Dominion Energy Services, Inc.
5000 Dominion Boulevard, Glen Allen, VA 23060
DominionEnergy.com

July 1, 2025

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Serial No.: 25-158
NRA/JHH: R0

DOMINION ENERGY SERVICES, INC.
TOPICAL REPORT QUALITY ASSURANCE PROGRAM DESCRIPTION FOR DOMINION ENERGY NEW NUCLEAR PROGRAM, REVISION 1 (PROJECT NUMBER 99902135)

In reference 1, Dominion Energy Services, Inc. ("Dominion Energy") transmitted the subject topical report, which provided the New Nuclear (NN) Quality Assurance Program Description (QAPD) for Nuclear Regulatory Commission (NRC) review and approval. In reference 2, the NRC provided information needs for the Topical Report. On May 20, 2025, the NRC and Dominion Energy engaged in a clarification call on the information needs provided in reference 2. No changes to the NRC information needs were necessary based on the clarification call.

In the attachment to this letter, Dominion Energy is providing a voluntary revision to the reference 1 submittal to address the NRC information needs provided in reference 2. Revision 1 to the NN QAPD also contains revisions to the Dominion Energy NN Organization Chart to reflect recent changes to the Dominion Energy organizational structure. The scope of applicability of the proposed QAPD is limited to preliminary site licensing activities (e.g., Early Site Permit renewal) at this time. Due to the structure of the Dominion Energy NN project, the proposed QAPD does not apply to design or construction activities. Dominion Energy requests that the NRC continue their review of Revision 1 of the Dominion Energy NN QAPD.

Dominion Energy requests the review and approval of the proposed QAPD by February 28, 2026, with a 90-day implementation period, consistent with the approval date requested in reference 1.

Should you have any questions regarding this request, please contact Adina LaFrance at 757-365-2658.

Sincerely,

James E. Holloway
Vice President - Nuclear Engineering and Fleet Support

References:
1. Letter from Dominion Energy to NRC, “Dominion Energy Services, Inc., Topical Report Quality Assurance Program Description for Dominion Energy New Nuclear Program,” dated February 19, 2025 (ADAMS Accession No. ML25051A248).

2. Information Needs Provided by the NRC Staff for the 5-20-25 Public Meeting with Dominion Energy – New Nuclear QAPD Topical Report (ADAMS Accession No. ML25120A011).

Attachment: Dominion Energy, New Nuclear Quality Assurance Program Description, DOM-QA-3, Revision 1, Topical Report, July 2025

Commitments made by this letter: None

cc: Ms. Michelle Hayes
Chief, Licensing and Regulatory Infrastructure Branch
Division of New and Renewed Licenses

Ms. India Banks
NRC Project Manager
Licensing and Regulatory Infrastructure Branch
Division of New and Renewed Licenses

Ms. Kerri Kavanagh
Chief, Quality Assurance and Vendor Inspection Branch
Division of Reactor Oversight

ATTACHMENT

Dominion Energy

New Nuclear Quality Assurance Program Description

DOM-QA-3, Revision 1

Topical Report

July 2025

DOMINION ENERGY SERVICES, INC

Dominion Energy

New Nuclear Quality Assurance Program Description for Dominion Energy

DOM-QA-3, Revision 1

July 2025

EXECUTIVE SUMMARY

This topical report details the Dominion Energy New Nuclear Quality Assurance Program Description (NN QAPD) for activities affecting the quality and performance of safety-related structures, systems and components (SSC), including, but not limited to, siting. This NN QAPD contains information relevant to Dominion Energy ongoing activities performed in accordance with Title 10, Part 50 of the Code of Federal Regulations (10 CFR 50), "Domestic Licensing of Productions and Utilization Facilities," Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants" and 10 CFR 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants".

This NN QAPD was developed in accordance with the requirements of 10 CFR 50 and 10 CFR 52. This NN QAPD commits to the requirements of American Society of Mechanical Engineers (ASME) NQA-1-2015, "Quality Assurance Requirements for Nuclear Facility Applications," Parts I and II, with specific reference to selected Part III appendices as identified in this NN QAPD, and Regulatory Guide (RG) 1.28, Revision 5, "Quality Assurance Program Criteria (Design and Construction)." This document is based on the Nuclear Energy Institute (NEI) 11-04A, "Nuclear Generation Quality Assurance Program Description" template. As the NEI 11-04A template is based on ASME NQA-1-2008 Edition and NQA-1-2009 Addendum, the NN QAPD has been updated to conform to requirements in ASME NQA-1-2015.

Currently, Dominion Energy is not performing work activities pertaining to design, construction, testing, or operations. Therefore, this NN QAPD is limited in scope for Dominion Energy activities and any subcontracts.

Dominion Energy

POLICY STATEMENT

Dominion Energy shall develop a licensing application 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 License(s) and applicable laws and regulations of the state and local governments.

The Dominion Energy New Nuclear Quality Assurance Program (NN QAP) is the New Nuclear Quality Assurance Program Description (NN QAPD) provided in this document and the associated implementing documents. Together, they provide for control of Dominion Energy activities that affect the quality of safety-related nuclear plant 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 NN QAPD may also be applied to certain equipment and activities that are not safety-related, but support safe plant operations, or where other NRC guidance establishes program requirements.

The NN QAPD is the top-level policy document that establishes the manner in which quality is to be achieved and presents Dominion Energy'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 NN QAP. Senior management establishes overall expectations for effective implementation of the New Nuclear Quality Assurance Program and is responsible for obtaining the desired end result.

Compliance with the NN QAPD and implementing documents is mandatory for personnel directly or indirectly associated with implementation of the Dominion Energy NN QAP.

