

SAFETY EVALUATION BY THE OFFICE OF NEW REACTORS

RELATED TO AMENDMENT NO. 52

TO THE COMBINED LICENSE NOS. NPF-93 AND NPF-94

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

VIRGIL C. SUMMER NUCLEAR STATION UNITS 2 AND 3

DOCKET NOS. 52-027 AND 52-028

1.0 INTRODUCTION

By letter dated March 14, 2016 (Agencywide Document Access and Management System (ADAMS) Accession No. ML16075A264), the South Carolina Electric & Gas Company (SCE&G) on behalf of itself and the South Carolina Public Service Authority (both hereafter called the licensee) requested that the U.S. Nuclear Regulatory Commission (NRC or Commission) amend the combined licenses (COL) for Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3, COL Nos. NPF-93 and NPF-94, respectively.

The proposed license amendment request (LAR) involves changes to the Updated Final Safety Analysis Report (UFSAR) in the form of departures from the incorporated plant-specific Design Control Document (DCD) Tier 2 licensing basis information; involves changes to UFSAR information that has been designated as Tier 2* information; and would upgrade the VCSNS Technical Specifications (TS) to be consistent with the proposed changes to the plant-specific AP1000 fuel system design, nuclear design, thermal hydraulic design, and accident analysis. These proposed changes are consistent with those generically approved in WCAP-17524-P-A, Revision 1, "AP1000 Core Reference Report," which received NRC's approval on February 19, 2015 (ADAMS Accession No. ML15015A571).

The LAR was supplemented by a letter dated May 12, 2016 (ADAMS Accession No. ML16138A279). This letter contained Enclosure 5, "Supplement to Proposed Changes to Licensing Basis Documents," (LAR-14-17). VCSNS determined that Enclosure 2 of the original submittal required two corrections, and Enclosure 5 is a markup of the affected page in the original Enclosure 2. Enclosures 1, 3, and 4 of the original request are not impacted by the supplemental information.

The LAR was further supplemented by a letter dated July 12, 2016, (ADAMS Accession No. ML16195A177). This letter, Core Reference Report Incorporation (LAR-14-17), clarifies the incorporation of the Tier 2 and Tier 2* information in WCAP-17524-P-A, Revision 1. The applicant states that they will incorporate the blue text added and remove the red boxed text deleted by WCAP-17524-P-A verbatim into the VCSNS Units 2 and 3 UFSAR for UFSAR Chapters 1, 4, 6, 12, and 15. Additionally, all figures updated by WCAP-17524-P-A will be incorporated into the VCSNS Units 2 and 3 UFSAR in their entirety, unmodified, except UFSAR

Figure 4.2-8, (same figure as provided in WCAP-17524-P-A, but redrawn to remove stray marks). The staff finds the information contained in this supplement acceptable.

The proposed changes to the VCSNS TS are based on (1) Revision 4 of Standard Technical Specifications (STS) NUREG-1431, "Standard Technical Specifications - Westinghouse Plants," dated April 30, 2012; (2) the "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" (Final Policy Statement), published on July 22, 1993 (58 FR 39132); (3) Title 10 of the *Code of Federal Regulations* (10 CFR) 50.36, "Technical specifications"; and (4) TSTF-GG-05-01, "Writer's Guide for Plant-Specific Improved Technical Specifications," Revision 1, dated June 2005 (the writer's guide).

The NRC staff issued an initial *Federal Register* notice of opportunity to request a hearing and a proposed No Significant Hazard Determination on May 10, 2016 (81 FR 28900). The May 12 and July 12, 2016, letters provided additional information that did not change the scope or the conclusions of the No Significant Hazards Determination.

2.0 BACKGROUND

10 CFR Part 52, Subpart C - Combined Licenses, sets out the requirements and procedures applicable to Commission issuance of COLs for nuclear power facilities. 10 CFR 52.79(a) and (d) set out the requirements for a COL application that references a standard design certification. On March 30, 2012, referenced COLs were issued by the NRC under 10 CFR Part 52, Subpart C, to SCE&G for VCSNS Units 2 and 3. The SCE&G COL application for VCSNS referenced the Westinghouse Electric Company (Westinghouse) AP1000 design certification rule, Appendix D to 10 CFR Part 52. The plant-specific TS, which were issued with the VCSNS COL, consist of the VCSNS site-specific TS and the AP1000 generic TS (Chapter 16 of DCD, Revision 19). The AP1000 generic TS were modeled after Revision 2 of NUREG-1431, dated June 30, 2001, and were incorporated by reference into the VCSNS plant-specific TS.

