CARBON FREE
POWER PROJECT
155 North 400 West, Suite 480
Salt Lake City, UT 84103

LO-125342

September 22, 2022 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 of Topical Report TR-121172, Revision 1, on behalf of CFPP, LLC for the "Carbon Free Power Project (CFPP) Nuclear Quality Assurance Program Description," Revision 003 (Nonproprietary)

REFERENCES:

1. CFPP Letter to Nuclear Regulatory Commission, "Licensing Lead for Carbon Free Power Project, LLC", dated October 12, 2021 (ML21299A363)
2. NuScale Power, LLC Submittal of Topical Report TR-121172, Revision 0, on behalf of CFPP, LLC for "Carbon Free Power Project (CFPP) Nuclear Quality Assurance Program Description," Revision 002, dated July 26, 2022 (ML22207A859) (Nonproprietary)
3. U.S. Nuclear Regulatory Commission Summary of the August 23, 2022, Observation Public Meeting To Discuss Topical Report TR-121172, Revision 0, Carbon Free Power Project Nuclear Quality Assurance Program Description, Revision 002, dated August 30, 2022, (ML22236A566)

As Carbon Free Power Project, LLC's ("Grantee") designated licensing lead for the Carbon Free Power Project (CFPP) Combined License Application (COLA) (Reference 1), NuScale Power, LLC ("NuScale") hereby submits TR-121172, Revision 1 for the "Carbon Free Power Project (CFPP) Nuclear Quality Assurance Program Description (QAPD)", Revision 003 (Enclosure 1). The purpose of this letter and submittal is to respond to the staff's request for supplemental information from an observation public meeting on August 23, 2022 to discuss the submittal of TR-121172, Revision 0 (Reference 2 and Reference 3).

The staff's request for supplemental information is addressed as follows:

- The NRC staff requested additional information regarding the development of the TR and whether it followed the guidance provided in NUREG-0800 (Standard Review Plan (SRP)) Section 17.5. The applicant responded that the Quality Assurance Program Description (QAPD) was developed based on the guidance in NEI 11-04, and that a future revision to support the combined license application (COLA) would follow the applicable revision of SRP Section 17.5.

- CFPP Response: The QAPD has been prepared in accordance with the requirements of Title 10, Part 50 of the Code of Federal Regulations (10 CFR 50), “Domestic Licensing of Production and Utilization Facilities,” Appendix B, “Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocess Plans,” and NRC-accepted NEI 11-04A, “Nuclear Generation Quality Assurance Program Description” and NUREG-0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants,” Section 17.5, “Quality Assurance Program Description.” The QAPD is based on requirements and guidance of ASME NQA-1-2008 and NQA-1a-2009 Addenda, “Quality Assurance Requirements for Nuclear Facility Applications” as endorsed in NRC Regulatory Guide 1.28, Revision 4.

  The above information is described in the abstract of TR-121172, Revision 1 and Part I of the CFPP QAPD, Revision 003.

  The CFPP QAPD is limited in scope and contains information relevant to current project activities. Information not complete at this time will be submitted to the NRC in a future revision to support the CFPP COLA. Alignment with NQA-1 requirements and SRP Section 17.5 is described in the executive summary of TR-121172, Revision 1.

- The NRC staff noted that limited scope QAPD is applicable to the ongoing site activities; however, these activities are not described in the submittal, nor did the submittal include information on what standards or guidance were applied to these activities. The NRC staff noted that it would be helpful to the staff to have information on what aspects of SRP Section 17.5 apply to the QAPD and the reason why certain aspects of the SRP do not apply.

  - CFPP Response: The executive summary of the enclosed TR-121172, Revision 1, and Parts II and III of the CFPP QAPD, Revision 003, state the activities that are underway and detail the conformance to the applicable quality standards. The submittal also provides justification for sections not applicable to SRP Section 17.5. Sections of the QAPD that are not yet applicable are revised to state that the CFPP will establish the necessary measures and governing procedures prior to initiating such activities.

- The NRC staff referenced one SRP Section 17.5 acceptance criterion regarding a description of the periodic evaluation of significantly delegated activities and the individuals/companies performing these activities. The NRC staff understands that CFPP has contractual agreements with various entities supporting the development of its COLA and noted that this information is not in the submittal and that Figure II.1-1 in the submittal is unreadable to determine which entities support the CFPP activities.

- CFPP Response: A description of the periodic evaluation of significantly delegated activities and the companies performing these activities are provided in Section 2 Quality Assurance Program of the CFPP QAPD Revision 003. Figure II.1-1 (renumbered as Figure I.1-1) has also been revised in the enclosed CFPP QAPD Revision 003.

- At the end of the meeting, the NRC staff noted that CFPP has the option to supplement the submittal with the information discussed during the meeting. CFPP proposed that the submittal could be supplemented through a letter addressing the items discussed. The NRC staff does not believe that information in a letter is sufficient to determine that the TR is complete and acceptable for review because the TR is a stand-alone document. The NRC issues NRC Form 898 to communicate its completeness review of submitted TRs including reasons for the determination that the TR is not complete.

    - CFPP Response: The CFPP decided to submit TR-121172, Revision 1, for the CFPP QAPD, Revision 003, which includes the supplemental information requested by the staff. The TR is considered a stand-alone document and the information provided in the TR is intended to support the acceptance review by the staff.

- After the conclusion of the meeting, NuScale contacted the NRC project managers and informed them that NuScale plans to submit a supplement to the topical report to facilitate NRC staff's acceptance review of the topical report. NuScale plans to submit the supplemental information by September 22, 2022.

    - CFPP Response: To address the NRC staff's request for supplemental information, TR-121172, Revision 1, for the CFPP QAPD, Revision 003, is provided as Enclosure 1.

This letter does not make any regulatory commitments or revisions to any existing regulatory commitments.

If you have any questions, please contact Kyra Perkins at 980-349-4117 or at kperkins@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
Greg Cranston, NRC
Demetrius Murray, NRC

Enclosure: NuScale TR-121172, Revision 1 on behalf of CFPP, LLC (“Grantee”) for the Carbon Free Power Project (CFPP) Nuclear Quality Assurance Program Description (QAPD), Revision 003, nonproprietary

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Enclosure 1:

NuScale TR-121172, Revision 1 on behalf of CFPP, LLC (“Grantee”) for the Carbon Free Power Project (CFPP) Nuclear Quality Assurance Program Description (QAPD), Revision 003, nonproprietary

Licensing Topical Report

Carbon Free Power Project, LLC

Quality Assurance Program Description

September 2022

Revision 1

Docket: 99902052

CARBON FREE
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Licensing Topical Report

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Licensing Topical Report

ABSTRACT

This topical report provides a description of the Carbon Free Power Project, LLC (CFPP, LLC) Quality Assurance Program (QAP) for Combined License (COL) activities conducted by or for the Carbon Free Power Project (CFPP). For ease of reference, this topical report is referred to as the Quality Assurance Program Description (QAPD). The QAPD has been prepared in accordance with the requirements of Title 10, Part 50 of the Code of Federal Regulations (10 CFR 50), “Domestic Licensing of Production and Utilization Facilities,” Appendix B, “Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocess Plans,” and NRC accepted NEI 11-04A, “Nuclear Generation Quality Assurance Program Description” and NUREG-0800, “Standard Review Plan (SRP) for the Review of Safety Analysis Reports for Nuclear Power Plants,” Section 17.5, “Quality Assurance Program Description.” The QAPD is based on requirements and guidance of ASME NQA-1-2008 and NQA-1a-2009 Addenda, “Quality Assurance Requirements for Nuclear Facility Applications” as endorsed in NRC Regulatory Guide 1.28, Revision 4.

The topical report is divided into four parts: I. Introduction; II. Quality Assurance Program Description Details; III. Nonsafety-Related SSC Quality Control and IV. Regulatory Commitments.

Licensing Topical Report

EXECUTIVE SUMMARY

This topical report provides the CFPP Quality Assurance Program Description that applies to activities within the scope of the COL application affecting the quality and performance of safety-related structures, systems and components, including, but not limited to siting, design and procurement. This QAPD contains information relevant to the project activities at this time and are performed in accordance with 10 CFR 50 Appendix B.

