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License No.: NPF-12

**SOUTH CAROLINA ELECTRIC AND GAS COMPANY**  
**VIRGIL C. SUMMER NUCLEAR STATION (VCSNS) UNIT 1**  
**TRANSMITTAL OF THE QUALITY ASSURANCE PROGRAM DESCRIPTION (QAPD)**

In accordance with 10 CFR 50.54(a)(3), South Carolina Electric and Gas Company (SCE&G), acting for itself and as agent for South Carolina Public Service Authority, transmits one controlled copy of the QAPD, Revision 7. The 10 CFR 50.54(a) evaluation for this change is also attached.

On April 29, 2019 SCE&G, which is authorized under Facility Operating License NPF-12 to operate and possess Virgil C. Summer Nuclear Station Unit 1, changed its name to Dominion Energy South Carolina, Inc. SCE&G will be requesting a license amendment to reflect this name change, in the near future.

Should you have questions concerning this please feel free to contact Mrs. Alison Fulmer at 803-941-9844.

Sincerely,

A handwritten signature in black ink, appearing to read 'George A. Lippard', written over a horizontal line.

George A. Lippard  
Site Vice President  
V.C. Summer Nuclear Station

Commitments contained in this letter: None

Attachments: 1) V. C. Summer Quality Assurance Program Description  
2) 50.54(a) Evaluation

cc: (Without Attachment unless noted)  
Gregory J. Lindamood – Santee Cooper  
Laura Dudes - NRC Region II (With 2 Attachments)  
S. A. Williams – NRC Project Manager  
NRC Resident Inspector

Q004  
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## **Quality Assurance Program Description**

**Title:** Dominion Energy, South Carolina Electric & Gas Co.  
V. C. Summer Quality Assurance Program Description

**Process/Program Owner:** Site Vice President

	Version Number	Effective Date
<b>Safety-Related</b>	<b>Revision 7</b>	<b>06/27/2019</b>

**Revision Summary:**

1. Significant changes in Part II, Section 1, to restructure the administration of the organization to align with the other Dominion Energy nuclear facilities. Details of the changes are contained in QAPD Change Request 19-004.
2. Changes throughout the document from specific position titles to generic descriptive titles to align with the practice at the other Dominion Energy nuclear facilities. (Change Request 19-004.)
3. Administrative changes to the terms South Carolina Electric & Gas Co. and SCE&G to Dominion Energy or VCS as appropriate within the text of the document to reflect the change in ownership. (Change Request 19-004.)
4. Editorial changes throughout to include: changing plant to facility where appropriate, minor corrections to punctuation and format, add missing revision numbers for commitment documents, renumber and reorder subsections to address the reorganization, and update the Table of Contents. (Change Request 19-004.)
5. Updated the Policy Statement to address the change in administration for the QA program and the name and title of the approver. (Change Request 19-004.)
6. Administrative changes to Parts I and II, to include applicability of the QAPD to 10 CFR Part 71 activities for transportation packagings as authorized by the NRC. (Change Request 19-004.)
7. Revised Part II, subsection 2.4 to address the responsibility and authority for changes to the QAPD to align with the established authority within the rest of the Dominion Energy fleet of nuclear facilities. (Change Request 19-004.)
8. Revised Part V, Section 1 to add a definition for Safety Analysis Report (SAR) as a generic term used within the QAPD that refers to various forms of SARs that are required by regulation for a particular facility. (Change Request 19-004.)

Continued next page

9. Revised Part II, subsection 7.2, second bulleted list of clarifications/exceptions to NQA-1-1994, Supplement 7S-1, regarding the purchase of commercial grade calibration and testing services to allow the use of accreditation in lieu of commercial grade services. The change also includes the NRC positions clarifying the provisional use of an updated ISO standard for accreditation and the use of subcontractors by the accredited supplier. (Change Request 19-005.)
10. Revised Part V, subsections 2.3.1.a, and 3.2, second bulleted item, to change the approval authority for administrative procedures from the General Manager, Nuclear Plant Operations, to the individual filling the management position responsible for the functional area. (Change Request 19-006.)

Reviewed By/Date:

John M. Quigley / 6/20/19

Manager, Nuclear Oversight

Approved By/Date:

George A. Lippard / 6/20/19

Site Vice President

**NUCLEAR OPERATION**

**COPY NO. 157J**

## DOMINION ENERGY SOUTH CAROLINA, INC.

### POLICY STATEMENT

Dominion Energy South Carolina, Inc. shall design, procure, and operate the V. C. Summer (VCS) nuclear station, including the associated Independent Spent Fuel Storage Installation, in a manner that will ensure the health and safety of the public and workers. These activities shall be performed in compliance with the requirements of the Code of Federal Regulations (CFR), the applicable Nuclear Regulatory Commission (NRC) Facility Operating Licenses, and applicable laws and regulations of the state and local governments.

The VCS 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 VCS activities that affect the quality of safety-related nuclear facility structures, systems, and components (SSCs) and include all planned and systematic activities necessary to provide adequate confidence that such SSCs will perform satisfactorily in service. The QAPD may also be applied to certain equipment and activities that are not safety-related, but support safe facility operations, or where other NRC guidance establishes program requirements.

The QAPD is the top-level policy document that establishes the manner in which quality is to be achieved and presents VCS'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 activities within the scope of the QAPD. Compliance with the QAPD and implementing documents is mandatory for personnel directly or indirectly associated with implementation of the VCS QAP.

The management position responsible for Nuclear Oversight is responsible for interpretations and clarifications of the requirements of the QAPD, and is delegated the responsibility and authority to maintain and update the QAPD, including approving changes that do not constitute a reduction in the commitment of the program description accepted by the NRC. Where a conflict in opinions arise that cannot be resolved at that level, they are escalated to the Chief Nuclear Officer (CNO) position for resolution.

Signed: Dan Stoddard  
Daniel G. Stoddard  
Senior Vice President & Chief Nuclear Officer

Date: 6/24/19

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## **PART I INTRODUCTION**

### **SECTION 1 GENERAL**

VCS's Operational Phase Quality Assurance Program Description (QAPD) is the top-level policy document that establishes the quality assurance policy and assigns major functional responsibilities for operations activities conducted by or for VCS. The QAPD describes the methods and establishes quality assurance (QA) and administrative control requirements that meet 10 CFR 50, Appendix B. The QAPD is based on the requirements and recommendations of ASME NQA-1-1994, "Quality Assurance Requirements for Nuclear Facility Applications," Parts I, II, and III, as specified in this document.

The QAPD is applied to the Independent Spent Fuel Storage Installation governed by Subpart G of 10 CFR 72 as specifically delineated in 72.140. The quality assurance elements and required control detailed in Subpart G are addressed in the QAPD.

VCS activities conducted with regard to transportation packagings under 10 CFR Part 71 have the QAPD applied to them using the applicable criteria of Appendix B to 10 CFR Part 50 as authorized by NRC approval. These activities include procurement, maintenance, repair, and use of such packagings.

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 Operational Phase activities were or will be developed prior to 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 all VCS organizations performing those activities so that the activity is controlled and carried out in a manner that meets QAPD requirements. Procedures specific to a site, organization, or group 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 operational phase activities affecting the quality and performance of safety-related structures, systems, and components, including, but not limited to:

Designing	Storing	Operating
Maintaining	Procuring	Erecting
Repairing	Fabricating	Installing
Modifying	Cleaning	Inspecting
Refueling	Handling	Testing
Training	Shipping	Startup
Decommissioning	Receiving	

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, Appendix B, 10 CFR 71, Subpart H, and 10 CFR 72, Subpart G, establish QA requirements for activities within their scope.

The policy of VCS is to assure a high degree of availability and reliability of the V. C. Summer Nuclear Station Unit 1 while ensuring the health and safety of its workers and the public. To this end, selected elements of the QAPD are also applied to certain equipment and activities that are not safety-related, but support safe, economic, and reliable facility operations, or where other NRC guidance establishes quality assurance requirements. Implementing documents establish program element applicability.

The definitions provided in ASME NQA-1-1994, Part I, Section 1.4, apply to select terms as used in this document. Additional definitions are provided in Part V, Section 1.0 of this QAPD.

## **PART II                      QAPD DETAILS**

### **SECTION 1                ORGANIZATION**

This Section describes VCS's key organizational structure, functional responsibilities, levels of authority and interfaces for establishing and executing the quality assurance program, and verifying its implementation. The organizational structure includes corporate management, corporate support functions (both off-site and on-site) for nuclear facility operations, including interface responsibilities for multiple groups within the organization that perform quality-related functions, and the onsite facility operations functions. Implementing documents assign more specific authorities, functions, and responsibilities, and define the organizational interfaces involved in conducting activities and duties within the scope of the QAP. Management gives careful consideration to the timing, extent and effects of organizational structure changes.

The Dominion Energy, SCE&G nuclear operations organization is responsible for implementing and supporting the QAPD.

During the operating life of the V. C. Summer Nuclear Station, management may delegate the work of executing portions of the QAPD. However; Dominion Energy, SCE&G shall retain the responsibility for its overall effectiveness.

Outside organizations that perform activities in support of the design, procurement, fabrication, modification, inspection, test, or maintenance of the safety-related SSCs of the facility are required to work under an approved QAPD.

The following subsections and organization charts describe the reporting relationships, functional responsibilities and authorities for organizations implementing and supporting the VCS QAP. The Dominion Energy, SCE&G corporate organization and the operating facility management organization are shown in Figures II.1-1 through II.1-3.

#### **1.1      Chief Nuclear Officer**

The Chief Nuclear Officer (CNO) is Dominion Energy's executive management position responsible for nuclear operations and has overall authority and responsibility for the implementation of all activities associated with the safe and reliable design, construction, and operation of Dominion Energy's nuclear facilities. The CNO establishes Dominion Energy's quality assurance policy and is responsible for implementing the quality assurance program during operating activities. The CNO delegates authority and responsibility for the operation and support of the nuclear facilities through the executive management position responsible for facility operations, the executive management position responsible for engineering, the executive management position responsible for fleet performance, and the management position responsible for nuclear oversight.

#### **1.2      VCS Operating Organization**

The operating organization is responsible for keeping the executive management position responsible for facility operations abreast of facility conditions and verifying that the day to day operations of the facility are conducted safely and in accordance with all administrative controls including the QAPD.

### **1.2.1 Facility Operations**

An executive management position is responsible for operations of their assigned Company nuclear facilities. The necessary responsibility and authority for the management and direction of all activities related to the safe and efficient operation has been delegated by the senior executives. This responsibility includes ensuring quality through implementation of this QAPD in all the activities related to operation such as maintenance, testing, start-up and shutdown, refueling, fuel storage, and modification.

#### **1.2.1.1 Facility Operations and Maintenance**

A senior management position is responsible for safe operations and maintenance of their assigned nuclear facilities including those activities necessary for safe storage and handling of spent nuclear fuel. The position responsibilities include: directing the operations, maintenance, outage and planning, and site services groups; implementing facility modifications; and maintaining compliance with requirements of the operating license, Technical Specifications, and applicable federal, state, and local laws, regulations, and codes.

##### **1.2.1.1.1 Operations**

Operations is responsible for the day to day operation of the facility in a safe and efficient manner in compliance with the operating license. The management position responsible for operations directs overall facility operation, and is responsible for review of normal and emergency training and retraining programs to ensure they are effective. Operations activities include monitoring and controlling day-to-day operation of the nuclear facility; responding to alarms; manipulating facility equipment; coordinating facility operations to manage work such as maintenance, testing, and modifications; and moving nuclear fuel. The Operations organization contains supervision and staff for shift operations, including shift managers, unit supervisors, licensed control room operators, and non-licensed operators. Operations is also responsible for the shift technical advisor function. In the absence of the individual filling the management position responsible for operations, the individual filling the supervisor position responsible for operations will assume these responsibilities. Operations also has overall responsibility for the Fire Protection program.

##### **1.2.1.1.2 Maintenance**

Maintenance is responsible for establishing and implementing the programs for maintenance activities to ensure the continued safe, efficient, and reliable operation of VCS. The management position responsible for maintenance is responsible for directing and coordinating facility maintenance activities including on-line maintenance, installation, maintenance, alterations, adjustment and calibration, replacement and repair of facility electrical and mechanical equipment, and instruments and controls. The responsibilities include performance of surveillances required by technical specifications, establishing standards and frequency of calibration for instrumentation and control devices, and ensuring instrumentation and related testing equipment are properly used, inspected and maintained in compliance with company policies and procedures.

#### **1.2.1.1.3 Outage & Planning**

Outage & Planning is responsible for planning and scheduling online maintenance and outage activities, including the scheduling of maintenance, modification, test and inspection activities within the constraints imposed by operational, regulatory, and system load requirements.

#### **1.2.1.1.4 Site Services**

Site Services is responsible for facility project support, including project construction and project controls. Site Services is responsible for, and serves as, the primary organizational interface with outside organizations for management, engineering, planning and implementation of capital projects. The organization provides coordination and interface for resolving conflicts and delays for execution of activities as necessary for project implementation.

### **1.2.2 Facility Safety & Licensing**

A senior management position is responsible for ensuring that facility safety and licensing requirements are implemented. This position is responsible for directing and coordinating radiological protection and chemistry programs, site emergency preparedness, and assessment of nuclear safety issues at the facility, including certain independent review functions. The responsibilities also include managing licensing activities; industrial safety and loss prevention; interfacing with corporate management on operating experience and licensing issues, managing facility procedures, and administering the facility environmental compliance program. This position is independent of cost and scheduling concerns associated with operations, maintenance, and modification activities to avoid undue pressures when carrying out radiological protection, and independent nuclear safety review functions.

#### **1.2.2.1 Organizational Effectiveness**

Nuclear Organizational Effectiveness is responsible for ensuring that procedures are prepared in accordance with applicable regulatory requirements, industry quality standards and this QAPD; management of facility QA records; the corrective action program; and the operating experience program. This responsibility includes review of NRC and industry issuances, significant events, and other operating experience to meet independent nuclear safety review requirements.

#### **1.2.2.2 Radiological Protection & Chemistry**

The Radiological Protection & Chemistry group performs health physics and chemistry functions and maintains sufficient organizational freedom and independence from operating pressures as required by the facility Technical Specifications. A qualified supervisor or manager is assigned to fulfill the radiological protection manager position.

Radiological protection responsibilities include scheduling and conducting radiological surveys, contamination sample collection, determining contamination levels, assigning work restrictions through radiation work permits, administering the personnel monitoring program, count room

and radwaste processing, radiological environmental monitoring, and maintaining required records in accordance with federal and state codes.

Chemistry responsibilities include implementing the chemistry programs, controlling non-radiological releases, maintaining the quality of fluids in various facility systems within the prescribed limits, and operating water treatment facilities.

### **1.2.2.3 Emergency Preparedness**

The Emergency Preparedness group is responsible for development and maintenance of the facility radiological emergency plans and coordination with required off-site emergency response groups for the nuclear facilities. This includes managing the overall scheduling and coordination of emergency plan testing, training and exercises with federal, state, and local agencies, and working with corporate and facility personnel to ensure emergency plans meet all requirements and commitments.

### **1.2.3 Training**

A management position is responsible for the training of personnel who operate or support the nuclear facilities. Training responsibilities include: determining the need for training based on information provided by the various groups, developing performance-based training programs, implementing training programs to support employee and facility needs, coordinating maintenance and modification of the plant simulator, and evaluating training programs. Certain functional groups may be assigned responsibility for the development and conduct of their own training programs provided these groups are not required to have a systems approach to training under 10 CFR 50.120.

## **1.3 Engineering Services**

An executive management position is responsible for the engineering functions supporting design and construction activities and long-term nuclear operations. These are accomplished through nuclear engineering, projects, nuclear analysis and fuel, supply chain management, and information technology. Responsibilities include system level implementation of the requirements established by this QAPD for the nuclear facilities and facility specific engineering and technical support required for day-to-day operations. Where implementation of any or all of these functions is delegated to organizations outside the Company, procedures require the establishment of interface documents including defining lines of communication and authorities as appropriate for the delegated functions. However, this executive management position retains responsibility for the scope and effective implementation of the quality assurance program for those functions.

### **1.3.1 Nuclear Engineering and Fuel**

A senior management position is responsible for design engineering functions, nuclear projects, nuclear safety engineering, nuclear fuel analysis and procurement, and supporting activities. These functions and activities include independent design checks and reviews, developing and maintaining engineering programs, including those for nondestructive examination (NDE), and the facility inservice inspection and test (ISI/IST) programs; configuration management including

design and configuration control, and engineering technical support for the operating facilities. The engineering activities also include evaluation, and analysis of: core design, fuel and reactor performance, probabilistic risk assessment, spent fuel storage, and radiological effects. This group also provides support to reactor engineering for the operating power stations.

Nuclear Engineering and Fuel is responsible for nuclear fuel procurement, assurance of nuclear fuel quality through surveillances and inspections at Company and Supplier facilities, and special nuclear material accountability. This position has the authority to control further processing or installation of nonconforming materials. The authority delegated to inspection and surveillance personnel is delineated in procedures. Nuclear Engineering and Fuel is also responsible for providing engineering oversight of dry cask spent fuel storage system fabrication, including approval of nonconformance disposition.

Nuclear Engineering and Fuel is responsible for the implementation of large projects for the nuclear facilities on behalf of the Company. Implementation includes development of the detailed scope, estimate, schedule, cost, design, procurement, construction, testing, and closeout of each project. Nuclear Projects focuses on defined projects separate from ongoing routine engineering projects.

### **1.3.2 Facility Engineering**

Facility Engineering is responsible for managing engineering resources providing day-to-day technical support for facility operations. The functions include engineering, reactor-engineering, and technical support at a system and component level to ensure optimum design basis performance, system reliability, and optimum component performance and reliability. Support is also provided in developing and implementing testing programs, tracking and scheduling test performance, and evaluating test results. The test programs include inservice inspections, Technical Specification surveillances, post-modification and post-maintenance testing, and nondestructive examinations. Facility Engineering is responsible for performing technical reviews and performance monitoring of key structures, systems, and components.

Facility Engineering is also responsible for Design Engineering including classifying SSCs, implementing the design control program, developing and revising facility drawings, and ensuring the design basis for the facility is maintained.

### **1.3.3 Supply Chain Management**

A senior management position is responsible for material management, purchasing, procurement engineering, Supplier surveillance functions, and source and receipt inspection. This position has the authority to control further processing or installation of nonconforming materials. This authority is delegated to inspection and surveillance personnel as delineated in procedures.

#### **1.3.4 Nuclear Regulatory Affairs**

A senior management position for Nuclear Regulatory Affairs is responsible for providing regulatory compliance and licensing support through NRC communications, maintaining and acquiring licenses required for continued and extended operations.

Nuclear Regulatory Affairs is responsible to ensure controlled documents (such as manuals, instructions, procedures, and drawings) and QA records are maintained in accordance with applicable regulatory requirements, industry quality standards, and this QAPD. Nuclear Regulatory Affairs is also responsible for leading and providing strategy for the fleet emergency preparedness organizations.

#### **1.3.5 Information Technology**

A senior management position is responsible for direction and support of information technology for the nuclear organizations and facilities. Responsibilities include: network infrastructure maintenance and upgrade, network and application security, network operations; automation strategy, application development and support, automation training; development and maintenance of the software control program; and oversight, maintenance, and repair of the Emergency Response Facility Computer System.

### **1.4 Fleet Performance**

An executive management position is responsible for the training of personnel who support the nuclear facilities and for assessing fleet and facility performance to identify areas for improvement and recommend actions to improve performance.

#### **1.4.1 Performance Improvement and Training**

A senior management position is responsible for the training of personnel who support the nuclear facilities. Training responsibilities include: determining the need for training based on information provided by the various groups, developing performance-based training programs, implementing training programs to support employee and facility needs, and evaluating training programs. Certain functional groups may be assigned responsibility for the development and conduct of their own training programs provided these groups are not required to have a systems approach to training under 10 CFR 50.120. Performance Improvement and Training is also responsible for assessing fleet and facility performance to identify areas for improvement and recommend actions to improve performance.

#### **1.4.2 Protection Services**

A senior management position is responsible for providing nuclear facility protective services, including physical security, security force operations, training, and qualification programs, maintenance and testing activities for security equipment for the facility, nuclear facility access programs, and fitness for duty programs.

## **1.5 Nuclear Oversight**

A management position is responsible for the verification of effective Company and Supplier QA program development, documentation, and implementation, and the effective performance of Nuclear Oversight activities. This position is responsible for the performance of independent audits of facility operations related to quality and safety with lines of communication to the executive management position responsible for facility operations. This position is independent of cost and scheduling concerns associated with construction, operations, maintenance, modification, and decommissioning activities for performing quality assurance program verification. Where implementation of any or all of these functions is delegated to Suppliers, procedures require the establishment of interface documents including defining lines of communication and authorities as appropriate for the delegated functions. However, this management position retains responsibility for the scope and effective implementation of the quality assurance program for those functions. This management position has the necessary authority and responsibility for verifying quality achievement; identifying quality problems, recommending solutions and verifying implementation of the solutions; and escalating quality problems to higher management levels. This position has the authority to suspend unsatisfactory work and control further processing or installation of non-conforming materials. The authority to stop work delegated to Nuclear Oversight personnel is delineated in procedures.

Nuclear Oversight is responsible for the evaluation of Suppliers' quality programs through a system of external audits, surveys, evaluations, and/or reviews of Supplier performance in accordance with quality assurance requirements. A list of approved Suppliers is maintained.

Nuclear Oversight is responsible for assuring Company compliance with this QAPD through administration of a comprehensive and systematic internal audit program.

Nuclear Oversight is responsible for developing and maintaining an appropriate quality verification inspection program where not provided for in the facility construction or operating organization functions.

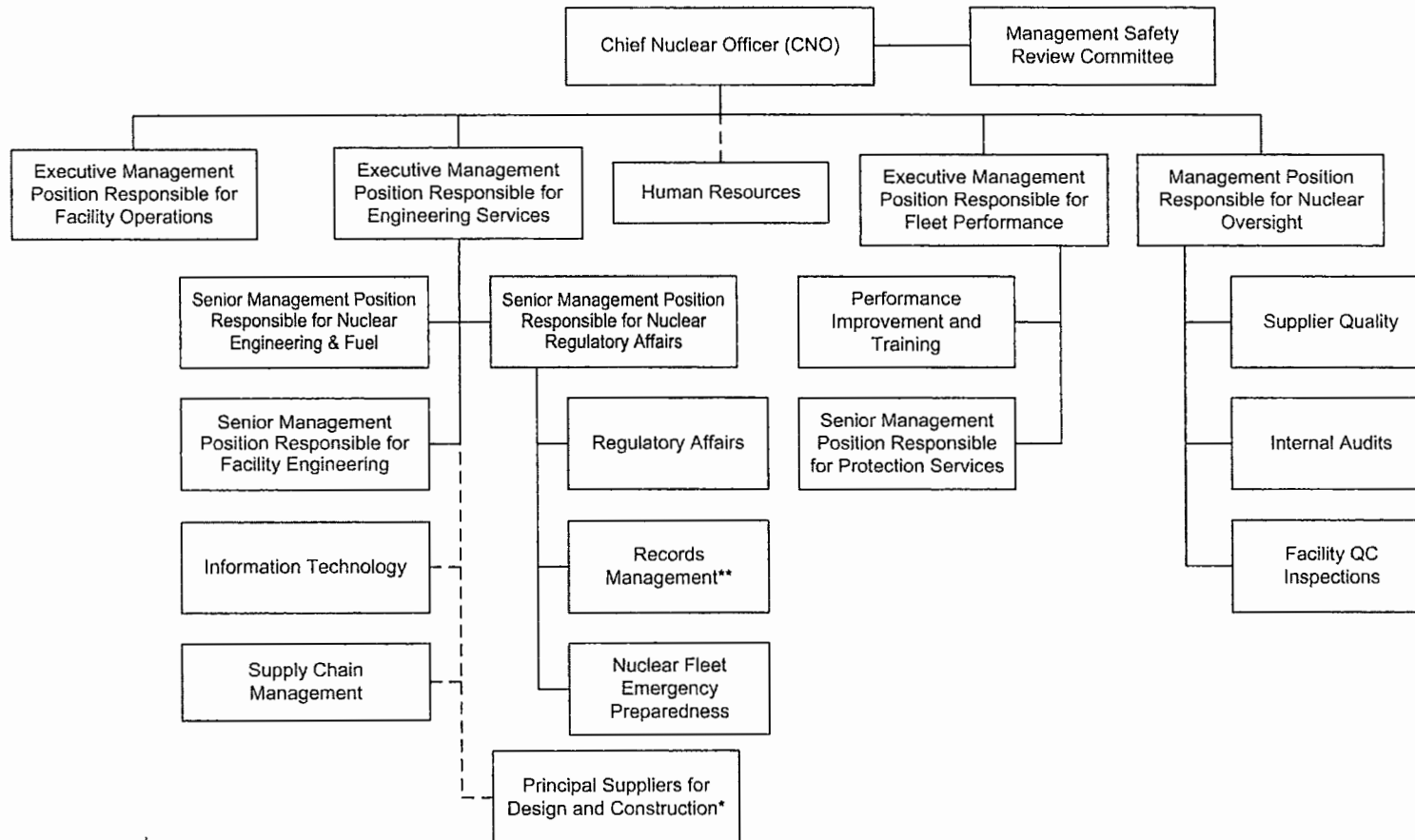
### **1.5.1 Quality Control Inspections (VCS)**

The Quality Control Inspection group plans and conducts inspections of operating facility maintenance and modification activities to ensure quality in accordance with the requirements of the QA program. The Quality Control Inspectors report through this functional organization while performing maintenance and modification inspections for the operating facilities associated with VCS.