Eric S. Carr
Chief Nuclear Officer
Dominion Energy

February 2025

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
A2LA	American Association for Laboratory Accreditation
ACLASS	ACLASS Accreditation Services
ANS	American Nuclear Society
ASME	American Society of Mechanical Engineers
ATWS	Anticipated Transients Without Scram
CFR	Code of Federal Regulations
CNO	Chief Nuclear Officer
COLA	Combined Operating License Application
CPA	Construction Permit Application
EPRI	Electric Power Research Institute
ESP	Early Site Permit
IAS	International Accreditation Service
IEC	International Electrotechnical Commission
ILAC	International Laboratory Accreditation Cooperation
ISO	International Organization for Standardization
L-A-B	Laboratory Accreditation Bureau
LAN	Local Area Network
M&TE	Measuring and Test Equipment
MRA	Mutual Recognition Arrangement
NEI	Nuclear Energy Institute
NIRMA	Nuclear Information Records Management Association
NN	New Nuclear
NRC	Nuclear Regulatory Commission
NUPIC	Nuclear Procurement Issues Corporation
NVLAP	National Voluntary Laboratory Accreditation Program
OLA	Operating License Application
QA	Quality Assurance
QAP	Quality Assurance Program
QAPD	Quality Assurance Program Description
RG	Regulatory Guide
RIS	Regulatory Information Summary
SBO	Station Blackout
SSC	Structures, systems, and components
SSE	Safe Shutdown Earthquake
TG	Technical Guideline
WAN	Wide Area Network

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PART I INTRODUCTION

SECTION 1 GENERAL

Dominion Energy New Nuclear Quality Assurance Program Description (NN QAPD) is the top-level policy document that establishes the quality assurance policy and assigns major functional responsibilities for activities conducted by or for Dominion Energy. The NN QAPD describes the methods and establishes quality assurance (QA) and administrative control requirements that meet Title 10 of the Code of Federal Regulations (CFR) Part 50, Appendix B, “Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants”. The NN QAPD is based on the requirements and guidance of American Society of Mechanical Engineers (ASME) NQA-1-2015, "Quality Assurance Requirements for Nuclear Facility Applications," Parts I and II, with specific reference to selected Part III sections, as identified in this document.

The New Nuclear QA Program (NN QAP) is defined by the Nuclear Regulatory Commission (NRC) as an approved regulatory document that describes the NN QA elements (i.e., the NN QAPD), along with the associated implementing documents. Procedures and instructions that control New Nuclear activities 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 NN QAPD. Procedures establish practices for certain activities which are common to all Dominion Energy organizations performing those activities so that the activities are controlled and carried out in a manner that meets NN 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 NN QAPD applies to activities affecting the quality and performance of safety-related structures, systems, and components (SSCs), including, but not limited to, siting. The NN QAPD applies to Dominion Energy’s activities towards new nuclear development efforts and is not applicable to the operating fleet.

Safety-related SSCs, under the control of the NN 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 NN QAPD may be applied to certain activities where regulations other than 10 CFR 50 and 10 CFR 52 establish QA requirements for activities within their scope.

The policy of Dominion Energy is to assure a high degree of availability and reliability of the nuclear plant while ensuring the health and safety of its workers and the public. To this end, selected elements of the NN QAPD are also applied to certain equipment and activities that are not safety-related, but support safe, economic, and reliable plant operations, or where other NRC guidance establishes quality assurance requirements. Implementing documents establish program element applicability. The definitions provided in ASME NQA-1–2015, Part I, Section 400, apply to select terms as used in this document.

PART II New Nuclear QAPD DETAILS

SECTION 1 ORGANIZATION

This section describes the Dominion Energy organizational structure, functional responsibilities, levels of authority and interfaces for establishing, executing, and verifying NN QAPD implementation. The organizational structure includes corporate, support, off-site and, on-site functions for New Nuclear including interface responsibilities for multiple organizations that perform quality-related functions. Implementing documents assign more specific responsibilities and duties, and define the organizational interfaces involved in conducting activities and duties within the scope of the NN QAPD. Management gives careful consideration to the timing, extent, and effects of organizational structure changes.

Dominion Energy's Senior Management Position, Nuclear Quality Assurance, is responsible for sizing the Quality Assurance staff commensurate with the duties and responsibilities assigned.

The Dominion Energy organization is responsible for new nuclear plant licensing, engineering, and procurement activities. Several organizations within Dominion Energy implement and support the NN QAPD. These organizations include, but are not limited to New Nuclear activities, Technical Services, Corporate Services and Quality Assurance.

Design, engineering, and environmental services may be provided to the Dominion Energy organization in accordance with the Supplier's QAPD, which shall be compliant with 10 CFR 50, Appendix B, or by contracted services working to the Dominion Energy NN QA Program.

The following sections describe the reporting relationships, functional responsibilities, and authorities for organizations implementing and supporting the New Nuclear QA Program. The Dominion Energy organization is shown in Figure II.1-1.

1.1 Chief Nuclear Officer

The Chief Nuclear Officer (CNO) has overall responsibility and authority for implementing all activities associated with the safe, reliable, and efficient operation of Dominion Energy plant(s) and is responsible for all aspects of licensing for the Dominion Energy organization. The CNO establishes the New Nuclear quality assurance policy and provides guidance regarding its implementation. The CNO has the authority to resolve disputes related to implementation of the NN QAPD for which resolution is not achieved at lower levels within the organization. The CNO is also responsible for all technical and administrative support activities provided by Dominion Energy and its contractors.

1.1.1 Executive Management Position, Nuclear Engineering

The Executive Management Position, Nuclear Engineering, reports to the CNO and is responsible for the establishment and implementation of the New Nuclear QAPD and the development of new nuclear power plants. This includes activities associated with new nuclear plant engineering, analysis, design, procurement, pre-construction preparation, developing applications, and obtaining permits and licenses for potential construction. The Executive Management Position, Nuclear Engineering, has overall responsibility for the New Nuclear Quality Assurance Program.

1.1.1.1 Senior Management Position, New Nuclear

The Senior Management Position, New Nuclear, reports to the Executive Management Position, Nuclear Engineering, and is responsible for interfacing with suppliers regarding New Nuclear development phase activities, including site and design selection, and any design information necessary to support the application. The Senior Management Position, New Nuclear, interfaces as necessary with Dominion Energy fleet organizations for support in developing the content of the application and establishing procurement documents for the development phase engineering and

procurement activity.

1.1.1.1.1 Management Position, New Nuclear Engineering

The Management Position, New Nuclear Engineering, reports to the Senior Management Position, New Nuclear, and is responsible for the engineering and technical aspects of New Nuclear development that affect nuclear safety. This position establishes interfaces with suppliers and other Dominion Energy groups as necessary. New Nuclear Engineering develops the technical requirements for the procurement of items and services. This position is also responsible for the procedures, document control, and records functions within the project through an interface with the responsible Dominion Energy fleet organization. This position manages the corrective action program for the project.

1.1.1.1.2 Management Position, New Nuclear Licensing

The Management Position, New Nuclear Licensing, reports to the Senior Management Position, New Nuclear, and is responsible for developing, maintaining, changing, and controlling the new nuclear plant application, including interfacing with the NRC on the review of the application. This position is responsible for ensuring NRC reporting requirements for the project are met, including 10 CFR 21 and 10 CFR 50.55(e). This position maintains and interprets the licensing basis, develops and manages the licensing commitment program, and ensures project personnel meet the training requirements consistent with NN QAP requirements.