Currently the CFPP is not performing work activities pertaining to construction, testing, or operations of the plant. Therefore, the QAPD is limited in scope for CFPP and requisite subcontracts. The scope of the current QAPD is such that all NQA-1 requirements and related SRP Section 17.5 guidance apply to only those sections that are relevant.

For sections that are not yet within scope it is noted that they are still in conformance with applicable sections of NQA-1, but are not yet complete. The QAPD will be revised and submitted to the NRC prior to such activities commencing with complete descriptions of their implemented quality program. The following describes this QAPD's alignment with NQA-1 requirements and SRP Section 17.5:

1. Organization – CFPP has a mature organizational structure for implementation of the project and drafting of the COLA. This section is complete and written in accordance with guidance and standards.
2. Quality Assurance Program – CFPP is actively performing work activities with its subcontractors pertaining to safety-related structures, systems and components. This section is complete and written in accordance with guidance and standards.
3. Design Control – The subcontractors for design are actively performing design work, and have developed document control procedures and processes. Section is complete and written in accordance with guidance and standards.
4. Procurement Document Control – Procurement is underway for safety-related services and structures, systems and components which generate documents to be distributed between organizations. These activities are under the controls of a quality program. This section is complete and written in accordance with guidance and standards.
5. Instructions, Procedures and Drawings – All organizations conducting safety-related activities have developed methods for documenting instructions, procedures, and drawings and controlling those documents. This section is complete and written in accordance with guidance and standards.
6. Document Control – Documents are being managed in appropriate data storage repositories in conformance with the requisite standards. This section is complete and written in accordance with guidance and standards.
7. Control of Purchased Items and Services – Procurement has established measures such that the items and services are controlled in accordance with applicable quality requirements prior to the submittal of the COL application. This section is complete and written in accordance with guidance and standards.
8. Identification and Control of Purchased Items – At this time no items have been purchased by CFPP such that measures are necessary to establish processes for identification and control. This section is not complete, and a revision will be

submitted to the NRC prior to the commencement of these activities. However, this section commits to the applicable requirements to NQA-1.

9. Control of Special Processes – No special processes are currently underway for activities pertaining to safety-related structures, systems and components. This section is not complete, and a revision will be submitted to the NRC prior to the commencement of these activities. However, this section commits to the applicable requirements to NQA-1.
10. Inspection – No inspection activities are being performed in the scope of CFPP at this time. This section is not complete, and a revision will be submitted to the NRC prior to the commencement of these activities. However, this section commits to the applicable requirements to NQA-1.
11. Test Control – No test activities are being performed in the scope of CFPP at this time. This section is not complete, and a revision will be submitted to the NRC prior to the commencement of these activities. However, this section commits to the applicable requirements to NQA-1.
12. Control of Measuring & Testing Equipment – No M&TE equipment is being used by CFPP at this time. This section is not complete, and a revision will be submitted to the NRC prior to the commencement of these activities. However, this section commits to the applicable requirements to NQA-1.
13. Handling, Storage, and Shipping – No purchased items are being shipped or stored at this time by CFPP. This section is not complete, and a revision will be submitted to the NRC prior to the commencement of these activities. However, this section commits to the applicable requirements to NQA-1.
14. Inspection, Test, and Operating Status – No test activities are being performed in the scope of CFPP at this time. This section is not complete, and a revision will be submitted to the NRC prior to the commencement of these activities. However, this section commits to the applicable requirements to NQA-1.
15. Control of Nonconforming Items – No purchased safety-related structures, systems and components have been delivered to CFPP at this time. This section is not complete, and a revision will be submitted to the NRC prior to the commencement of these activities. However, this section commits to the applicable requirements to NQA-1.
16. Corrective Action – The corrective action programs for CFPP and suppliers are developed and complete at this time, with audits and verification activities being performed across the organizations which are providing safety-related services or structures, systems and components. This section is complete and written in accordance with guidance and standards.
17. Records – All records are being kept in accordance with the applicable standards, and will be maintained in the manner of their classification. This section is complete and written in accordance with guidance and standards.
18. Audits – Audits are being performed in accordance with the applicable regulations and standards between the CFPP and supporting organizations. This section is complete and written in accordance with guidance and standards.

POLICY STATEMENT

Carbon Free Power Project, LLC (CFPP), a wholly owned subsidiary of the Utah Associated Municipal Power Systems (UAMPS), shall perform Combined License Application (COLA) activities in a manner that will ensure technical, quality, and administrative requirements important to public health and safety are effectively implemented. These activities shall be performed in compliance with the requirements of the Code of Federal Regulations (CFR), the applicable Nuclear Regulatory Commission (NRC) licensing requirements and applicable laws and regulations of the state and local governments.

The CFPP Quality Assurance Program (QAP) is the Quality Assurance Program Description (QAPD) provided in this document and the associated implementing documents. Together, they provide for control of CFPP activities that affect quality of safety-related nuclear plant structures, systems, and components and include all planned and systematic activities necessary to provide confidence that such structures, systems, and components will perform satisfactorily in service. This includes those CFPP activities that can affect directly or indirectly the safety-related site characteristics or engineering analysis of those characteristics. In addition, the QAPD applies to engineering services for plant design and licensing. The requirements of this QAPD are consistent with the applicable requirements of 10CFR Part 50, Appendix B. This QAPD may also be applied to certain equipment and activities that are not safety related, but support safe plant operations, or where other NRC guidance established program requirements.

The QAPD is the top-level policy document that establishes how quality is achieved and presents CFPP's overall philosophy regarding achievement and assurance of quality. Implementing documents assign more detailed responsibilities and requirements and define the organizational interfaces involved in conducting COLA activities within the scope of the QAP. Senior management establishes overall expectations for effective implementation of the quality assurance program and is responsible for obtaining the desired result.

Compliance with the QAPD and implementing procedures is mandatory for personnel directly or indirectly associated with the implementation of the CFPP QAP.

Signed

Doug Hunter

President CFPP, LLC

09/19/2022

Date

PART I INTRODUCTION

SECTION 1 GENERAL

The Carbon Free Power Project (CFPP) Quality Assurance Program Description (QAPD) is the top-level policy document that establishes the quality assurance policy and assigns major functional responsibilities for Combined License (COL) activities conducted by or for CFPP. The QAPD describes the methods and establishes quality assurance (QA) and administrative control requirements that meet 10 CFR 50, Appendix B and 10 CFR 52. This Quality Assurance Program Description (QAPD) was developed using the guidance provided in NRC accepted NEI 11-04A, “Nuclear Generation Quality Assurance Program Description” and NUREG 0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants”. The QAPD is based on the requirements and guidance of ASME NQA-1-2008 and NQA-1a-2009 Addenda, "Quality Assurance Requirements for Nuclear Facility Applications" as endorsed in NRC Regulatory Guide 1.28, Revision 4.

The QA Program (QAP) is defined by the NRC-approved regulatory document that describes the QA elements (i.e., the QAPD), along with the associated implementing documents. Procedures and instructions that control CFPP activities will be developed before the commencement of those activities. Policies establish high-level responsibilities and authority for carrying out important administrative functions which are outside the scope of the QAPD. Procedures establish practices for certain activities which are common to CFPP performing those activities, so the activity is controlled and carried out in a manner that meets QAPD requirements. Procedures establish detailed implementation requirements and methods, and may be used to implement policies or be unique to particular functions or work activities.

1.1 Scope/Applicability

The QAPD applies to activities within the scope of the Combined License (COL) Application affecting the quality and performance of safety-related structures, systems, and components (SSCs), including, but not limited to the following.

1) Siting
2) Design
3) Procurement

Safety-related SSCs under the control of the QAPD, are identified by design documents. The technical aspects of these items are considered when determining program applicability, including, as appropriate, the item's design safety function. The QAPD may be applied to certain activities where regulations other than 10 CFR 50 and 10 CFR 52 establish QA requirements for activities within scope.

Contractors, suppliers, or other organizations supporting CFPP are required to comply with this QAPD, or with their own programs as determined by CFPP to include sufficient controls to meet the applicable requirements of 10 CFR 50, Appendix B and 10 CFR 52.

