



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 28, 2021

Mr. Daniel G. Stoddard
Senior Vice President and
Chief Nuclear Officer
Dominion Energy South Carolina
Innsbrook Technical Center
5000 Dominion Blvd.
Glen Allen, VA 23060-6711

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION, UNIT 1 — ISSUANCE OF
AMENDMENT NO. 220 TO RELOCATE UNIT STAFF QUALIFICATIONS FROM
TECHNICAL SPECIFICATION TO QUALITY ASSURANCE PROGRAM
DESCRIPTION (EPID L-2021-LLA-0094)

Dear Mr. Stoddard:

The U.S. Nuclear Regulatory Commission (NRC, or the Commission) has issued the enclosed Amendment No. 220 to Renewed Facility Operating License No. NPF-12 for the Virgil C. Summer Nuclear Station, Unit 1. The amendment revises the technical specifications (TS) in response to your application dated May 27, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21147A377).

The amendment revises TS 6.3, "Unit Staff Qualifications," by removing the licensee's staff qualification requirements from the TS and relocating the control of unit staff qualification requirements to the licensee controlled Dominion Energy South Carolina (DESC) Nuclear Facility Quality Assurance Program Description (QAPD) consistent with the guidance in NRC Administrative Letter (AL) 95-06, "Relocation of Technical Specification Administrative Controls Related to Quality Assurance" (ADAMS Accession No. ML031110271).

A copy of the related safety evaluation and notice and environmental findings are also enclosed. The Commission's monthly *Federal Register* notice will include the notice of issuance.

If you have any questions, please contact me at (301) 415-5301 or Stephanie.Devlin-Gill@nrc.gov.

Sincerely,

/RA/

Stephanie Devlin-Gill, Project Manager
Plant Licensing Branch II-I
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-395

Enclosures:

1. Amendment No. 220 to NPF-12
2. Safety Evaluation

cc: Listserv



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NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

DOMINION ENERGY SOUTH CAROLINA, INC.

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

DOCKET NO. 50-395

VIRGIL C. SUMMER NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 220
Renewed License No. NPF-12

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Virgil C. Summer Nuclear Station, Unit No. 1 (the facility), Renewed Facility Operating License No. NPF-12, filed by the Dominion Energy South Carolina, Inc. (the licensee), dated May 27, 2021, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering public health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations as set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is hereby amended by a page change to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-12 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 220, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. Dominion Energy South Carolina, Inc. shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Michael T. Markley, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility Operating
License and Technical Specifications

Date of Issuance: December 28, 2021

VIRGIL C. SUMMER NUCLEAR STATION, UNIT 1
ATTACHMENT TO LICENSE AMENDMENT NO. 220
RENEWED FACILITY OPERATING LICENSE NO. NPF-12
DOCKET NO. 50-395

Replace the following pages of the renewed facility operating license and Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Page

License
Page 3

Technical Specifications
6-3

Insert Page

License
Page 3

Technical Specifications
6-3

- (3) SCE&G, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage amounts required for reactor operation, as described in the Final Safety Analysis Report, as amended through Amendment No. 33;
 - (4) SCE&G, pursuant to the Act and 10 CFR Part 30, 40 and 70 to receive, possess and use at any time byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed neutron sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (5) SCE&G, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use in amounts as required any byproduct source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (6) SCE&G, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as m[a]y be produced by the operation of the facility.
- C. This renewed license shall be deemed to contain, and is subject to, the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level

SCE&G is authorized to operate the facility at reactor core power levels not in excess of 2900 megawatts thermal in accordance with the conditions specified herein and in Attachment 1 to this renewed license. The preoccupation tests, startup tests and other items identified in Attachment 1 to this renewed license shall be completed as specified. Attachment 1 is hereby incorporated into this renewed license.
 - (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 220, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. South Carolina Electric & Gas Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

ADMINISTRATIVE CONTROLS

6.2.3 NOT USED

6.2.4 SHIFT TECHNICAL ADVISOR

The Shift Technical Advisor shall provide technical support to the Shift Manager in the areas of thermal hydraulics, reactor engineering and plant analysis with regard to the safe operation of the unit.

6.3 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications referenced for comparable positions as specified in the Nuclear Facility Quality Assurance Program Description.