1.1.1.2 Senior Management Position, Nuclear Quality Assurance

The Senior Management Position, Nuclear Quality Assurance, reports to the CNO and communicates with the Executive Management Position, Nuclear Engineering, and is responsible for independently planning and performing activities to verify the development, maintenance, and effective implementation of the Dominion Energy NN QAPDs including, but not limited to, New Nuclear activities, Engineering, Licensing, Document Control, Corrective Action Program, and Procurement that support new nuclear plant generation. The Senior Management Position, Nuclear Quality Assurance, is responsible for managing the Quality Assurance Organization resources. The Senior Management Position, Nuclear Quality Assurance, has sufficient authority and organizational freedom to provide oversight of the following quality-related activities: verifying compliance with regulatory requirements and procedures through audits and technical reviews; monitoring organizational processes to ensure conformance with commitments and licensing document requirements; and ensuring that vendors providing quality services, parts, and materials to Dominion Energy are meeting the requirements of 10 CFR 50, Appendix B through Dominion Energy vendor audits or audits performed by acceptable industry auditing organizations, such as the Nuclear Procurement Issues Corporation (NUPIC).

The Senior Management Position, Nuclear Quality Assurance, has sufficient independence from other New Nuclear priorities to bring forward issues affecting safety and quality and makes judgments regarding quality in all areas regarding Dominion Energy's activities as appropriate. The Senior Management Position, Nuclear Quality Assurance, is independent of cost and scheduling concerns associated with the development phase of new nuclear projects. The Senior Management Position, Nuclear Quality Assurance, may make recommendations to the New Nuclear management regarding improving the quality of work processes. If the Senior Management Position, Nuclear Quality Assurance, disagrees with any actions taken by the New Nuclear organization and is unable to obtain resolution, the Senior Management Position, Nuclear Quality Assurance, shall inform the Executive Management Position, Nuclear Engineering, and bring the matter to the attention of the CNO, who will determine the final disposition.

1.2 Senior Management Position, Nuclear Analysis and Fuel and Regulatory Assurance

The Senior Management Position, Nuclear Analysis and Fuel and Regulatory Assurance, reports to the Executive Management Position, Nuclear Engineering. The Senior Management Position, Nuclear Analysis and Fuel and Regulatory Assurance, is responsible for providing regulatory compliance and

licensing support through NRC communications.

1.3 Business Development and Project Construction Organizations

The Business Development and Project Construction Organizations direct the planning and development of the New Nuclear staff and organization resources. The Business Development and Project Construction Organizations are responsible for managing the project schedule and budget for the Dominion Energy activities.

1.3.1 Executive Management Position, Business Development

The Executive Management Position, Business Development, is responsible for supporting the New Nuclear organization through performing activities related to Business Development.

1.3.2 Executive Management Position, Project Construction

The Executive Management Position, Project Construction, is responsible for supporting the New Nuclear organization through organizing and performing activities related to Project Construction.

1.4 Authority to Stop Work

The authority to stop work is delegated to New Nuclear quality assurance personnel and is delineated in procedures. These personnel have the authority and responsibility to stop work in progress, which is not being done in accordance with approved procedures or where safety or SSC integrity may be jeopardized. This authority extends to off-site work performed by suppliers that furnish safety-related materials and services to Dominion Energy.

1.5 Quality Assurance Organizational Independence

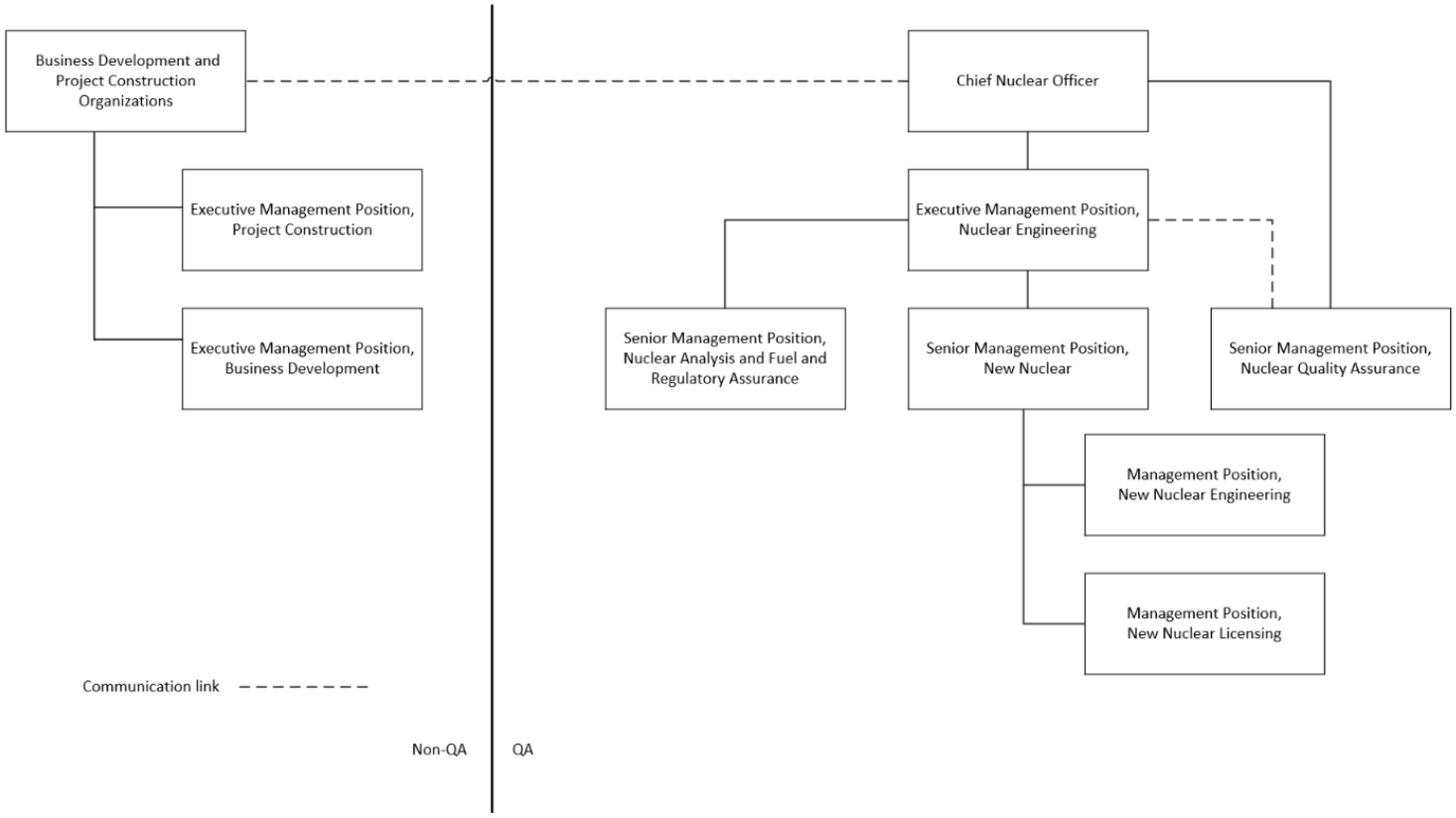
Independence shall be maintained between the organization(s) performing the checking (quality assurance and control) and the organization(s) performing the functions. This provision is not applicable to design review/verification.