PART II QUALITY ASSURANCE PROGRAM DESCRIPTION DETAILS

SECTION 1 ORGANIZATION

This section describes the CFPP organizational structure, functional responsibilities, levels of authority, and interfaces for establishing, executing, and verifying QAPD implementation. The organizational structure includes corporate and support functions for CFPP including interface responsibilities for multiple organizations that perform Combined License Application (COLA) quality-related functions. Implementing documents assign more specific responsibilities and duties, and define the organizational interfaces involved in conducting activities and duties within the scope of the QAPD. Management gives careful consideration to the timing, extent, and effects of organizational structure changes.

The CFPP quality assurance function is responsible for determining the size of the Quality Assurance staff commensurate with the duties and responsibilities assigned.

Design, engineering, and environmental services are provided to CFPP by contractors in accordance with their QAPs, which are determined by CFPP to include sufficient controls to satisfy applicable criterion as identified in 10 CFR 50, Appendix B and 10 CFR 52. Work performed by these organizations is evaluated by CFPP through periodic audits and assessments of their QA programs to assure compliance with said programs and implementing procedures. Additionally, contractors may provide Owner's Engineer services to CFPP in support of COLA activities. The following sections describe the reporting relationships, functional responsibilities, and authorities for organizations implementing and supporting the CFPP QA Program. The CFPP organization is shown in Figure II.1-1.

1.1 President

The President is responsible for all aspects of the design, construction, and operation of the CFPP nuclear plants. The President is also responsible for all technical and administrative support activities provided by CFPP and its contractors. The President directs the CFPP Project Director fulfillment of their responsibilities. The President reports to the UAMPS Board of Directors concerning all matters.

1.2 CFPP Project Director

The CFPP Project Director reports to the CFPP President and is responsible for the establishment and effective implementation of all activities controlled by the QAPD. The CFPP Project Director also directs the planning and development of the CFPP staff and organization resources. The CFPP Project Director is also responsible for establishing and managing the contracts for the development of new nuclear generation.

1.3 CFPP Owner’s Engineers

The CFPP Owner’s Engineers are responsible for support of the CFPP organization by providing oversight of Engineering, Licensing, Document Control, and other support where applicable.

The CFPP Owner’s Engineers report to the CFPP Project Director and are responsible for supporting oversight of COLA field work, quality assurance, scheduling of COLA activities, risk management, and cost estimating.

1.4 Contract Manager

The Contract Manager, reports to the CFPP Project Director and is responsible for managing contracts for CFPP activities in accordance with the QAPD.

1.5 Quality Assurance

The CFPP Quality Assurance Organization is responsible for independently planning and performing activities to verify the development and effective implementation of the CFPP QAPD.

1.6 Quality Assurance Manager

The Quality Assurance Manager (QAM) reports to the CFPP Project Director with an independent line function to the CFPP President, for the COLA activities and is responsible for developing and maintaining the CFPP QAPD, evaluating compliance to Quality Assurance Program requirements, and managing Quality Assurance Organization resources.

The Quality Assurance Manager is responsible for the development and verification of the implementation of the QAPD described in this document. The QAM is responsible for assuring compliance with regulatory requirements and procedures through audits and technical reviews; monitoring organizational processes to ensure conformance to commitments and licensing document requirements; and ensuring vendors providing quality services, parts, and materials to CFPP meet the requirements of 10 CFR 50, Appendix B through CFPP or third-party vendor audits. Where applicable, the QAM is also responsible for confirming entities to whom ASME Boiler and Pressure Vessel Code (BPVC) Section III work is subcontracted or designated, hold current and appropriate Certificates of Authorization and the applicable quality program is satisfactorily implemented.

1.7 Reactor Technology Provider

The Reactor Technology Provider provides engineering services for plant design and licensing. These engineering services for new nuclear generation include nuclear plant design in support of the COLA development.

1.8 Engineering, Procurement and Construction (EPC) Provider

The Engineering, Procurement and Construction Provider provides engineering services for the development of the COLA. These engineering services include site-specific licensing, engineering, and design activities; including site characterization and other activities necessary to support the development of the COLA.

1.9 Authority to Stop Work

Quality Assurance personnel have the authority, and the responsibility, to stop work in progress not being done per approved procedures or when safety or SSC integrity may be jeopardized. This authority extends to work performed by suppliers/contractors that furnish safety-related materials and services to CFPP.

1.10 Quality Assurance Organizational Independence

Independence shall be maintained between the organization(s) performing the checking (quality assurance) functions and the organizations performing the functions. Design review/verification independence is described in Section 3.1.

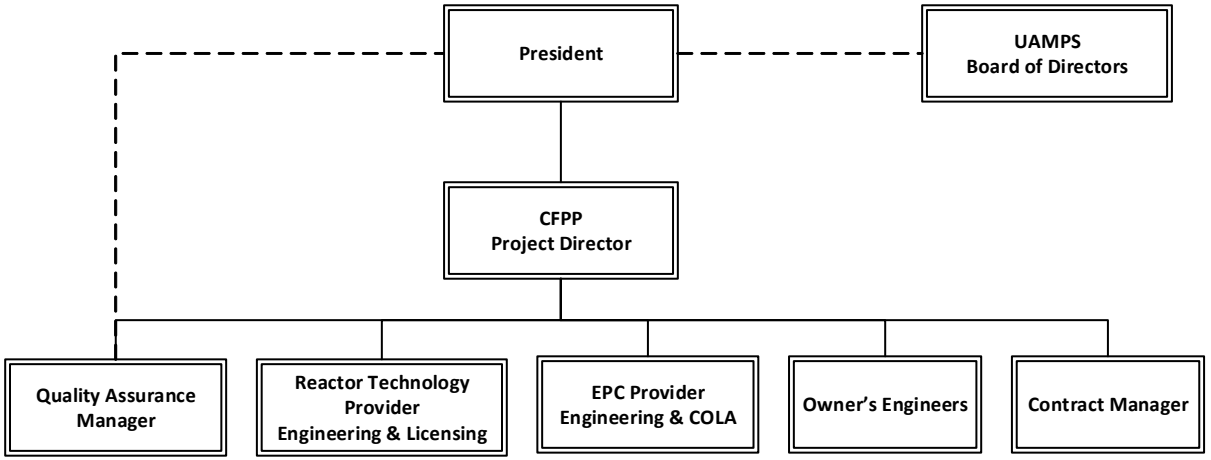
The QAM has sufficient independence from other CFPP priorities (including cost and schedule) to bring forward issues affecting safety and quality and makes judgments regarding quality in all areas regarding CFPP's activities as appropriate. The QAM may make recommendations to the CFPP management regarding improving the quality of work processes. If the QAM disagrees with any actions taken by the CFPP organization and is unable to obtain a resolution, the QAM shall bring the matter to the attention of the CFPP President, who will determine the final disposition.

1.11 NQA-1 Commitment

In establishing its organizational structure, CFPP commits to compliance with NQA-1-2008, Requirement 1.

Figure I.1-1
CFPP Organization

Carbon Free Power Project, LLC



SECTION 2 QUALITY ASSURANCE PROGRAM

The Carbon Free Power Project (CFPP) has established the necessary measures and governing procedures to implement the QAP as described in this QAPD document. CFPP is committed to implementing the QAP to the extent applicable for COLA activities. Further, CFPP ensures through the systematic process described herein that its contractors of safety-related COLA-related services meet the applicable requirements of 10 CFR 50, Appendix B and 10 CFR 52. Senior management is regularly apprised of the adequacy of implementation of the QAP through the audit functions described in PART II, SECTION 18.

The objective of the QAP is to assure CFPP nuclear generating plants are designed, in accordance with governing regulations and license requirements. The program is based on the requirements of ASME NQA-1-2008 and NQA-1a-2009 Addenda, "Quality Assurance Requirements for Nuclear Facility Applications," as further described in this document. The QAP applies to those quality-related activities that involve the functions of safety-related structures, systems, and components (SSCs) associated with the design, fabrication, construction, and testing of the SSCs to technical, quality, managerial and administrative requirements important to the public health and safety including, but not limited to, site-specific engineering related to safety-related SSCs, site geotechnical investigations, site engineering analysis, seismic analysis, and meteorological analysis. A list that identifies SSCs and activities to which this program applies is maintained by the Reactor Technology Provider and the Design Certification Document is used as the basis for this list.