## **1.6 NQA-1-1994 Commitment**

In establishing its organizational structure, VCS commits to compliance with NQA-1-1994, Basic Requirement 1 and Supplement 1S-1.

**Figure II.1-1  
Organizational Relationships of Key Management  
And Functional Groups  
Corporate and Technical Support**

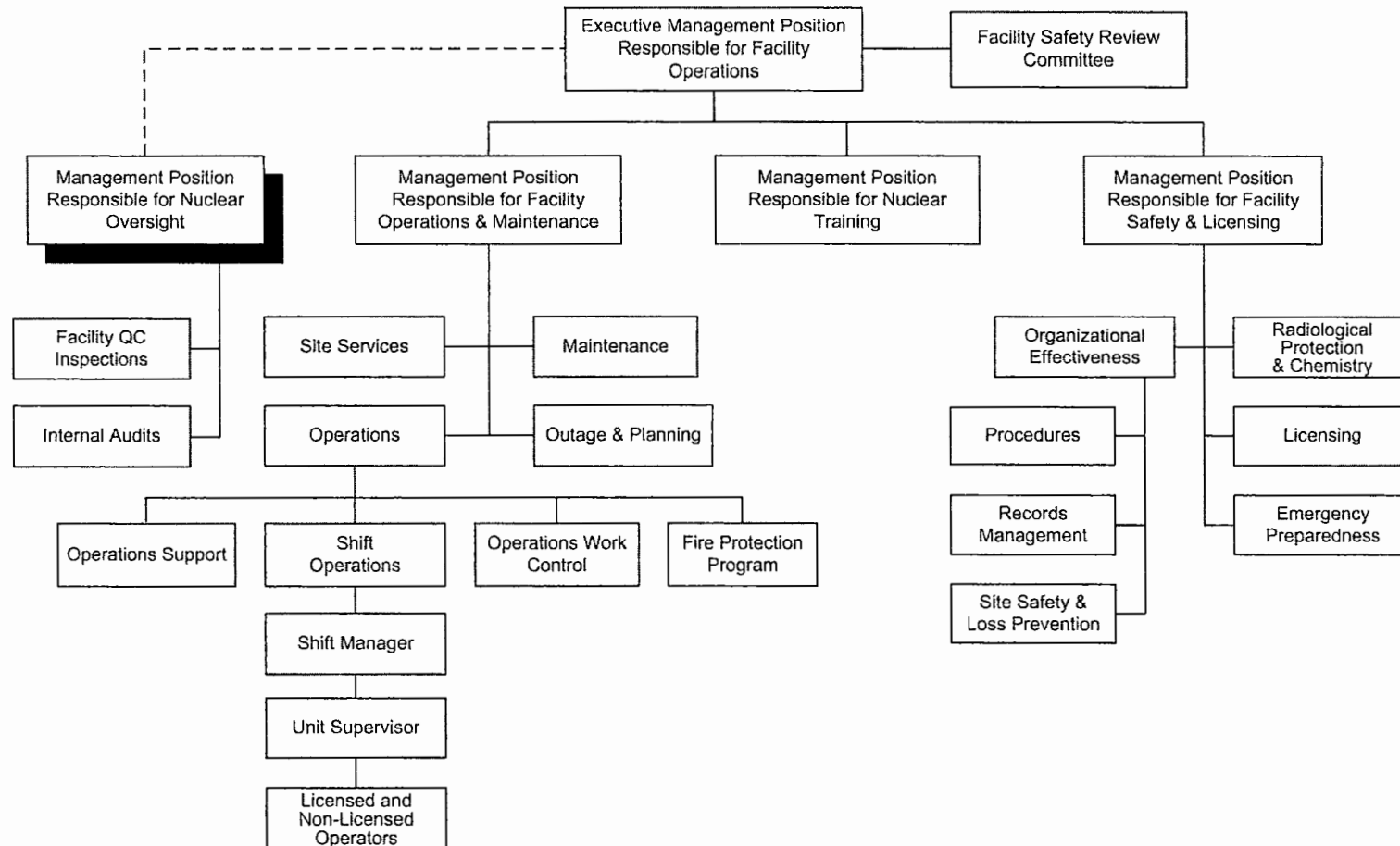


\* When principal Suppliers are used.

\*\* Includes document control and records management functions.

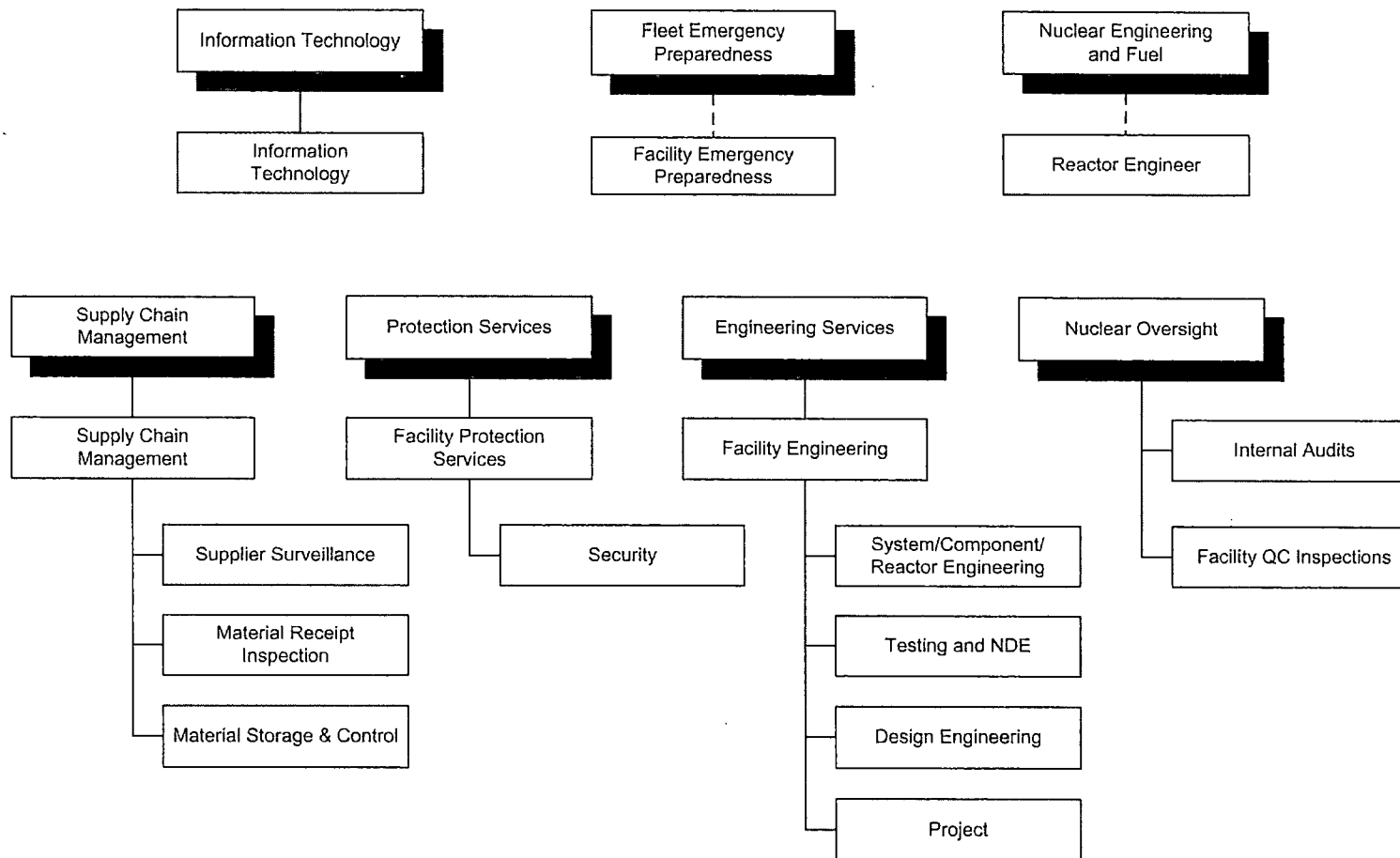
Dotted lines represent matrixed relationships from outside Dominion Energy's Nuclear group.

**Figure II.1-2  
Organizational Relationships of Key Management  
And Functional Groups  
VCS Facility Operating Organization**



Shaded box and dotted line indicates Corporate oversight of the functions for facility operation with a line of communication to the site.

**Figure II.1-3  
Organizational Relationships of Key Management  
And Functional Groups  
Facility Operating Staff Reporting To Support Organizations**



Shadowed boxes indicate Corporate support organizations.  
Dotted lines represent a line of communication, not direct reporting.

## **SECTION 2                      QUALITY ASSURANCE PROGRAM**

VCS has established the necessary measures and governing procedures to implement the Quality Assurance Plan (QAP) as described in the QAPD. VCS is committed to implementing the QAP in all aspects of work that are important to the safety of the nuclear facility as described and to the extent delineated in the QAPD. Further, VCS ensures through the systematic process described herein that its suppliers of safety-related equipment or services meet the applicable requirements of 10 CFR 50, Appendix B. 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 that the V. C. Summer Nuclear Station Unit 1 is designed and operated in accordance with governing regulations and license requirements. The program is based on the requirements of ASME NQA-1-1994, "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, maintenance, testing, and safe operation of the nuclear facility and managerial and administrative controls as described in the Final Safety Analysis Report (FSAR). A list or system that identifies SSCs and activities to which this program applies is maintained at the V. C. Summer Nuclear Station. Cost and scheduling functions do not prevent proper implementation of the QAP.

As described in Part III of the QAPD, specific program controls are applied to non-safety related SSCs, for which 10 CFR 50, Appendix B, 10 CFR 71, Subpart H, and 10 CFR 72, Subpart G, are not applicable, that are significant contributors to facility 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 facility safety.

Responsibilities may be delegated under a suppliers or principal contractors QAP, provided that the supplier or principle contractor has been approved as a supplier in accordance with the QAPD. Periodic audits and assessments of supplier QA programs are performed to assure compliance with the supplier's or principle contractors QAPD and implementing procedures. In addition, routine interactions with the supplier's personnel provide added assurance that quality expectations are met.

For the operational phase, the QAPD applies to those operational and VCS activities that can affect, either directly or indirectly, the safety-related site characteristics or analysis of those characteristics.

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

A grace period of 90 days may be applied to provisions that are required to be performed on a periodic basis 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 backwards by performing the activity early. Audit schedules are based on the month in which the audit starts.

## **2.1 Responsibilities**

Personnel who work directly or indirectly for VCS are responsible for achieving acceptable quality in the work covered by the QAPD. This includes the activities delineated in Part I, Section 1.1. VCS 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 that 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 that such documents are being used. The management position responsible for Nuclear Oversight is responsible to verify that processes and procedures comply with QAPD and other applicable requirements, that such processes or procedures are implemented, and that management appropriately ensures compliance.

## **2.2 Delegation of Work**

VCS retains and exercises the responsibility for the scope and implementation of an effective QAPD. Positions identified in Part II, Section I, 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 level appropriate for its nature and effect, and with any necessary technical advice or review.

## **2.3 Periodic Review of the Quality Assurance Program**

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

## **2.4 Issuance and Revision to Quality Assurance Program**

Administrative control of the QAPD will be in accordance with 10 CFR 50.54(a). Changes to the QAPD are evaluated by the management position responsible for Nuclear Oversight to ensure that such changes do not degrade 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 operating life of the V. C. Summer Nuclear Station Unit 1. New revisions to the document will be reviewed, at a minimum, by management of the affected organizational group(s) and approved by the management position responsible for Nuclear Oversight.

Regulations require that the Final Safety Analysis Report (FSAR) include, among other things, the managerial and administrative controls to be used to assure safe operation, including a discussion of how the applicable requirements of Appendix B will be satisfied. In order to comply with this requirement, the FSAR references the QAPD and, as a result, the requirements of 10 CFR 50.54(a) is satisfied by, and applies to, the QAPD.

## **2.5 Personnel Qualifications**

Personnel assigned to implement elements of the QAPD shall be capable of performing their assigned tasks. To this end, VCS establishes and maintains formal indoctrination and training programs for personnel performing, verifying, or managing activities within the scope of the QAPD to assure that suitable proficiency is achieved and maintained. Facility and support staff minimum qualification requirements are as delineated in the V. C. Summer Technical Specifications. Other qualification requirements may be established but will not reduce those required by Technical Specifications. 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 VCS procedures. Indoctrination includes the administrative and technical objectives, requirements of the applicable codes and standards, and the QAPD elements to be employed. Training for positions identified in 10 CFR 50.120 is accomplished according to programs accredited by the National Nuclear Accrediting Board of the National Academy of Nuclear Training that implement a systematic approach to training. Records of personnel training and qualification are maintained.

The minimum qualifications of the management positions responsible for Nuclear Oversight and Materials & Procurement are that they have 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 the individuals responsible for planning, implementing and maintaining the programs for the QAPD are that each has a high school diploma or equivalent and has 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.

## **2.6 NQA-1-1994 Commitment / Exceptions**

In establishing qualification and training programs, VCS commits to compliance with NQA-1-1994, Basic Requirement 2 and Supplements 2S-1, 2S-2, 2S-3 and 2S-4, with the following clarifications and exceptions:

- **NQA-1-1994, Supplement 2S-1**

- Supplement 2S-1 will include use of the guidance provided in Appendix 2A-1 the same as if it were part of the Supplement. The following two alternatives may be applied to the implementation of this Supplement and Appendix:

- (1) In lieu of being certified as Level I, II, or III in accordance with NQA-1-1994, personnel that perform independent quality verification inspections, examinations, measurements, or tests of material, products, or activities will be required to possess

qualifications equal to or better than those required for performing the task being verified; and the verification is within the skills of these personnel and/or is addressed by procedures. These individuals will not be responsible for the planning of quality verification inspections and tests (i.e., establishing hold points and acceptance criteria in procedures, and determining who will be responsible for performing the inspections), evaluating inspection training programs, nor certifying inspection personnel.

- (2) A qualified engineer may be used to plan inspections, evaluate the capabilities of an inspector, or evaluate the training program for inspectors. For the purpose of these functions, a qualified engineer is one who has a baccalaureate in engineering in a discipline related to the inspection activity (such as electrical, mechanical, civil) and has a minimum of five years engineering work experience with at least two years of this experience related to nuclear facilities.

- **NQA-1-1994, Supplement 2S-2**

In lieu of Supplement 2S-2, for qualification of nondestructive examination personnel, VCS will follow the applicable standard cited in the version(s) of Section III and Section XI of the ASME Boiler and Pressure Vessel Code approved for use at the V. C. Summer Nuclear Station Unit 1.

- **NQA-1-1994, Supplement 2S-3**

The requirement that prospective Lead Auditors have participated in a minimum of five (5) audits in the previous three (3) years is replaced by the following, "The prospective lead auditor shall demonstrate his/her ability to properly implement the audit process, as implemented by VCS, to effectively lead an audit team, and to effectively organize and report results, including participation in at least one nuclear audit within the year preceding the date of qualification."

## **SECTION 3            DESIGN CONTROL**

VCS establishes and implements a process to control the design, design changes and temporary modifications (e.g., temporary bypass lines, electrical jumpers and lifted wires, and temporary setpoints) 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 VCS and with suppliers. 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 can be related to the design input in sufficient detail to permit verification. Design change processes and the division of responsibilities for design-related activities are detailed in VCS and supplier procedures. 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 VCS design organization or by other organizations so authorized by VCS.

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

### **3.1      Design Verification**

VCS design processes provide for design verification to ensure that items 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 facility 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 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 item's intended use.

VCS 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 installation. 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**

VCS 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.

Facility design drawings reflect the properly reviewed and approved configuration of the facility.

### **3.3 Computer Application and Digital Equipment Software**

The QAPD governs the development, procurement, testing, maintenance, and use of computer application and digital equipment software when used in safety-related applications and designated non-safety-related applications. VCS and suppliers are responsible for developing, approving, and issuing procedures, as necessary, to control the use of such computer application and digital equipment software. The procedures require that the application software be assigned a proper quality classification and that the associated quality requirements be consistent with this classification. Each application 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 Setpoint Control**

Instrument and equipment setpoints that could affect nuclear safety shall be controlled in accordance with written instructions. As a minimum, these written instructions shall:

1. Identify responsibilities and processes for reviewing, approving, and revising setpoints and setpoint changes originally supplied by the A/E for V. C. Summer Nuclear Station Unit 1 and the station's technical staff;
2. Ensure that setpoints and setpoint changes are consistent with design and accident analysis requirements and assumptions;
3. Provide for documentation of setpoints, including those determined operationally; and
4. Provide for access to necessary setpoint information for personnel who write or revise facility procedures, operate or maintain facility equipment, develop or revise design documents, or develop or revise accident analyses.

### **3.5 NQA-1–1994 Commitment**

In establishing its program for design control and verification, VCS commits to compliance with NQA-1–1994, Basic Requirement 3, and Supplement 3S-1, and the standards for computer software contained in Subpart 2.7.

### **3.6 Design Control Commitment (Section 3)**

The requirement that design documents are reviewed by individuals knowledgeable in QA to ensure the documents contain the necessary QA requirements is not applicable to VCS Operating Unit 1 as discussed in 10 CFR 50.34(f)(3)(iii)(H).

## **SECTION 4                      PROCUREMENT DOCUMENT CONTROL**

VCS has established the necessary measures and governing procedures to assure that 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. These controls include provisions such that:

- 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 that interfaces, interchangeability, safety, fit, and function, as applicable, are not adversely affected or contrary to applicable regulatory requirements.
- Applicable technical, regulatory, administrative, quality and reporting requirements (such as specifications, codes, standards, tests, inspections, special processes, and 10 CFR 21) are invoked for procurement of items and services. 10 CFR 21 requirements for posting, evaluating, and reporting will be followed and imposed on suppliers when applicable. 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 suppliers to have a documented QA program that is determined to meet the applicable requirements of 10 CFR 50, Appendix B, 10 CFR 71, Subpart H, and/or 10 CFR 72, Subpart G, as appropriate to the circumstances of procurements (or the supplier may work under VCS's approved QA program).

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.

### **4.1      NQA-1-1994 Commitment / Exceptions**

In establishing controls for procurement, VCS commits to compliance with NQA-1-1994, Basic Requirement 4 and Supplement 4S-1, with the following clarifications and exceptions:

- NQA-1 -1994, Supplement 4S-1:
  - Section 2.3 of this Supplement 4S-1 includes a requirement that procurement documents require suppliers to have a documented QAP that implements NQA-1-1994, Part I. In lieu of this requirement, VCS may require suppliers to have a documented supplier QAP that is determined to meet the applicable requirements of 10 CFR 50, Appendix B, 10 CFR 71, Subpart H, and/or 10 CFR 72, Subpart G, as appropriate to the circumstances of the procurement;
  - With regard to service performed by a supplier, VCS procurement documents may allow the supplier to work under the VCS QAP, including implementing procedures, in lieu of the supplier having its own QAP;

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- Section 3 of this supplement 4S-1 requires procurement documents to be reviewed prior to bid or award of contract. The quality assurance review of procurement documents is satisfied through review of the applicable procurement specification, including the technical and quality procurement requirements, prior to bid or award of contract.
- Procurement document changes (e.g., scope, technical or quality requirements) will also receive the quality assurance review; and
- Procurement documents for Commercial Grade Items that will be procured by VCS for use as safety-related items shall contain technical and quality requirements such that the procured item can be appropriately dedicated.

## **SECTION 5            INSTRUCTIONS, PROCEDURES, AND DRAWINGS**

VCS has established the necessary measures and governing procedures to ensure that 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 QAPD 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**

VCS's policy is that procedures are followed, and the requirements for use of procedures have been established in administrative procedures. Where 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 to be 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; and (3) verification of completion of significant steps, by initials or signatures or use of check-off lists. Procedures that are required to be present and referred to directly are those developed for extensive or complex jobs where reliance on memory cannot be trusted, tasks that are infrequently performed, and tasks where steps must be performed in a specified sequence.

In cases of emergency, personnel are authorized to depart from approved procedures when necessary to prevent injury to personnel or damage to the facility. Such departures are recorded describing the prevailing conditions and reasons for the action taken.

### **5.2      Procedure Content**

The established measures address the applicable content of procedures as described in the introduction to Part II of NQA-1-1994. 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-1-1994 Commitment**

In establishing procedural controls, VCS commits to compliance with NQA-1-1994, Basic Requirement 5.

## **SECTION 6            DOCUMENT CONTROL**

VCS has established the necessary measures and governing procedures to control the preparation of, issuance of, and changes to documents that specify quality requirements or prescribe how activities affecting quality, including organizational interfaces, are controlled to assure that correct documents are being employed. The control systems (including electronic systems used to make documents available) are documented and provide for the following:

- (a) identification of documents to be controlled and their specified distribution;
- (b) a method to identify the correct document (including revision) to be used and control of superseded documents;
- (c) identification of assignment of responsibility for preparing, reviewing, approving, and issuing documents;
- (d) review of documents for adequacy, completeness, and correctness prior to approval and issuance;
- (e) a method for providing feedback from users to continually improve procedures and work instructions; and
- (f) coordinating and controlling interface documents and procedures.

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) 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, modification, installation, operating (including normal and emergency operations), maintenance, calibration, and routine testing ;
- (i) technical specifications; and
- (j) nonconformance reports and corrective action reports.

Where temporary procedures are used, they shall include a designation of the period of time during which it is acceptable to use them.

## **6.1 Review and Approval of Documents**

Documents are reviewed for adequacy by qualified persons other than the preparer. Station Administrative Procedures, as identified by the management position responsible for Nuclear Oversight, defining and/or implementing portions of the Quality Assurance Program, shall be reviewed by Nuclear Oversight to ensure quality assurance measures have been appropriately applied. This documented review signifies concurrence.

Documents affecting the configuration or operation of the station as described in the FSAR are screened to identify documents that require review by the Plant Safety Review Committee (PSRC) prior to implementation as described in Part V, Section 2 of the QAPD.