1.6 NQA-1 Commitment

In establishing its organizational structure, Dominion Energy commits to compliance with NQA-1-2015, Requirement 1.

Figure II.1-1

Dominion Energy Organization



SECTION 2 NEW NUCLEAR QUALITY ASSURANCE PROGRAM

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to implement the NN QAP as described in the NN QAPD. Dominion Energy is committed to implementing the NN QAP in all aspects of work that are important to the safety of the nuclear plant as described and to the extent delineated in the NN QAPD. The NN QAP shall include monitoring of activities important to safety against acceptance criteria, to provide sufficient assurance that they are performed satisfactorily. Further, Dominion Energy 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. Cognizant management will be regularly apprised of the adequacy of implementation of the NN QAP through the audit functions described in Part II, Section 18.

The objective of the NN QAP is to assure that Dominion Energy's generating plant(s) is(are) licensed in accordance with governing regulations and license requirements. The program is based on the requirements of ASME NQA-1-2015, "Quality Assurance Requirements for Nuclear Facility Applications," as further described in this document. The NN QAP applies to quality-related activities that involve the functions of safety-related SSCs associated with the design of the SSCs of the facility. Examples of safety-related activities include, but are not limited to, site-specific engineering related to safety-related SSCs, site geotechnical investigations, site engineering analysis, seismic analysis, and meteorological analysis. Cost and scheduling challenges must be addressed; however, they do not prevent proper implementation of the NN QAP.

As described in Part III of the NN QAPD, specific program controls are applied to non-safety-related SSCs that are significant contributors to plant safety, for which 10 CFR 50, Appendix B, is not applicable. The specific program controls, consistent with applicable sections of the NN QAPD, are applied to those items in a select manner, targeted at those characteristics or critical attributes that qualifies the SSC as a significant contributor to plant safety.

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

The NN QAPD applies to those Dominion Energy activities that can directly or indirectly the safety-related site characteristics or analysis of those characteristics. In addition, the NN QAPD applies to engineering activities that are used to characterize the site or analyze that characterization.

In general, the program requirements specified herein are detailed in either Dominion Energy implementing procedures, or supplier implementing procedures governed by a supplier quality assurance 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 Dominion Energy are responsible for achieving acceptable quality in the work covered by the NN QAPD. This includes the activities delineated in Part I, Section 1.1. Dominion Energy personnel performing verification activities are responsible for verifying the achievement of acceptable quality. Activities governed by the NN QAPD are performed as directed by documented instructions, procedures, and drawings that are appropriately detailed 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 Senior Management Position, Nuclear Quality Assurance, is responsible to verify that: processes and procedures comply with NN QAPD and other applicable requirements, such processes or procedures are implemented, and management appropriately ensures compliance.

2.2 Delegation of Work

Dominion Energy retains and exercises the responsibility for the scope and implementation of an effective QAP. Positions identified in Part II, Section 1, may delegate all or part of the activities of planning, establishing, and implementing the program for which they are responsible to others, but retain the responsibility for the program's effectiveness. Decisions affecting safety are made at the appropriate based upon their nature and effect, with technical advice or review as appropriate.

2.3 Site-Specific Safety-Related Design Basis Activities

Site-specific safety-related design basis activities are defined as activities used to determine the bounding physical parameters of the site, which include sampling, testing, data collection, and supporting engineering calculations and reports. Appropriate quality assurance measures are applied.

2.4 Periodic Review of the New Nuclear Quality Assurance Program

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

2.5 Issuance and Revision to New Nuclear Quality Assurance Program

Administrative control of the NN QAPD will be in accordance with 10 CFR 50.55(f) and 10 CFR 50.54(a). Changes to the NN QAPD are evaluated by the Senior Management Position, Nuclear Quality Assurance, to ensure that such changes do not degrade safety for previously approved quality assurance controls specified in the NN QAPD. This document shall be revised as appropriate to incorporate additional QA commitments that may be established during licensing product development. New revisions to the document will be reviewed, at a minimum, by the Dominion Energy Senior Management Position, Nuclear Quality Assurance, and approved by the CNO.

2.6 Personnel Training and Qualifications

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

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

Sufficient managerial depth is provided to cover absences of principals. 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 Dominion Energy procedures. Indoctrination includes the administrative and technical objectives, requirements of the applicable codes and standards, and the NN QAPD elements to be employed. Records of personnel training and qualification are maintained.

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

The minimum qualifications of individuals that are responsible for planning, implementing, and maintaining the programs for the NN QAPD are that each individual 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 automatically eliminated 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.

2.7 NQA-1 Commitment/Exceptions

In establishing qualification and training programs, Dominion Energy commits to compliance with NQA-1-2015, Requirement 2 and the regulatory position stated in Regulatory Guide 1.28, Revision 5, with the following clarifications and exceptions:

- Section 302, Inspection and Test
  - NQA-1-2015, Requirement 2 includes use of Part III, Subpart 3.1-2.3, guidance as if it were part of the Requirement.

    (1) In lieu of being certified as Level I, II, or III in accordance with NQA-1- 2015, 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.

- Dominion Energy conforms to Section 301 for qualification of nondestructive examination personnel, except that Dominion Energy will follow the applicable standard cited in the version(s) of Section III and Section XI of the ASME Boiler and Pressure Vessel Code of Record at Dominion Energy sites for the scope of activities governed by these cited standards.