Activities affecting quality will be accomplished under suitable controlled conditions, including:

1) the use of appropriate equipment,
2) a suitable environment for accomplishing the activity, e.g., adequate cleanliness, and
3) compliance with necessary prerequisites for the given activity.

Delegated responsibilities may be performed under a contractor's QAP, provided the contractor is approved per the CFPP QAP. Periodic audits and assessments of contractor QA programs are performed to assure compliance with the contractor's QAP and implementing procedures. In addition, routine interfaces with the contractors personnel provide added assurance quality expectations are met.

For the COLA, the QAPD applies to those CFPP activities that can affect directly or indirectly the safety-related site characteristics or engineering analysis of those characteristics. In addition, the QAPD applies to engineering services for plant design and licensing.

In general, the program requirements specified herein are detailed in implementing procedures that are either CFPP implementing procedures, or contractor implementing procedures governed by a contractor quality assurance program.

A grace period of 90 days may be applied to provisions required to be performed periodically unless otherwise noted. Annual evaluations and audits that must be performed on a triennial basis are examples where the 90-day general period could be applied. The grace period does not allow the "clock" for a particular activity to be reset forward. The "clock" for an activity is reset backward by performing the activity early. Audit schedules are based on the month in which the audit starts.

Under exigent conditions, the audit or survey interval may be extended up to 25% of the periodicity of the audit or survey when performance of such activities is not feasible. This unique grace period can be applied if exigent conditions exist including, but not limited to:

a) a severe local or national public health concern,

b) natural disaster, severe localized or national weather conditions, or

c) a declaration of a national emergency.

Under these exigent conditions, the grace period clock reset under Regulatory Guide 1.28, Rev. 4 does not apply; the audit performed within this extension period resets the triennial clock. The 25% grace period extension is applicable to domestic and international suppliers.

During the use of the 25% extension, an evaluation of the supplier's program shall be performed and the documented results used to determine any necessary adjustments to their qualification status. Suppliers on the CFPP Approved Supplier List (ASL) may be maintained during the 25% extension period provided the following actions (1 – 3) are taken and the results satisfactory:

1) Verification that:
    a. the supplier is still implementing a quality assurance program that meets 10 CFR 50 Appendix B or
    b. commercial suppliers surveyed are still maintaining adequate controls for activities affecting quality.
2) Monitor on-going and previous supplier performance promptly considering the impact of the following types of information:
    a. Results of receipt inspection activities or other operating experience.
    b. Review of supplier-furnished documents and records such as certificates of conformance, nonconformance notices, and corrective actions.
    c. Results of audits and inspections from other sources (e.g. customer, American Society of Mechanical Engineers (ASME), Nuclear Industry Assessment Corporation (NIAC) audits or NRC inspections).
3) In the event of a new procurement activity or change to existing procurements that significantly extends the scope or changes the method / controls for activities performed by the supplier, the evaluation shall document the justification that the change(s) are adequately addressed by the supplier's quality assurance program or mitigating actions are taken by CFPP.

2.1 Responsibilities

Personnel who work directly or indirectly for CFPP are responsible for achieving acceptable quality in work covered by the QAPD. These responsibilities include the activities delineated in 0, SECTION 1 . CFPP personnel performing verification activities are responsible for verifying the achievement of acceptable quality. Activities governed by the QAPD are performed as directed by documented instructions, procedures, and drawings are of a detail appropriate for the activity's complexity and effect on safety. Instructions, procedures, and drawings specify

quantitative or qualitative acceptance criteria as applicable or appropriate for the activity, and verification is against these criteria. Provisions are established to designate or identify the proper documents to be used in an activity, and to ascertain such documents are being used. The Quality Assurance Manager is responsible to verify processes and procedures comply with QAPD and other applicable requirements, that such processes or procedures are implemented, and management appropriately ensures compliance.

2.2 Delegation of Work

CFPP retains and exercises the responsibility for the scope and implementation of an effective QAP. Positions identified in PART II, SECTION 1, may delegate all or part of the activities of planning, establishing, and implementing the program for which they are responsible to others, but retain the responsibility for the program's effectiveness.

Decisions affecting safety are made at the appropriate level based upon their nature and effect, with technical advice or review as appropriate.

2.3 COL Site-Specific Safety-Related Design Basis Activities

COL site-specific safety-related design basis activities are defined as those activities, including sampling, testing, data collection, and supporting engineering calculations and reports, that will be used to establish design inputs for safety-related SSCs. The development of the CFPP COLA will involve site testing, data collection, and calculations may create or bound safety-related design basis data. Site testing and data collection of information pertaining to the physical characteristics of the site that have the potential to affect safety-related design will be treated as safety-related.

2.4 Periodic Review of the Quality Assurance Program

Management of those organizations implementing the QA program, or portions thereof, shall assess the adequacy of that part of the program for which they are responsible to assure its effective implementation at least once each year or at least once during the life of the activity whichever is shorter.

2.5 Management Reviews

Regular management reviews of the QAP will be conducted to assess the effectiveness and the adequacy of the QAP scope and implementation. The persons performing the review are management above or outside the QA organization to ensure an objective assessment.

2.6 Issuance and Revision to Quality Assurance Program

Administrative control of the QAPD will be in accordance with 10 CFR 50.55(f). Changes to the QAPD are evaluated by the CFPP Quality Assurance Manager to ensure such changes do not reduce previously approved quality assurance controls specified in the QAPD. This document shall be revised as appropriate to incorporate additional QA commitments that may be established during the COLA development process. New revisions to the document will be reviewed, at a minimum, by the CFPP

Quality Assurance Manager and approved by the CFPP Project Director.

2.7 Personnel Training and Qualifications

Personnel assigned to implement elements of the QAPD shall be capable of performing their assigned tasks. To this end, CFPP establishes and maintains formal indoctrination, training, and qualification as necessary for personnel performing, verifying, or managing activities within the scope of the QAPD to achieve initial proficiency, maintain proficiency, and adapt to technology changes, method, or job responsibilities. The indoctrination, training, and qualification programs are commensurate with scope, complexity, and importance of the activities; and include or address the following, as appropriate:

1) Education, experience, and proficiency of the personnel receiving training
2) General criteria, technical objectives, requirements of applicable codes standards, regulatory commitments, company procedures, and quality assurance program requirements
3) On-the-job training, if direct hands-on applications or experience is needed to achieve and maintain proficiency.

Sufficient managerial depth is provided to cover absences of incumbents. When required by code, regulation, or standard, specific qualification and selection of personnel is conducted in accordance with those requirements as established in the applicable CFPP procedures. Indoctrination includes the administrative and technical objectives, requirements of the applicable codes and standards, and the QAPD elements to be employed. Records of personnel training and qualification are maintained.

The minimum qualifications of the CFPP Quality Assurance Manager are that they hold an engineering or related science degree and a minimum of four years of related experience including two years of nuclear power plant experience, one year of supervisory or management experience, and one year of the experience is in performing quality verification activities. Special requirements shall include management and supervisory skills and experience or training in leadership, interpersonal communication, management responsibilities, motivation of personnel, problem analysis and decision making, and administrative policies and procedures. Individuals who do not possess these formal education and minimum experience requirements should not be eliminated automatically when other factors provide sufficient demonstration of their abilities. These other factors are evaluated on a case-by-case basis and approved and documented by senior management.

The minimum qualifications of individuals who are part of the Quality Assurance Group responsible for planning, implementing, and maintaining the programs for the QAPD are that each has a high school diploma or equivalent and a minimum of one year of related experience. Individuals who do not possess these formal education and minimum experience requirements should not be eliminated automatically when other factors provide sufficient demonstration of their abilities. These other factors are evaluated on a case-by-case basis and approved and documented by senior management.

2.8 NQA-1 Commitment

In establishing qualification and training programs, CFPP commits to compliance with NQA-1-2008, Requirement 2.

SECTION 3 DESIGN CONTROL

Design activities being performed during the COLA development are performed under contract by the Reactor Technology Provider and the Engineering, Procurement and Construction Provider in accordance with their documented Quality Assurance Programs that meet the requirements of 10 CFR 50, Appendix B.

