWA Enclosure 3, Environmental Report [10 CFR 51.49(b) and 10 CFR 50.10(d)(3)(ii)]
ER Section 2.8, Nonradiological Resources
ER Section 2.9, Radiological Environment and Radiological Monitoring
ER Chapter 3, Site Layout and Project Description
ER Section 3.1, External Appearance and Plant Layout
ER Section 3.2, Proposed Plant Structures, Systems, and Components
ER Section 3.3, Building Activities
ER Chapter 4, Environmental Impacts from Construction of the Proposed Project
ER Section 4.1, Land Use
ER Section 4.2, Water Resources
ER Section 4.3, Ecological Resources
ER Section 4.4, Socioeconomics
ER Section 4.5, Environmental Justice
ER Section 4.6, Historic and Cultural Resources
ER Section 4.7, Air Resources
ER Section 4.8, Nonradiological Health
ER Section 4.9, Radiological Health
ER Section 4.10, Nonradioactive Waste Management
ER Section 4.11, Measures and Controls to Limit Adverse Impacts during Construction Activities
ER Chapter 7, Cumulative Impacts
ER Section 7.1, Past, Present, and Reasonably Foreseeable Future Projects
ER Section 7.2, Impact Assessment
ER Chapter 10, Conclusions
ER Section 10.1, Impacts of the Proposed Actions
ER Section 10.2, Unavoidable Adverse Environmental Effects
ER Section 10.3, Relationship between Local Short-term Use of the Environment and Long-term Productivity
ER Section 10.4, Irreversible and Irretrievable Commitments of Resources
ER Section 10.5, Alternatives to the Proposed Action
ER Section 10.6, Benefits and Costs
ER Chapter 11, References
ER Appendix A, Consultation
ER Appendix B, Environmental Protection Plan
LWA Enclosure 4, Site Redress Plan [10 CFR 50.10(d)(3)(iii)]
1.0, Introduction
1.1, Objectives and Considerations (including NEPA Considerations)
1.2, Criteria
2.0 Description of Site Redress
2.1, Assumptions
2.2, Redress Activities and Sequences
2.3, Activities Proposed for Omission from Redress
2.4, DOE Use Permit Impacts
2.5, Final Site Condition Following Redress
3.0, Impact Mitigation Controls During Redress
4.0 Financial Responsibilities
5.0, Conclusions
LWA Enclosure 5, Proposed ITAAC for LWA Scope
None

3.1.4 Plant Reporting Requirements

This section is not currently used.

3.2 National Environmental Policy Act

The NRC staff's obligations under the National Environmental Policy Act (NEPA) are described in 10 CFR 51 (Reference 10.5).

3.3 Principal Design Criteria

This section is not currently used.

3.4 Selection of Applicable Guidance

The primary NRC controlling regulation for an exemption request is 10 CFR 50.12, and for an LWA request is 10 CFR 50.10 and 10 CFR 2.101(a)(9). The primary NRC guidance for the format and content of an LWA request is Regulatory Guide 1.206.

3.5 Use of Standards and Industry Guidance

Industry standards including consensus standards, NEI guidance and lessons learned guidance will be utilized when appropriate during the exemption request and LWA application preparation process.

3.6 Assessing Alignments/Gaps

The applicability of the NRC's regulatory framework to the NPP design has previously been assessed to identify "gaps," that is, instances in which regulations or guidance is not (or is only partially) applicable due to unique aspects of the NPP design. The exemption request and LWA application processes are not expected to involve any regulatory gaps not already identified in the previous gap analyses. In the unlikely event new gaps are identified, pre-application interactions will be conducted with NRC staff to align on gap resolution.

The NRC staff published a white paper to provide information to advanced reactor developers on the importance of pre-application engagement during application reviews (Reference 10.17). This has been referenced in the preparation of this REP to ensure alignment between NRC staff and the CFPP.

3.7 Design-Centered Review Approach

This section not used.

3.8 Key Issues

Refer to Section 4.1 for discussion of anticipated key issues.