- As an alternative to Section 303.3 that prospective Lead Auditors have participated in a minimum of five (5) audits in the previous three (3) years, the guidance in Regulatory Guide 1.28, Revision 5, Section C.1.a, “Prospective lead auditors, with comparable industry experience, may satisfy the lead auditor qualification requirement of participating in a minimum of five QA audits within a period of 3 years prior to the date of qualification by alternatively demonstrating the ability to properly implement the audit process, effectively organize and report results, and participate in at least one nuclear audit within the year preceding the date of qualification, subject to review and acceptance by the responsible QA organization.”

- Sections 401 (g) requires the date of certification expiration be included on the qualification record. Dominion Energy considers the certification expiration date to be the date from the certification or recertification date plus the certification interval time and its inclusion on the qualification record is optional.

SECTION 3 DESIGN CONTROL

Prior to initiating the activities defined in this section, Dominion Energy shall establish and implement 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 NN QAPD. The design process shall include provisions to control design inputs, outputs, changes, interfaces, records, and organizational interfaces within Dominion Energy and with suppliers. These provisions shall 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). The translation is performed such that the final design output contains or references appropriate acceptance criteria that can be related to the design input in sufficient detail to permit verification by inspection and test, as required.

Design change processes and the division of responsibilities for design-related activities are detailed in Dominion Energy and supplier procedures. Changes to design inputs, final designs, and field changes are justified and subject to design control measures commensurate with those applied to the original design. The design control program includes interface controls for 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 Dominion Energy design organization or by other organizations authorized by Dominion Energy.

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

3.1 Design Verification

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

Design verifications are performed by competent individuals or groups other than those who performed the original design, though they 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, or establish the design inputs used in the design, or if the supervisor is the only individual in the organization competent to perform the verification. If the verification is performed by the originator's supervisor, the justification of the need is documented and approved in advance by management.

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

Dominion Energy will normally complete 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, manufacturing, or construction. When such timing cannot be achieved, design verification shall be completed before relying on the item to perform its intended design or safety function.

3.2 Design Records

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

3.3 Computer Application and Digital Equipment Software

The NN QAPD governs the development, procurement, testing, maintenance, control, and use of computer applications and digital equipment software when used in safety-related applications and designated non-safety-related applications. Computer program acceptability is pre-verified, or the results verified with the design analysis for each application. Pre-verified computer programs are controlled using a software configuration management process. Dominion Energy 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 are documented and approved by authorized personnel. The NN 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:

- Identify responsibilities and processes for reviewing, approving, and revising setpoints and setpoint changes originally supplied by a supplier, applicant for certification, or Design Certification holder, and the plant's technical staff.
- Ensure that setpoints and setpoint changes are consistent with design and accident analysis requirements and assumptions.
- Provide for documentation of setpoints, including those determined operationally.
- Provide for access to necessary setpoint information for personnel who write or revise plant procedures, operate or maintain plant equipment, develop or revise design documents, or develop or revise accident analyses.

3.5 NQA-1 Commitment

In establishing its program for design control and verification, Dominion Energy commits to compliance with NQA-1-2015, Part I Requirement 3, and Part II Subpart 2.7, Quality Assurance Requirements for Computer Software for Nuclear Facility Applications, Subpart 2.14, Quality Assurance Requirements for Commercial Grade Items and Services, and Subpart 2.20, Quality Assurance Requirements for Subsurface Investigations for Nuclear Facilities.

SECTION 4 PROCUREMENT DOCUMENT CONTROL

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to assure that purchased items, computer programs, 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 needed 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, as appropriate to the circumstances of procurements (or the supplier may work under Dominion Energy's approved NN 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 Commitment/Exceptions

In establishing controls for procurement, Dominion Energy commits to compliance with NQA-1-2015, Requirement 4, with the following clarifications and exceptions:

- Section 203 requires the purchaser to specify the quality assurance requirements in the procurement documents. To meet this requirement, Dominion Energy may require suppliers to have a documented QAP that meets the applicable requirements of 10 CFR 50, Appendix B, as appropriate to the circumstances of the procurement.

- With regard to service performed by a supplier, Dominion Energy procurement documents may allow the supplier to work under the Dominion Energy NN QAP, including implementing procedures, in lieu of the supplier having its own QAP.

- Section 300 and 400 of Requirement 4 require the review of technical and Quality Assurance Program requirements of procurement documents prior to award of a contract and for procurement document changes. Dominion Energy may satisfy this requirement through the review of the procurement specification, when the specification contains the technical and quality assurance requirements of the procurement.

- Procurement documents for Commercial Grade Items that will be procured by Dominion Energy for use as safety-related items shall contain technical and quality requirements such that the procured item can be appropriately dedicated in accordance with the Dominion Energy NN QAPD, Section 7, "Control of Purchased Material, Equipment and Services."

SECTION 5 INSTRUCTIONS, PROCEDURES, AND DRAWINGS

Prior to initiating the activities defined in this section, Dominion Energy shall establish 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. Where applicable, these documents shall include quantitative or qualitative acceptance criteria to implement the NN QAP, as described in the NN QAPD. Such documents shall be prepared and controlled according to Part II, Section 6. In addition, means shall be provided to disseminate to the staff instructions of both general and continuing applicability, as well as those of short-term applicability. Provisions shall be included for reviewing, updating, and canceling such procedures.

5.1 Procedure Adherence

Dominion Energy'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 tasks that require: (1) the written procedure to be present and followed step-by-step while the task is being performed, (2) the user to have committed the procedure steps to memory, (3) verification of completion of significant steps, by initials or signatures or use of check-off lists. Procedures 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 plant. Such departures are recorded describing the prevailing conditions and reasons for the action taken.

5.2 Procedure Content

The established measures shall address the applicable content of procedures as described in the Introduction to Part II of NQA-1-2015. In addition, procedures governing tests, inspections, operational activities and maintenance will include as applicable, initial conditions and prerequisites for the performance of the activity.

5.3 NQA-1 Commitment

In establishing procedural controls, Dominion Energy commits to compliance with NQA-1-2015, Requirement 5.

SECTION 6 DOCUMENT CONTROL

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to control the preparation, issuance, and revision of documents that specify quality requirements or prescribe how activities affecting quality, including organizational interfaces, to ensure that correct documents are employed. The following controls, including electronic systems used to make documents available, are applied to documents and changes thereto:

- Identification of controlled documents
- Specified distribution of controlled documents for use at the appropriate location
- A method to identify the correct document (including revision) to be used and control of superseded documents
- Identification of individuals responsible for controlled document preparation, review, approval, and distribution
- Review of controlled documents for adequacy, completeness, and approval prior to distribution
- A method to ensure the correct documents are being used
- A method to provide feedback from users to improve procedures and work instructions
- Coordinating and controlling interface documents and procedures

The types of documents to be controlled include:

- Drawings such as design, construction, installation, and as-built drawings
- Engineering calculations
- Design specifications
- Purchase orders and related documents
- Vendor-supplied documents
- Audit, surveillance, and quality verification/inspection procedures
- Inspection and test reports
- Instructions and procedures for activities covered by the NN QAPD
- Technical specifications
- Nonconformance reports and corrective action reports

6.1 Review and Approval of Documents

Documents are reviewed for adequacy by qualified persons other than the preparer. Procedures for design, construction, and installation are also reviewed by the organization responsible for quality verification to ensure quality assurance measures have been appropriately applied. The documented review signifies concurrence.