CFPP may designate certain aspects of its responsibilities to other organizations as allowed in ASME BPVC Section III. The organization shall act as the CFPP designee, however, CFPP shall retain responsibilities for such activities. This includes, but is not limited to, providing Design Specifications that comply with the requirements of the ASME Code. Designee assignments shall contain, as a minimum, the name and address of the designee, the responsibilities assigned, and the applicable nuclear facility or facilities.

Prior to initiating the following activities, CFPP will establish and implement a process to control the design, design changes, and temporary modifications of items that are subject to the provisions of the QAPD. The design process includes provisions to control design inputs, outputs, changes, interfaces, records, and organizational interfaces within CFPP and with contractors. These provisions assure that design inputs (such as design bases and the performance, regulatory, quality, and quality verification requirements) are correctly translated into design outputs (such as analyses, specifications, drawings, procedures, and instructions) so that the final design output contains or references appropriate acceptance criteria that can be related to the design input in sufficient detail to permit verification by inspection and test, as required. Design change processes and the division of responsibilities for design-related activities are detailed in CFPP and contractor procedures. Changes to design inputs, final designs, field changes, and temporary and permanent modifications to operating facilities are justified and subject to design control measures commensurate with those applied to the original design. The design control program includes interface controls necessary to control the development, verification, approval, release, status, distribution, and revision of design inputs and outputs. Design changes and disposition of nonconforming items as "use as is" or "repair" are reviewed and approved by the CFPP design organization or by other organizations so authorized by CFPP.

Design documents are reviewed by individuals knowledgeable in QA to ensure documents contain the necessary QA requirements.

3.1 Design Verification

The CFPP design processes will provide design verification to ensure items, computer programs, and activities subject to the provisions of the QAPD are suitable for their intended application, consistent with their effect on safety. Design changes are subjected to these controls, which include verification measures commensurate with those applied to original plant design.

Design verifications are performed by competent individuals or groups other than those who performed the original design but who may be from the same organization. The verifier shall not have taken part in the selection of design inputs, the selection of design considerations, or the selection of a singular design approach, as applicable. This verification may be performed by the originator's supervisor provided the supervisor did not specify a singular design approach, rule out certain design considerations, and did not establish the design inputs used in the design, or if the

supervisor is the only individual in the organization competent to perform the verification. If the verification is performed by the originator's supervisor, the justification of the need is documented and approved in advance by management.

The extent of the design verification required is a function of the importance to safety of the item or computer program under consideration, the complexity of the design, the degree of standardization, the state-of-the-art, and the similarity with previously proven designs. This includes design inputs, design outputs, and design changes. Design verification procedures are established and implemented to assure that an appropriate verification method is used, the appropriate design parameters to be verified are chosen, the acceptance criteria are identified, and the verification is satisfactorily accomplished and documented. Verification methods may include, but are not limited to, design reviews, alternative calculations, and qualification testing. Testing used to verify the acceptability of a specific design feature demonstrates acceptable performance under conditions that simulate the most adverse design conditions expected for the item's intended use.

CFPP normally completes design verification activities before the design outputs are used by other organizations for design work, and before they are used to support other activities such as procurement, manufacture, or construction. When such timing cannot be achieved, the design verification is completed before relying on the item to perform its intended design or safety function.

3.2 Design Records

CFPP and its contractors maintains records sufficient to provide evidence that the design was properly accomplished. These records include the final design output and any revisions thereto, as well as record of the important design steps (e.g., calculations, analyses and computer programs) and the sources of input that support the final output. Plant design drawings reflect the properly reviewed and approved configuration of the plant.

3.3 Computer Software

The QAPD governs the development, procurement, testing, maintenance, control, and use of computer software when used in safety-related applications. Computer program acceptability is pre-verified or the results verified with the design analysis for each application. Pre-verified computer programs are controlled using a software configuration management process. CFPP and contractors are responsible for developing, approving, and issuing procedures, as necessary, to control the use of such computer software. The procedures require that the software be assigned a proper quality classification and that the associated quality requirements be consistent with this classification. Each software and revision thereto is documented and approved by authorized personnel. The QAPD is also applicable to the administrative functions associated with the maintenance and security of computer hardware where such functions are considered essential in order to comply with other QAPD requirements such as QA records.

3.4 NQA-1 Commitment

In establishing its program for design control and verification, CFPP commits to compliance with NQA-1-2008, Requirement 3, Subpart 2.7 for computer software, and Subpart 2.20 for subsurface investigation requirements.

SECTION 4 PROCUREMENT DOCUMENT CONTROL

4.1 General

CFPP has established the necessary measures and governing procedures to ensure purchased items and services are subject to appropriate quality and technical requirements. Procurement document changes shall be subject to the same degree of control as utilized in the preparation of the original documents.

CFPP has established the organizational responsibilities for:

1) Procurement planning
2) Preparation, review, approval, and control of procurement documents
3) Supplier selection
4) Bid evaluations
5) Review and concurrence of supplier/contractor QA programs by QA prior to initiation of activities affected by the QAP.

4.2 Contents Of Procurement Documents

1) Where original technical or quality assurance requirements cannot be determined, an engineering evaluation is conducted and documented by qualified staff to establish appropriate requirements and controls to assure interfaces, interchangeability, safety, fit, and function, as applicable, are not adversely affected or contrary to applicable regulatory requirements.
2) Applicable technical, regulatory, administrative, quality, and reporting requirements (such as specifications, codes, standards, tests, inspections, special processes, and 10 CFR 21/50.55(e) are invoked for the procurement of items and services. Applicable design bases and other requirements necessary to assure adequate quality shall be included or referenced in documents for procurement of items and services. To the extent necessary, procurement documents shall require contractors to have a documented QA program that is determined to meet the applicable requirements of 10 CFR 50, Appendix B, as appropriate to the circumstances of procurements.

4.3 Procurement Document Review

Reviews of procurement documents shall be performed by personnel who have access to pertinent information and who have an adequate understanding of the requirements and intent of the procurement documents.

4.4 NQA-1 Commitment

In establishing controls for procurement documents, CFPP commits to compliance with NQA-1-2008, Requirement 4.

SECTION 5 INSTRUCTIONS, PROCEDURES, AND DRAWINGS

CFPP has established the necessary measures and governing procedures to ensure activities affecting quality are prescribed by and performed in accordance with instructions, procedures, or drawings of a type appropriate to the circumstances and which, where applicable, include quantitative or qualitative acceptance criteria to implement the QAP as described in the QAPD. Such documents are prepared and controlled according to Part II, Section 6. In addition, means are provided to disseminate to the staff instructions of both general and continuing applicability, as well as those of short-term applicability. Provisions are included for reviewing, updating, and canceling such procedures.

5.1 Procedure Adherence

The CFPP policy requires procedures be followed, and the requirements for use of procedures is established in administrative procedures. When procedures cannot be followed as written, provisions are established for making changes in accordance with Part II, SECTION 6.

Requirements are established to identify the manner in which procedures are implemented, including identification of those tasks that require:

1) The written procedure to be present and followed step-by-step while the task is being performed
2) The user to have committed the procedure steps to memory
3) Verification of completion of significant steps, by initials or signatures or use of check-off lists.

Procedures are required to be present and referred to directly be those developed for extensive or complex jobs where reliance on memory cannot be trusted, tasks infrequently performed, and tasks when steps must be performed in a specified sequence.

5.2 Procedure Content

The established measures address the applicable content of procedures as described in the Introduction to Part II of NQA-1-2008. In addition, procedures governing tests, inspections, operational activities, and maintenance will include as applicable, initial conditions and prerequisites for the performance of the activity.

5.3 NQA-1 Commitment

In establishing procedural controls, CFPP commits to compliance with NQA-1-2008, Requirement 5.