3.9 NRC Review Timeframe

- Exemption Request:

The proposed timeframe for the NRC acceptance review is 30 days.

The proposed application review time is approximately 17 months including acceptance review.

- LWA Application:

The proposed timeframe for the NRC acceptance review is 30 - 60 days.

The proposed application review time is approximately 24 months including acceptance review.

4.0 Pre-application Engagement

As licensing lead for the CFPP team, NuScale will facilitate pre-application engagements (e.g., teleconferences, videoconferences, and face-to-face meetings) between the CFPP team and the NRC staff. The primary objectives of these engagements are to identify, assess, and mitigate regulatory risks associated with the planned exemption request and LWA request. The primary benefit planned for these engagements is alignment on the content of the applications, and scope and depth of the application/request content and level of detail. The CFPP project team will coordinate with staff to establish an appropriate engagement schedule of open and closed meetings with the NRC staff until application submittal. These meetings will ensure the NRC staff has timely and accurate information to complete regulatory responsibilities in making its safety and environmental determinations with respect to agency resource availability. The CFPP team understands the need to notify the public of agency meetings and will support efforts for early meeting notification.

4.1 Identification of Topics

Table 4-1 below includes topics identified as important to address in pre-application engagements. The NRC staff will be promptly notified in the event additional topics are needed for planning and budget purposes. Timely pre-application engagement for each identified topic will be important to keep the NRC staff informed and aligned on schedule. Some of the pre-application engagements are currently estimated by quarter based on current information and subject to change as the project progresses.

Table 4-1, Topics for pre-application engagement meeting with NRC and DOE

TOPIC	DESCRIPTION	PLANNED ENGAGEMENT
LWA pre-application public meeting	CFPP presentation of proposed licensing approach to facilitate early construction	September 13, 2022 (actual)
LWA/Exemption pre-application public meeting	Three-Way Meeting between NRC, DOE, and CFPP – Updated proposed licensing approach to facilitate early construction	January 26, 2023 (actual)
Coordination Meeting	Discuss pre-submittal of CFPP’s regulatory engagement plan in support of exemption request and LWA	February 21, 2023 (actual)
Proposed Exemption Request and LWA Review Schedule	Further engagements as needed to align with NRC on exemption request and LWA application review schedules	TBD
LWA Environmental Report Readiness Review	Establish a phased readiness review of ER sections to be submitted with LWA	March – May, 2023

4.2 Types and Frequency of Interactions

Interactions between the CFPP team and the NRC staff include phone calls, teleconferences, meetings to solicit feedback on proposed technical approaches, and audits/inspections of engineering information and testing facilities to support the exemption request and LWA request development.

The CFPP team proposes the following interactions with the NRC staff:

- biweekly or weekly meetings with the NRC project managers
- quarterly status reports to document goals and objectives for pre-application
- planning meetings and drop-ins, as needed
- public meetings

4.3 NRC Feedback

An electronic reading room (eRR) on the Certrec Licensing Review Platform (CLRP) will allow the CFPP team and the NRC staff to track meeting summaries, feedback, action items and readiness reviews.

Pre-application engagement correspondence with the NRC staff will include: project status information, presentations.

4.4 Schedule Considerations

Pre-application engagements will establish a schedule of meetings and submittals, and the timing/duration of the NRC staff reviews and public meetings, as noted in table below. Additionally, the expectations for communicating changes to the schedule and scope will also be established.