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

6.2 Changes to Documents

Changes to documents, other than those defined in implementing procedures as minor changes, are reviewed and approved by the same organizations that performed the original review and approval unless

other organizations are specifically designated. The reviewing organization has access to pertinent background data or information upon which to base their approval. Minor changes to documents, such as inconsequential editorial corrections, do not require 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 Commitment

In establishing provisions for document control, Dominion Energy commits to compliance with NQA-1-2015, Requirement 6.

SECTION 7 CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to control purchased items and services to assure conformance with specified requirements. Such control provides for the following as appropriate: source evaluation and selection, evaluation of objective evidence of quality furnished by the supplier, source inspection, audit, and examination of items or services.

7.1 Acceptance of Item or Service

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

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 safety-related items and service suppliers are evaluated to assure only qualified suppliers are used. Qualified suppliers are audited on a triennial basis. In addition, if a subsequent contract or a contract modification significantly changes the scope, methods, or controls performed by a supplier, an audit of the changes is performed, thus starting a new triennial period.
- Dominion Energy may utilize audits conducted by outside organizations for supplier qualification provided that the scope and adequacy of the audits meet Dominion Energy 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, 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 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 Commitment/Exceptions

In establishing controls for purchased items and services, Dominion Energy commits to compliance with NQA-1-2015, Requirement 7, with the following clarifications and exceptions:

- Dominion Energy considers that other 10 CFR Parts 50 and 52 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 Dominion Energy plant 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 17025:2017 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 in accordance with NRC Safety Evaluation (ML20322A019) endorsement of NEI 14-05A, Revision 1:

  1. A documented review of the supplier's accreditation is performed and includes a verification of the following:

     a. The calibration or test laboratory holds accreditation by an accrediting body recognized by the ILAC MRA. The accreditation encompasses ISO/IEC 17025:2017, “General Requirements for the Competence of Testing and Calibration Laboratories.”

     b. For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.

     c. 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.

     d. The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.

  2. The purchase documents require that:

     a. The service must be provided in accordance with their accredited ISO/IEC 17025:2017 program and scope of accreditation.

     b. 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.

     c. For calibration services, the equipment/standards used to perform the calibration must be identified in the certificate of calibration.

     d. Dominion Energy must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.

     e. The laboratory performing the calibration and/or testing service shall not subcontract the service to any other supplier.

     f. Performance of the services listed on this purchase order is contingent on the laboratory’s accreditation having been achieved through an on-site accreditation assessment by the Accreditation Body (AB) within the past 48 months.

     g. 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:

    a. The contracted calibration or test service has been performed in accordance with their ISO/IEC 17025:2017 program and has been performed within their scope of accreditation, and

    b. The purchase order's requirements are met.

NOTE: The ILAC accreditation process cannot be used as part of the commercial-grade dedication process of nondestructive examination (NDE) or nondestructive testing (NDT) services in lieu of performing a commercial-grade survey. This is applicable to both American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code and non-ASME B&PV Code safety-related applications.

- In establishing commercial grade item requirements, Dominion Energy commits to compliance with NQA-1-2015, Requirement 7, Section 700 and Part II, Subpart 2.14, with the following clarification:

    - For commercial grade items, quality verification requirements are established and described in Dominion Energy documents to provide the necessary assurance that an item will perform satisfactorily in service. The Dominion Energy 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.

- Dominion Energy will assume 10 CFR Part 21 reporting responsibility for all items that Dominion Energy dedicates as safety-related.

SECTION 8 IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS

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

8.1 NQA-1 Commitment

In establishing provisions for identification and control of items, Dominion Energy commits to compliance with NQA-1-2015, Requirement 8.

SECTION 9 CONTROL OF SPECIAL PROCESSES

Prior to initiating the activities defined in this section, Dominion Energy shall establish 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 shall 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 interim process controls are necessary to ensure a final acceptable product and where reliance on a final inspection or test is insufficient to determine quality.

9.1 NQA-1 Commitment

In establishing measures for the control of special processes, Dominion Energy commits to compliance with NQA-1-2015, Requirement 9.

SECTION 10 INSPECTION

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to implement inspections that assure items, services, and activities affecting safety meet established requirements and conform to applicable documented specifications, instructions, procedures, and design documents. Inspection may also be applied to items, services, and activities affecting plant reliability and integrity. Types of inspections may include those verifications related to procurement, such as source, in-process, final, and receipt inspection 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 shall establish 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 Dominion Energy facility, (3) for final acceptance of fabricated and/or installed items during construction, and (4) upon receipt of items for a facility.

The inspection program shall establish requirements for planning inspections, such as the group or discipline responsible for performing the inspection, where inspection hold points are to be applied, determination of 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 for the facilities are to occur, management responsible for the inspection programs evaluate 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 controlled by instructions, procedures, and drawings.

10.2 Inspector Qualification

Dominion Energy will establish 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 Commitment

In establishing inspection requirements, Dominion Energy commits to compliance with NQA-1-2015, Requirement 10 and Part II, Subparts 2.5 and 2.8.

SECTION 11 TEST CONTROL

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to demonstrate that items subject to the provisions of the NN QAPD will perform satisfactorily in service, that the plant can be operated safely and as designed, and that the coordinated operation of the plant as a whole is satisfactory. These programs shall include criteria for determining when testing is required to demonstrate that performance of plant 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 tests, (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.

The initial start-up test program is planned and scheduled to permit safe fuel loading and start-up; to increase power in safe increments; and to perform major testing at specified power levels. If tests require the variation of operating parameters outside of their normal range, the limits within which such variation is permitted will be prescribed. The scope of the testing demonstrates, insofar as practicable, that the plant is capable of withstanding the design transients and accidents.