To ensure effective and accurate procedures, applicable procedures are reviewed, and updated as necessary, based on the following conditions:

- (a) following any modification to a system;
- (b) following an unusual incident, such as an accident, significant operator error, or equipment malfunction;
- (c) when procedure discrepancies are found;
- (d) prior to use if not used in the previous two years; or
- (e) results of QA audits conducted in accordance with Part II, Section 18.1.

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 shall have access to pertinent background data or information upon which to base their approval. Where temporary procedure changes are necessary, changes that clearly do not change the intent of the approved procedure may be implemented provided the changes are approved by two members of the staff knowledgeable in the areas affected by the procedures. Minor changes to documents, such as inconsequential editorial corrections, do not require that 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-1–1994 Commitment**

In establishing provisions for document control, VCS commits to compliance with NQA-1–1994, Basic Requirement 6 and Supplement 6S-1.

### **6.4 Alternative Commitment To Biennial Review Of Procedures (Section 6.1(d))**

VCS Unit 1 continues to implement an alternative commitment to performing biennial procedure reviews as documented in NRC Letter from Albert F. Gibson, Director Division of Reactor Safety to John L. Skolds, Vice President, Nuclear Operations dated 11/29/1990. This alternative commitment is described below:

The following programs and activities provide adequate procedure revision control and a method to verify the adequacy of these programs and activities:

- Design Change Program
- Non-Conformance and Corrective Action Program
- Licensee Event Report System
- Operator Feedback Program
- Surveillance Test Program
- Operating Experience Review Program
- Technical Specification and FSAR Revision Process
- Corrective Actions for Regulatory Issues
- Quality Assurance Program
- Quality Assurance audit of the procedural development program using a representative sample process. The biennial audit will provide verification that the existing facility programs and activities listed above are effective in maintaining procedures current.

## **SECTION 7                      CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES**

VCS has established the necessary measures and governing procedures to control the procurement of 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.

### **7.1      Acceptance of Item or Service**

VCS 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's importance to safety, complexity, quantity, and the frequency of procurement. Verification actions include testing, as appropriate, during design, fabrication and operation 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:

- Items are inspected, identified, and stored to protect against damage, deterioration, or misuse.
- Prospective suppliers of safety-related items and services are evaluated to assure that only qualified suppliers are used. Qualified suppliers are audited on a triennial basis. In addition, if a subsequent contract or a contract modification significantly enlarges the scope of, or changes the methods or controls for activities performed by the same supplier, an audit of the modified requirements is conducted, thus starting a new triennial period. VCS may utilize audits conducted by outside organizations for supplier qualification provided that the scope and adequacy of the audits meet VCS 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, Nuclear Procurement Issues Committee (NUPIC), or other established utility groups, are 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 are 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.
- 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 that procurement, inspection, and test requirements, as applicable, have been satisfied before relying on the item to perform its intended safety function.
- 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.

- 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 has completed sufficient work to demonstrate that its organization is implementing a QA program.

## **7.2 NQA-1–1994 Commitment/Exceptions**

In establishing procurement verification controls, VCS commits to compliance with NQA-1–1994, Basic Requirement 7 and Supplement 7S-1, with the following clarifications and exceptions:

- NQA-1–1994, Supplement 7S-1
  - VCS considers that other 10 CFR 50 licensees, Authorized Nuclear Inspection Agencies, National Institute of Standards and Technology, or other State and Federal agencies which may provide items or services to the V. C. Summer facility are not required to be evaluated or audited.
  - Commercial-grade calibration and/or testing services may be procured from commercial laboratories based on the laboratory's accreditation to ISO/IEC-17025 by an Accreditation Body (AB) which is a signatory to the International Laboratory Accreditation and Cooperation (ILAC) Mutual Recognition Arrangement (MRA) provided all of the following are met:
    - (1) A documented review of the supplier's accreditation will be performed and will include a verification of the following:
      - The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA.
      - The accreditation encompasses ISO/IEC-17025:2005 (or ISO/IEC-17025:2017 during the ILAC-ISO transition period that expires on November 30, 2020).
      - For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.
      - For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.
    - (2) The purchase documents require that:
      - The service must be provided in accordance with their accredited ISO/IEC-17025:2005 (or ISO/IEC-17025:2017 during the ILAC-ISO transition period that expires on November 30, 2020) program and scope of accreditation.

- For calibration services, as-found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance.
- For calibration services, the equipment/standards used to perform the calibration must be identified in the certificate of calibration.
- VCS must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.
- The laboratory performing the calibration and/or testing services shall not subcontract the service to any other supplier.
- Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.

(3) It is validated, at receipt inspection, that the laboratory's documentation certifies that:

- The contracted calibration or test service has been performed in accordance with their ISO/IEC-17025:2005 (or ISO/IEC-17025:2017 during the ILAC-ISO transition period that expires on November 30, 2020) program and has been performed within their scope of accreditation.
- The purchase order's requirements are met.

- For Section 8.1, VCS considers documents that may be stored in approved electronic media under VCS or vendor control not physically located on the V. C. Summer Nuclear Station site, but are accessible from the site, as meeting the NQA-1 requirement for documents to be available at the site. The VCS records management system will provide for timely retrieval of necessary records.

-In lieu of the requirements of Section 10, Commercial Grade Items, controls for commercial grade items and services are established in VCS documents using 10 CFR 21 and the guidance of EPRI NP-5652 as discussed in Generic Letter 89-02 and Generic Letter 91-05.

- For commercial grade items, special quality verification requirements are established and described in VCS documents to provide the necessary assurance an item will perform satisfactorily in service. The VCS documents address determining the critical characteristics that ensure an item is suitable for its intended use, technical evaluation of the item, receipt requirements, and quality evaluation of the item.

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- VCS will also use other appropriate approved regulatory means and controls to support VCS commercial grade dedication activities. VCS will assume 10 CFR 21 reporting responsibility for all items that VCS dedicates as safety-related.

## **Section 8                    IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS**

VCS has established 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 that 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.

### **8.1        NQA-1-1994 Commitment**

In establishing provisions for identification and control of items, VCS commits to compliance with NQA-1-1994, Basic Requirement 8 and Supplement 8S-1.

## **SECTION 9            CONTROL OF SPECIAL PROCESSES**

VCS has established the necessary measures and governing procedures to assure that special processes that require interim process controls to assure quality, such as welding, heat treating, and nondestructive examination, are controlled. These provisions include assuring that 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.

### **9.1      NQA-1-1994 Commitment**

In establishing measures for the control of special processes, VCS commits to compliance with NQA-1-1994, Basic Requirement 9 and Supplement 9S-1.

## **SECTION 10      INSPECTION**

VCS has established 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 facility 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 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.

### **10.1    Inspection Program**

The inspection program establishes inspections (including surveillance of processes), as necessary to verify quality: (1) at the source of supplied items or services, (2) in-process during fabrication at a Supplier's facility or at a Company Facility, (3) for final acceptance of fabricated and/or installed items, (4) upon receipt of items at the V. C. Summer Unit 1, as well as (5) during maintenance, modification, in-service, and operating activities.

The inspection program establishes requirements for planning inspections, such as the group or discipline responsible for performing the inspection, where inspection hold points are to be applied, determining applicable acceptance criteria, the frequency of inspection to be applied, and identification of special tools needed to perform the inspection. Inspection planning is performed by personnel qualified in the discipline related to the inspection and includes qualified inspectors or engineers. Inspection plans are based on, as a minimum, the importance of the item to the safety of the facility, the complexity of the item, technical requirements to be met, and design specifications. Where significant changes in inspection activities are to occur, management responsible for the inspection programs evaluates the resource and planning requirements to ensure effective implementation of the inspection program.

Inspection program documents establish requirements for performing the planned inspections, and documenting required inspection information such as rejection, acceptance, and re-inspection results, and the person(s) performing the inspection.

Inspection results are documented by the inspector, reviewed by authorized personnel qualified to evaluate the technical adequacy of the inspection results, and are controlled by instructions, procedures, and drawings.

### **10.2    Inspector Qualification**

VCS has established qualification programs for personnel performing quality inspections. The qualification program requirements are described in Part II, Section 2. These qualification programs are applied to individuals performing quality inspections regardless of the functional group where they are assigned.

### **10.3 NQA-1-1994 Commitment / Exceptions**

In establishing inspection requirements, VCS commits to compliance with NQA-1-1994, Basic Requirement 10, Supplement 10S-1 and Subpart 2.4, with the following clarification. In addition, VCS commits to compliance with the requirements of Subparts 2.5 and 2.8 for establishing appropriate inspection requirements.

- Subpart 2.4 commits VCS to IEEE 336-1985. IEEE 336-1985 refers to IEEE 498- 1985. Both IEEE 336 - 1985 and IEEE 498-1985 use the definition of "Safety Systems" from IEEE 603-1980. VCS commits to the definition of Safety Systems in IEEE 603- 1980, but does not commit to the balance of that standard. This definition is only applicable to equipment in the context of Subpart 2.4.
- Subpart 2.4 commits VCS to IEEE 336-1985. IEEE 336-1985, Step 1.1.2 refers to ANSI/ANS 3.2-1982. VCS commits to ANSI N18.7-1976/ANS 3.2.
- An additional exception to Subpart 2.4 is addressed in Part II, Section 12 of the QAPD.
- Where inspections at the V. C. Summer nuclear facility are performed by persons within the same organization (e .g. Maintenance group), VCS takes exception to the requirements of NQA-1-1994, Supplement 10S-1, Section 3.1, the inspectors report to nuclear oversight management while performing those inspections.

## **SECTION 11      TEST CONTROL**

VCS has established the necessary measures and governing procedures to demonstrate that items subject to the provisions of the QAPD will perform satisfactorily in service, that the facility can be operated safely and as designed, and that the coordinated operation of the station as a whole is satisfactory. These programs include criteria for determining when testing is required, such as proof tests before installation, post-maintenance tests, post-modification tests, in-service tests, and operational tests (such as surveillance tests required by Facility Technical Specifications), to demonstrate that performance of facility systems is in accordance with design. Programs also include provisions to establish and adjust test schedules and to maintain status for periodic or recurring tests. Tests are performed according to applicable procedures that include, consistent with the effect on safety, (1) instructions and prerequisites to perform the test, (2) use of proper test equipment, (3) acceptance criteria, and (4) mandatory verification points as necessary to confirm satisfactory test completion. Test results are documented and evaluated by the organization performing the test and reviewed by a responsible authority to assure that the test requirements have been satisfied. If acceptance criteria are not met, re-testing is performed as needed to confirm acceptability following correction of the system or equipment deficiencies that caused the failure.

Tests are performed and results documented in accordance with applicable technical and regulatory requirements, including those described in the Technical Specifications and FSAR. Test programs ensure appropriate retention of test data in accordance with the records requirements of the QAPD. Personnel that perform or evaluate tests are qualified in accordance with the requirements established in Part II, Section 2.

### **11.1    NQA-1-1994 Commitment**

In establishing provisions for testing, VCS commits to compliance with NQA-1-1994, Basic Requirement 11 and Supplement 11S-1.

### **11.2    NQA-1-1994 Commitment for Computer Program Testing**

VCS establishes and implements provisions to assure that computer software used in applications affecting safety is prepared, documented, verified and tested, and used such that the expected output is obtained and configuration control maintained. To this end VCS commits to compliance with the requirements of NQA-1-1994, Supplement 11S-2 and Subpart 2.7 to establish the appropriate provisions.

## **SECTION 12            CONTROL OF MEASURING AND TEST EQUIPMENT**

VCS has established the necessary measures and governing procedures to control the calibration, maintenance, and use of measuring and test equipment (M&TE) that provides information important to safe facility operation. The provisions of such procedures cover equipment such as indicating and actuating instruments and gages, tools, reference and transfer standards, and nondestructive examination equipment. The suppliers of commercial grade calibration services are controlled as described in Part II, Section 7.

### **12.1    Installed Instrument and Control Devices**

VCS has established and implements procedures for the calibration and adjustment of instrument and control devices installed in the facility. The calibration and adjustment of these devices is accomplished through the facility maintenance programs to ensure the facility is operated within design and technical requirements. Appropriate documentation shall be maintained for these devices to indicate the control status, when the next calibration is due, and identify any limitations on use of the device.

### **12.2    NQA-1-1994 Commitment/Exceptions**

In establishing provisions for control of measuring and test equipment, VCS commits to compliance with NQA-1-1994, Basic Requirement 12 and Supplement 12S-1 with the following clarification and exception:

- The out of calibration conditions described in paragraph 3.2 of Supplement 12S-1 refers to when the M&TE is found out of the required accuracy limits (i.e. out of tolerance) during calibration.
- Measuring and test equipment are not required to be marked with the calibration status where it is impossible or impractical due to equipment size or configuration (such as the label will interfere with operation of the device) provided the required information is maintained in suitable documentation traceable to the device. This exception also applies to the calibration labeling requirement stated in NQA-1-1994, Subpart 2.4, Section 7.2.1 (ANSI/IEEE Std. 336-1985).

## **SECTION 13            HANDLING, STORAGE, AND SHIPPING**

VCS has established 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. These provisions include specific procedures, when required to maintain acceptable quality of the items important to the safe operations of the facility. Items are appropriately marked and labeled during packaging, shipping, handling, and storage to identify, maintain, and preserve the item's integrity and indicate the need for special controls. Special controls (such as containers, shock absorbers, accelerometers, inert gas atmospheres, specific moisture content levels, and temperature levels) are provided when required to maintain acceptable quality.

Special or additional handling, storage, shipping, cleaning, and preservation requirements are identified and implemented as specified in procurement documents and applicable procedures. Where special requirements are specified, the items and containers (where used) are suitably marked.

Special handling tools and equipment are used and controlled as necessary to ensure safe and adequate handling. Special handling tools and equipment are inspected and tested at specified time intervals and in accordance with procedures to verify that the tools and equipment are adequately maintained.

Operators of special handling and lifting equipment are experienced or trained in the use of the equipment. VCS establishes and implements controls over hoisting, rigging and transport activities to the extent necessary to protect the integrity of the items involved, as well as potentially affected nearby structures and components. Where required, VCS complies with applicable hoisting, rigging and transportation regulations and codes.

### **13.1    Housekeeping**

Housekeeping practices are established to account for conditions or environments that could affect the quality of structures, systems and components within the facility. This includes control of cleanliness of facilities and materials, fire prevention and protection, disposal of combustible material and debris, control of access to work areas, protection of equipment, radioactive contamination control, and storage of solid radioactive waste. Housekeeping practices help assure that only proper materials, equipment, processes, and procedures are used and that the quality of items is not degraded. Necessary procedures or work instructions, such as for electrical bus and control center cleaning, cleaning of control consoles, and radioactive decontamination, are developed and used.

### **13.2    NQA-1-1994 Commitment / Exceptions**

In establishing provisions for handling, storage and shipping, VCS commits to compliance with NQA-1-1994, Basic Requirement 13 and Supplement 13S-1. VCS also commits to compliance with the requirements of NQA-1-1994, Subpart 2.1, Subpart 2.2, Subpart 2.3, and Subpart 3.2, Appendix 2.1, with the following clarifications and exceptions:

#### **NQA-1-1994, Subpart 2.1**

- Subpart 2.1, Section 3.1 and 3.2 establish criteria for classifying items into cleanliness classes and requirements for each class. Instead of using the cleanliness level system of Subpart 2.1, VCS may establish cleanliness requirements on a case-by-case basis, consistent with the other provisions of

Subpart 2.1. VCS establishes appropriate cleanliness controls for work on safety-related equipment to minimize introduction of foreign material and maintain system/component cleanliness throughout maintenance or modification activities, including documented verification of absence of foreign material prior to system closure.

**NQA-1-1994, Subpart 2.2**

- Subpart 2.2, Section 2.2 establishes criteria for classifying items into protection levels. Instead of classifying items into protection levels, VCS may establish controls for the packaging, shipping, handling, and storage of such items on a case-by-case basis with due regard for the item's complexity, use, and sensitivity to damage. Prior to installation or use, the items are inspected and serviced as necessary to assure that no damage or deterioration exists which could affect their function.
- Subpart 2.2, Section 6.6, "Storage Records:" This section requires written records be prepared containing information on personnel access. As an alternative to this requirement, VCS documents establish controls for storage areas that describe those authorized to access areas and the requirements for recording access of personnel. However, these records of access are not considered quality records and will be retained in accordance with the administrative controls established for the V. C. Summer Nuclear Station.
- Subpart 2.2, Section 7.1 refers to Subpart 2.15 for requirements related to handling of items. The scope of Subpart 2.15 includes hoisting, rigging and transporting of items for the nuclear power plants during construction.

**NQA-1-1994, Subpart 2.3**

- Subpart 2.3, Section 2.3 requires the establishment of five zone designations for housekeeping cleanliness controls. Instead of the five-level zone designation, VCS bases its control over housekeeping activities on a consideration of what is necessary and appropriate for the activity involved. The controls are implemented through procedures or instructions which, in the case of maintenance or modification work, are developed on a case-by-case basis. Factors considered in developing the procedures and instructions include cleanliness control, personnel safety, fire prevention and protection, radiation control and security. The procedures and instructions make use of standard janitorial and work practices to the extent possible.

**NQA-1-1994, Subpart 3.2**

- Subpart 3.2, Appendix 2.1: Only Section 3 precautions are being committed to in accordance with RG 1.37. In addition, a suitable chloride stress-cracking inhibitor should be added to the fresh water used to flush systems containing austenitic stainless steels.

## **SECTION 14            INSPECTION, TEST, AND OPERATING STATUS**

VCS has established 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 in order to maintain personnel and reactor safety and avoid inadvertent operation of equipment. Where necessary to preclude inadvertent bypassing of inspections or tests, or to preclude inadvertent operation, these measures require the inspection, test or operating status be verified before release, fabrication, receipt, installation, test or use. These measures also establish the necessary authorities and controls for the application and removal of status indicators or labels.

In addition, temporary design changes (temporary modifications), such as temporary bypass lines, electrical jumpers and lifted wires, and temporary trip-point settings, are controlled by procedures or work instructions that include requirements for appropriate installation and removal, independent / concurrent verifications and status tracking.

Administrative procedures also describe the measures taken to control altering the sequence of required tests, inspections, and other operations. Review and approval for these actions is subject to the same control as taken during the original review and approval of tests, inspections, and other operations.

### **14.1    NQA-1-1994 Commitment**

In establishing measures for control of inspection, test and operating status, VCS commits to compliance with NQA-1-1994, Basic Requirement 14.

## **SECTION 15            NONCONFORMING MATERIALS, PARTS, OR COMPONENTS**

VCS has established 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 that the individual discovering a nonconformance identify, describe, and document the nonconformance in accordance with the requirements of Part II, Section 16. Controls provide for identification, documentation, evaluation, segregation when practical, and disposition of nonconforming items, and for notification to affected organizations. Controls are provided to address conditional release of nonconforming items for use on an at-risk basis prior to resolution and disposition of the nonconformance, including maintaining identification of the item and documenting the basis for such release. Conditional release of nonconforming items for installation requires the approval of the designated management. Nonconformances are corrected or resolved depending on the item to perform its intended safety function. Nonconformances are evaluated for impact on operability of quality structures, systems, and components to assure that the final condition does not adversely affect safety, operation, or maintenance of the item or service. Nonconformances to design requirements dispositioned repair or use-as-is, are subject to design control measures commensurate with those applied to the original design. Nonconformance dispositions are reviewed for adequacy, analysis of quality trends, and reports provided to the designated management. Significant trends are reported to management in accordance with VCS procedures, regulatory requirements, and industry standards.

### **15.1    Interface with the Reporting Program**

VCS has appropriate interfaces between the QAP for identification and control of nonconforming materials, parts, or components and the non-QA Reporting Program to satisfy the requirements of 10 CFR 21 during operations.

### **15.2    NQA-1-1994 Commitment**

In establishing measures for nonconforming materials, parts, or components, VCS commits to compliance with NQA-1-1994, Basic Requirement 15, and Supplement 15S-1.

## **SECTION 16            CORRECTIVE ACTION**

VCS has established the necessary measures and governing procedures to promptly identify, control, document, classify and correct conditions adverse to quality. VCS procedures assure that corrective actions are documented and initiated following the determination of conditions adverse to quality in accordance with regulatory requirements and applicable quality standards. VCS 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, VCS 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 working on safety-related activities, or other similar situations, VCS may delegate specific responsibilities for corrective actions, but VCS maintains responsibility for the effectiveness of corrective action measures.

### **16.1    Interface with the Reporting Program**

VCS has appropriate interfaces between the QAP for corrective actions and the non-QA Reporting Program to satisfy the requirements of 10 CFR 21 during operations.

### **16.2    NQA-1–1994 Commitment**

In establishing provisions for corrective action, VCS commits to compliance with NQA-1–1994, Basic Requirement 16.

## **SECTION 17            QUALITY ASSURANCE RECORDS**

VCS has the necessary measures and governing procedures to ensure that 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 VCS and include requirements for records administration, including receipt, preservation, retention, storage, safekeeping, retrieval, access controls, user privileges, and final disposition.

### **17.1    Record Retention**

Measures are established that ensure that sufficient records of completed items and activities affecting quality are appropriately stored. Records of activities for design, engineering, procurement, manufacturing, inspection and test, installation, operations, maintenance, modification, decommissioning, and audits and their retention times are defined in appropriate procedures. The records and retention times are based on regulatory requirements, where specified. When records and retention times are not specified they shall be based upon the best fit of records that are similar in nature based on NQA-1-1994 Appendix 17A-1 Nonmandatory Guidance on Quality Assurance Records. In all cases where state, local, or other agencies have more restrictive requirements for record retention, those requirements shall be met. For example, ISFSI records required by 10 CFR 72.174 must include the following: design records, records of use, and the results of reviews, inspections, tests, audits, monitoring of work performance, and materials analyses. The records must include closely related data such as qualifications of personnel, procedures, and equipment. Inspection and test records must, at a minimum, identify the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any noted deficiencies. Records must be identifiable and retrievable. Records pertaining to the design, fabrication, erection, testing, maintenance, and use of structures, systems, and components important to safety must be maintained by or under the control of the licensee or certificate holder until the NRC terminates the license or COC.

### **17.2    Electronic Records**

When using electronic records storage and retrieval systems, VCS complies with NRC guidance in Generic Letter 88-18, "Plant Record Storage on Optical Disks." VCS will manage the storage of QA Records in electronic media consistent with the intent of RIS 2000-18 and associated NIRMA Guidelines TG11-2011, TG15-2011, TG16-2011, and TG21-2011.

### **17.3    NQA-1-1994 Commitment / Exceptions**

In establishing provisions for records, VCS commits to compliance with NQA-1-1994, Basic Requirement 17 and Supplement 17S-1, with the following clarifications and exceptions:

- NQA-1-1994, Supplement 17S-1
  - Supplement 17S-1, section 4.2(b) requires records to be firmly attached in binders or placed in folders or envelopes for storage in steel file cabinets or on shelving in containers. For hard-copy records maintained by VCS, the records are suitably stored in steel file cabinets or on shelving in containers, except that methods other than binders, folders or envelopes may be used to organize the records for storage.

## **SECTION 18            AUDITS**

VCS has established the necessary measures and governing procedures to implement audits to verify that activities covered by the QAPD are performed in conformance with the requirements established. The audit programs are themselves reviewed for effectiveness as a part of the overall audit process.

### **18.1    Performance of Audits**

Internal audits of selected aspects of licensing, design, and operating activities are performed with a frequency commensurate with safety significance and in a manner which assures that audits of safety-related activities are completed. 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., operating, design, procurement, maintenance, modification, refueling, surveillance, test, security, radiation control procedures, and the Emergency Plan), Technical Specifications, regulations and license conditions, programs for training, retraining, qualification and performance of operating staff, corrective actions, and observation of performance of operating, refueling, maintenance and modification activities, including associated record keeping.