	Start	Finish
DOE Preconstruction NEPA Process		
DOE receipt of draft Environmental Input		{{ }} ^{2(c)}
DOE prepares NEPA Evaluation & Decision Document	{{ }} ^{2(c)}	{{ }} ^{2(c)}
DOE issues Draft NEPA Decision Document for Public Review		{{ }} ^{2(c)}
DOE Issues Final NEPA Decision Document		{{ }} ^{2(c)}
Start Preconstruction Field Activities	{{ }} ^{2(c)}	
Exemption Request Process		
LWA and Exemption Request content discussion with NRC		{{ }} ^{2(c)}
LWA and Exemption Request pre-app		{{ }} ^{2(c)}
CFPP INL Site visit	{{ }} ^{2(c)}	{{ }} ^{2(c)}
Submit Exemption Request to NRC		{{ }} ^{2(c)}
NRC Acceptance Review		{{ }} ^{2(c)}
NRC Issues Draft EA and FONSI for Public Review		{{ }} ^{2(c)}
NRC Issues Final EA and FONSI		{{ }} ^{2(c)}
Start Exemption Field Activities	{{ }} ^{2(c)}	
LWA Process		
LWA and Exemption Request content discussion with NRC		{{ }} ^{2(c)}
Availability of LWA Environmental Report materials on eRR	{{ }} ^{2(c)}	{{ }} ^{2(c)}
CFPP INL Site visit	{{ }} ^{2(c)}	{{ }} ^{2(c)}
Issue INL/BEA Cultural and Ecological Survey Reports		{{ }} ^{2(c)}
Submit LWA Application		{{ }} ^{2(c)}
NRC issues NOI for LWA DEIS		{{ }} ^{2(c)}

	Start	Finish
Public Meetings		{{ }} ^{2(c)}
NRC Issues DEIS		{{ }} ^{2(c)}
NRC Issues FEIS		{{ }} ^{2(c)}
ASLB Hearing (uncontested)		{{ }} ^{2(c)}
ASLB Initial Decision		{{ }} ^{2(c)}
NRC Issues EIS ROD		{{ }} ^{2(c)}
DOE Issues EIS ROD		{{ }} ^{2(c)}
NRC Issues LWA		{{ }} ^{2(c)}
Start LWA Field Activities	{{ }} ^{2(c)}	
COLA Process		
Submit COLA		{{ }} ^{2(c)}
NRC Issues NOI for SEIS Prep		{{ }} ^{2(c)}
Public Meetings	{{ }} ^{2(c)}	{{ }} ^{2(c)}
NRC Issues Draft SEIS		{{ }} ^{2(c)}
Public Comment Period on SEIS	{{ }} ^{2(c)}	{{ }} ^{2(c)}
NRC Issues SEIS		{{ }} ^{2(c)}
Commission Hearing (uncontested)		{{ }} ^{2(c)}
Commission Decision (Including NRC ROD)		{{ }} ^{2(c)}
DOE Issues EIS ROD		{{ }} ^{2(c)}
Construction Start		{{ }} ^{2(c)}

4.5 Relation to Other Proceedings/Reviews

The exemption request and LWA application proceedings are part of the overall CFPP COLA proceedings and are related to the ongoing NRC proceeding/review of the SDAA for the US460 NPP design (see Section 1.4 above). As detailed below, the interrelationship between these proceedings/reviews warrant robust pre- and post-application engagement, configuration management, and coordination by the CFPP team to support the NRC staff's concurrent review proceedings.

Specifically, as described in Section 3.1, the LWA application will be the first part of a “phased COLA” in accordance with 10 CFR 50.10(d) and 10 CFR 2.101(a)(9), and the exemption request supports the CFPP COLA. Both the exemption request and LWA application will be submitted in July 2023. Thus the NRC's reviews of the exemption request and LWA application will be ongoing when the second part of the phased CFPP COLA (i.e., main COLA) is submitted to NRC in January 2024. As shown in Section 4.4 above, the exemption and LWA approvals are needed no later than end of December 2024 and August 2025, respectively, to facilitate start of early site construction.

The main COLA will build on the information provided in the exemption and LWA requests. The CFPP COLA will incorporate by reference the applicable portions of the NuScale US460 NPP SDAA. That SDAA is now undergoing an NRC technical review that is projected to continue through end of 2024.

Based on the above, the NRC proceedings/reviews of the NuScale SDAA and CFPP exemption request, LWA application, and main COLA will be ongoing in parallel during 2024. With the SDAA and exemption request approvals issued at end of 2024, the LWA application and main COLA proceedings/reviews will continue in parallel through August 2025, at which point the remaining proceeding/review will be the main COLA review projected to be completed July 2026.