Except for computer program testing, which is addressed in Section 11.1, tests are performed, and results documented in accordance with applicable technical and regulatory requirements, including those described in the Technical Specifications and Safety Analysis Report. Test programs ensure appropriate retention of test data in accordance with the records requirements of the NN QAPD. Personnel that perform or evaluate tests are qualified in accordance with the requirements established in Part II, Section 2.

11.1 NQA-1 Commitment for Computer Program Testing

Dominion Energy shall establish and implement 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, Dominion Energy commits to compliance with the requirements of NQA-1-2015, Requirement 11 and Subpart 2.7 to establish the appropriate provisions in addition to the commitment to NQA-1-2015, Requirement 3.

11.2 NQA-1 Commitment

In establishing provisions for testing, Dominion Energy commits to compliance with NQA-1-2015, Requirement 11.

SECTION 12 CONTROL OF MEASURING AND TEST EQUIPMENT

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to control the calibration, maintenance, and use of measuring and test equipment (M&TE) to verify acceptance criteria are met or information important to safe plant operation is identified. The provisions of such procedures shall 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

Appropriate documentation will 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 Commitment/Exceptions

In establishing provisions for control of measuring and test equipment, Dominion Energy commits to compliance with NQA-1-2015, Requirement 12 with the following clarification and exception:

- The out of calibration conditions described in Section 303.2 refers to when the M&TE is found out of the required accuracy limits (i.e., out of tolerance) duringcalibration and not overdue for calibration.

- M&TE are not required to be marked with the calibration status, as described in Section 303.6, 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.

SECTION 13 HANDLING, STORAGE, AND SHIPPING

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to control the handling, storage, packaging, shipping, cleaning, and preservation of items to prevent inadvertent damage or loss, and to minimize deterioration. These provisions shall include specific procedures, when required to maintain acceptable quality of the items important to the safe operations of the plant. 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 in accordance with procedures at specified time intervals or prior to use.

Operators of special handling and lifting equipment are experienced or trained in the use the equipment. Where required, Dominion Energy 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 plant. 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, and protection of equipment. 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, and cleaning of control consoles are developed and used.

13.2 NQA-1 Commitment

In establishing provisions for handling, storage, and shipping, Dominion Energy commits to compliance with NQA-1-2015, Requirement 13.

SECTION 14 INSPECTION, TEST, AND OPERATING STATUS

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to identify the inspection, test, and operating status of items and components subject to the provisions of the NN 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 shall require the inspection, test, or operating status be verified before release, fabrication, receipt, installation, test or use. These measures shall 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 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 Commitment

In establishing measures for control of inspection, test and operating status, Dominion Energy commits to compliance with NQA-1-2015, Requirement 14.

SECTION 15 NONCONFORMING MATERIALS, PARTS, OR COMPONENTS

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to control items, including services that do not conform to specified requirements to prevent inadvertent installation or use. Instructions shall require that the individual discovering a nonconformance identify, describe, and document the nonconformance in accordance with the requirements of Part II, Section 16. Controls shall provide for identification, documentation, evaluation, segregation when practical, and disposition of nonconforming items, and for notification to affected organizations. Controls shall be 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 prior to 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 Dominion Energy procedures, regulatory requirements, and industry standards.

15.1 Interface with the Reporting Program

Dominion Energy will have appropriate interfaces between the NN QAP and the non-QA Reporting Program for identification and control of nonconforming materials, parts, or components to satisfy the requirements of 10 CFR 52, 10 CFR 50.55, and 10 CFR 21.

15.2 NQA-1 Commitment

In establishing measures for nonconforming materials, parts, or components, Dominion Energy commits to compliance with NQA-1-2015, Requirement 15.

SECTION 16 CORRECTIVE ACTION

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to promptly identify, control, document, classify, and correct conditions adverse to quality. Dominion Energy procedures shall 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. Dominion Energy procedures shall 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, Dominion Energy documents shall 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, Dominion Energy may delegate specific responsibilities for corrective actions but Dominion Energy maintains responsibility for the effectiveness of corrective action measures.

16.1 Interface with the Reporting Program

Dominion Energy will have appropriate interfaces between the NN QAP and the non-QA Reporting Program for corrective actions to satisfy the requirements of 10 CFR 52, 10 CFR 50.55, and 10 CFR 21.

16.2 NQA-1 Commitment

In establishing provisions for corrective action, Dominion Energy commits to compliance with NQA-1-2015, Requirement 16.

SECTION 17 QUALITY ASSURANCE RECORDS

Prior to initiating the activities defined in this section, Dominion Energy shall establish 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 shall establish the scope of the records retention program for Dominion Energy 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 shall be established that ensure that sufficient records of completed items and activities affecting quality are appropriately stored. Records of activities for design, engineering, procurement, and audits, and their retention times, are defined in appropriate procedures. The records and retention times are based on Regulatory Position C.3.a.(1) for “Lifetime Records” and C.3.a.(2) for “Nonpermanent Records” of Regulatory Guide 1.28, Revision 5. In all cases where state, local, or other agencies have more restrictive requirements for record retention, those requirements will be met.

17.2 Electronic Records

When using electronic records storage and retrieval systems, Dominion Energy complies with guidance outlined in associated Nuclear Information Records Management Association, Inc. (NIRMA) Technical Guidelines TG-11-2011, TG-15-2011, TG-16-2011, and TG-21-2011.

17.3 NQA-1 Commitment/Exceptions

In establishing provisions for records, Dominion Energy commits to compliance with NQA-1-2015, Requirement 17, and regulatory positions stated in Regulatory Guide 1.28, Revision 5, with the following clarifications and exceptions:

- In establishing the provisions for a list of records, Dominion Energy commits to comply with Regulatory Guide 1.28, Revision 5, position C.3.a.(2) with the following clarifications:

    - Dominion Energy commits to develop a list of typical NN QA records and their retention periods using the guidance of NQA-1-2015, Part III, Subpart 3.1-17.1, Section 200, for the lifetime records recognizing that the record name may vary, and the list may not be all-inclusive. For records not listed, the record that most nearly describes the record in question will be followed regarding retention. Dominion Energy commits to maintain sufficient records to furnish evidence of activities affecting quality.

SECTION 18 AUDITS

Prior to initiating the activities defined in this section, Dominion Energy shall establish the necessary measures and governing procedures to implement audits to verify that activities covered by the NN QAPD are performed in conformance with the established requirements and performance criteria are met. 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 and design activities are performed with a frequency commensurate with safety significance and in a manner which assures that audits of safety-related activities are completed. During the initial portions of the New Nuclear activities, audits will focus on areas including, but not limited to, site investigation, procurement, and corrective action. Functional areas of an organization's QA program for auditing include, at a minimum, verification of compliance and effectiveness of implementation of internal rules, procedures (e.g., design, procurement, and surveillance), Technical Specifications, regulations and license conditions, programs for training, retraining, qualification and performance of staff, corrective actions, and observation of performance, including associated record keeping.