The audits are scheduled on a formal preplanned audit schedule. The audit system is reviewed periodically and revised as necessary to assure coverage commensurate with current and planned activities. Additional audits may be performed as deemed necessary by management. Projects or programs that have a duration less than two years, or are scheduled such that these activities would not be evaluated during the normal audit cycle should be considered for inclusion in the audit schedule. 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 management position responsible for Nuclear Oversight.

VCS 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 supplier and contractor quality assurance program.

The results of each audit are reported in writing to the Site Vice President, or designee, as appropriate. Additional internal distribution is made to other concerned management levels in accordance with approved procedures.

Management 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 to verify implementation of assigned corrective action.

Audits of suppliers of safety-related components and/or services are conducted as described in Section 7.1.

## **18.2 Internal Audits**

Internal audits of activities should be performed in such a manner as to assure that an audit of all applicable QA program elements is completed for each functional area within a period of two years. Internal audit frequencies of well established activities, conducted after placing the facility in operation, may be extended one year at a time beyond the above two-year interval based on the results of an annual evaluation of the applicable functional area and objective evidence that the functional area activities are being satisfactorily accomplished. The evaluation should include a detailed performance analysis of the functional area based upon applicable internal and external source data and due consideration of the impact of any function area changes in responsibility, resources or management. However, the internal audit frequency interval should not exceed a maximum of four years. If an adverse trend is identified in the applicable functional area, the extension of the internal audit frequency interval should be rescinded and an audit scheduled as soon as practicable.

Audits are performed at a frequency commensurate with the safety significance of the activities and in such a manner to assure audits of all applicable QA program elements are completed within a period of two years. These audits will include, as a minimum, activities in the following areas:

- (1) The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions including administrative controls.
- (2) The performance, training, and qualifications of the facility staff.
- (3) The performance of activities required by the QAPD to meet the criteria of 10 CFR 50, Appendix B and 10 CFR 72, Subpart G.
- (4) The Fire Protection Program and implementing procedures. A fire protection equipment and program implementation inspection and audit are conducted utilizing either a qualified off-site licensed fire protection engineer or an outside qualified fire protection consultant.
- (5) Other activities and documents considered appropriate by the Site Vice President.

Audits may also be used to meet the periodic review requirements of the code for the Security, Emergency Preparedness, and Radiological Protection programs within the provisions of the applicable code.

Internal audits include verification of compliance and effectiveness of the administrative controls established for implementing the requirements of this QAPD; regulations and license provisions; provisions for training, retraining, qualification, and performance of personnel performing activities covered by this QAPD; corrective actions taken following abnormal occurrences; and observation of the performance of fabrication, operating, refueling, maintenance, and modification activities including associated record keeping.

## **18.3 NQA-1-1994 Commitment**

In establishing the independent audit program, VCS commits to compliance with NQA-1-1994, Basic Requirement 18 and Supplement 18S-1.

## **PART III                      NON-SAFETY-RELATED SSC QUALITY CONTROL**

### **SECTION 1                      Non-safety-Related SSCs - Significant Contributors to Plant Safety**

Specific program controls are applied to non-safety 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 non-safety related SSCs and related activities, including the identification of exceptions to the QA Program described in Part II, Sections 1 through 18 taken for non-safety related SSCs.

#### **1.1            Organization**

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

#### **1.2            QA Program**

VCS QA requirements for non-safety 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**

VCS has established design control measures to ensure that the established design requirements are included in the design. These measures ensure that 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 VCS shall 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**

VCS 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**

VCS 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**

VCS 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**

VCS employs 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**

VCS employs 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**

VCS uses 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**

VCS employs measures to identify required testing that demonstrates that equipment conforms to design requirements. These tests are performed in 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)**

VCS employs measures to control M&TE use, and calibration and adjustment at specific intervals or prior to use.

### **1.13 Handling, Storage, and Shipping**

VCS employs 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**

VCS employs 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**

VCS employs measures to identify and control items that do not conform to specified requirements to prevent their inadvertent installation or use.

### **1.16 Corrective Action**

VCS employs measures to ensure that failures, malfunctions, deficiencies, deviations, defective components, and non-conformances are properly identified, reported, and corrected.

### **1.17 Records**

VCS 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**

VCS 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. Where the measures of this 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 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), and a station blackout (SBO) (10 CFR 50.63) for SSCs that are not safety-related.

- VCS implements quality requirements for the Fire Protection System in accordance with Regulatory Position 1.7, "Quality Assurance," in Regulatory Guide 1.189, Rev. 2, "Fire Protection for Operating Nuclear Power Plants," as identified in FSAR Chapter 3, Appendix 3A.
- VCS implements the quality requirements for ATWS equipment in accordance with Part III, Section 1.
- VCS implements quality requirements for SBO equipment in accordance with Regulatory Guide 1.155, Rev. 0, "Station Blackout," and Part III, Section 1.

## **PART IV                      REGULATORY COMMITMENTS**

### **NRC Regulatory Guides and Quality Assurance Standards**

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

#### **Regulatory Guides:**

See FSAR Chapter 3 for the VCS evaluation of conformance with the guidance in NRC Regulatory Guides.

#### **Regulatory Guide 1.8, Rev. 2, "Personnel Selection and Training," April 1987 (Unit 1 only)**

Regulatory Guide 1.8 provides guidance that is acceptable to the NRC staff regarding qualifications and training for nuclear power plant personnel.

VCS identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in Unit 1 FSAR Chapter 3, Appendix 3A.

#### **Regulatory Guide 1.26, Rev. 3, "Quality Group Classification and Standards for Water, Steam, and Radioactive-Waste-Containing Components of Nuclear Power Plants," February 1976**

Regulatory Guide 1.26 defines classification of systems and components.

VCS identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 3, Appendix 3A.

#### **Regulatory Guide 1.29, Rev. 2 for Comment, "Seismic Design Classification," February 1976**

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

VCS identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 3, Appendix 3A.

**Regulatory Guide 1.33, Rev. 2, February 1978, Quality Assurance Program Requirements (Operations)**

Regulatory Guide 1.33 describes a method acceptable to the NRC staff for complying with the Commission's regulations with regard to overall quality assurance program requirements for the operation phase of nuclear power plants.

VCS identifies conformance and exceptions for the applicable regulatory position VCS guidance provided in this regulatory guide in FSAR Chapter 3, Appendix 3A.

**Regulatory Guide 1.37, Rev. 1, "Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants," March 2007.**

Regulatory Guide 1.37 provides guidance on specifying water quality and precautions related to the use of alkaline cleaning solutions and chelating agents.

VCS identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 3, Appendix 3A.

**Regulatory Guide 1.54, Rev. 0, "Quality Assurance Requirements for Protective Coatings Applied to Water Cooled Nuclear Power Plants," June 1973**

Regulatory Guide 1.54 provides guidance for the application of protective coatings within nuclear power plants to protect surfaces from corrosion, contamination from radionuclides, and for wear protection.

VCS identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 3, Appendix 3A.

**Standards:**

**ASME NQA-1–1994 Edition, Quality Assurance Requirements for Nuclear Facility Applications**

VCS commits to NQA-1–1994, Parts I, II, and III, as described in Parts II and V of this document.

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

VCS commits to NIRMA TGs as described in Part II, Section 17.

## **PART V                      ADDITIONAL QUALITY ASSURANCE AND ADMINISTRATIVE CONTROLS FOR THE FACILITY OPERATIONAL PHASE**

VCS includes the requirements of Part V that follow when establishing the necessary measures and governing procedures for the operations phase of the facility.

### **Section 1    Definitions**

VCS uses the definitions of terms as provided in Section 4 of the Introduction of NQA-1-1994 in interpreting the requirements of NQA-1-1994 and the other standards to which the QAPD commits. In addition, definitions are provided for the following terms not covered in NQA-1-1994:

**administrative controls:** rules, orders, instructions, procedures, policies, practices and designations of authority and responsibility

**experiments:** performance of plant operations carried out under controlled conditions in order to establish characteristics or values not previously known

**independent review:** a review completed by personnel not having direct responsibility for the work function under review regardless of whether they operate as a part of an organizational unit or as individual staff members (see review)

**ISFSI:** An independent spent fuel storage installation (ISFSI) is a facility designed and constructed for the interim storage of spent nuclear fuel and other radioactive materials associated with the spent fuel (10 CFR 72.3). The term ISFSI refers to the facility authorized for storage of spent nuclear fuel pursuant to 10 CFR Part 72 and includes the storage pad, the storage containers, and any support facilities. However, if the ISFSI is located at a reactor site, it does not include any structures, facilities, or services that are part of the 10 CFR Part 50 license, unless they are identified as being shared jointly.

**nuclear power plant:** any plant using a nuclear reactor to produce electric power, process steam or space heating

**on-site operating organization:** on-site personnel concerned with the operation, maintenance and certain technical services

**operating activities:** work functions associated with normal operation and maintenance of the plant, and technical services routinely assigned to the on-site operating organization

**operational phase:** that period of time during which the principal activity is associated with normal operation of the plant. This phase of plant life is considered to begin formally with commencement of initial fuel loading, and ends with plant decommissioning

**review:** a deliberately critical examination, including observation of facility operation, evaluation of assessment results, procedures, certain contemplated actions, and after-the-fact investigations of abnormal conditions

**Safety Analysis Report (SAR):** generic term used to refer to the SAR required by NRC regulations that is applicable for the particular nuclear facility for which the activity is being performed. This usage includes, but is not limited to preliminary, final, updated final, and decommissioning safety analysis reports.

**supervision:** direction of personnel activities or monitoring of facility functions by an individual responsible and accountable for the activities they direct or monitor

**surveillance testing:** periodic testing to verify that safety related structures, systems, and components continue to function or are in a state of readiness to perform their functions

**system:** an integral part of nuclear power plant comprising components which may be operated or used as a separate entity to perform a specific function

## **Section 2                      Review of Activities Affecting Safe Facility Operation**

### **2.1      Onsite Operating Organization Review**

The VCS onsite organization employs reviews, both periodic and as situations demand, to evaluate facility operations and plan future activities. The important elements of the reviews are documented and subjects of potential concern for the independent review described below are brought to the attention of the senior management position responsible for operations and maintenance. The reviews are part of the normal duties of facility supervisory personnel in order to provide timely and continuing monitoring of operating activities in order to assist the senior management position responsible for operations and maintenance in keeping abreast of general facility conditions and to verify that day-to-day operations are conducted safely in accordance with the established administrative controls. The senior management position responsible for operations and maintenance ensures the timely referral of the applicable matters discussed in the reviews to appropriate management and independent reviewers.

### **2.2      Independent Review**

Activities occurring during the operational phase shall be independently reviewed on a periodic basis. The independent review function performs the following:

- a. Reviews proposed changes to the facility as described in the safety analysis report (SAR). The Independent Safety Review Body (Plant Safety Review Committee (PSRC))/Independent Review Committee (Nuclear Safety Review Committee (NSRC)) also verifies that changes do not adversely affect safety and if a technical specification change or NRC review is required.
- b. Reviews proposed tests and experiments not described in the SAR prior to implementation. Verifies the determination of whether changes to proposed tests and experiments not described in the SAR require a technical specification change or license amendment.
- c. Reviews proposed technical specification changes and license amendments relating to nuclear safety prior to NRC submittal and implementation, except in those cases where the change is identical to a previously approved change.

- d. Reviews violations, deviations, and reportable events that are required to be reported to the NRC in writing within 24 hours. This review includes the results of investigations and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.
- e. Reviews any matter related to nuclear safety that is requested by the Site Vice President, Plant Manager, or any PSRC/NSRC member.
- f. Reviews corrective actions for significant conditions adverse to quality.
- g. Reviews internal audit reports.
- h. Reviews the adequacy of the internal audit program every 24 months.

#### Plant Safety Review Committee

The PSRC functions as an independent review body. In discharging its review responsibilities, the PSRC keeps Safety considerations paramount when opposed to cost or schedule considerations. One or more organizational units may collectively perform this function.

1. PSRC reviews are supplemented as follows:
  - a. A qualified person, independent of the preparer, reviews proposed changes in the procedures as described in the SAR prior to implementation of the change to determine if a technical specification change or NRC approval is required.
  - b. Audits of selected changes in the procedures described in the SAR are performed to verify that procedure reviews and revision controls are effectively implemented.
  - c. Competent individual(s) or group(s) other than those who performed the original design but who may be from the same organization verify that changes to the facility do not result in a loss of adequate design or safety margins.
2. The results of PSRC reviews of matters involving the safe operation of the facility are periodically independently reviewed with a minimum of one such review conducted yearly. This review is intended to support management in identifying and resolving issues potentially affecting safe plant operation. This review supplements the existing corrective action programs and audits.
  - a. The review is performed by a team consisting of personnel with experience and competence in the activities being reviewed, but independent from cost and schedule considerations and from the organizations responsible for those activities. The PSRC supervisor or chairman has a minimum six (6) years combined managerial and technical support experience. The members of the PSRC should have a minimum of five (5) years of experience in their own area of responsibility as applicable to the activities being reviewed (i.e., a minimum of five years of experience in one of the twelve areas listed below:
    - (1) Nuclear power plant operations
    - (2) Nuclear engineering
    - (3) Chemistry and radiochemistry
    - (4) Metallurgy
    - (5) Nondestructive testing
    - (6) Instrumentation and control

- (7) Radiological safety
  - (8) Mechanical engineering
  - (9) Electrical engineering
  - (10) Administrative control and quality assurance practices
  - (11) Training
  - (12) Emergency plans and related procedures and equipment).
- b. The review is supplemented by outside consultants or organizations as necessary to ensure the team has the requisite expertise and competence.
  - c. Results of the review are documented and reported to responsible management, PSRC Chairman, and NSRC.
  - d. Management periodically consider issues they determine warrant special attention, such as deficient plant programs, declining performance trends, employee concerns, or other issues related to safe plant operations and determine what issues warrant the review.
  - e. Management determines the scheduling and scope of review and the composition of the team performing the review.

#### Nuclear Safety Review Committee

- 1. The NSRC is assigned independent review responsibilities.
- 2. The NSRC reports to Site Vice President.
- 3. The NSRC is composed of no less than 5 persons and no more than a minority of members are from the on-site operating organization.

For example, at least 3 of the 5 members must be from off-site if there are 5 members on the committee. A minimum of the chairman or alternative chairman and 2 members must be present for all meetings.

- 4. During the period of initial operation, meetings are conducted no less frequently than once per calendar quarter. Afterwards meetings are conducted no less than twice a year.
- 5. Results of the meeting are documented and recorded.
- 6. Consultants and contractors are used for the review of complex problems beyond the expertise of the off-site/on-site independent review committee.
- 7. Persons on the NSRC are qualified as follows:
  - a. Supervisor or Chairman of the NSRC
    - Education: baccalaureate in engineering or related science
    - Minimum experience: 6 years combined managerial and technical support
  - b. NSRC members

Education: Baccalaureate in engineering or related science for those Independent review personnel who are required to review problems in

- nuclear power plant operations,
- nuclear engineering
- chemistry and radiochemistry,
- metallurgy,
- nondestructive testing,
- instrumentation and control,
- radiological safety,
- mechanical engineering, and electrical engineering.

High school diploma for those independent review personnel who are required to review problems in administrative control and quality assurance practices, training, and emergency plans and related procedures and equipment.

Minimum experience: 5 years experience in their own area of responsibility (nuclear power plant operations, nuclear engineering, chemistry and radiochemistry, metallurgy, nondestructive testing, instrumentation and control, radiological safety, mechanical engineering, and electrical engineering, administrative control and quality assurance practices, training, and emergency plans and related procedures and equipment).

## **2.3 TECHNICAL REVIEW AND CONTROL**

### **2.3.1 ACTIVITIES**

Activities which affect nuclear safety shall be conducted as follows:

- a. Procedures required by Technical Specification 6.8 and other procedures which affect plant nuclear safety, and changes thereto, shall be prepared, reviewed, and approved. Each such procedure or procedure change shall be reviewed by an individual/group other than the individual/group which prepared the procedure or procedure change, but who may be from the same organization as the individual/group who prepared the procedure or procedure change. Procedures other than administrative procedures will be approved as delineated in writing by the senior management position responsible for operations and maintenance. The senior management position responsible for operations and maintenance will approve security implementing procedures, and emergency plan implementing procedures. Administrative procedures will be approved by the individual filling the management position responsible for the functional area. Temporary approval to procedures which clearly do not change the intent of the approved procedures can be made by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's License. For changes to procedures which may involve a change in intent of the approved procedures, the person authorized above to approve the procedures shall approve the change.
- b. Proposed changes or modifications to plant nuclear safety-related structures, systems, and components shall be reviewed as designated by the senior management position responsible for operations and maintenance. Each such modification shall be designed as authorized by Engineering Services and shall be reviewed by an individual/group other than the individual/group which designed the modification, but who may be from the same organization as the individual/group which designed the modification. Implementation of modifications to plant nuclear safety-related structures, systems, and components shall require concurrence by the senior management position responsible for operations and maintenance.

- c. Proposed tests and experiments which affect nuclear plant safety and are not addressed in the Final Safety Analysis Report shall be reviewed by an individual/group other than the individual/group which proposed the test or experiment.
- d. Events reportable pursuant to the Technical Specification 6.9 and violations of Technical Specifications shall be investigated and a report prepared which evaluates the event and which provides recommendations to prevent recurrence. Such report shall be approved by the senior management position responsible for operations and maintenance and forwarded to the Chairman of the NSRC.
- e. Individuals responsible for reviews performed in accordance with 2.3.1 a through d above shall be members of the plant staff that meet or exceed the qualification requirements of Section 4 of ANSI 18.1, 1971, as previously designated by the senior management position responsible for operations and maintenance. Each such review shall include a determination of whether or not additional, cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by the review personnel of the appropriate discipline.
- f. Each review will include a determination of whether or not prior NRC approval is required.
- g. Procedures listed in Part V, Section 3.2 and Technical Specifications 6.8.1, and changes thereto, shall be reviewed prior to implementation as set forth in Part V, Sections 2.2 and 2.3 above.

### **2.3.2 RECORDS**

Records of the above activities shall be provided to the senior management position responsible for operations and maintenance, PSRC and/or NSRC as necessary for required reviews.

## 2.4 RECORD RETENTION

In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for the duration of the unit operating license.

- a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the UFSAR.
- b. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories.
- c. Records of radiation exposure for all individuals entering radiation control areas.
- d. Records of gaseous and liquid radioactive material released to the environment.
- e. Records of transient or operational cycles for those unit components identified in TS Table 5.7-1.
- f. Records of reactor tests and experiments.
- g. Records of training and qualification for current member of the unit staff.
- h. Records of in-service inspections performed pursuant to the Technical Specifications and this Part V of the QAPD.
- i. Records of Quality Assurance activities as specified in the NRC's approved VCS position on Regulatory Guide 1.28, Revision 3, August 1985.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59 and 10 CFR 72.48.
- k. Records of meetings of the PSRC and the NSRC.
- l. Records of the service lives of all hydraulic and mechanical snubbers defined in TS 3.7.7 including the date at which the service life commences and associated installation and maintenance records.
- m. Records of secondary water sampling and water quality.
- n. Records of analysis required by the radiological environmental monitoring program.
- o. Records and logs of unit operation covering time interval at each power level.
- p. Records and logs of principal maintenance activities, inspections, repair, and replacement of principal items of equipment related to nuclear safety.
- q. All Reportable Events submitted to the Commission.
- r. Records of surveillance activities, inspections, and calibrations required by the Technical Specifications and Part V of the QAPD.
- s. Records of changes made to the procedures required by TS 6.8.1
- t. Records of radioactive shipments.
- u. Records of sealed source and fission detector leak tests and results.
- v. Records of annual physical inventory of all sealed source material of record.
- w. Records of reviews performed for changes made to the Offsite Dose Calculation Manual and the Process Control Program.

## **Section 3                      Operational Procedures**

The following is a description of the various types of procedures used by VCS to govern the design, operation, and maintenance of its nuclear generating plants. VCS follows the guidance of Appendix A to Regulatory Guide 1.33 in identifying the types of activities that should have procedures or instructions to control the activity. Each procedure shall be sufficiently detailed for a qualified individual to perform the required function without direct supervision, but need not provide a complete description of the system or plant process.

### **3.1      Format and Content**

The VCS procedure format and content include the following elements as appropriate to the purpose or task to be described:

- **Title/Status**  
Each procedure is given a title descriptive of the work or subject it addresses, and includes a revision number and/or date and an approval status.
- **Purpose/Statement of Applicability/Scope**  
The purpose for which the procedure is intended is clearly stated (if not clear from the title). The systems, structures, components, processes or conditions to which the procedure applies are also clearly described.
- **References**  
Applicable references, including reference to appropriate Technical Specifications, are required. References are included within the body of the procedure when the sequence of steps requires other tasks to be performed (according to the reference) prior to or concurrent with a particular step.
- **Prerequisites/Initial Conditions**  
Prerequisites/initial conditions identify those independent actions or procedures that must be accomplished and plant conditions which must exist prior to performing the procedure. A prerequisite applicable to only a specific portion of a procedure is so identified.
- **Precautions**  
Precautions alert the user to those important measures to be used to protect equipment and personnel, including the public, or to avoid an abnormal or emergency situation during performance of the procedure. Cautionary notes applicable to specific steps are included in the main body of the procedure and are identified as such.
- **Limitations and actions**  
Limitations on the parameters being controlled and appropriate corrective measures to return the parameter to the normal control band are specified.
- **Main body**  
The main body of the procedure contains the step-by-step instructions in the degree of detail necessary for performing the required function or task.

- **Acceptance criteria**

The acceptance criteria provide the quantitative or qualitative criteria against which the success or failure (as of a test-type activity) of the step or action would be judged.

- **Checklists**

Complex procedures utilize checklists which may be included as part of the procedure or appended to it.

## **3.2 Procedure Types**

### **Administrative Control Procedures**

The administrative control procedures and directives provide a clear understanding of operating philosophy and management policies to ensure safe operation of the plant within the limits set by the operating license and Technical Specifications. They provide that plant activities are conducted in a manner that will protect the general public, plant personnel, and equipment. A description of these procedure categories is as follows:

- **Plant Organization and Responsibility Procedures**

These procedures describe the plant organization and give the responsibility of the individuals by position and authority to operate the plant in a safe and efficient manner.

- **Development, Review, Approval, and Control of Safety-Related Plant Procedures**

These procedures describe the method by which station procedures are written, the control process for review and approval, and the system utilized to revise the procedures where needed. Administrative procedures receive final approval by the individual filling the management position responsible for the functional area. Security plan implementing procedures, and emergency plan implementing procedures receive final approval by the senior management position responsible for operations and maintenance or his/her designated alternate. They are reviewed under the direction of a supervisor from a group other than the originating group before final approval.

- **Conduct of Plant Operations Procedures**

These procedures describe the rules and instructions issued by the senior management position responsible for operations and maintenance pertaining to personnel conduct and control. These rules and instructions provide a clear understanding of operating philosophy and management policies. They delineate the authority and responsibility of the Reactor Operators and Senior Reactor Operators for the safe operation of the reactor. They establish the rules for procedure use and the designation of the persons responsible to authorize a temporary change to an approved procedure. Additional procedures establish standard operating orders which deal with such matters as job turnover and relief, designation of the confines of the Control Room including a diagram of the Control Room that indicates the area designated as at the controls, transmittal of operating data, limitations on access to equipment, and other such matters. Provisions are made for periodic review and updating of standing orders.

Instructions which have short time applicability such as housekeeping, publications and their distribution, and personnel actions are issued as special orders.

These procedures define the procedural steps for relief of shift personnel. Checklists are provided for the oncoming and off-going Control Room Supervisor and the oncoming Shift Manager to complete and sign. These checklists provide assurance that actual plant parameters are within allowable limits and that required systems are available and are in proper alignment for the prevention and mitigation of operational transients. Systems and components that are in a degraded mode of operation permitted by Technical Specifications shall be listed and time in degraded mode is compared with Technical Specification action statements. Auxiliary Operator checklists include any equipment under maintenance or test that could degrade a system or initiate an operational transient and shall include criteria for acceptable status. The Operations Supervisor will make unannounced audits of shift relief to evaluate the effectiveness of shift relief and turnover.