4.6 Pre-application Site Visits, Audits, and Inspections

Audits and inspections will be coordinated with the designated NRC project manager and subject matter experts.

5.0 Application Process

5.1 Readiness Assessment Audit

A Readiness Assessment will be provided for the LWA Environmental Report.

5.2 Application Submittal

The exemption request and LWA request submittals are scheduled for July 31, 2023.

5.3 Acceptance Review and Docketing

After the exemption request and LWA request submittals, the NRC will acknowledge receipt of the applications and conduct an acceptance review in accordance with NRO-REG-100, "Acceptance Review Process for Early Site Permit, Environmental Report and LWA" (Reference 10.14).

5.4 NRC Processes

See Sections 4.4 and 4.5 above.

5.5 DOE Processes

The DOE will review and approve preconstruction activities and the related environmental factors as described above.

6.0 Post-application Engagement

6.1 Technical Meetings

Technical meetings will be coordinated with the designated NRC project manager for open and closed public meetings. The NRC will provide ten working day notice in advance, and include whether the meeting is open or closed to the public.

6.2 Audits and Inspections

Post-application audits and inspections will be coordinated with the designated NRC project manager and subject matter experts.

6.3 Submittal of Additional Information

6.3.1 Supplemental Information

During the NRC approval process, information in the application might require updating. Notification of pending supplemental information and the associated schedule will be communicated to the NRC during routine interactions.

6.3.2 Requests for Additional Information

When issues or questions arise during the approval process, the NRC eRAI process will be used to clarify the request and identify proprietary information to be withheld from the public for the formal RAI.

Any impacts to the content of the applications will be identified as part of the RAI response. A description of the impact and markups of affected application text will be included in the response.

The metrics are goals used to monitor the health of the project. If metrics are not being met, the concerns causing the delays will be escalated up the managerial chain.

6.3.3 Application Revisions/Updates

Submitted as needed, based on RAI responses.

6.4 Frequency of Interactions

This section will be updated as plans evolve. A routine interaction schedule will be proposed to ensure alignment between the CFPP team and the NRC/DOE during the exemption request and LWA request review.

6.5 Review Phases and Schedule

Proposed exemption request and LWA review schedules are as noted in Section 4.4.

6.6 Relation to other Proceedings/Reviews

As stated in Section 4.5 above.

7.0 Withheld Information

The CFPP team will comply with the Code of Federal Regulations and use existing project procedures and processes as related to withheld information, to request information marked as appropriate and withheld. (Reference 10.2)

8.0 Partnerships and Industry Participation

8.1 Design-Centered Working Group

This section not currently used.

8.2 Nuclear Energy Institute (NEI)

NEI publishes guidance documents on various topics to assist applicants. NEI 18-06, “Guidelines for Development of a Regulatory Engagement Plan” (Reference 10.11) was used to develop this document. Other relevant NEI documents will be utilized during the exemption request and LWA request process, as applicable.

8.3 Standard Development Organizations

This section is not currently used.

8.4 Department of Energy

The U.S. Department of Energy approved a cost share award to CFPP LLC to commercialize a NuScale Power Plant at INL. Fluor was contracted by CFPP LLC under a cooperative agreement between CFPP LLC and DOE. The DOE requirements will be met and milestones satisfied as this project progresses.

8.5 Other Organizations

This section is not currently used.

8.6 International Considerations

This section is not currently used.

9.0 Scheduled Activities

9.1 Pre-application

See Section 4.0.

9.2 Application

The exemption request and LWA requests will be submitted in July 2023 (see Section 4.4).

9.3 Acceptance review

See Section 3.9.

9.4 Post-Application Activities

- Docketing of submitted applications
- Establish review schedules
- RAI tracking and closure
- Revisions as required

9.5 Budget

Budgeting considerations are an important consideration in establishing and maintaining the project schedule. Estimated NRC staff review fees, including review hours, will be estimated at the time of acceptance for review and monitored on an ongoing basis. The NRC staff and CFPP team will communicate frequently for any expected changes in the level of estimated NRC staff review fees or any funding restrictions.