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

Dominion Energy Quality Assurance 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 NN QAPD. External audits determine the adequacy of a supplier or contractor quality assurance program and are issued to the management of the audited organization and applicable Dominion Energy management.

The results of each audit are reported in writing to the responsible Executive Management Position, Nuclear Engineering, or designee, as appropriate. Additional internal distribution is made to other concerned management levels and to management of the internal audited organizations or activities 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 Part II, Section 7.1.

18.2 Internal Audits

Internal audits of organization and facility activities, conducted prior to placing the facility in operation, should be performed in such a manner as to assure that an audit of all applicable NN QA program elements is completed for each functional area at least once each year or at least once during the life of the activity, whichever is shorter.

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

18.3 NQA-1 Commitment/Exceptions

In establishing the independent audit program, Dominion Energy commits to compliance with NQA-1-2015, Requirement 18 and the regulatory positions stated in Regulatory Guide 1.28, Revision 5, with the following clarification:

- Dominion Energy annual evaluations of suppliers in Regulatory Guide 1.28, Revision 5, position C.4.b. (4). (a), (b), and (c) shall only be required to consider activities related to Dominion Energy procurement activities.

PART III NONSAFETY-RELATED SSC QUALITY CONTROL

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

Specific program controls are applied to nonsafety-related SSCs, for which 10 CFR 50, Appendix B is not applicable, that are significant contributors to plant safety. The specific program controls consistent with applicable sections of the NN 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 NN QA Program to the non-safety-related SSCs and related activities, including the identification of exceptions to the NN QA Program described in Part II, Sections 1 through 18 taken for nonsafety-related SSCs.

1.1 Organization

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

1.2 NN QA Program

Dominion Energy NN QA requirements for nonsafety-related SSCs are established in the NN 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

Dominion Energy has design control measures to ensure that the contractually 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. Normal supervisory review of the designer's work is an adequate control measure.

1.4 Procurement Document Control

Procurement documents for items and services obtained by or for Dominion Energy 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

Dominion Energy 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

Dominion Energy 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

Dominion Energy 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

Dominion Energy 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

Dominion Energy 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

Dominion Energy 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

Dominion Energy 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)

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

1.13 Handling, Storage, and Shipping

Dominion Energy 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

Dominion Energy 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

Dominion Energy 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

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

1.17 Records

Dominion Energy 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

Dominion Energy 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 (Part III) are implemented by the same programs, processes, or procedures as the comparable activities of Part II, the audits performed under the provisions of Part II may be used to satisfy the review requirements of this Section (Part III, Section 1.18).

SECTION 2 NONSAFETY-RELATED SSCS CREDITED FOR REGULATORY EVENTS

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

- Dominion Energy implements quality requirements for the fire protection system in accordance with Regulatory Position 1.7, "Quality Assurance," in Regulatory Guide 1.189, Rev. 3, February 2018, "Fire Protection for Nuclear Power Plants".

- Dominion Energy implements the quality requirements for ATWS equipment in accordance with Part III, Section 1.

- Dominion Energy implements quality requirements for SBO equipment in accordance with Part III, Section 1.

PART IV REGULATORY GUIDES AND QUALITY STANDARD COMMITMENT

NRC Regulatory Guides and Quality Assurance Standards

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

Regulatory Guides:

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

Regulatory Guide 1.26 defines classification of systems and components containing water, steam, or radioactive material in light-water-cooled nuclear power plants. Dominion Energy identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in applicable license applications.

Regulatory Guide 1.28, Rev. 5, October 2017, Quality Assurance Program Criteria (Design and Construction)

Regulatory Guide 1.28 describes a method acceptable to the NRC staff for complying with the provisions of Appendix B with regard to establishing and implementing the requisite quality assurance program for the design and construction of nuclear power plants. Dominion Energy identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in applicable license applications.

Regulatory Guide 1.29, Rev. 6, July 2021, Seismic Design Classification for Nuclear Power Plants

Regulatory Guide 1.29 defines systems required to withstand a safe shutdown earthquake (SSE). Dominion Energy identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in applicable license applications.

Regulatory Guide 1.164, Rev. 1, April 2024, Dedication of Commercial-Grade Items for Use in Nuclear Power Plants

Regulatory Guide 1.164 provides guidance for dedication of commercial-grade items and services used in nuclear power plants. This RG endorses, in part, the Electric Power Research Institute (EPRI) 3002002982, Revision 1 to EPRI NP-5652 and TR-102260, “Plant Engineering: Guideline for the Acceptance of Commercial-Grade Items in Nuclear Safety-Related Applications”. Dominion Energy identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in applicable license applications.

Regulatory Guide 1.234, Rev. 1, March 2024, Evaluating Deviations and Reporting Defects and Noncompliance Under 10 CFR Part 21

Regulatory Guide 1.234 describes methods acceptable to the NRC staff for complying with the Commission's regulations with regard to 10 CFR Part 21, “Reporting of Defects and Noncompliance”. Dominion Energy identifies conformance and exceptions for the applicable

regulatory position guidance provided in this regulatory guide in applicable license applications.

Standards:

ASME NQA-1-2015 Edition - Quality Assurance Requirements for Nuclear Facility Applications

Dominion Energy commits to NQA-1-2015, Parts I and II, as described in Parts I and II of this document with specific identification of exceptions or clarifications. Dominion Energy commits to NQA-1-2015, Part III, only as specifically noted in Parts I and II of this document.

Nuclear Information and Records Management Association, Inc. Technical Guidelines

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

NEI 14-05A, Revision 1- Guidelines for the Use of Accreditation in Lieu of Commercial Grade Surveys for Procurement of Laboratory Calibration and Test Services

Dominion Energy commits to compliance with ASME NQA-1-2015, Part I, Requirement 7, as described in Part II, Section 7.2. As an alternative, Dominion Energy will conform with guidelines for procurement of commercial-grade calibration and/or testing services from commercial laboratories based on the laboratory's accreditation to ISO/IEC 17025:2017 by an Accreditation Body (AB) which is a signatory to the International Laboratory Accreditation and Cooperation (ILAC) Mutual Recognition Arrangement (MRA) provided the provisions described in NEI 14-05A, Revision 1 (as endorsed by NRC Safety Evaluation ML20322A019) are met.