Also these procedures establish the authority and responsibility of the person in charge of the Control Room to limit access.

Conduct of Plant Operations administrative procedures establish actual work time limitations for plant shift personnel who maintain or operate any structures, systems, or components important to safety.

- **Shift Manager's Responsibility**

Upper level management shall issue a directive that establishes the management responsibility for the Shift Manager under all plant conditions. It shall contain clear delineation of management chain of authority as to who can, and when the Shift Manager is relieved of the responsibility for direct control of the plant.

An administrative procedure is provided that gives the authority and responsibilities of the Shift Manager, Control Room Supervisor, Control Room Operator, and other shift personnel.

Both on the job training and classes emphasize responsibility for safe operation and management functions as given in the administrative procedure.

A review of administrative duties of the Shift Manager has been conducted by senior plant and corporate management. Additional administrative personnel have been added to the operating group that relieves the Shift Manager of routine duties that distract from the management responsibility for assuring the safe operation of the plant.

- **Control of Plant Documents Procedures**

These procedures describe the preparation and retention of plant records. Retention periods are established to assure the ability to reconstruct significant events and satisfy statutory requirements.

- **Corrective Action Reporting Procedures**

These procedures assure that conditions adverse to plant safety such as equipment and material

malfunction, abnormal occurrences, and nonconformances are promptly identified and corrected. They ensure that the cause of the conditions is determined and reported to the appropriate level of management for corrective action.

- **Equipment Control Procedures**

These procedures describe the control measures and actions such as locking, tagging, notification, removal of tags, and identification of equipment. They provide for control of equipment to maintain reactor and personnel safety and to avoid unauthorized operation of equipment. They provide instructions for verifying correct performance of operating activities.

- **Design Modification Control Procedures**

These procedures ensure that plant modifications satisfy, at a minimum, the same design requirements as the original equipment.

- **Procurement and Materials Control Procedures**

These procedures provide for the control of purchased material, equipment, and services. They provide for proper identification, quality level requirements, control, handling, storage, and shipping of materials, parts, and components. These procedures also provide for the proper documentation to ensure quality of safety-related systems, equipment, and structures after maintenance or repair.

- **Control and Calibration of Test Equipment and Instrumentation Procedures**

These procedures ensure that testing and measuring devices are of the proper range and type and are controlled, calibrated, adjusted, and maintained at specified intervals or prior to use to assure the necessary accuracy of calibrated devices. Records are made and equipment suitably marked to indicate calibration status.

- **Control of Special Processes During Operations Procedures**

These procedures assure that special processes are accomplished under controlled conditions in accordance with applicable codes, standards, specifications, criteria, and other special requirements using qualified personnel and procedures.

- **Non-Conformance Control/Deficiency Reporting Procedures**

These procedures provide for control of items, services, or activities which do not conform to requirements. These procedures include instructions for identification, documentation, segregation, notification of affected organizations, and method of disposition of such items, services, or activities.

- **Test Control Procedures**

These procedures assure that testing required to demonstrate that an item will perform satisfactorily in

service is accomplished properly. Test procedures incorporate or reference the requirements and acceptance limits contained in applicable design documents. These test procedures may include preoperational tests, initial operational phase tests, surveillance tests, and tests during design, fabrication, and construction activities associated with plant maintenance and modification.

- **Feedback of Operating Experience**

These procedures establish a program for evaluating operating plant experience and providing the results of the evaluations, as necessary, to pertinent plant personnel. The services of "Industry Groups" such as INPO will be utilized to the extent possible in the performance of this function.

- **Control Room Operating Procedures**

Control Room operating procedures are those procedures that are performed by the licensed Control Room Operator or under his/her direction and control. They are a preplanned method for the conduct of operations to minimize reliance on memory. These procedures include anticipated operating conditions, the normal method of control, means for and limits on operation of the plant, or plant systems that affect the safety of the plant and the public.

- **General Operating Procedures**

General Operating Procedures (GOP) provide for the integrated operation of the plant. These procedures provide the sequence of plant operations to take the plant from given initial conditions to final expected conditions. Associated system operating procedures are referenced as applicable. Necessary precautions are inserted at critical points.

- **Emergency Operating Procedures**

Emergency Operating Procedures (EOP) are written so that a trained operator and crew will be able to identify an emergency from the symptoms available to them and take immediate action on the expected course of events to place the plant in a known safe condition and to mitigate the consequence of a serious condition should it occur. Since emergencies may not follow anticipated patterns these procedures provide sufficient flexibility to accommodate variations. Those sections of the procedure that require immediate response action from the operating crew are committed to memory. Considerable judgment on the part of competent personnel is exercised before departure from these procedures.

- **System Operating Procedures**

System Operating Procedures (SOP) provide instructions for energizing, starting up, shutting down, changing modes of operation, and other instructions for operations of systems related to the safety of the plant.

These procedures are concerned with systems only and include valve and switch lineups, control operations, and instrumentation within the system boundaries. They are subdivided into normal operations, infrequent operations, and off normal conditions in the main body.

- **Annunciator Response Procedures**

Annunciator Response Procedures (ARPs) are written to instruct the operator on the proper action to be taken in response to annunciators on the Main Control Board. They contain annunciator identification, inputs into the annunciator, and logical operator responses to be taken to ensure proper corrective action. The ARPs are identified by panel number. An illustration in the beginning of the ARP depicts the annunciator panel. In the case of computer alarms each alarm's unique identifier is listed.

When use of the ARP is required, the operator selects the proper tab by an alarm panel number.

- **Fuel Handling Procedures**

Fuel Handling Procedures (FHP) are written to specify actions and philosophy for core alterations and partial or complete refueling operations. They include requirements for continuous monitoring of neutron flux throughout core loading and audible annunciation of abnormal flux increases. The duties of personnel assigned to refueling, such as periodic data taking, response actions to alarms during refueling, and criteria for stopping the refueling are specified. Also, instructions for proper sequence of events, verification, and frequency of sampling to ensure shutdown margin, communications between the control room and the fuel loading station, documentation of final fuel component serial numbers and location, containment integrity requirements, and rules for periods when refueling is interrupted are included. System operating procedures are referenced as required.

- **Special Procedures**

Special procedures are written and issued to direct operations during testing, refueling, maintenance, and modifications. These procedures provide guidance in unusual situations not covered by existing procedures. They ensure orderly and uniform operations for short periods when the plant, a system, or a component is not performing in a normal manner and an existing procedure does not apply. Special procedures designate the period of time during which they may be used and are subject to the same review and approval process as other operating procedures.

- **Maintenance and Modification Procedures**

Maintenance and modification procedures define the policies and practices by which structures, systems, and components are kept in a condition of good repair so that they are capable of reliably performing their intended functions. This includes those activities performed by maintenance or contractor personnel to maintain, repair, or modify safety-related equipment. Additional related activities covered are those by operating personnel to ensure that a planned maintenance activity can be safely accomplished, that proper plant operating conditions exist, to authorize the release of equipment to be maintained using equipment control procedures, and to assure that the equipment has been returned to normal operating status at the completion of maintenance work, as well as verification of functional acceptability. Procedures are written to assure measurement accuracies are adequate to keep safety parameters and controls within safety and operational limits. This instrumentation includes interlocks, alarm devices, sensors, readout instruments, transmitters, signal conditioners, laboratory equipment, key recorders, and protective logic circuits. Calibration, testing, and checking of instrumentation channels are performed at the frequency specified in Technical Specifications.

- **Emergency Plan Procedures**

These procedures are written in sufficient detail that a qualified individual can perform the required actions without supervision. They provide a step by step order and logical sequence in a concise manner but are flexible enough to give latitude to the user for the exercise of judgment in implementing specific actions or parts of the procedure. These instructions specify the individual or organization having authority and responsibility for performing critical tasks. The actions to be performed by support agencies and the coordination with other elements of the emergency organization are also specified. Guidelines for initiating recovery after the emergency is over to restore the plant to the pre-emergency conditions are given.

- **Chemical Radiochemical Control Procedures**

These procedures provide instructions for maintaining reactor coolant, condensate, and feedwater within prescribed quality limits and include the nature and frequency of sampling and analysis. They also include laboratory instructions and instructions for calibration of laboratory equipment. Limitations on concentrations of agents that could cause corrosive attack, foul heat transfer surfaces, or become sources of radiation hazards due to activation are given.

- **Plant Radiation Protection Procedures**

These procedures cover plant personnel, other personnel temporarily assigned, contractor and vendor personnel, and visitor protection to maintain occupational dose rate to as low as reasonably achievable. They provide coverage for all normal operations and anticipated operational occurrences. This includes refueling, purging, fuel handling and storage, also radioactive material handling, processing, use, and storage. Other areas covered are maintenance, routine operational surveillance, inservice inspection, and calibration.

- **Plant Security Procedures**

These procedures are written to supplement physical barriers and features designed to control access to the plant and as appropriate to sensitive areas and equipment within the plant. Information concerning design features and administrative provisions is protected and distribution is limited.

- **Surveillance Test Procedures**

These tests and inspections are performed in accordance with the Technical Specifications to ensure that the required reliability of safety systems is maintained. These surveillance test procedures contain a description of the test objectives, the acceptance criteria used to evaluate the test results, and the prerequisites for performing the test. They include any special conditions to be used to simulate normal or abnormal operating conditions, limiting conditions, the test procedure, and any special test equipment or calibrations required to conduct the test. A master surveillance schedule, reflecting the status of surveillance testing is also maintained. Additional control procedures ensure timely conduct of surveillance testing, appropriate documentation, reporting, and evaluation of test results. Significant deficiencies identified by the tests are reported to management. The deficiencies will be evaluated and the condition corrected in a timely manner.

- **Test and Inspection Procedures**

These documents provide the necessary measures to assure quality is achieved and maintained for the nuclear facilities. The instructions for tests and inspections may be included within other procedures, such as installation and maintenance procedures, but will contain the objectives, acceptance criteria, prerequisites for performing the test or inspection, limiting conditions, and appropriate instructions for performing the test or inspection, as applicable. These procedures also specify any special equipment or calibrations required to conduct the test or inspection and provide for as appropriate documentation and evaluation by responsible authority to assure test or inspection requirements have been satisfied. Where necessary, hold or witness points are identified within the procedures and require appropriate approval for the work to continue beyond the designated point. These procedures provide for recording the date, identification of those performing the test or inspection, as-found condition, corrective actions performed (if any), and as-left condition, as appropriate, for the subject test or inspection.

- **Fire Protection Procedures**

These associated procedures provide the necessary planning and instructions to ensure adequate fire protection. Included Are: SAP-0131, Fire Protection Program; SAP-0131A, Fire Protection Program Surveillances and Compensatory Measures; DBD-FP-NFPA 805, Fire Protection; DBD-FS, Design Basis Document Fire Protection System; Fire Protection Procedures (FPPs); Fire Preplans (FP1s); Abnormal Operating Procedures (AOPs) ; and various supporting procedures required by the Operations, Maintenance, and Technical Groups.

## **Section 4                      Control of Systems and Equipment During Plant Operation**

Permission to release systems and equipment for maintenance or modification is controlled by designated operating personnel and documented. Measures, such as installation of tags or locks and releasing stored energy, are used to ensure personnel and equipment safety. When entry into a closed system is required, VCS has established control measures to prevent entry of extraneous material and to assure that foreign material is removed before the system is reclosed.

Administrative procedures require the designated operating personnel to verify that the system or equipment can be released and determine the length of time it may be out of service. In making this determination, attention is given to the potentially degraded degree of protection where one subsystem of a redundant safety system is not available for service. Conditions to be considered in preparing equipment for maintenance include, for example: shutdown margin; method of emergency core cooling; establishment of a path for decay heat removal; temperature and pressure of the system; valves between work and hazardous material; venting, draining and flushing; entry into closed vessels; hazardous atmospheres; handling hazardous materials; and electrical hazards.

When systems or equipment are ready to be returned to service, designated operating personnel control placing the items in service and document its functional acceptability. Attention is given to restoration of normal conditions, such as removal of jumpers or signals used in maintenance or testing, or actions such as returning valves, breakers or switches to proper start-up or operating positions from "test" or "manual" positions. Where necessary, the equipment placed into service receives additional surveillance during the run-in period.

Independent verifications, where appropriate, are used to ensure that the necessary measures have been implemented correctly. The minimum requirements and standards for using independent verification are established in company documents.

## **SECTION 5            Facility Maintenance**

VCS establishes controls for the maintenance or modification of items and equipment subject to this QAPD to ensure quality at least equivalent to that specified in original design bases and requirements, such that safety-related structures, systems and components are maintained in a manner that assures their ability to perform their intended safety function(s). Maintenance activities (both corrective and preventive) are scheduled and planned so as not to unnecessarily compromise the safety of the facility.

In establishing controls for facility maintenance, VCS commits to compliance with NQA-1-1994, Subpart 2.18, with the following clarifications:

- Where Subpart 2.18 refers to the requirements of ANS-3.2, it shall be interpreted to mean the applicable standards and requirements established within the QAPD.
- Section 2.3 requires cleanliness during maintenance to be in accordance with Subpart 2.1. The commitment to Subpart 2.1 is described in the QAPD, Part II, Section 13.2.
- Subpart 2.18, Section 5(a), requires tools used during maintenance to be included in maintenance records. The term "tools" shall be interpreted to mean calibrated tools to meet the intent of Section 2.1(e) by its reference to "...calibrated test equipment and tools."

Document Review Form (DRF)

Section I		Document Identification		Page 1 of 3	
Preparer Name: Greg Kelley		Ext: 55824		Mail Code 829	
Date: 5/15/2019		Document #: QAPD		Revision: 7	
Title: Quality Assurance Program Description		<input checked="" type="checkbox"/> SR <input type="checkbox"/> QR <input type="checkbox"/> NNS			
Development Process: <input type="checkbox"/> New <input checked="" type="checkbox"/> Revision/Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Temporary Approval					
Description: See pages 2 and 3.					
ISFSI Related? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Has scope changed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No [If YES, attach 50.59 and/or 72.48 documentation]					
Reason/Basis for Revision/Change: See pages 2 and 3.					
Temporary Approval –		CR # <u>N/A</u>			
<u>N/A</u>		<u>N/A</u>		<u>N/A</u>	
Qualified Reviewer		Shift Manager		Date	
Section II      List Required Reviewers including All Impacted Groups					
Additional Reviewers – identify with an *					
Position	Type/Print Name	Comments	Position	Type/Print Name	Comments
QR	V. Harper	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	GMOE	R. Haselden	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
GMES	W. Stuart	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MCHS	C. Raymond	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
GMNPO	R. Justice	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MDE	B. Brown	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
GMNSS	S. Zarandi	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MEP	R. Williamson	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
MB&F	L. Bennett	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MNOS	M. Quigley	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
* <u>Greg Kelley</u> <u>5/16/19</u> Designated Supervisor Concurrence      Date		Comment Due Date: June 7, 2019 GM concurrence _____ for expedited review			
Section III      Pre-implementation Actions					
All Comments Resolved? <input type="checkbox"/> NA <input checked="" type="checkbox"/> YES <u>Greg Kelley</u> <u>6/19/19</u> Preparer Sign      Date					
50.59 and/or 72.48 Review Requirements Addressed?		<input checked="" type="checkbox"/> NA <input type="checkbox"/> YES	Attached?   YES <input type="checkbox"/> No <input type="checkbox"/>		
50.59/Part 52 Review Requirements Addressed?		<input checked="" type="checkbox"/> NA <input type="checkbox"/> YES	Attached?   YES <input type="checkbox"/> No <input type="checkbox"/>		
Commitments (PCAP and MLSA) Addressed?		<input checked="" type="checkbox"/> NA <input type="checkbox"/> YES	PCAP # _____		
QR Qualification Verified?		<input checked="" type="checkbox"/> YES	NL Initial/Date		
Security Compliance Review Completed?		<input checked="" type="checkbox"/> NA <input type="checkbox"/> YES	CR# _____		
Pre-Implementation Training Completed?		<input checked="" type="checkbox"/> NA <input type="checkbox"/> YES	Mtg. # _____		
Training required after implementation?		<input checked="" type="checkbox"/> NA <input type="checkbox"/> YES	Mtg. # _____		
PSRC Review Completed?		<input checked="" type="checkbox"/> NA <input type="checkbox"/> YES	Planner Notified YES <input type="checkbox"/>		
NSRC Review Completed?		<input checked="" type="checkbox"/> NA <input type="checkbox"/> YES			
CMMS Update Required?		<input checked="" type="checkbox"/> NA <input type="checkbox"/> YES			
<u>J.M. Quigley</u> <u>6/19/18</u> Designated Supervisor Approval      Date		<u>Greg Kelley</u> <u>6/20/19</u> Approval Authority Approval      Date Effective Date: <u>6/27/19</u>			

\* J.M. Quigley 6/18/19  
J.M. Quigley  
MQS

DRF Form (Continued)

DOCUMENT QAPD

Rev. 7

DESCRIPTION:

1-Ownership and operating responsibility for the South Carolina Electric & Gas, Co. (SCE&G) V. C. Summer Nuclear Station (VCSNS) has changed based on NRC approval of a merger with Dominion Energy. The change in ownership has resulted in a change in the administration for the facility and corresponding organizational changes to reflect the organization that exists for the other operating nuclear power stations in the Dominion Energy fleet. In addition, a number of administrative changes are needed to maintain consistency throughout the QAPD. Changes to multiple station documents will be managed under the site's change management process. (QAPD Revision Request 19-004).

2-Revise Part II, subsection 7.2, second bulleted list under the clarification/exception to NQA-1-1994, Supplement 7S-1 regarding the purchase of commercial grade calibration services to allow the use of the approved information from NEI 14-05A. Guidelines for the Use of Accreditation in Lieu of Commercial Grade Surveys for Procurement of Laboratory and Calibration and Test Services, as approved by NRC SER for the AmerenUE Callaway Plant Unit 1, Operating Quality Assurance Manual (dated April 1, 2016, NRC ADAMS Accession No. ML16089A167). (QAPD Revision Request 19-005)

3-Revise Part V, subsection 2.3.1.a to assign and control the approval authority for administrative procedures through the document control process (e.g., SAP-139, Document Review and Approval Process), rather than require all administrative procedures to be approved by the General Manager, Nuclear Plant Operations. (QAPD Revision Request 19-006)

REASON/BASIS:

1- The administrative and organizational changes are necessary to ensure that the functions, authorities, and responsibilities committed to in the Quality Assurance Program Description (QAPD) are retained within the restructured organization.

2- The process for using accreditation in lieu of commercial grade dedication for calibration services has been expanded to include nondomestic service providers and also includes testing laboratories. Provisions to use this process will require the alternative described in subsection 7.2 of the QAPD to be revised and NRC identified provisions for acceptance of the 2017 edition of the ISO standard 17025 will need to be added to the standard text that the NRC approved. Ref. NRC Letter to Mark A. Richter, Ph.D. of NEI, dated April 16, 2019. (NRC ADAMS Accession No. ML19056A451).

3-Technical Specification 6.5.3 administrative controls were relocated from the Summer Unit 1 technical specifications to the VCSNS QAPD under the provisions of the NRC Administrative Letter 95-06. The Administrative Letter permitted the licensee to then modify the relocated administrative controls in accordance with the NRC regulation for changes to the QA program. The former technical specification administrative control required in part that the general Manager, Nuclear Plant Operations will approve administrative procedures. The corresponding QA and Administrative controls approved by the NRC for operating facilities do not require that specificity of approval authority. They provide for the owner (licensee) to establish measures that identify the individuals or organizations responsible for approving documents (including administrative procedures) and revisions thereto. SAP-0139 is the current process used by the station to establish the approval authority for administrative procedures. In order to allow that document to control the assignment of the appropriate authority based on knowledge and responsibility in the area affected by the procedure, a change to the requirement in Part V, subsection 2.3.1.a of the QAPD is necessary.

REQUIRED REVIEWERS CONTINUED:

Position	Type/Print Name	Comments	Position	Type/Print Name	Comments
MHPSS	K. Ellison	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MNPS	G. Douglass	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
MIT	E. Greco	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MNT	W. Moore	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
MMS	W. Kearney	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MOD&P	J. Wasieczko	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
MMPR	B. Campbell	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MOM	M. Torres	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
MNFA	B. Morris	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MOPS	D. Shue	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
MNF&A	J. Stanley	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MPS	T. Ledbetter	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
MNL	M. Moore	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MPSE	D. Weir	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

### QAPD Revision Request

**Note1:** For management approval, the Manager, Nuclear Oversight (MNOS) signature is required for any changes to the QAPD.

#### **I. Request**

Current QAPD Revision: 6

Requested by: David Blakeney Date: 03/21/2019

Description of Change (include Source Document for change, i.e. SAP-107, SAP-139, etc.)

Ownership and operating responsibility for the South Carolina Electric & Gas, Co. (SCE&G) V. C. Summer Nuclear Station (VCSNS) has changed based on NRC approval of a merger with Dominion Energy. The change in ownership has resulted in a change in the administration for the facility and corresponding organizational changes to reflect the organization that exists for the other operating nuclear power stations in the Dominion Energy fleet. In addition, a number of administrative changes are needed to maintain consistency throughout the QAPD. Attached is a table with an overview of the proposed organizational changes. Changes to multiple station documents will be managed under the site's change management process.

#### **Justification for Change**

The administrative and organizational changes are made in a manner to ensure that the functions, authorities, and responsibilities committed to in the Quality Assurance Program Description (QAPD) are retained within the restructured organization. NRC regulations permit organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations.

**Note:** The source document may not be changed until Sections II and III have been completed and the originator has been notified by Quality Assurance.

#### **II. QAPD Revision Request Screening**

QAPD Revision Request Tracking # 19-004 Date 05/06/2019

Review assigned to: Kerry L. Rhoads

Does proposed revision require QAPD revision?

Yes/No Yes

Kerry McDonald 05/06/2019  
Reviewer Signature/Date

Basis: The NRC regulations do not stipulate any particular organizational structure. The regulations make allowance for changes to the administration of a QA program and the organization and administration. The changes identified in this request result from a change in the ownership of V. C. Summer facility that was previously approved by the NRC and are needed to provide consistency with the remainder of the Dominion Energy fleet of nuclear facilities. The changes will be evaluated against the requirements of the NRC regulations prior to being implemented.

QAPD Section(s) Requiring Revision: Policy Statement (administrative clarifications); Part I, Section 1 (administrative clarifications); Part II, Section 1 (administrative clarifications and restructure of the organization, use of generic descriptive titles, updated organization charts); Part II, Sections 2-18 (administrative clarifications); Part III (administrative clarifications); Part IV (administrative clarifications); Part V (administrative clarifications throughout), Section 2.2, Independent Review (restructure of review functions to meet the Dominion fleet organization and process).

QA Supervisor Greg V. Hines [Signature] 5/12/19  
Printed Name Signature Date

62 5/12/19

☒ QAPD Revision Not Required (Sections III and IV not applicable)

☒ QAPD Revision Required, develop QAPD Procedure Review Package per SAP-139.

☒ Originator of QAPD Revision Request notified that a QAPD revision is required and a 50.54(a) evaluation must be completed before the source document can be changed.

## III. 50.54(a) Evaluation

Reduction in Commitment YES \_\_\_\_\_ NO XEvaluation Completed by Kerry L. Rhoads Kerry L Rhoads 06/19/2019

Printed Name

Signature

Date

Independent Review by G. Kelley Gregory Kelley 6/19/19

Printed Name

Signature

Date

## IV. SRP Conformance

Yes Does the proposed QAPD change meet the Acceptance Criteria Standard Review Plan (SRP) 17.5 (March 2007) or alternative acceptable method?

If yes, proceed by submitting proposed change to the appropriate Nuclear Licensing department.

If no, provide basis below and notify originating group for correction.