SECTION 6 DOCUMENT CONTROL

CFPP has established the necessary measures and governing procedures to control the preparation, issuance, and revision of documents that specify quality requirements or prescribe how activities affecting quality, including organizational interfaces, to ensure correct documents are employed. The following controls, including electronic systems used to make documents available, are applied to documents and changes thereto:

1) Identification of controlled documents
2) Specified distribution of controlled documents for use at the appropriate location
3) A method to identify the correct document (including revision) to be used and control of superseded documents
4) Identification of individuals responsible for controlled document preparation, review, approval, and distribution
5) Review of controlled documents for adequacy, completeness, and approval prior to distribution
6) A method to ensure the correct documents are being used
7) A method to provide feedback from users to improve procedures and work instructions
8) Coordinating and controlling interface documents and procedures
9) The types of documents to be controlled include:
   a. Drawings, such as design, construction, installation, and as-built drawings
   b. Engineering calculations
   c. Design specifications
   d. Purchase orders and related documents
   e. Supplier/contractor/vendor-supplied documents
   f. Audit, surveillance, and quality verification/inspection procedures
   g. Inspection and Test reports
   h. Instructions and procedures for activities covered by this QAPD including design, construction, installation, operating (including normal and emergency operations), maintenance, calibration, and routine testing
   i. Technical Specifications
   j. Nonconformance reports and corrective action reports

6.1 Review and Approval of Documents

Documents are reviewed for technical adequacy and inclusion of appropriate quality requirements prior to implementation by qualified persons other than the preparer. Procedures are reviewed by the organization responsible for quality verification to ensure quality assurance measures are appropriately applied. The documented review signifies concurrence.

Prior to issuance or use, documents including revisions thereto, are approved by the designated authority. A listing of all controlled documents identifying the current approved revision, or date, is maintained so personnel can readily determine the appropriate document for use.

6.2 Changes to Documents

Changes to documents, other than those defined in implementing procedures as minor changes, are reviewed, and approved by the same organizations that performed the original review and approval unless other organizations are specifically designated. The reviewing organization has access to pertinent background data or information upon which to base their approval.

Minor changes to documents, such as inconsequential editorial corrections, do not require the revised documents receive the same review and approval as the original documents. To avoid a possible omission of a required review, the type of minor changes that do not require such a review and approval and the persons who can authorize such a classification shall be clearly delineated in implementing procedures.

6.3 NQA-1 Commitment

In establishing provisions for document control, CFPP commits to compliance with NQA-1-2008, Requirement 6.

SECTION 7 CONTROL OF PURCHASED ITEMS AND SERVICES

7.1 General

CFPP has established the necessary measures and governing procedures to control purchased items and services to assure conformance with specified requirements. Such control provides for the following as appropriate: source evaluation and selection, evaluation of objective evidence of quality furnished by the supplier, source inspection, audit, and examination of items or services.

7.2 Acceptance of Item or Service

CFPP establishes and implements measures to assess the quality of purchased items and services, whether purchased directly or through contractors, at intervals and to a depth consistent with the item or service importance to safety, complexity, quantity, and the frequency of procurement. Verification actions include testing, as appropriate, during design and construction activities. Verifications occur at the appropriate phases of the procurement process, including, as necessary, verification of activities of suppliers below the first tier.

Measures to assure the quality of purchased items and services include the following, as applicable:

1) Items are inspected, identified, and stored to protect against damage, deterioration, or misuse.

2) Prospective safety-related items and service suppliers are evaluated to assure only qualified suppliers are used. Qualified suppliers are audited on a triennial basis. In addition, if a subsequent contract or a contract modification significantly changes the scope, methods, or controls performed by a supplier, an audit of the changes is performed, thus starting a new triennial period.

3) CFPP may utilize audits conducted by outside organizations for supplier qualification provided the scope and adequacy of the audits meet CFPP requirements. Documented annual evaluations are performed for qualified suppliers to assure they continue to provide acceptable products and services. Industry programs, such as those applied by ASME, or other established utility groups, may be used as input or the basis for supplier qualification whenever appropriate. The results of the reviews are promptly considered for effect on a supplier's continued qualification and adjustments made as necessary (including corrective actions, adjustments of supplier audit plans, and input to third party auditing entities, as warranted). In addition, results are reviewed periodically to determine if, as a whole, they constitute a significant condition adverse to quality requiring additional action.

4) Provisions are made for accepting purchased items and services, such as source verification, receipt inspection, pre- and post-installation tests, certificates of conformance, and document reviews (including Certified Material Test Report/Certificate). Acceptance actions/documents should be established by the Purchaser with appropriate input from the Supplier and be completed to ensure procurement, inspection, and test requirements, as

applicable, have been satisfied before relying on the item to perform its intended safety function.

5) Controls are imposed for the selection, determination of suitability for intended use (critical characteristics), evaluation, receipt, and acceptance of commercial-grade services or items to assure they will perform satisfactorily in service in safety-related applications.

6) If there is insufficient evidence of implementation of a QA program, the initial evaluation is of the existence of a QA program addressing the scope of services to be provided. The initial audit is performed after the supplier completed sufficient work to demonstrate its organization is implementing a QA program.

7.3 NQA-1 Commitment

In establishing provisions for control of purchased items and services, CFPP commits to compliance with NQA-1-2008 and NQA-1a-2009, Requirement 7.

SECTION 8 IDENTIFICATION AND CONTROL OF ITEMS

8.1 General

Prior to initiating the activities defined in this section, CFPP will establish the necessary measures and governing procedures to identify and control items to prevent the use of incorrect or defective items. This includes controls for consumable materials and items with limited shelf life. The identification of items is maintained throughout fabrication, erection, installation, and use so the item can be traced to its documentation, consistent with the item's effect on safety. Identification locations and methods are selected so as not to affect the function or quality of the item.

8.2 NQA-1 Commitment

In establishing provisions for identification and control of items, CFPP commits to compliance with NQA-1-2008, Requirement 8.

SECTION 9 CONTROL OF SPECIAL PROCESSES

9.1 General

Prior to initiating the activities defined in this section, CFPP will establish the necessary measures and governing procedures to assure the special processes that require interim process controls to assure quality, such as welding, heat treating, and nondestructive examination, are controlled.

9.2 Process Control

These provisions include assuring special processes are accomplished by qualified personnel using qualified procedures and equipment. Personnel are qualified and special processes are performed in accordance with applicable codes, standards, specifications, criteria or other specially established requirements. Special processes are those where the results are highly dependent on the control of the process or the skill of the operator, or both, and for which the specified quality cannot be fully and readily determined by inspection or test of the final product.

9.3 NQA-1 Commitment

In establishing measures for the control of special processes, the CFPP commits to compliance with NQA-1-2008, Requirement 9.

SECTION 10 INSPECTION

10.1 General

Prior to initiating the activities defined in this section, CFPP will establish the necessary measures and governing procedures to implement inspections that assure items, services, and activities affecting safety meet established requirements and conform to applicable documented specifications, instructions, procedures, and design documents. Inspection may also be applied to items, services, and activities affecting plant reliability and integrity. Types of inspections may include those verifications related to procurement, such as source, in-process, final, and receipt inspection, as well as construction, installation, maintenance, modification, in-service, and operations activities. Inspections are carried out by properly qualified persons independent of those who performed or directly supervised the work. Inspection results are documented.

10.2 NQA-1 Commitment

In establishing measures for inspection, the CFPP commits to compliance with NQA-1-2008, Requirement 10.

SECTION 11 TEST CONTROL

11.1 General

Prior to initiating the activities defined in this section, CFPP will establish the necessary measures and governing procedures to demonstrate items subject to the provisions of the QAPD will perform satisfactorily in service, the plant can be operated safely and as designed, and the coordinated operation of the plant as a whole is satisfactory. These programs include criteria for determining when testing is required, such as proof tests before installation, pre-operational tests, post-maintenance tests, post-modification tests, in-service tests, and operational tests (such as surveillance tests required by the plant Technical Specifications), to demonstrate performance of plant systems is in accordance with design. Programs also include provisions to establish and adjust test schedules, and maintain status for periodic or recurring tests.

11.2 NQA-1 Commitment

In establishing provisions for testing, the CFPP commits to compliance with NQA-1a-2009, Requirement 11.