6.4 NOT USED



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WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 220 TO

RENEWED FACILITY OPERATING LICENSE NO. NPF-12

DOMINION ENERGY SOUTH CAROLINA, INC.

VIRGIL C. SUMMER NUCLEAR STATION, UNIT 1

DOCKET NO. 50-395

1.0 INTRODUCTION

By application dated May 27, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21147A377), Dominion Energy South Carolina (the licensee) submitted a license amendment request for Virgil C. Summer Nuclear Station, Unit 1 (Summer). The proposed amendment would revise the facility Technical Specifications (TSs) by removing the licensee's staff qualification requirements from the TS and relocating the control of the unit staff qualification requirements to the licensee controlled Nuclear Facility Quality Assurance Program Description (QAPD).

Currently, the Summer TSs require, with one specified exception, that the licensee's staff meet or exceed the minimum qualifications stated in American National Standards Institute (ANSI) N18.1-1971, "Standard Selection and Training of Nuclear Power Plant Personnel," for comparable positions. Qualification standards currently listed in the licensee's QAPD are based on either the same or more recent versions of ANSI N18.1 and U. S. Nuclear Regulatory Commission (NRC) Regulatory Guide (RG) 1.8, "Qualification and Training of Personnel for Nuclear Power Plants," Revision 2 (ADAMS Accession No. ML003739928) April 1987. Current TS 6.3.1 requires the Radiation Protection Manager to meet RG 1.8, September 1975. The licensee's proposed amendment would eliminate the inconsistency between the TS and QAPD, which currently specify unit staff qualifications based on different NRC-endorsed industrial standards. The proposed amendment would allow the licensee to adopt updated NRC-endorsed standards for unit staff qualifications in the future, without the need for additional license amendments.

2.0 REGULATORY EVALUATION

2.1 Description of Proposed Changes

Current TS 6.3.1 states:

Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions except for the Radiation Protection Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

Revised TS 6.3.1 would state:

Each member of the plant staff shall meet or exceed the minimum qualifications referenced for comparable positions as specified in the Nuclear Facility Quality Assurance Program Description.

Revision 28 of the QAPD was submitted to the NRC via a periodic update, dated June 29, 2020 (ADAMS Accession No. ML20182A692). The licensee's qualification commitments are discussed in QAPD, Section 2.5, "Selection, Training and Qualification of Personnel," with requirements specific to Summer listed in Section 2.5.1.4.

2.2 Regulatory Requirements and Guidance

The NRC staff considered the following regulatory requirements and guidance in its review of the licensee's application:

- Paragraph (c)(5) of 10 CFR 50.36, "Technical specifications," provides requirements for the content of the TSs in the category of administrative controls. Paragraph (c)(5) of 10 CFR 50.36 requires, in part, that Technical Specifications (TSs) include administrative controls, which are "provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner."
- 10 CFR 50.120, "Training and qualification of nuclear power plant personnel," requires training and qualification for personnel to operate and maintain the facility in a safe manner in all modes of operation.
- Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50 provides requirements for quality assurance programs. 10 CFR 50.54(a) provides requirements for making changes to quality assurance programs.

Paragraph (a)(3) of 10 CFR 50.54 states, in part:

Each licensee described in paragraph (a)(1) of this section may make a change to a previously accepted quality assurance program description included or referenced in the Safety Analysis Report without prior NRC approval, provided the change does not reduce the commitments in the program description as accepted by the NRC. Changes to the quality assurance program description that do not reduce the commitments must

be submitted to the NRC in accordance with the requirements of [10 CFR] Section 50.71(e).

Paragraph (a)(4) of 10 CFR 50.54 requires changes to the quality assurance program that do reduce commitments to be submitted to the NRC and receive NRC approval prior to implementation.

- NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: [Light-Water Reactor] LWR Edition," Section 13.2.2, "Non-Licensed Plant Staff Training" (ADAMS Accession No. ML15006A129), provides guidance for the review of training programs for non-licensed plant staff.
- NRC RG 1.8, Revision 2, "Qualification and Training of Personnel for Nuclear Power Plants," April 1987 (ADAMS Accession No. ML003739928), endorsed ANSI/ANS-3.1-1981 for certain positions and ANSI N18.1-1971 for other positions, with exceptions, clarifications, and additions.