Basis Through the functional descriptions of the organization and the accompanying organizational charts, the acceptance criteria under criterion A, Organization, from the SRP are met. Appropriate authorities and responsibilities are established along with an independence of the quality assurance functions from the quality achieving functions.

The acceptance criteria under criterion W, Independent Review, is met through the alternative that was approved for the Dominion Fleet in DOM-QA-1. The revised QAPD requirements include those from the Dominion Fleet plus specific provisions that were contained in the current VCSNS QAPD regarding supplementing the independent review activities. Those supplemental provisions are also included in the SRP acceptance criteria.

Completed by Kerry L. Rhoads Kerry L Rhoads 05/10/2019

Printed Name

Signature

Date

Independent Review by G. Kelley Gregory Kelley 6/19/19

Printed Name

Signature

Date

# 11-007

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Attachment I  
Page 4 of 4  
Revision 3

**QAPD Revision Closure**

***A. Requested Revision Approved***

NRC Safety Evaluation Report (SER) Letter Number \_\_\_\_\_

Date Received \_\_\_\_\_

New QAPD Revision \_\_\_\_\_

***B. Requested Revision Disapproved***

NRC Safety Evaluation Report (SER) Letter Number \_\_\_\_\_

Date Received \_\_\_\_\_

Organization Changes VCS QAPD to DOM-QA-1

#19-004

VCSNS-QAPD	Functions Added	Functions Relocated
1.1 SCE&G Corporate Management Organization		
1.1.1 Chief Executive Officer (CEO) and President SCANA Services		Function described is above those directly responsible for establishing the QA program policy and its implementation. Description removed from the QAPD.
1.1.2 SCE&G President & Chief Operating Officer (COO)		Function described is above those directly responsible for establishing the QA program policy and its implementation. Description removed from the QAPD.
1.1.3 Senior Vice President (SVP) - SCANA & SVP/Chief Nuclear Officer (SVP/CNO)		
1.2 VCSNS Plant Management Organization		
1.2.1 Site Vice President		<ul style="list-style-type: none"> <li>• Engineering Services to Corporate Engineering</li> <li>• Nuclear Oversight to CNO via Corp Nuclear Oversight</li> </ul>
1.2.1.1 General Manager Nuclear Plant Operations	Planning & Scheduling, Workweek Management, Outage, and Projects	<ul style="list-style-type: none"> <li>• Radiation Protection &amp; Chemistry, and Industrial Safety* to Facility Safety and Licensing (formerly Nuclear Support Services)</li> <li>• Chairperson of the Plant Safety Review Committee (ESRC in Dominion terms)</li> </ul>
1.2.1.1.1 Manager, Nuclear Operations		
1.2.1.1.2 Manager, Maintenance Services		
1.2.1.1.3 Manager, Chemistry Services	Merges with RP	
1.2.1.1.4 Manager, Health Physics and Safety Services	Merges with Chemistry	Industrial Safety functions to Organizational Effectiveness*
1.2.1.2 General Manager, Nuclear Support Services	Becomes Facility Safety & Licensing. <ul style="list-style-type: none"> <li>• Organizational Effectiveness (includes Industrial Safety)</li> <li>• Radiation Protection &amp; Chemistry</li> <li>• Emergency Preparedness</li> <li>• Chairperson of Plant Safety Review Committee (or Facility Safety Review Committee)</li> </ul>	Planning, Outage, and project functions of Business and Financial Services to Operations & Maintenance.
1.2.1.2.1 Manager, Nuclear Licensing		Review of industry issues and generic communications to Organizational Effectiveness
1.2.1.2.2 Manager, Planning & Scheduling		Aligns to Operations & Maintenance
1.2.1.2.2.1 Workweek Management		Aligns to Operations & Maintenance

VCSNS-QAPD	Functions Added	Functions Relocated
1.2.1.2.3 Outage Manager		Aligns to Operations & Maintenance
1.2.1.2.4 Manager, Business and Financial Services		Aligns to Site Services
1.2.1.3 General Manager, Engineering Services		Aligns to Corporate Engineering Services
1.2.1.3.1 Manager, Design Engineering		Aligns to Corporate Engineering Services
1.2.1.3.2 Manager, Plant Support Engineering		Aligns to Corporate Engineering Services
1.2.1.3.3 Manager, Materials and Procurement		<ul style="list-style-type: none"> <li>Aligns to Corporate Engineering Services</li> <li>Supplier QA Audit function to Nuclear Oversight</li> </ul>
1.2.1.3.4 Manager, Nuclear Fuels and Analysis		Aligns to Corporate Engineering Services (VCS QAPD doesn't specify who is responsible for nuclear fuel procurement - in the fleet this is under Nuclear Engineering and Fuel.
1.2.1.4 General Manager, Organizational Development/Effectiveness (GMOE)		<ul style="list-style-type: none"> <li>Aligns under Facility Safety &amp; Licensing</li> <li>Site Emergency Planning reporting to Facility Safety &amp; Licensing</li> <li>Nuclear Protection Services to Corporate Fleet Performance</li> <li>Information Systems Technology to Corporate Engineering Services</li> </ul>
1.2.1.4.1 Manager, Organizational Development & Performance		Aligns to Facility Safety & Licensing
1.2.1.4.2 Manager, Nuclear Protection Services		Aligns to Fleet Performance
1.2.1.4.3 Manager, Emergency Planning		Aligns to Facility Safety & Licensing
1.2.1.4.4 Manager, Corporate Information and System Technology		Aligns to Corporate Engineering Services
1.2.1.4.5 Supervisor Records, Documents, and Reproduction		Aligns to Organizational Effectiveness at site Aligns to Nuclear Regulatory Affairs at corporate
1.2.1.5 Manager, Nuclear Oversight	Supplier QA audits	
1.2.1.6 Manager, Nuclear Training (MNT)		<ul style="list-style-type: none"> <li>Corporate function aligns to Fleet Performance, Performance Improvement &amp; Training</li> </ul>
1.2.2 Corporate Services		Industrial Safety and Environmental functions to Organizational Effectiveness Corporate support still provided under the respective Dominion Energy groups

Organization Changes VCS QAPD to DOM-QA-1

#19-004

VCSNS-QAPD	Functions Added	Functions Relocated
1.2.2.1 Manager, Nuclear Finance	The regulatory compliance aspects of this VCS position are the responsibility of Facility Safety & Licensing for the rest of the fleet.	Nuclear Regulatory compliance aspects aligned to Facility Safety & Licensing Non-QA functions deleted from the QAPD

**50.54(a) Reduction in Commitment Evaluation**

QAPD Revision Request Tracking Number 19-004

**NOTE: At a minimum, Sections 1 and 2 must be completed**

1. Is the revision limited to administrative improvements and clarifications, spelling corrections, punctuation, or editorial items?

Yes ☐ No ☒

Basis: This change does include administrative improvements, clarifications, and editorial items, but is not limited to them. It also includes changes in the organization structure as addressed in item 2 below. See the attached detailed analysis for reduction in commitment.

2. Is the revision limited to any of the changes specifically referenced in 10CFR50.54(a)(i)-(vi)?

(See page 50.54(a) Instructions section)

Yes ☐ No ☒

Basis: This change includes administrative and editorial items as mentioned above. It also includes a number of organizational changes that are bounded by the changes addressed in 10 CFR 50.54(a)(iii), (iv), and (vi). The revision also includes changes to the independent review function that are bounded by the provision of 10 CFR 50.54(a)(ii). See the attached detailed analysis for reduction in commitment. During the preparation of the revision, management requested to defer the changes to the independent review function until a later date, therefore, this part of the change has been removed from the analysis.

\*If the answer to either question 1 or 2 is YES, the change is not a reduction in commitment. Sign the evaluation and forward for approval.

If the answer to both questions 1 and 2 is NO, complete the remaining question.

3. Does the revision take exception to any part of a Regulatory Guide identified in the QAPD or will the method of implementing the Regulatory Guide reduce the level of commitment? (See Enclosure A for examples of reduction in commitments.)

Yes ☐ No ☒

# 19-004

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Attachment II  
Page 2 of 4  
Revision 3

Basis: See the attached detailed analysis for reduction in commitment.

\*If the answer to question 3 is YES, the revision is a reduction in commitment and prior NRC approval is required per 10CFR50.54(a)(4) before implementing the revision.

Originator Kerry L. Rhoads

Printed Name

Signature

06/19/2019

Date

Independent Reviewer

Printed Name

Signature

Date

MNOS Approval

Printed Name

Signature

Date

**50.54(a) Evaluation Instructions**

The intent of the 10CFR50.54(a) evaluation is to determine if a proposed change to a V.C. Summer Quality Assurance Plan Description (QAPD) would constitute a reduction in the level of commitments previously accepted and approved by the NRC. Changes that are a reduction in the level of commitment require NRC approval prior to implementation.

In general, a reduction in a commitment is a change in the Quality Assurance Program Description that diminishes the intent or scope of the program, potentially permitting deficiencies to arise in the design, fabrication, construction or operation of the facility.

The following information provides guidance on answering the 50.54(a) evaluation questions. Enclosure A should be reviewed when screening QAPD changes.

1. Changes to the QAPD that are administrative in nature or provide clarifications, spelling corrections, punctuation, or editorial items are not reductions in commitment.
2. The NRC recognizes the following changes to the QAPD as not being reductions in commitment.
  - (i) The use of a QA standard approved by the NRC which is more recent than the QA standard in the licensee's current QA program at the time of the change.
  - (ii) The use of a quality assurance alternative or exception approved by an NRC safety evaluation, provided that the bases of the NRC approval are applicable to the licensee's facility.
  - (iii) The use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles.
  - (iv) The use of generic organizational charts to indicate functional relationships, authorities, and responsibilities, or, alternately, the use of descriptive text.
  - (v) The elimination of quality assurance program information that duplicates language in quality assurance regulatory guides and quality assurance standards to which the licensee is committed.
  - (vi) Organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations.

3. Part IV of the QAPD contains a list of Regulatory Guides and other quality assurance standards which were selected to supplement and support the QAPD. Conformance and exceptions to these Regulatory Guides are identified in Chapter 3 of the Unit 1 FSAR.
4. The QAPD defines organizational responsibilities and functions, and administrative controls on activities performed at the station. This statement requires evaluation of the impact of the revision on these elements of the quality assurance program. The intent of this is to determine if responsibilities, functions or controls are being eliminated or reduced.
5. The QAPD establishes the minimum quality assurance and controls on station activities (i.e. design, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, modifying). In general, a reduction in commitment is a change that diminishes the intent or scope of the program and control of station activities that potentially permits deficiencies to arise in the design, fabrication, construction, or operation of the facility, resulting in increased risk to the public health and safety.

### **Analysis for Reduction in Commitment Due to V. C. Summer Nuclear Station Organization Realignment**

The regulations at Appendix B to 10 CFR 50, Criterion I, 10 CFR 71.103, and 10 CFR 72.142 recognize that: "Because of the many variables involved, such as the number of personnel, the type of activity being performed, and the location or locations where activities are performed, the organizational structure for executing the quality assurance program may take various forms, provided that the persons and organizations assigned the quality assurance functions have the required authority and organizational freedom." In addition, the technical specifications for the facilities require the establishment and documentation of the onsite and offsite (corporate) organizations without specifying any particular organizational structure. The lines of authority, responsibility, and communication are to be documented in the QA Program. While the QA program regulations require the persons and organizations performing quality assurance functions to have sufficient authority and organizational freedom (in order to identify quality problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions), the technical specifications also require that the individuals who train the operating staff and those who carry out the health physics functions have sufficient organizational freedom to ensure independence from operating pressures. The technical specifications permit these individuals (i.e., those who perform health physics functions, quality assurance functions, or train the operating staff) to report to the appropriate onsite manager; however, these individuals shall still have the required organizational freedom.

NRC regulations at 10 CFR 50.54(a) allow for changes to the quality assurance program description that do not reduce the commitments of the program description accepted by the NRC provided they are submitted to the NRC in accordance with the requirements of Sec. 50.71(e). The regulation identifies the changes that are not considered as a reduction in commitment as follows:

- Administrative improvements and clarifications, spelling corrections, punctuation, or editorial items;
- The use of a QA standard approved by the NRC which is more recent than the QA standard in the licensee's current QA program at the time of the change;
- The use of a quality assurance alternative or exception approved by an NRC safety evaluation, provided that the bases of the NRC approval are applicable to the licensee's facility;
- The use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles;
- The use of generic organizational charts to indicate functional relationships, authorities, and responsibilities, or, alternately, the use of descriptive text;
- The elimination of quality assurance program information that duplicates language in quality assurance regulatory guides and quality assurance standards to which the licensee is committed; and
- Organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom,

including sufficient independence from cost and schedule when opposed to safety considerations.

The below listed administrative and organization changes have been analyzed against the above requirements with the following results:

The VCS QAPD is being revised due to the change in ownership and operating responsibility. The change in ownership and operating responsibility has been previously approved by the NRC. The change in ownership resulted in a change in the administration for the facility that results in a change in the way the organization is aligned. The administrative and organizational changes are made in a manner to ensure that the functions, authorities, and responsibilities committed to in the QAPD are retained within the restructured organization as documented in this analysis of the changes. Throughout the QAPD, the terms South Carolina Electric & Gas Co. and SCE&G have been changed to either Dominion Energy or VCS depending on the context of their usage when referring to the VCS station. These changes are due to the change in ownership that was approved by the NRC and are editorial, therefore, they do not constitute a reduction in the commitment of the program description accepted by the NRC. These changes will be shown in the mark-up copy of the QAPD, but will not be individually addressed in this analysis for each occurrence.

Throughout the Organization section of the VCS QAPD, the term "plant" as referring to the power generating complex is revised to the more commonly used term "facility" that may be used to describe an Independent Spent Fuel Storage Installation to which this program also applies. These changes are editorial and not considered a reduction in commitment under NRC regulations. In addition, other minor editorial corrections are made to punctuation and adding revisions to commitment documents that were missing from the QAPD, but are contained in the UFSAR, Appendix 3A, that identifies conformance with the Regulatory Guides committed to for VCS. These changes will be shown in the marked-up copy of the QAPD, but will not be individually addressed in this analysis for each occurrence.

Throughout the VCS QAPD, organizational positions have the specific titles replaced with generic position descriptions and descriptive text. As needed for consistency, subsection headings are changed from specific position titles to general descriptions of the functions. The accompanying organization charts are used to identify the generic organization functional position and depict the reporting path. Changes to the QAPD of this type are not considered a reduction in commitment under NRC regulations.

The change in the alignment of the organization results in a number of subsections being renumbered, or deleted when the description is moved to another subsection, to maintain the format of the QAPD. The renumbering or deleting of these subsections is an editorial change and thus not considered a reduction in commitment under the NRC regulations.

The following provide a more detailed analysis of specific sections of the QAPD being revised under this change.

## **Policy Statement**

The policy statement is revised to acknowledge the change in administration of the QA program for the nuclear facility due to the change in ownership. The responsibility for establishing the nuclear facility quality assurance policy is delegated by the Dominion Energy executives to the SVP & CNO, Dominion Nuclear. This change is an administrative clarification resulting from the change in ownership of the facility that was approved by the NRC. Therefore, this change is not considered a reduction in the commitments of the program description accepted by the NRC.

## **Part I, Introduction**

### **Section 1, General**

Added a paragraph to acknowledge the applicability of the QAPD to 10 CFR Part 71 activities for transportation packagings as authorized by the NRC. This applicability previously existed, however, it had not been captured in the text of the QAPD. Related changes were also made in the second paragraph of subsection 1.1 of this Part, and in Part II, at Section 2, Quality Assurance Program, the third paragraph, and Section 4, Procurement Document Control, in the second bullet of the first paragraph and the first clarification to NQA-1-1994, Supplement 4S-1 under subsection 4.1, NQA-1-1994 Commitment/Exceptions. This change is an administrative clarification to include approved activities. Therefore, this change is not considered a reduction in the commitments of the program description accepted by the NRC.

## **Part II, QAPD Details**

### **Section 1, Organization**

Editorial and administrative changes made to the paragraphs that clarify the overall organizational arrangement and functions. No changes to quality assurance commitments were made. These type of changes are identified in the NRC regulations as not a reduction in commitment. The renumbering of subsections described in the following changes within Section 1, are subject to change during the final preparation of the document for printing and only represent a best choice during the preparation of this change analysis. The renumbering of the subsections is editorial and not considered a reduction in the commitment of the program description accepted by the NRC.

#### **1.1 SCE&G Corporate Management Organization**

The title of this section is revised to be generic in its description. The functional responsibilities described under subsection 1.1 are transferred to the Dominion Energy corporate management organization. This is an administrative change that resulted from the change in ownership that has been approved by the NRC. This does not reduce the commitment to quality in the QAPD since the form of the organization is not stipulated by the regulations. The functions, authorities, and organizational freedom for executing the QA program are retained. Therefore, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.1.1 Chief Executive Officer (CEO) and President SCANA Services**

The functional responsibilities and authorities described in this subsection are not directly related to the establishment and execution of the nuclear quality assurance program; therefore, this position is removed from the QAPD description of the organization. The organization description in the V. C. Summer Unit 1 Updated Final Safety Analysis, Chapter 13, subsection 13.1.2, Operating Organization, identifies the direct responsibilities for operation and maintenance of the nuclear facilities starting at the Chief Nuclear Officer level and that is reflected in the current organization chart in that subsection of the UFSAR that meets Summer Unit 1 Technical Specification 6.2.1.a. This is consistent with the rest of the Dominion Energy nuclear facilities in describing the most senior management level of the organization responsible for establishment and execution of the quality assurance program. This is an administrative change that resulted from the change in ownership that has been approved by the NRC. This does not reduce the commitment to quality in the QAPD since the form of the organization is not stipulated by the regulations. The functions, authorities, and organizational freedom for establishing and executing the QA program are retained. Therefore, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.1.2 SCE&G President & Chief Operating Officer (COO)**

The functional responsibilities and authorities described in this subsection are not directly related to the establishment and execution of the nuclear quality assurance program; therefore, this position is removed from the QAPD description of the organization. The organization description in the V. C. Summer Unit 1 Updated Final Safety Analysis, Chapter 13, subsection 13.1.2, Operating Organization, identifies the direct responsibilities for operation and maintenance of the nuclear facilities starting at the Chief Nuclear Officer level and that is reflected in the current organization chart in that subsection of the UFSAR that meets Summer Unit 1 Technical Specification 6.2.1.a. This is consistent with the rest of the Dominion Energy nuclear facilities in describing the most senior management level of the organization responsible for establishment and execution of the quality assurance program. This is an administrative change that resulted from the change in ownership that has been approved by the NRC. This does not reduce the commitment to quality in the QAPD since the form of the organization is not stipulated by the regulations. The functions, authorities, and organizational freedom for establishing and executing the QA program are retained. Therefore, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.1.3 Senior Vice President (SVP) - SCANA & SVP/Chief Nuclear Officer (SVP/CNO)**

These authorities and functional responsibilities are transferred to the SVP & CNO, Dominion Nuclear, in Nuclear Operations and the position description is revised to use the generic title Chief Nuclear Officer (CNO). This position is the highest position in the company directly responsible for the establishment and implementation of the QA program as described in the licensing document UFSAR subsection 13.1.2. This is consistent with

the description of the organization for the remainder of the Dominion Energy fleet of nuclear facilities. This is an administrative change that resulted from the change in ownership that has been approved by the NRC. Since the form of the organization is not stipulated by the regulations and the functions, authorities, and organizational freedom for executing the QA program are retained, these changes do not constitute a reduction in the commitment of the program description accepted by the NRC. The use of generic descriptive titles is permitted without being considered a reduction in commitment.

## **1.2 VCSNS Plant Management Organization**

This subsection title is changed to the generic description VCS Operating Organization. A change in the descriptive title of the subheading would be an administrative clarification. The position title abbreviation of VPNO is changed to the generic term executive management position responsible for facility operations. These changes are identified in the regulations as not considered a reduction in commitment. Therefore, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

### **1.2.1 Vice President, Nuclear Operations (VPNO)**

This title is changed to the generic description of the executive management position responsible for facility operations. The change to use generic descriptive text for the organization is not considered a reduction in commitment of the program description accepted by the NRC. The responsibilities for safe operation of the assigned nuclear facility under this management position are realigned as described below and in the subsections that start with 1.2.1. The descriptive text for this subsection is modified to address the administrative change to the organizational alignment. The modified text retains the overall function, responsibility, and authority for operation of the facilities at the VCS site and is an administrative clarification of the paragraph resulting from the change in ownership. Therefore, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

The functions, responsibilities, and authorities for Engineering Services (under subsection 1.2.1.3), including Design Engineering, Plant Support Engineering, Materials and Procurement, and Nuclear Fuels and Analysis are realigned from this position to the respective corporate functional groups under the Executive Management Position Responsible for Engineering that is described later in this document. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

The functions, responsibilities, and authorities for Nuclear Oversight (under subsection 1.2.1.5) are realigned to directly report to the CNO with a line of communication directed to the executive management position responsible for facility operations (formerly VPNO) as depicted in the revised QAPD organization charts. This realignment continues to satisfy the technical specification requirement regarding the individuals who carry out the quality

assurance functions having sufficient organizational freedom to ensure their independence from operating pressures. It also maintains compliance with the NQA-1-1994 commitment for this part of the organization to report at a management level sufficiently high to ensure that cost and schedule considerations do not unduly influence decision making and to ensure effective lines of communication with persons in other senior management positions. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.1 General Manager Nuclear Plant Operations**

This subsection is retitled to the generic functional description "Facility Operations and Maintenance." The specific title for this functional position is given the generic description senior management position responsible for operations and maintenance. These changes are part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC. The descriptive text of the paragraph is changed to identify the following changes in functions, responsibilities, and authorities for this position to support the administrative realignment of the organization:

The functions, responsibilities, and authorities for radiation protection, chemistry, and industrial safety are realigned under the former Nuclear Support Services group (previously described in subsection 1.2.1.2) that is renamed Facility Safety and Licensing under this change. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

The functions, responsibilities, and authorities for Planning & Scheduling, Workweek Management, Outage, and Business and Financial are realigned from Nuclear Support Services (previously described in subsection 1.2.1.2) to the facility operations and maintenance functional group. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

The specific designation of the individual who functions as the Chairperson of the Plant Safety Review Committee (PSRC) is removed from this paragraph. The functions, responsibilities, authorities, and qualifications for the PSRC are specified in Part V, subsection 2.2 of the QAPD. Those requirements do not specify any particular management position to fill this role, but requires the members of the review body or committee, including the chair, to possess certain qualifications along with independence from cost and schedule considerations and the organization responsible for the activities under review. That

commitment is unchanged. By not specifying the management position in subsection 1.2.1.1 of this QAPD, the committee is better able to meet the commitment when assigning a qualified Chairperson. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this change, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.1.1 Manager, Nuclear Operations**

This subsection is retitled to the generic functional description "Operations." The specific title for this functional position is changed to the generic description management position responsible for operations. These changes are part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC.

Additional descriptive text is provided to identify functions performed under this management position. The additional text is an administrative improvement to the QAPD and does not remove any commitments previously stated. Removed the responsibility for implementation of the normal and emergency training and retraining programs, since this responsibility actually resides with the Training group. This change is an administrative clarification since the responsibility already was assigned to the proper functional group. Administrative improvements and clarifications are identified as changes that are not considered as a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.1.2 Manager, Maintenance Services**

This subsection is retitled to the generic functional description "Maintenance." The specific title for this functional position is changed to the generic description management position responsible for maintenance. These changes are part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC.