SECTION 12 CONTROL OF MEASURING AND TEST EQUIPMENT

12.1 General

Prior to initiating the activities defined in this section, CFPP will establish the necessary measures and governing procedures to control the calibration, maintenance, and use of Measuring and Test Equipment (M&TE) that provides data to verify acceptance criteria are met or information important to safe plant operation. The provisions of such procedures cover equipment such as indicating and actuating instruments and gages, tools, reference and transfer standards, and non-destructive examination equipment. The suppliers of commercial-grade calibration services are controlled as described in PART II, SECTION 7.

12.2 NQA-1 Commitment

In establishing provisions for control of measuring and test equipment, the CFPP commits to compliance with NQA-1-2008, Requirement 12.

SECTION 13 HANDLING, STORAGE, AND SHIPPING

13.1 General

Prior to initiating the activities defined in this section, the CFPP will establish the necessary measures and governing procedures to control the handling, storage, packaging, shipping, cleaning, and preservation of items to prevent inadvertent damage or loss, and to minimize deterioration.

13.2 NQA-1 Commitment

In establishing provisions for control of measuring and test equipment, the CFPP commits to compliance with NQA-1-2008, Requirement 13.

SECTION 14 INSPECTION, TEST, AND OPERATING STATUS

14.1 General

Prior to initiating the activities defined in this section, the CFPP will establish the necessary measures and governing procedures to identify the inspection, test, and operating status of items and components subject to the provisions of the QAPD to maintain personnel and reactor safety and avoid inadvertent operation of equipment.

14.2 NQA-1 Commitment

In establishing measures for control of inspection, test and operating status, the CFPP commits to compliance with NQA-1-2008, Requirement 14.

SECTION 15 NON-CONFORMING ITEMS

15.1 General

Prior to initiating the activities defined in this section, the CFPP will establish the necessary measures and governing procedures to control items, including services that do not conform to specified requirements to prevent inadvertent installation or use. Instructions require the individual discovering a nonconformance identify, describe, and document the nonconformance in accordance with the requirements of PART II, SECTION 16.

15.2 NQA-1 Commitment

In establishing measures for nonconforming materials, parts, or components, the CFPP commits to compliance with NQA-1-2008, Requirement 15.

SECTION 16 CORRECTIVE ACTION

16.1 General

CFPP has established the necessary measures and governing procedures to promptly identify, control, document, classify, and correct conditions adverse to quality. CFPP procedures assure corrective actions are documented and initiated following the determination of conditions adverse to quality in accordance with regulatory requirements and applicable quality standards. CFPP procedures require personnel to identify known conditions adverse to quality. When complex issues arise where it cannot be readily determined if a condition adverse to quality exists, CFPP documents establish the requirements for documentation and timely evaluation of the issue. Reports of conditions adverse to quality are analyzed to identify trends. Significant conditions adverse to quality and significant adverse trends are documented and reported to responsible management. In the case of a significant condition adverse to quality, the cause is determined and actions to preclude recurrence are taken.

In the case of suppliers/contractors working on safety-related activities, or other similar situations, CFPP may delegate specific responsibilities for corrective actions, but CFPP maintains responsibility for the effectiveness of corrective action measures.

16.2 Interface with the Reporting Program

CFPP has procedures to implement a program to identify, evaluate and report defects and noncompliance's to satisfy the requirements of 10 CFR 52, 10 CFR 50.55(e) and 10 CFR 21 during COL design and construction and 10 CFR 21 during operations. Such a reporting program applies to safety-related activities and services performed by CFPP and CFPP suppliers/sub-suppliers providing input to the COLA development.

16.3 NQA-1 Commitment

In establishing provisions for corrective action, the CFPP commits to compliance with NQA-1-2008, Requirement 16.

SECTION 17 QUALITY ASSURANCE RECORDS

17.1 General

CFPP has the necessary measures and governing procedures to ensure sufficient records of items and activities affecting quality are developed, reviewed, approved, issued, used, and revised to reflect completed work. The provisions of such procedures establish the scope of the records retention program for CFPP and include requirements for records administration, including receipt, preservation, retention, storage, safekeeping, retrieval, access controls, user privileges, and final disposition.

17.2 Record Retention

Measures are established to ensure sufficient records of completed items and activities affecting quality are appropriately stored. Records of activities for design, engineering, procurement, manufacturing, construction, inspection and test, installation, preoperation, startup, operations, maintenance, modification, decommissioning, and audits and their retention times are defined in appropriate procedures. The records and retention times are based on Regulatory Position C.1.a.(3) of Regulatory Guide 1.28, Revision 4 for design, construction, and initial start-up. In all cases where state, local, or other agencies have more restrictive requirements for record retention, those requirements will be met.

17.3 Electronic Records

When using optical disks for electronic records storage and retrieval systems, CFPP complies with the NRC guidance in Generic Letter 88-18, "Plant Record Storage on Optical Disks." CFPP will manage the storage of QA Records in electronic media consistent with the intent of RIS 2000-18 and associated NIRMA Technical Guides TG 11-1998, TG15-1998, TG16-1998, and TG21-1998.

17.4 NQA-1 Commitment

CFPP commits to compliance with NQA-1-2008, Requirement 17 and regulatory positions stated in Regulatory Guide 1.28, Revision 4.

SECTION 18 AUDITS

18.1 General

CFPP has established the necessary measures and governing procedures to implement audits to verify the activities covered by the QAPD are performed in conformance with the established requirements. The audit programs are reviewed for effectiveness as a part of the overall audit process. Audits shall be performed in accordance with written procedures or checklists by personnel who do not have direct responsibility for performing the activities being audited.

18.2 Audit Program

Internal audits of selected aspects of licensing, design and construction phase activities are performed with a frequency commensurate with safety significance and in a manner which assures audits of safety-related activities are completed. During the early portions of project activities, audits will focus on areas including, but not limited to, site investigation, procurement, and corrective action. Functional areas of an organization's QA program for auditing include, at a minimum, verification of compliance and effectiveness of implementation of internal rules, procedures (e.g., design, procurement, surveillance, test), regulations, programs for training, retraining, and personnel qualification; and corrective actions, including associated record keeping).

The audits are scheduled in a manner to provide coverage and coordination with ongoing activities, based on the status and importance of the activity. Additional audits may be performed as deemed necessary by management. The scope of the audit is determined by the quality status and safety importance of the activities being performed. These audits are conducted by trained personnel not having direct responsibilities in the area being audited and in accordance with preplanned and approved audit plans or checklists, under the direction of a qualified lead auditor and the cognizance of the Quality Assurance Manager.

CFPP Quality Assurance Manager is responsible for conducting periodic internal and external audits. Internal audits are conducted to determine the adequacy of programs and procedures (by representative sampling), and to determine if they are meaningful and comply with the overall QAPD. External audits determine the adequacy of a contractors quality assurance program.

The results of each audit are reported in writing to the management of the audited organization and the CFPP Project Director, or designee, as appropriate. Additional distribution is made to other concerned management levels and to management of the audited organizations or activities in accordance with approved procedures.

The audited organization responds to all audit findings and initiates corrective action where indicated. Where corrective action measures are indicated, documented follow-up of applicable areas through inspections, review, re-audits, or other appropriate means is conducted.

18.3 Internal Audits

Internal audits of organization and facility activities, conducted prior to placing the facility in operation, should be performed in such a manner as to assure an audit of all applicable QA

program elements is completed for each functional area at least once each year or at least once during the life of the activity, whichever is shorter.

Internal audits include verification of compliance and effectiveness of the administrative controls established for implementing the requirements of the QAPD. These include regulations; provisions for training, retraining, qualification, and performance of personnel performing activities covered by the QAP; and observation of the performance of activities including associated record keeping.

18.4 External Audits

Additional controls for external audits are described in Section 7.2.

18.5 Surveillances

As part of the quality oversight activities conducted by the CFPP QA Organization, surveillances may be conducted on the CFPP COLA related activities. Surveillance personnel shall be qualified to the Surveillance procedure by the CFPP Quality Assurance Manager. Surveillance activities include initial planning, conducting, reporting, and tracking of surveillance findings.

18.6 NQA-1 Commitment

In establishing the independent audit program, the CFPP commits to compliance with NQA-1-2008, Requirement 18 and the regulatory positions stated in Regulatory Guide 1.28, Rev 4.