Revision 1 of RG 1.8 (ADAMS Accession No. ML13038A100) endorsed ANSI N18.1-1971 with one exception.¹

- NRC Administrative Letter (AL) 95-06, "Relocation of Technical Specification Administrative Controls Related to Quality Assurance," dated December 12, 1995 (ADAMS Accession No. ML031110271), provides guidance for relocating requirements from the administrative controls section of TSs in cases where adequate controls are provided by other methods.

3.0 TECHNICAL EVALUATION

The licensee's proposed amendment would modify the TS 6.3.1 to relocate unit staff qualification requirements from the Summer TSs into the licensee controlled QAPD. The licensee would thereafter rely on the guidance listed in the QAPD to govern staff qualification requirements including its associated change control process.

The NRC staff reviewed the licensee's submittal dated May 27, 2021, and determined that the licensee's proposed change to the TSs would align the UNIT STAFF QUALIFICATIONS with the QAPD, which would maintain the requirement to meet or exceed the qualifications of RG 1.8. The change would eliminate the existing reference to the 1975 version of RG 1.8 and align the requirement with the 1987 version of RG 1.8 referenced in Section 2.5.1.4 of the Summer QAPD.

The proposed relocation of the licensee's staff qualification requirements to the QAPD is consistent with the guidance in AL 95-06, and the precedent cited in Section 4.2 of the licensee's submittal dated May 27, 2021. AL 95-06 notes the following regarding the relocation of administrative requirements to a licensee's quality assurance program:

The quality assurance program is a logical candidate for such relocations due to the controls imposed by such regulations as Appendix B to 10 CFR Part 50, the existence of U.S. Nuclear Regulatory Commission-approved quality assurance plans and

¹ Revision 1 of RG 1.8 was originally published in September 1975 and was republished in May 1977 as Revision 1-R (ADAMS Accession No. ML12305A250).

commitments to industry quality assurance standards, and the established quality assurance program change control process in 10 CFR 50.54(a).

The licensee's commitments regarding staffing qualification will be retained in the QAPD, and the licensee will not be permitted to reduce these commitments without prior NRC approval, per 10 CFR 50.54(a)(3). The NRC staff, therefore, determined that removal of the licensee's staff qualification requirements from the facility TSs will not constitute a reduction in commitments regarding unit staff qualifications, nor will it reduce the NRC's ability to maintain approval authority over future proposed changes that could reduce commitments.

The NRC staff also determined that the requirements of 10 CFR 50.36(c)(5) to assure operation of the facility in a safe manner will continue to be met, because the facility TSs will still maintain adequate administrative control of staff qualification requirements, by reference to the requirements listed in and controlled via the QAPD. The requirements in 10 CFR 50.120 will also continue to be met because the proposed amendment does not change the licensee's training and qualification of plant personnel.

Because the staff qualification requirements located in the QAPD will continue to be subject to adequate change control via 10 CFR 50.54(a), the requirements of 10 CFR 50.36 and 50.120 will continue to be met and will not adversely affect the NRC's ability to maintain oversight of licensee programs. Therefore, the NRC staff finds that the licensee's proposed changes to the Summer TSs to be acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the NRC staff notified the South Carolina State official of the proposed issuance of the amendment on November 8, 2021. On November 23, 2021, the State official confirmed the State of South Carolina had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement for the installation or use of a facility component located within the restricted area as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20, "Standards for protection against radiation," and changes administrative requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released off site, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* (86 FR 36779; July 13, 2021). Accordingly, the amendment meets the eligibility criteria for categorical exclusion in 10 CFR 51.22(c)(9) and (c)(10). In accordance with 10 CFR 51.22(b), the NRC staff does not need to prepare an environmental impact statement or environmental assessment in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that public health and safety will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to public health and safety.

Principal Contributors: Justin Vazquez, NRR
Yiu Law, NRR

Date: December 28, 2021

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION, UNIT 1—ISSUANCE OF
AMENDMENT NO. 220 TO RELOCATE UNIT STAFF QUALIFICATIONS FROM
TECHNICAL SPECIFICATION TO QUALITY ASSURANCE PROGRAM
DESCRIPTION (EPID L-2021-LLA-0094), DATED DECEMBER 28, 2021

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ADAMS Accession Nos: ML21319A262

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DATE	12/28/2021			

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