Additional descriptive text is provided to identify functions performed under this management position. The additional text is an administrative improvement to the QAPD and does not remove or alter any commitments previously stated. Administrative improvements and clarifications are identified as changes that are not considered as a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.1.3 Manager, Chemistry Services**

The functions, authorities, and responsibilities for the Chemistry Services group is merged with the Radiation Protection group, the descriptive paragraph is moved to the appropriate subsection and retitled "Radiation Protection and Chemistry." The merged group is aligned

under the Facility Safety and Licensing group that reports to the executive management position responsible for facility operations through a management line that is outside of the group directly responsible for facility operations and maintenance. This change is part of the administrative change to realign the organization and is further addressed in the change to subsection 1.2.1.2.2. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

Subsection 1.2.1.1.3 of the VCS QAPD is retitled "Outage & Planning" to address the realignment of the functions identified in subsections 1.2.1.2.2 – Manager, Planning & Scheduling, 1.2.1.2.2.1 – Workweek Management, and 1.2.1.2.3 – Outage Manager, to the operations and maintenance group. This change is part of the administrative change to realign the organization and use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC. Descriptive text of the outage & planning functions is moved to and added to this retitled subsection. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.1.4 Manager, Health Physics and Safety Services**

The functions, authorities, and responsibilities for the Health Physics and Safety Services group is merged with the Chemistry Services group and the descriptive paragraph is moved to subsection 1.2.1.2.2, and retitled "Radiation Protection and Chemistry." The merged group is aligned under the Facility Safety and Licensing group that reports to the executive management position responsible for facility operations through a management line that is outside of the group directly responsible for facility operations and maintenance. The commitment for qualification of the individual filling the role of the Radiation Protection Manager (RPM) is retained and applied in this functional group. The functions, authorities, and responsibilities for industrial safety are realigned from the Radiation Protection and Chemistry group to the Organizational Effectiveness functional group under the broader Facility Safety and Licensing group and described in the modified subsection 1.2.1.2.1. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

Subsection 1.2.1.1.4 of the VCS QAPD is retitled "Site Services" to address the realignment of those functions, authorities, and responsibilities related to capital projects previously identified in subsections 1.2.1.2.2.1 – Workweek Management, and 1.2.1.2.4 – Manager, Business and Financial Services. This change is part of the administrative change to use generic position titles supported with organization charts that indicate the reporting

relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC. Descriptive text of the site services functions is moved to and added to this retitled subsection. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.2 General Manager, Nuclear Support Services**

This subsection is retitled to "Facility Safety & Licensing" to acknowledge the realignment of specified functions within this group. The generic position title description "senior management position responsible for facility safety & licensing" is used to indicate the position function. This change is part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC.

The descriptive text under this subheading is revised to address the realignment of functions in the organization as follows:

- (1) Planning, Outage, and Business and Financial services for project functions are realigned from this group to the Operations and Maintenance group and described in the revised subsections 1.2.1.1.3 and 1.2.1.1.4.
- (2) Radiation Protection and Chemistry functions are realigned from Operations and Maintenance to the Facility Safety & Licensing group and described in the revised subsection 1.2.1.2.2.
- (3) Emergency Preparedness functions are realigned from reporting to the Organizational Effectiveness group leader to the senior management position responsible for facility safety & licensing. The Emergency Preparedness functions remain in the same broader segment of the organization.
- (4) The functions, authorities, and responsibilities at the nuclear facility described in subsection 1.2.1.4.1, Manager, Organizational Development & Performance, are aligned to this functional group.

The evaluation of the realignment of the above functional groups is addressed in the specific subsections for those functions. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, changing which functional groups report under this management position does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.2.1 Manager, Nuclear Licensing**

This subsection describes a number of administrative functions for maintaining facility licenses and corresponding with regulators whereas these functions are not part of the quality assurance requirements of 10 CFR 50, Appendix B. These functions are important for inclusion in facility procedures to ensure good business practices, however, they are being removed from the QAPD. Since these are not quality assurance commitments, the removal of them does not constitute a reduction in the commitment of the program description accepted by the NRC. The functions, authorities, and responsibilities for review of NRC and industry issues, including significant events and operating experiences are aligned under the Organizational Effectiveness group that is described in this revision to the subsection. This subsection is retitled "Organizational Effectiveness" to align with the functions described in this section. This change is part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC. Descriptive text is added to this subsection to clarify the functions, authorities, and responsibilities of the Organizational Effectiveness group. The responsibilities regarding identifying and training in human error reduction techniques is included in the SAT process that is the responsibility of the training group and that process includes feedback on the effectiveness of the training programs from all of the affected groups, not just from the organizational effectiveness group. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.2.2 Manager, Planning & Scheduling**

The functions, authorities, and responsibilities of this position are realigned under the Operations and Maintenance section of the organization as described in subsection 1.2.1.1.3. The necessary descriptive text is inserted into subsection 1.2.1.1.3. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, changing which management position this functional group reports under does not constitute a reduction in the commitment of the program description accepted by the NRC.

This subsection is retitled "Radiological Protection and Chemistry" as part of the administrative change to realign the organization. The two functional groups of Chemistry Services (formerly described in subparagraph 1.2.1.1.3) and Health Physics and Safety Services (formerly described in subparagraph 1.2.1.1.4) are merged into one functional group in this paragraph under the broader Facility Safety & Licensing group. The industrial safety functions are realigned within the Facility Safety & Licensing functional group. The necessary descriptive text for the Radiation Protection and Chemistry functions is added to this revised subsection (1.2.1.2.2), while the industrial safety functions are addressed in the

Facility Safety and Licensing subsection (1.2.1.2). The change in the title of this subsection is part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, changing the senior management position to which this functional group reports, and merging the two groups under one management position does not constitute a reduction in the commitment of the program description accepted by the NRC. In addition, the technical specification (6.2.1.d) required organizational freedom from operating pressures is retained or possibly strengthened by realigning from within the Operations group to within the Facility Safety & Licensing group.

#### **1.2.1.2.2.1 Workweek Management**

The functions, authorities, and responsibilities for Workweek Management are realigned under Outage & Planning (subsection 1.2.1.1.3) for maintenance functions and Site Services (subsection 1.2.1.1.4) for modification projects. The appropriate descriptive text is added to the respective subsections. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, changing the senior management position to which this functional group reports, and realigning the functions into two groups does not constitute a reduction in the commitment of the program description accepted by the NRC.

With the realignment of these functions into subsections 1.2.1.1.3 and 1.2.1.1.4, this subsection is deleted. The deletion of this subsection is an editorial change to support the administrative change in the organizational alignment and use of generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.2.3 Outage Manager**

The functions, authorities, and responsibilities for the outage manager are realigned under Outage & Planning (subsection 1.2.1.1.3) for the outage functions. The appropriate descriptive text is added to the respective subsection. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, changing the management position to which this functional group reports does not constitute a reduction in the commitment of the program description accepted by the NRC.

This subsection is retitled "Emergency Preparedness" as part of the administrative change to realign the organization. The functions, authorities, and responsibilities previously identified in subsection 1.2.1.4.2 that relate to the VCSNS site are relocated to the descriptive text for this revised subsection with use of generic descriptions as a part of the administrative change resulting from the change in ownership of the facility. The corporate responsibilities related to Emergency Preparedness are aligned to the Nuclear Regulatory

Affairs functional group and described in the revised subsection 1.2.2.4. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.2.4 Manager, Business and Financial Services**

The Quality Assurance Program functions, authorities, and responsibilities for the Manager, Business and Financial Services are realigned under subsection 1.2.1.1.4 that is renamed Site Services. The financial-related functions are not a part of this Quality Assurance Program and are omitted during this revision. The appropriate descriptive text is added to the respective subsection. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC. The removal of the description of functions that are not related to quality assurance do not constitute a reduction in the commitment of the program description accepted by the NRC.

With the realignment of these functions into subsection 1.2.1.1.4, this subsection is deleted. The deletion of this subsection is an editorial change to support the administrative change in the organization along with use of generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.3 General Manager, Engineering Services**

A new subsection 1.2.1.3, titled "Training," is inserted to address the relocation of the facility training functions, authorities, and responsibilities that were previously described under subsection 1.2.1.6, titled "Manager, Nuclear Training" as part of the administrative change that is needed to maintain consistency in the format of the document. The descriptive text of the functions, authorities, and responsibilities is modified from what was included in the former subsection 1.2.1.6 to use generic position descriptions and a modified organization chart to reflect the reporting authority of this management position. The modified text also provides an allowance that the groups whose functions are not required to have training programs under the 10 CFR 50.120 regulations may be assigned responsibility for the development and conduct of their own training programs.

The former subsection 1.2.1.3, General Manager, Engineering Services is renumbered as 1.2.2 as an editorial change to match the administrative changes in the organization and subsequent subsections are renumbered to maintain consistency with the changes. The title of this renumbered subsection is changed from "General Manager, Engineering Services" to "Engineering Services" and the generic description of executive management position responsible for engineering is added with the organization chart depicting the realignment for reporting to a corporate function under the executive management position responsible for engineering that reports to the Chief Nuclear Officer. The descriptive text of the

functional responsibilities is modified and additional information provided in the subsection. The engineering functions, authorities, and responsibilities are retained within this realignment to a corporate position. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.3.1 Manager, Design Engineering**

The title of this subsection is changed to "Nuclear Engineering and Fuel" and renumbered to 1.2.2.1 to address the administrative realignment of the organization. The change in the numbering and title of this subsection is part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC.

The functions, authorities, and responsibilities of this previous subsection are retained with this change, and the functions authorities and responsibilities described in subsection 1.2.1.3.4, Manager, Nuclear Fuels and Analysis are added to this group. The two functional groups formerly addressed in subsections 1.2.1.3.1 and 1.2.1.3.4 are merged under the senior management position responsible for nuclear engineering and fuel that is managed from the corporate part of the nuclear organization. The functions for developing and maintaining engineering programs, such as ISI/IST, are aligned with the nuclear engineering and fuel functional group and coordinated with the realigned facility engineering functional group described in the former subsection 1.2.1.3.2 (previously titled "Manager, Plant Support Engineering"). The functions for Design Engineering and onsite development of design change packages, as well as the supporting functions of maintaining the facility configuration control programs are principally assigned to the facility engineering functional group described in the modified subsection 1.2.1.3.2 (renumbered by this change to 1.2.2.2, and retitled to Facility Engineering) and support for those functions is provided by the Nuclear Engineering and Fuel group described in subsection 1.2.1.3.1. The functions, authorities, and responsibilities are retained within this realignment. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.3.2 Manager, Plant Support Engineering**

The title of this subsection is changed to "Facility Engineering" and renumbered to 1.2.2.2 to address the administrative realignment of the organization. The change in the title of this subsection is part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC.

The descriptive text and corresponding organization chart are modified to address the realignment of functional responsibilities, including those for design control that were previously aligned under the former subsection 1.2.1.3.1, Manager, Design Engineering, and those for coordinating with the realigned functions described in the modified subsection 1.2.1.3.1 (renumbered to 1.2.2.1), Nuclear Engineering and Fuel, for the development and maintenance of engineering programs. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.3.3 Manager, Materials and Procurement**

The title of this subsection is changed to "Supply Chain Management" and renumbered to 1.2.2.3 to address the administrative realignment of the organization. The change in the title of this subsection is part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC.

The functions, authorities, and responsibilities previously described in this subsection are realigned to the corporate Supply Chain Management organizational group reporting, for quality assurance program purposes, to the executive management position responsible for engineering services; except that the functions, authorities, and responsibilities for supplier quality assurance audits previously in this group are realigned to the Nuclear Oversight functional group. The descriptive paragraph and corresponding organization chart are modified to address the realignment of the organization. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.3.4 Manager, Nuclear Fuels and Analysis**

The functions, authorities, and responsibilities described in this subsection are realigned and merged with the functional group described in the previous subsection 1.2.1.3.1 (formerly titled "Manager, Design Engineering), that is renumbered to 1.2.2.1 and retitled "Nuclear Engineering and Fuel" to address the administrative realignment of the organization. The realignment and consolidation of these functions is addressed in the analysis for the new subsection 1.2.2.1 with the conclusion that, since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

This subsection is retitled "Nuclear Regulatory Affairs" and renumbered 1.2.2.4 to address the corporate functions provided under the executive management position for engineering services related to providing regulatory compliance and licensing support through NRC communications, as well as maintaining and acquiring licenses required for continued and

extended operations. This group includes those functions, authorities, and responsibilities necessary at the corporate location to ensure controlled documents (such as manuals, instructions, procedures, and drawings) and QA records are maintained in accordance with applicable regulatory requirements, industry quality standards, and this QAPD. Nuclear Regulatory Affairs is also responsible for leading and providing strategy for the fleet emergency preparedness organization. The descriptive text and corresponding organization chart are changed to address this realignment. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment and added description, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.4 General Manager, Organizational Development/Effectiveness (GMOE)**

The functions, authorities, and responsibilities for this position are changed as follows:

- Nuclear Protection Services (previously described in subsection 1.2.1.4.2) is aligned under corporate Fleet Performance (new subsection 1.2.3).
- Information Systems Technology (previously described in subsection 1.2.1.4.4) is aligned under corporate Engineering Services (new subsection 1.2.2).
- Organizational Development & Performance for site functions (previously described in 1.2.1.4.1) is aligned under Facility Safety & Licensing (revised subsection 1.2.1.2) including the appropriate QA program functions for change management and corrective action, and the Corporate functions are aligned under corporate Fleet Performance (new subsection 1.2.3).
- Emergency Planning at the site (previously described in 1.2.1.4.3) is aligned to Facility Safety & Licensing (revised subsection 1.2.1.2) and the corporate functions are aligned to Nuclear Regulatory Affairs (new subsection 1.2.2.4).
- The QA functions for Records and Document Control at the site (previously described in subsection 1.2.1.4.5) are aligned to Organizational Effectiveness (revised subsection 1.2.1.2.1) and the corporate functions are aligned to Nuclear Regulatory Affairs (new subsection 1.2.2.4).

This subsection is renumbered to 1.2.3 and renamed "Fleet Performance" to address the administrative change that resulted from the change in ownership that has been approved by the NRC. Descriptive text is added to this section to identify that an executive management position directs this group and to address the functions, authorities, and responsibilities for this functional group. The organization chart is updated to identify the reporting relationship for this functional group. The functions, authorities, and responsibilities described above that are realigned are further addressed in the applicable subsections referenced. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment and added description, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.4.1 Manager, Organizational Development & Performance**

The title of this subsection is renumbered to 1.2.3.1 and renamed "Performance Improvement and Training" to address the administrative change that resulted from the change in ownership that has been approved by the NRC. The change in the title of this subsection is part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC. The functions, authorities, and responsibilities described in this subsection are realigned to separate those related to activities for assessing fleet and facility performance performed at the corporate offices as described in this modified subsection and those performed at the nuclear facility as described in the modified subsection 1.2.1.2.1 (now titled "Organizational Effectiveness"). The realignment also establishes functions, authorities, and responsibilities for the training of the corporate personnel that support the nuclear facilities. An allowance is provided that the groups whose functions are not required to have accredited training programs under the 10 CFR 50.120 regulations may be assigned responsibility for the development and conduct of their own training programs. Training for personnel at the nuclear facilities is addressed in the revised subsection 1.2.1.3 (now titled "Training"). Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.4.2 Manager, Nuclear Protection Services**

The subsection is renumbered 1.2.3.2, and renamed "Protection Services" to address the administrative change that resulted from the change in ownership that has been approved by the NRC. The change in the title of this subsection is part of the administrative change to use generic position titles supported with organization charts that indicate the reporting relationships, thus it is not considered a reduction in the commitment of the program description accepted by the NRC. The functions, authorities, and responsibilities described in this subsection are realigned to the corporate Fleet Performance functional group (new subsection 1.2.3) as shown in the modified organization chart. The descriptive text for this subsection is modified to use a generic position description and remove the reporting relationship since that is depicted in the organization chart. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.4.3 Manager, Emergency Planning**

The functions, authorities, and responsibilities for Emergency Planning (Emergency Preparedness) are realigned to the Facility Safety and Licensing functional group as described in the revised subsection 1.2.1.2.3 (retitled "Emergency Preparedness") for

activities occurring at the facility, and to the Engineering Services functional group for activities occurring at the corporate location as described in the new subsection 1.2.2.4 (titled "Nuclear Regulatory Affairs"). With the realignment of these functions, an editorial change to delete this subsection is made. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.4.4 Manager, Corporate Information and System Technology**

The functions, authorities, and responsibilities for Corporate Information and System Technology are realigned to the Engineering Services functional group and this subsection is renumbered/relocated to 1.2.2.5 and retitled "Information Technology" to address the administrative change that resulted from the change in ownership that has been approved by the NRC. A generic descriptive position title of senior management position for information technology is used to replace the specific position title identified in this subsection and the reporting relationship is removed from the text since it is depicted in the organization charts. The descriptive text for this subsection is modified to address further functions described for the Dominion fleet. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.4.5 Supervisor Records, Documents, and Reproduction**

The functions, authorities, and responsibilities for document control and records are realigned to the Facility Safety and Licensing functional group as described in the revised subsection 1.2.1.2.1 (retitled "Organizational Effectiveness") for activities occurring at the facility, and to the Engineering Services functional group for activities occurring at the corporate location as described in the new subsection 1.2.2.4 (titled "Nuclear Regulatory Affairs"). With the realignment of these functions, this subsection will be deleted. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.5 Manager, Nuclear Oversight**

The functions, authorities, and responsibilities for Nuclear Oversight are realigned to a corporate position reporting directly to the CNO to address the administrative change that resulted from the change in ownership that has been approved by the NRC. This subsection is renumbered to 1.2.4 to maintain the format of the document. The responsibility for supplier quality assurance audits is realigned from the Manager, Materials and Procurement function (previously described in subsection 1.2.1.3.3), to the Nuclear Oversight function. The specific title of Manager, Nuclear Oversight is changed to the generic description of management position responsible for Nuclear Oversight and the reporting relationship is as

depicted on the revised organization chart. The descriptive text is modified to reflect the Dominion fleet functions, authorities, and responsibilities that fully encompass those described in the previous text. It also has information added to address the corporate functions and the added responsibility for Supplier quality assurance audits. A new subsection is added to describe the Quality Control Inspection functions at VCSNS. The new subsection is numbered 1.2.4.1 and titled "Quality Control Inspections" to maintain the document format. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.2.1.6 Manager, Nuclear Training (MNT)**

This descriptive text for this subsection is relocated and renumbered as 1.2.1.3 to administratively provide consistency with the rest of the descriptions of functions under the executive management position responsible for facility operations. With the relocation of this description, this subsection will be deleted. This change is administrative in the layout of the QAPD to maintain consistency within the document.

The functions, authorities, and responsibilities for training of support personnel at the corporate level is aligned to the performance improvement and training functional group described in the new subsection 1.2.3.1 (titled "Performance Improvement and Training") to address the administrative change in the organization that resulted from the change in ownership that has been approved by the NRC. This change is further addressed under that section. Since the form of the organization is not stipulated by the regulations, and the functions, authorities, and organizational freedom for executing the QA program are retained under this realignment, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

### **1.3 Corporate Services**

The functions described in this subsection are not a part of the quality assurance program requirements and are not considered a commitment of the program description accepted by the NRC. Removal of this subsection would not constitute a reduction in the commitment of the program description accepted by the NRC. The accounting, industrial safety, and environmental services are important business practices and have other regulatory significance, however, they are not required to be addressed in the QAPD.

#### **1.3.1 Manager, Nuclear Finance**

The functions described in this subsection are not a part of the quality assurance program requirements and are not considered a commitment of the program description accepted by the NRC. Removal of this subsection would not constitute a reduction in the commitment of the program description accepted by the NRC. The fatigue rule management function is an important regulatory function, however, this is not required to be addressed in the QAPD.

Budgets and financial analysis are important business needs and they have other regulatory significance, however, they are not required to be addressed in the QAPD.

#### **1.4 Quality Assurance**

The functions, authorities, and responsibilities in this subsection are addressed in the modified subsection 1.2.4 for Nuclear Oversight and new subsection 1.2.4.1 for Quality Control. The areas subject to verification of development and implementation of the quality assurance program are addressed in Section 18 of Part II of the QAPD and their repetition in this subsection is not necessary. Therefore, an editorial change is made to delete the duplicate information from this subsection. Since the functions, authorities, and organizational freedom for executing the QA program are addressed in the sections/subsections referenced above, this paragraph can be deleted as an editorial change and does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.5 Authority to Stop Work**

The function, authority, and responsibilities described in this subsection are addressed in the specific subsections where they apply: 1.2.2.1, Nuclear Engineering and Fuel; 1.2.2.3, Supply Chain Management; 1.2.4, Nuclear Oversight. Since the functions, authorities, and organizational freedom for executing the QA program are addressed in the subsections referenced above, this paragraph can be deleted as an editorial change and does not constitute a reduction in the commitment of the program description accepted by the NRC.

#### **1.6 Quality Assurance Organizational Independence**

The function, authority, and responsibilities described in this subsection are from NEI-06-14A, Rev. 7, Quality Assurance Program Description, that was approved by the NRC and used as a basis for development of the VCSNS QAPD. This subsection is listed as applicable during the Early Site Permit or construction phase of a nuclear facility based on NRC identification of lessons learned from earlier construction efforts and not to the operations phase. The requirements for organizational independence are addressed in 10 CFR 50, Appendix B the VCSNS commitment to NQA-1-1994, and the facility technical specifications. The description of the organization provided in Section 1 of the VCSNS QAPD and the reporting relationships shown in the organization charts clearly identifies the organizational independence for the quality assurance organization. Since the functions, authorities, and organizational freedom for executing the QA program are addressed in the applicable subsections of the QAPD, this paragraph can be deleted as an editorial change and does not constitute a reduction in the commitment of the program description accepted by the NRC.

## **Section 2 Quality Assurance Program**

### **2.4 Issuance and Revision to Quality Assurance Program**

The responsibility for review of changes to the QAPD and authority for approval of the changes is modified to be consistent with the revised policy that is being issued due to the change in administration that occurred due to the change in ownership of the facility. This administrative change in responsibility and authority is consistent with that of the rest of the Dominion Energy fleet of nuclear facilities and ensures that the persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations. Therefore, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

## **Part V Additional Quality Assurance and Administrative Controls for the Plant Operational Phase**

### **Section 1 Definitions**

Added a definition for Safety Analysis Report (SAR) that is being used within the QAPD in a general sense to refer to various forms of Safety Analysis Reports that are required by regulation for a particular facility. Depending on the facility's report it could be a PSAR, FSAR, UFSAR, DSAR, or several other forms, so it is necessary to use the term in a general sense within the QAPD. This is an administrative clarification to the QAPD and doesn't alter any commitment to quality. Therefore, this change does not constitute a reduction in the commitment of the program description accepted by the NRC.

## **CONCLUSION**

Based on the analysis of all the above changes to the QAPD, this change continues to meet the requirements of 10 CFR 50, Appendix B and the commitments, or approved alternatives, of the NRC accepted quality assurance program for the V. C. Summer facility, including the ISFSI. Since the changes do not constitute a reduction in the commitment to quality as accepted by the NRC they can be implemented without having prior NRC approval.

### QAPD Revision Request

**Note1:** For management approval, the Manager, Nuclear Oversight (MNOS) signature is required for any changes to the QAPD.

#### **I. Request**

Current QAPD Revision: 6

Requested by: Michael Verrilli Date: 05/06/2019

Description of Change (include Source Document for change, i.e. SAP-107, SAP-139, etc.).

Revise QAPD, Part II, subsection 7.2, Second bulleted list under the clarification/exception to NQA-1-1994, Supplement 7S-1 regarding the purchase of commercial grade calibration services to allow the use of the approved information from NEI 14-05A, Guidelines for the Use of Accreditation in Lieu of Commercial Grade Surveys for Procurement of Laboratory and Calibration and Test Services, as approved by NRC SER for the AmerenUE Callaway Plant Unit 1, Operating Quality Assurance Manual (dated April 1, 2016, NRC ADAMS Accession No. ML16089A167). Procedures ES-0321 and ES-0350 will need to be changed to implement the QAPD revision.