PART III NONSAFETY-RELATED SSC QUALITY CONTROL

SECTION 1 NONSAFETY-RELATED SSCS - SIGNIFICANT CONTRIBUTORS TO PLANT SAFETY

Specific program controls are applied to nonsafety-related SSCs, for which 10 CFR 50, Appendix B is not applicable, that are significant contributors to plant safety. The specific program controls consistent with applicable sections of the QAPD are applied to those items in a selected manner, targeted at those characteristics or critical attributes that render the SSC a significant contributor to plant safety.

The following clarify the applicability of the QA Program to the nonsafety-related SSCs and related activities, including the identification of exceptions to the QA Program described in Part II, Sections 1 through 18 taken for nonsafety-related SSCs.

1.1 Organization

The verification activities described in this part may be performed by the CFPP organization. The QA organization described in Part II is not required to perform these functions.

1.2 QA Program

CFPP QA requirements for nonsafety-related SSCs are established in the QAPD and appropriate procedures. Suppliers of these SSCs or related services describe the quality controls applied in appropriate procedures. A new or separate QA program is not required.

1.3 Design Control

CFPP has design control measures to ensure that the contractually established design requirements are included in the design. These measures ensure applicable design inputs are included or correctly translated into the design documents, and deviations from those requirements are controlled. Design verification is provided through the normal supervisory review of the designer's work.

1.4 Procurement Document Control

Procurement documents for items and services obtained by or for CFPP include or reference documents describing applicable design bases, design requirements, and other requirements necessary to ensure component performance. The procurement documents are controlled to address deviations from the specified requirements.

1.5 Instructions, Procedures, and Drawings

CFPP provides documents such as, but not limited to, written instructions, plant procedures, drawings, vendor technical manuals, and special instructions in work orders, to direct the performance of activities affecting quality. The method of instruction employed provides an appropriate degree of guidance to the personnel performing the activity to achieve acceptable functional performance of the SSC.

1.6 Document Control

CFPP controls the issuance and change of documents that specify quality requirements or prescribe activities affecting quality to ensure that correct documents are used. These controls include review and approval of documents, identification of the appropriate revision for use, and measures to preclude the use of superseded or obsolete documents.

1.7 Control of Purchased Items and Services

CFPP employs measures, such as inspection of items or documents upon receipt or acceptance testing, to ensure that all purchased items and services conform to appropriate procurement documents.

1.8 Identification and Control of Purchased Items

CFPP will employ measures where necessary, to identify purchased items and preserve their functional performance capability. Storage controls take into account appropriate environmental, maintenance, or shelf life restrictions for the items.

1.9 Control of Special Processes

CFPP will employ process and procedure controls for special processes, including welding, heat treating, and nondestructive testing. These controls are based on applicable codes, standards, specifications, criteria, or other special requirements for the special process.

1.10 Inspection

CFPP will use documented instructions to ensure necessary inspections are performed to verify conformance of an item or activity to specified requirements or to verify that activities are satisfactorily accomplished. These inspections may be performed by knowledgeable personnel in the line organization. Knowledgeable personnel are from the same discipline and have experience related to the work being inspected.

1.11 Test Control

CFPP will employ measures to identify required testing that demonstrates accordance with test instructions or procedures. The test results are recorded, and authorized individuals evaluate the results to ensure that test requirements are met.

1.12 Control of Measuring and Test Equipment (M&TE)

CFPP will employ measures to control M&TE use, and calibration and adjustment at specific intervals or prior to use.

1.13 Handling, Storage, and Shipping

CFPP will employ measures to control the handling, storage, cleaning, packaging, shipping, and preservation of items to prevent damage or loss and to minimize deterioration. These measures include appropriate marking or labels, and

identification of any special storage or handling requirements.

1.14 Inspection, Test, and Operating Status

CFPP will employ measures to identify items that have satisfactorily passed required tests and inspections and to indicate the status of inspection, test, and operability as appropriate.

1.15 Control of Nonconforming Items

CFPP will employ measures to identify and control items that do not conform to specified requirements to prevent their inadvertent installation or use.

1.16 Corrective Action

CFPP employs measures to ensure failures, malfunctions, deficiencies, deviations, defective components, and nonconformances are properly identified, reported, and corrected.

1.17 Records

CFPP employs measures to ensure records are prepared and maintained to furnish evidence that the above requirements for design, procurement, document control, inspection, and test activities have been met.

1.18 Audits

CFPP employs measures for line management to periodically review and document the adequacy of the process, including taking any necessary corrective action. Audits independent of line management are not required. Line management is responsible for determining whether reviews conducted by line management or audits conducted by any organization independent of line management are appropriate. If performed, audits are conducted and documented to verify compliance with design and procurement documents, instructions, procedures, drawings, and inspection and test activities. When the measures of this part (Part III) are implemented by the same programs, processes, or procedures as the comparable activities of Part II, the audits performed under the provisions of Part II may be used to satisfy the review requirements of this Section (Part III, Section 1.18).

SECTION 2 NON-SAFETY-RELATED SSCS CREDITED FOR REGULATORY EVENTS

The following criteria apply to fire protection (10 CFR 50.48), anticipated transients without scram (ATWS) (10 CFR 50.62), the station blackout (SBO) (10 CFR 50.63) SSCs not safety-related;

1) CFPP implements quality requirements for the fire protection system in accordance with Regulatory Position 1.7, "Quality Assurance," in Regulatory Guide 1.189, Revision 3, February 2018, "Fire Protection for Nuclear Power Plants”
2) CFPP implements the quality requirements for ATWS equipment in accordance with Generic Letter 85-06, “Quality Assurance Guidance for ATWS Equipment That Is Not Safety Related.”
3) CFPP implements quality requirements for SBO equipment in accordance with Regulatory Position 3.5, “Quality Assurance and Specific Guidance for SBO Equipment That Is Not Safety Related,” and Appendix A, “Quality Assurance Guidance for Nonsafety Systems and Equipment,” in Regulatory Guide 1.155, Revision 0, August 1988, “Station Blackout.”

PART IV REGULATORY COMMITMENTS

SECTION 1 NRC REGULATORY GUIDES AND QUALITY ASSURANCE STANDARDS

This section identifies the NRC Regulatory Guides (RG) and the other quality assurance standards which have been selected to supplement and support the CFPP QAPD. CFPP complies with these standards to the extent described or referenced. Commitment to a particular RG or standard does not constitute a commitment to other RGs or standards that may be referenced therein.

1.1 Regulatory Guides:

1) Regulatory Guide 1.26, Revision 6, December 2021 - Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants

   Regulatory Guide 1.26 defines classification of systems and components.

2) Regulatory Guide 1.28, Rev. 4, June 2010, Quality Assurance Program Criteria (Design and Construction)

   Regulatory Guide 1.28 describes a method acceptable to the NRC staff for complying with the provisions of 10 CFR 50, Appendix B with regard to establishing and implementing the requisite quality assurance program for the design and construction of nuclear power plants.

3) Regulatory Guide 1.29, Revision 5, July 2016 - Seismic Design Classification

   Regulatory Guide 1.29 defines systems required to withstand a safe shutdown earthquake (SSE).

4) Regulatory Guide 1.234, [Revision 0, April 2018], Evaluating Deviations and Reporting Defects and Noncompliance Under 10 CFR Part 21.

   Regulatory Guide 1.234 describes methods that the staff of the U.S. Nuclear Regulatory Commission (NRC) considers acceptable for complying with the provisions of Title 10 of the Code of Federal Regulations (10 CFR) Part 21, “Reporting of Defects and Noncompliance”.

1.2 Standards:

1) ASME NQA-1-2008 Edition with NQA-1a-2009 Addenda - Quality Assurance Requirements for Nuclear Facility Applications

   CFPP commits to NQA-1-2008 with NQA-1a-2009 Addenda, Parts I and II, as described in Part I, Section 1 of this document with specific identification of exceptions or clarification. CFPP commits to NQA-1-2008 with NQA-1a-2009 Addenda, and Part III only as specifically noted in Part I, Section 1 of this document.

2) Nuclear Information and Records Management Association, Inc. (NIRMA) Technical Guides (TGs)

   CFPP commits to NIRMA TGs TG 11-1998, TG15-1998, TG16-1998, and TG21-1998.