10.0 References

- 10.1 CFPP, LLC letter to NRC, “Licensing Lead for Carbon Free Power Project, LLC,” October 12, 2021, Docket Number: 99902052
- 10.2 LO-121350, NuScale Power, LLC Submittal Entitled “Carbon Free Power Project (CFPP) Regulatory Engagement Plan,” Revision 1, on behalf of CFPP, LLC (ML22224A238, ML22224A239)

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- 10.3 U.S. Code of Federal Regulations, " Public inspections, exemptions, requests for withholding," 10 CFR 2.390
 - 10.4 U.S. Code of Federal Regulations, "License required; limited work authorization," 10 CFR 50.10
 - 10.5 U.S. Code of Federal Regulations, "Environmental Protection Regulations For Domestic Licensing And Related Regulatory Functions," 10 CFR Part 51
 - 10.6 U.S. Code of Federal Regulations, "Environmental report - limited work authorization," Section 51.49, Part 51, Chapter 1, Title 10, "Energy" (10 CFR 51.49)
 - 10.7 U.S. Code of Federal Regulations, "Combined Licenses," Subpart C, Part 52, Chapter I, Title 10, "Energy," (10 CFR 52 Subpart C)
 - 10.8 NuScale Power, LLC, "Submittal of the NuScale Standard Plant Design Certification Application (NRC Project No. 0769)," December 31, 2016, ADAMS Accession No. ML17013A229. (Final version of the DCA was provided as Revision 5, July 29, 2020, Agencywide Documents Access and Management System (ADAMS) Accession No. ML20225A044
 - 10.9 U.S. Nuclear Regulatory Commission, "Final Safety Evaluation Report for the NuScale Standard Plant Design," August 28, 2020, Agencywide Documents Access and Management System (ADAMS) Accession No. ML20023A318
 - 10.10 U.S. Nuclear Regulatory Commission, "Standard Design Approval for the NuScale Power Plant Based on the NuScale 600 Standard Plant Design Certification Application," September 11, 2020, Agencywide Documents Access and Management System (ADAMS) Accession No. ML20247J564
 - 10.11 Nuclear Energy Institute, "Guidelines for Development of a Regulatory Engagement Plan," NEI 18-06, Rev. 0, June 2018
 - 10.12 U.S. Nuclear Regulatory Commission, "DRAFT Pre-application Engagement to Optimize Advanced Reactor Application Reviews," May 2021
 - 10.13 NuScale Power, LLC, "Interfacing with Regulatory Agencies," PG-0002-12889, Rev. 3, July 15, 2021
 - 10.14 U.S. Nuclear Regulatory Commission (Office of New Reactors), "Acceptance Review Process for Early Site Permit, Design Certification, and Combined License Applications," NRO-REG-100, Rev. 2, December 18, 2014, Agencywide Document Access and Management System (ADAMS) Accession No. ML14078A152
 - 10.15 U.S. Nuclear Regulatory Commission Summary Of The January 26, 2023, Observation Public Meeting With The Department Of Energy And Nuscale Power, LLC To Discuss The Carbon Free Power Project Plans For Early Construction Activates At Idaho National Laboratory, dated February 15, 2023 (ML23037A869)

- 10.16 U.S. Nuclear Regulatory Commission, “Applications for Nuclear Power Plants,”
Regulatory Guide 1.206, Rev. 1, October 2018
- 10.17 U.S. Nuclear Regulatory Commission, “DRAFT Pre-application Engagement to Optimize
Advanced Reactor Application Reviews,” May 2021

Enclosure 3:

Affidavit of John Volkoff, AF-135473

NuScale Power, LLC

AFFIDAVIT of John Volkoff

I, John Volkoff, state as follows:

- (1) I am the Manager, Combined License Applications of NuScale Power, LLC (NuScale), and as such, I have been specifically delegated the function of reviewing the information described in this Affidavit that NuScale seeks to have withheld from public disclosure, and am authorized to apply for its withholding on behalf of NuScale.
- (2) I am knowledgeable of the criteria and procedures used by NuScale in designating information as a trade secret, privileged, or as confidential commercial or financial information. This request to withhold information from public disclosure is driven by one or more of the following:
 - (a) The information requested to be withheld reveals distinguishing aspects of a process (or component, structure, tool, method, etc.) whose use by NuScale competitors, without a license from NuScale, would constitute a competitive economic disadvantage to NuScale.
 - (b) The information requested to be withheld consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), and the application of the data secures a competitive economic advantage, as described more fully in paragraph 3 of this Affidavit.
 - (c) Use by a competitor of the information requested to be withheld would reduce the competitor's expenditure of resources, or improve its competitive position, in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product.
 - (d) The information requested to be withheld reveals cost or price information, production capabilities, budget levels, or commercial strategies of NuScale.
 - (e) The information requested to be withheld consists of patentable ideas.
- (3) Public disclosure of "Carbon Free Power Project (CFPP) Regulatory Engagement Plan For Early Construction," PL-135470-P, Revision 0 is sought to be withheld is likely to cause substantial harm to NuScale's competitive position and foreclose or reduce the availability of profit-making opportunities. The accompanying document reveals distinguishing aspects about the process, structure and method by which NuScale develops its early construction plan.

NuScale has performed significant research and evaluation to develop a basis for this process, structure and method and has invested significant resources, including the expenditure of a considerable sum of money.

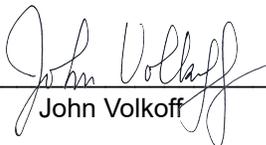
The precise financial value of the information is difficult to quantify, but it is a key element of the design basis for a NuScale plant and, therefore, has substantial value to NuScale.

If the information were disclosed to the public, NuScale's competitors would have access to the information without purchasing the right to use it or having been required to undertake a similar expenditure of resources. Such disclosure would constitute a misappropriation of NuScale's intellectual property, and would deprive NuScale of the opportunity to exercise its competitive advantage to seek an adequate return on its investment.

- (4) The information sought to be withheld is in the enclosed document. The enclosure contains the designation "Proprietary" at the bottom of each page containing proprietary information. The information considered by NuScale to be proprietary is identified within double braces, "{{ }}" in the document.

- (5) The basis for proposing that the information be withheld is that NuScale treats the information as a trade secret, privileged, or as confidential commercial or financial information. NuScale relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC § 552(b)(4), as well as exemptions applicable to the NRC under 10 CFR §§ 2.390(a)(4) and 9.17(a)(4).
- (6) Pursuant to the provisions set forth in 10 CFR § 2.390(b)(4), the following is provided for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld:
- (a) The information sought to be withheld is owned and has been held in confidence by NuScale.
 - (b) The information is of a sort customarily held in confidence by NuScale and, to the best of my knowledge and belief, consistently has been held in confidence by NuScale. The procedure for approval of external release of such information typically requires review by the staff manager, project manager, chief technology officer or other equivalent authority, or the manager of the cognizant marketing function (or his delegate), for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside NuScale are limited to regulatory bodies, customers and potential customers and their agents, suppliers, licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or contractual agreements to maintain confidentiality.
 - (c) The information is being transmitted to and received by the NRC in confidence.
 - (d) No public disclosure of the information has been made, and it is not available in public sources. All disclosures to third parties, including any required transmittals to NRC, have been made, or must be made, pursuant to regulatory provisions or contractual agreements that provide for maintenance of the information in confidence.
 - (e) Public disclosure of the information is likely to cause substantial harm to the competitive position of NuScale, taking into account the value of the information to NuScale, the amount of effort and money expended by NuScale in developing the information, and the difficulty others would have in acquiring or duplicating the information. The information sought to be withheld is part of NuScale's technology that provides NuScale with a competitive advantage over other firms in the industry. NuScale has invested significant human and financial capital in developing this technology and NuScale believes it would be difficult for others to duplicate the technology without access to the information sought to be withheld.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 22, 2023.



John Volkoff