Justification for Change The NRC has reviewed and conditionally approved the guidance from NEI 14-05A for the use of accreditation in lieu of commercial grade surveys for test laboratories and calibration service providers. The NRC also recently issued a letter to NEI that clarifies the use of ISO 17025:2017 during a transition period. The revised section of the QAPD will also address the provisions of this letter to NEI. The letter established a limited time period for acceptance of the 2017 edition of the standard and a limitation on the use of subsuppliers in this process. These will be factored into the revised text of the QAPD.

**Note:** The source document may not be changed until Sections II and III have been completed and the originator has been notified by Quality Assurance.

#### **II. QAPD Revision Request Screening**

QAPD Revision Request Tracking # 19-005 Date 05/06/2019

Review assigned to: Kerry L. Rhoads

Does proposed revision require QAPD revision?

Yes/No Yes

Kerry Rhoads

05/06/2019

Reviewer Signature/Date

Basis The process for using accreditation in lieu of commercial grade dedication for calibration services has been expanded to include nondomestic service providers and also includes testing laboratories. Provisions to use this process will require the alternative described in subsection 7.2 of the QAPD to be revised and NRC identified provisions for acceptance of the 2017 edition of the ISO standard 17025 will need to be added to the standard text that the NRC approved. Ref. NRC Letter to Mark A. Richter, Ph.D. of NEI, dated April 16, 2019, (NRC ADAMS Accession No. ML19056A451).

QAPD Section(s) Requiring Revision Part II, subsection 7.2, Second bullet point (-) under the clarifications and exceptions to NQA-1-1994, Supplement 7S-1 related to commercial grade calibration services.

QA Supervisor

Greg Hume

Printed Name

[Signature]

Signature

5/10/19

Date

QAPD Revision Not Required (Sections III and IV not applicable)

☒ QAPD Revision Required, develop QAPD Procedure Review Package per SAP-139.

☒ Originator of QAPD Revision Request notified that a QAPD revision is required and a 50.54(a) evaluation must be completed before the source document can be changed.

**III. 50.54(a) Evaluation**Reduction in Commitment YES \_\_\_\_\_ NO XEvaluation Completed by Kerry L. Rhoads Kerry L Rhoads 05/08/2019  
Printed Name Signature DateIndependent Review by Greg Grier Greg Grier 5/8/19  
Printed Name Signature Date**IV. SRP Conformance**Yes Does the proposed QAPD change meet the Acceptance Criteria Standard Review Plan (SRP) 17.5 (March 2007) or alternative acceptable method?

If yes, proceed by submitting proposed change to the appropriate Nuclear Licensing department.

If no, provide basis below and notify originating group for correction.

Basis This change is based on an alternative method for acceptance of commercial grade calibration and testing services that was approved by an NRC Safety Evaluation for the AmerenUE Callaway facility.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Completed by Kerry L. Rhoads Kerry L Rhoads 05/08/2019  
Printed Name Signature DateIndependent Review by Greg Grier Greg Grier 5/8/19  
Printed Name Signature Date

**QAPD Revision Closure**

***A. Requested Revision Approved***

NRC Safety Evaluation Report (SER) Letter Number \_\_\_\_\_

Date Received \_\_\_\_\_

New QAPD Revision \_\_\_\_\_

***B. Requested Revision Disapproved***

NRC Safety Evaluation Report (SER) Letter Number \_\_\_\_\_

Date Received \_\_\_\_\_

**50.54(a) Reduction in Commitment Evaluation**

QAPD Revision Request Tracking Number 19-005

**NOTE: At a minimum, Sections 1 and 2 must be completed**

1. Is the revision limited to administrative improvements and clarifications, spelling corrections, punctuation, or editorial items?

Yes        No   X  

Basis: This change adds an alternative to the QAPD, therefore, it is not considered one of the above items that are not a reduction in commitment.

2. Is the revision limited to any of the changes specifically referenced in 10CFR50.54(a)(i)-(vi)?

(See page 50.54(a) Instructions section)

Yes   X   No       

Basis: This change modifies the requirements for the use of accreditation in lieu of commercial grade survey of suppliers for testing laboratories and calibration laboratories. The change expands the approved accreditation beyond just domestic (US) facilities and recognizes the ILAC accreditation process under the Mutual Recognition Arrangement rather than limiting it to just a few accrediting bodies. The NRC conditionally approved the process described in NEI 14-05A, Revision 1 by Safety Evaluation, dated February 9, 2015, as documented in ADAMS Accession No.: ML14322A535. This permitted the industry to seek a revision to their QA program descriptions that would incorporate the process with the NRC specified conditions for approval. Following that approval, the AmerenUE Callaway facility submitted a change to their QAPD to adopt the NEI process with NRC conditions. The NRC approved the change to the Callaway Operating Quality Assurance Manual on April 1, 2016 as documented in ADAMS Accession No.: MS16089A167. A review of the bases for the NRC approval of the alternative to the QA requirements was performed and determined to be applicable to this change to the VCSNS QAPD. That bases included use of the approved requirements from NEI 14-05A with the NRC imposed conditions. These requirements and conditions have been included in the requirements stated in the VCSNS QAPD.

In addition, the NRC sent a letter to NEI, dated April 16, 2019, on the subject Provisional Recognition of the International Standard Organization/International Electrotechnical Commission Standard No., 17025; General Requirements for the Competence of Testing and Calibration Laboratories, 2017 Edition. This letter granted

provisional permission to licensees to continue the use of the ILAC accreditation process in lieu of performing a survey during the commercial-grade dedication process for calibration and testing services using accreditation to either the 2005 or 2017 edition of ISO/IEC 17025 during the ILAC/ISO agreed upon transition period to the new standard. The NRC permission is only valid during the transition period which runs from November 30, 2017 until November 30, 2020, by which time the NRC is expecting the NEI document to be revised to address the new standard. Another related provision of the letter identified a restriction on the use of subsuppliers by the accredited laboratories, since that practice does not ensure the calibration is done under an accredited program. These two provisions are included in this change to the QAPD.

\*If the answer to either question 1 or 2 is YES, the change is not a reduction in commitment. Sign the evaluation and forward for approval.

If the answer to both questions 1 and 2 is NO, complete the remaining question.

3. Does the revision take exception to any part of a Regulatory Guide identified in the QAPD or will the method of implementing the Regulatory Guide reduce the level of commitment? (See Enclosure A for examples of reduction in commitments.)

Yes \_\_\_\_\_ No \_\_\_\_\_

Basis: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\*If the answer to question 3 is YES, the revision is a reduction in commitment and prior NRC approval is required per 10CFR50.54(a)(4) before implementing the revision.

Originator Kerry L. Rhoads Kerry L Rhoads 05/08/2019  
Printed Name Signature Date

Independent Reviewer Gregory J. Long Gregory J Long 5/8/19  
Printed Name Signature Date

MNOS Approval J. W. Quigley J. W. Quigley 5/8/19  
Printed Name Signature Date

**50.54(a) Evaluation Instructions**

The intent of the 10CFR50.54(a) evaluation is to determine if a proposed change to a V.C. Summer Quality Assurance Plan Description (QAPD) would constitute a reduction in the level of commitments previously accepted and approved by the NRC. Changes that are a reduction in the level of commitment require NRC approval prior to implementation.

In general, a reduction in a commitment is a change in the Quality Assurance Program Description that diminishes the intent or scope of the program, potentially permitting deficiencies to arise in the design, fabrication, construction or operation of the facility.

The following information provides guidance on answering the 50.54(a) evaluation questions. Enclosure A should be reviewed when screening QAPD changes.

1. Changes to the QAPD that are administrative in nature or provide clarifications, spelling corrections, punctuation, or editorial items are not reductions in commitment.
2. The NRC recognizes the following changes to the QAPD as not being reductions in commitment.
  - (i) The use of a QA standard approved by the NRC which is more recent than the QA standard in the licensee's current QA program at the time of the change.
  - (ii) The use of a quality assurance alternative or exception approved by an NRC safety evaluation, provided that the bases of the NRC approval are applicable to the licensee's facility.
  - (iii) The use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles.
  - (iv) The use of generic organizational charts to indicate functional relationships, authorities, and responsibilities, or, alternately, the use of descriptive text.
  - (v) The elimination of quality assurance program information that duplicates language in quality assurance regulatory guides and quality assurance standards to which the licensee is committed.
  - (vi) Organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations.

3. Part IV of the QAPD contains a list of Regulatory Guides and other quality assurance standards which were selected to supplement and support the QAPD. Conformance and exceptions to these Regulatory Guides are identified in Chapter 3 of the Unit 1 FSAR.
4. The QAPD defines organizational responsibilities and functions, and administrative controls on activities performed at the station. This statement requires evaluation of the impact of the revision on these elements of the quality assurance program. The intent of this is to determine if responsibilities, functions or controls are being eliminated or reduced.
5. The QAPD establishes the minimum quality assurance and controls on station activities (i.e. design, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, modifying). In general, a reduction in commitment is a change that diminishes the intent or scope of the program and control of station activities that potentially permits deficiencies to arise in the design, fabrication, construction, or operation of the facility, resulting in increased risk to the public health and safety.

### **QAPD Revision Request**

**Note1:** For management approval, the Manager, Nuclear Oversight (MNOS) signature is required for any changes to the QAPD.

#### **I. Request**

Current QAPD Revision: 6

Requested by: R. P. Mike Date: 4/18/19

Description of Change (include Source Document for change, i.e. SAP-107, SAP-139, etc.)

Revise VCSNS QAPD Part V, subsection 2.3.1.a to assign and control the approval authority for administrative procedures through the document control process (e.g., SAP-0139, Document Review and Approval Process), rather than require all administrative procedures to be approved by the General Manager, Nuclear Plant Operations.

Justification for Change This change is consistent with the commitment to NRC Regulatory Guide 1.33, Rev. 2 and N18.7-1976 requirements that have been incorporated into NQA-1-1994 and Part II, Section 6 of the VCSNS QAPD. The commitments require that administrative controls provide measures to control the approval of documents by authorized personnel (individuals or organizations) as designated by the owner organization without assigning a single point of authority. Assigning this approval authority to individuals responsible in the areas affected by the administrative procedure under consideration allows for more appropriate control. This does not alter the requirement for any required independent review by the safety review committees described in Part V, Section 2.2.

**Note:** The source document may not be changed until Sections II and III have been completed and the originator has been notified by Quality Assurance.

#### **II. QAPD Revision Request Screening**

QAPD Revision Request Tracking # 19-006 Date 05/07/2019

Review assigned to: Kerry L. Rhoads

Does proposed revision require QAPD revision?

Yes/No Yes

Kerry W. Roads 05/07/2019  
Reviewer Signature/Date

Basis Technical Specification 6.5.3 administrative controls were relocated from the Summer Unit 1 technical specifications to the VCSNS QAPD under the provisions of NRC Administrative Letter 95-06. The Administrative Letter permitted the licensee to then modify the relocated administrative controls in accordance with the NRC regulations for changes to the QA program. The former technical specification administrative control required in part that the General Manager, Nuclear Plant Operations will approve administrative procedures. The corresponding QA and Administrative controls approved by the NRC for operating facilities do not require that specificity of approval authority, they provide for the owner (licensee) to establish measures that identify the individuals or organizations responsible for approving documents (including administrative procedures) and revisions thereto. SAP-0139 is the current process used by the station to establish the approval authority for administrative procedures. In order to allow that document to control the assignment of the appropriate authority based on knowledge and responsibility in the area affected by the procedure, a change to the requirement in Part V, subsection 2.3.1.a of the QAPD is necessary.

QAPD Section(s) Requiring Revision Part V, subsection 2.3.1.a

QA Supervisor Gregory [Signature] 5/8/19  
Printed Name Signature Date

     QAPD Revision Not Required (Sections III and IV not applicable)

X QAPD Revision Required, develop QAPD Procedure Review Package per SAP-139.

X Originator of QAPD Revision Request notified that a QAPD revision is required and a 50.54(a) evaluation must be completed before the source document can be changed.

**III. 50.54(a) Evaluation**Reduction in Commitment YES \_\_\_\_\_ NO XEvaluation Completed by Kerry L. Rhoads

Printed Name

Kerry L. Rhoads

Signature

Date

Independent Review by

Printed Name

Signature

Date

**IV. SRP Conformance**

X Does the proposed QAPD change meet the Acceptance Criteria Standard Review Plan (SRP) 17.5 (March 2007) or alternative acceptable method?

If yes, proceed by submitting proposed change to the appropriate Nuclear Licensing department.

If no, provide basis below and notify originating group for correction.

Basis NUREG-0800, SRP 17.5, Rev. 0; Acceptance Criterion F, Document Control items 1, 3, and 6 are satisfied by this change. In part these require that (1) a program is established to control the approval of documents; (3) revisions are approved by the same organization that originally approved it or by a designated organization that is qualified and knowledgeable; and (6) the control system is documented as follows: c. the individuals responsible for ... approval are identified. SAP-0139 satisfies these criteria for control of the approval of documents.

Completed by Kerry L. Rhoads

Printed Name

Kerry L. Rhoads

Signature

05/07/2019

Date

Independent Review by

Printed Name

Signature

Date

**QAPD Revision Closure**

***A. Requested Revision Approved***

NRC Safety Evaluation Report (SER) Letter Number \_\_\_\_\_

Date Received \_\_\_\_\_

New QAPD Revision \_\_\_\_\_

***B. Requested Revision Disapproved***

NRC Safety Evaluation Report (SER) Letter Number \_\_\_\_\_

Date Received \_\_\_\_\_

### 50.54(a) Reduction in Commitment Evaluation

QAPD Revision Request Tracking Number 19-006

**NOTE: At a minimum, Sections 1 and 2 must be completed**

1. Is the revision limited to administrative improvements and clarifications, spelling corrections, punctuation, or editorial items?

Yes ☐ No ☒

Basis: This change is to a commitment of the QAPD regarding the necessary authorities for approval of station administrative procedures. It does not meet the provisions described above.

2. Is the revision limited to any of the changes specifically referenced in 10CFR50.54(a)(i)-(vi)?

(See page 50.54(a) Instructions section)

Yes ☒ No ☐

Basis: This change may be made through use of a quality assurance alternative or exception approved by an NRC safety evaluation, and the bases of the NRC approval are applicable to the VCSNS facility. On April 16, 2003, the NRC issued an SER that approved a change to the Farley Units 1 and 2 QA program (reference TAC Nos. MB7935 and MB7936). The request was to reassign the approval authority for the station administrative procedures from a single authority (the QAM in this case) to the management position responsible for issuing the procedures (for Farley that was NPGM, the NSGM, and the QAM). The NRC reviewer noted that the ANSI standard N18.7-1976 endorsed by Regulatory Guide 1.33 requires approval by the management representative assigned approval authority. The evaluation concluded that reassigning the approval authority to the management responsible for issuing the procedures continues to comply with the requirements of 10 CFR 50, Appendix B and is consistent with ANSI N18.7. In applying this to the VCSNS QAPD change, the facility also commits to meeting Regulatory Guide 1.33, Revision 2, with the NRC approved alternative that the requirements of NQA-1-1994 are applied in lieu of using ANSI N18.7-1976 along with additional administrative controls identified in the VCSNS QAPD. The requirements for procedure control, specifically for assigning approval authority are consistent between ANSI N18.7-1976 and NQA-1-1994. Therefore, it can be concluded that the requested change to the VCSNS QAPD is bounded by the basis of the NRC's approval of a similar change for Farley. This change can be implemented without being considered a reduction in commitment.

\*If the answer to either question 1 or 2 is YES, the change is not a reduction in commitment. Sign the evaluation and forward for approval.

If the answer to both questions 1 and 2 is NO, complete the remaining question.

3. Does the revision take exception to any part of a Regulatory Guide identified in the QAPD or will the method of implementing the Regulatory Guide reduce the level of commitment? (See Enclosure A for examples of reduction in commitments.)

Yes \_\_\_\_\_ No \_\_\_\_\_

Basis: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\*If the answer to question 3 is YES, the revision is a reduction in commitment and prior NRC approval is required per 10CFR50.54(a)(4) before implementing the revision.

Originator Kerry L. Rhoads Kerry L Rhoads 05/07/2019  
Printed Name Signature Date

Independent Reviewer GREGORY [Signature] 5/8/19  
Printed Name Signature Date

MNOS Approval J.M. QUIGLEY [Signature] 5/7/19  
Printed Name Signature Date

**50.54(a) Evaluation Instructions**

The intent of the 10CFR50.54(a) evaluation is to determine if a proposed change to a V.C. Summer Quality Assurance Plan Description (QAPD) would constitute a reduction in the level of commitments previously accepted and approved by the NRC. Changes that are a reduction in the level of commitment require NRC approval prior to implementation.

In general, a reduction in a commitment is a change in the Quality Assurance Program Description that diminishes the intent or scope of the program, potentially permitting deficiencies to arise in the design, fabrication, construction or operation of the facility.

The following information provides guidance on answering the 50.54(a) evaluation questions. Enclosure A should be reviewed when screening QAPD changes.

1. Changes to the QAPD that are administrative in nature or provide clarifications, spelling corrections, punctuation, or editorial items are not reductions in commitment.
2. The NRC recognizes the following changes to the QAPD as not being reductions in commitment.
  - (i) The use of a QA standard approved by the NRC which is more recent than the QA standard in the licensee's current QA program at the time of the change.
  - (ii) The use of a quality assurance alternative or exception approved by an NRC safety evaluation, provided that the bases of the NRC approval are applicable to the licensee's facility.
  - (iii) The use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles.
  - (iv) The use of generic organizational charts to indicate functional relationships, authorities, and responsibilities, or, alternately, the use of descriptive text.
  - (v) The elimination of quality assurance program information that duplicates language in quality assurance regulatory guides and quality assurance standards to which the licensee is committed.
  - (vi) Organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations.

3. Part IV of the QAPD contains a list of Regulatory Guides and other quality assurance standards which were selected to supplement and support the QAPD. Conformance and exceptions to these Regulatory Guides are identified in Chapter 3 of the Unit 1 FSAR.
4. The QAPD defines organizational responsibilities and functions, and administrative controls on activities performed at the station. This statement requires evaluation of the impact of the revision on these elements of the quality assurance program. The intent of this is to determine if responsibilities, functions or controls are being eliminated or reduced.
5. The QAPD establishes the minimum quality assurance and controls on station activities (i.e. design, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, modifying). In general, a reduction in commitment is a change that diminishes the intent or scope of the program and control of station activities that potentially permits deficiencies to arise in the design, fabrication, construction, or operation of the facility, resulting in increased risk to the public health and safety.

April 16, 2003

Mr. J. B. Beasley, Jr.  
Vice President - Farley Project  
Southern Nuclear Operating  
Company, Inc.  
Post Office Box 1295  
Birmingham, Alabama 35201-1295

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT (FARLEY), UNITS 1 AND 2  
RE: QUALITY ASSURANCE PROGRAM CHANGE (TAC NOS. MB7935 AND  
MB7936)

Dear Mr. Beasley:

By letter dated February 13, 2003, you submitted a proposed revision to the Quality Assurance Program (QAP) described in the Farley Nuclear Plant (FNP) Updated Final Safety Analysis Report, Chapter 17. This revision to the FNP QAP was submitted in accordance with the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.54(a)(3), as reflecting a change that reduced commitments in the QAP description previously approved by the NRC.

This revision would delete procedure approval authority of the Quality Assurance Manager that is currently required by the QAP. The revision would also delete QAP reference to the Operations Quality Assurance Policy Implementation List (OQAPIL), which is a composite listing of administrative procedures. The OQAPIL is a procedure listing that divides FNP administrative procedures organizationally into procedures issued by the Nuclear Plant General Manager (NPGM), procedures issued by the Nuclear Support General Manager (NSGM), and procedures issued by the Quality Assurance Manager (QAM). Section 17.2.2.2 of the QAP currently requires that the QAM approve all procedures listed in the OQAPIL. This QAP revision would reassign procedure approval authority to the NPGM for procedures issued by the NPGM, to the NSGM for procedures issued by the NSGM, and the QAM for administrative procedures issued by the QAM.

We have reviewed and evaluated the information provided by you in your February 13, 2003, submittal, and we have determined that the proposed revision to the FNP's QAP continues to comply with 10 CFR Part 50, Appendix B, and is consistent with guidance for approval of

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procedures provided by the American National Standards Institute N18.7. Therefore, the proposed revision to FNP's QAP is found acceptable by the staff. Our Safety Evaluation is enclosed.

Sincerely,

**/RA/**

Frank Rinaldi, Project Manager, Section 1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364

Enclosure: As stated

cc w/encl: See next page

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REVISION TO QUALITY ASSURANCE PROGRAM

SOUTHERN NUCLEAR OPERATING COMPANY, INC

JOSEPH M. FARLEY NUCLEAR PLANT

DOCKET NOS. 50-348 AND 50-364

1.0 INTRODUCTION

By letter dated February 13, 2003 (Ref.1), Southern Nuclear Operating Company, Inc. (SNC) requested approval of a proposed revision to the Quality Assurance Program (QAP) described in the Farley Nuclear Plant (FNP), Units 1 and 2, Updated Final Safety Analysis Report (UFSAR) Chapter 17. This revision would delete the presently approved QAP description in UFSAR Chapter 17 that designates procedure approval authority to the Quality Assurance Manager (QAM) for administrative procedures that are organizationally assigned to the Nuclear Plant General Manager (NPGM) and the Nuclear Support General Manager (NSGM). The proposed QAP revision would designate the NPGM as having procedure approval authority for administrative procedures assigned to the NPGM, and designate the NSGM as having procedure approval authority for administrative procedures assigned to the NSGM. SNC submitted this request in accordance with the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(a)(4) as a change to the QAP description that reduces commitments.

2.0 EVALUATION

For the proposed changes to licensee's procedures, Section 5.4 of American National Standards Institute (ANSI) N18.7-1976, as endorsed by Regulatory Guide 1.33 (Ref. 3) requires approval by the management representative assigned approval authority.

The QAP currently requires that the QAM approve all administrative procedures listed in the Operations Quality Assurance Policy Implementation List (OQAPIL). The OQAPIL is a procedure listing that divides FNP administrative procedures organizationally into three areas: 1) procedures issued by the NPGM, 2) procedures issued by the NSGM, and 3) procedures issued by the QAM. The revised QAP removes the approval authority designation of the QAM from procedures issued by the NPGM and NSGM, but retains the QAM approval authority for procedures issued by the QAM.

SNC's assignment of the NPGM as having procedure approval authority for administrative procedures assigned to the NPGM; the NSGM as having procedure approval authority for administrative procedures assigned to the NSGM; and the QAM as having approval authority for procedures assigned to the QAM, remains consistent with the intent of ANSI N18.7 Section 5.4 and is acceptable to the staff.

The proposed revision reassigns the procedure review function from the QAM to the QAM staff or other QA personnel. This reassignment reflects the licensee's actual procedure review process and does not affect the quality of the reviews. The removal of the OQAPIL from the QAP does not remove or reduce the QAP review or audit commitments required to comply with 10 CFR Part 50, Appendix B, as described in QAP Section 17.2.18, "AUDITS" and QAP Section 17.2.20, "Review and Audit - Test and Operation."

### 3.0 CONCLUSION

The proposed revision to the FNP QAP continues to comply with the requirements of 10 CFR Part 50, Appendix B, and is consistent with ANSI N18.7 guidance for approval of procedures. Therefore, the proposed revision to FNP's QAP is found acceptable by the staff.

### 4.0 REFERENCES

1. Southern Nuclear Operating Company, Inc., (J. B. Beasley, Jr.) letter to USNRC, "Quality Assurance Program Change - Deletion of QA Manager Approval of Site Administrative Procedures and Elimination of the Operations Quality Assurance Policy Implementation List," February 13, 2003.
2. American National Standard Institute (ANSI) N18.7-1976, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants."
3. Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," Revision 2.

Principal Contributor: P. Balmain, DIPM

Date: April 16, 2003

Joseph M. Farley Nuclear Plant

cc:

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