Content of LAR-14-17

The LAR letter has four enclosures:

- Enclosure 1 Request for License Amendment Regarding Core Reference Report Incorporation
- Enclosure 2 Proposed Changes to Licensing Basis Documents
- Enclosure 3 Conforming Technical Specification (CTS) Bases Changes (For Information Only)
- Enclosure 4 Peak Clad Temperature (PCT) Rack-up Since WCAP-17524-P-A, Revision 1

Enclosure 1 contains a summary description of the LAR, the detailed description of the changes as well as the technical evaluation for the proposed changes; followed by a regulatory evaluation of the proposed changes, environmental considerations, and the applicable references.

Enclosure 2 provides a markup of affected CTS pages; CTS pages with no changes are not included.

Enclosure 3 provides a markup of affected CTS Bases; Bases pages with no changes are not included.

Enclosure 4 provides the PCT Rack-up since WCAP-17524-P-A, Revision 1, which includes the Background, Affected Evaluation Models, Estimated Effect, and References where applicable for each item (General Code Maintenance, Errors in Decay Group Uncertainty Factors, Pressurizer Error Correction, etc.)

Content of LAR-14-17S1

- Enclosure 5 — Supplement to Proposed Changes to Licensing Basis Documents

Enclosure 5 contains a markup showing two corrections SCE&G determined were required in the Required Actions of TS 3.2.1.

3.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act (the Act) requires that applicants for nuclear power plant operating licenses will state:

[S]uch technical specifications, including information of the amount, kind, and source of special nuclear material required, the place of the use, the specific characteristics of the facility, and such other information as the Commission may, by rule or regulation, deem necessary in order to enable it to find that the utilization . . . of special nuclear material will be in accord with the common defense and security and will provide adequate protection to the health and safety of the public. Such technical specifications shall be a part of any license issued.

In 10 CFR 50.36, the Commission established its regulatory requirements related to the content of TS. In doing so, the Commission placed emphasis on those matters related to the prevention of accidents and the mitigation of accident consequences. As recorded in the Statements of Consideration, "Technical Specifications for Facility Licenses; Safety Analysis Reports" (33 FR 18610, December 17, 1968), the Commission noted that applicants were expected to incorporate into their T,S "those items that are directly related to maintaining the integrity of the physical barriers designed to contain radioactivity." Pursuant to 10 CFR 50.36, TS for nuclear reactors are required to include items in the following categories: (1) safety limits, and limiting safety system settings; (2) limiting conditions for operation (LCO); (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. However, the rule does not specify the particular requirements to be included in a nuclear reactor plant's TS.

On February 6, 1987, the Commission issued an interim policy statement on TS improvements, "Interim Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" (52 FR 3788). During the period from 1989 to 1992, industry pressurized-water reactor (PWR) and boiling-water reactor (BWR) owners groups and the NRC staff developed improved STS (e.g., NUREG-1431) that would establish model TS based on the Commission's policy for each primary reactor type. In addition, representatives from the NRC, nuclear reactor plant licensees, and industry owners groups developed generic administrative and editorial guidelines in the form of a writer's guide for preparing TS (most recently issued in June 2005 as TSTF-GG-05-01, Revision 1), which gives appropriate consideration to human factors engineering principles and was used throughout the development of plant-specific improved TS.

In September 1992, the Commission issued NUREG-1431, Revision 0, which was developed using the guidance and criteria contained in the Commission's Interim Policy Statement. The STS in NUREG-1431 were established as a model for developing plant-specific improved TS for

Westinghouse plants, in general. The STS reflect the results of a detailed review of the application of the Interim Policy Statement criteria, which have been incorporated in 10 CFR 50.36(c)(2)(ii), to generic system functions, which were published in a "split report" issued to the PWR and BWR nuclear steam supply system vendor owner's groups in May 1988. The STS also reflect the results of extensive discussions concerning various drafts of STS so that the application of the TS LCO criteria and the writer's guide would consistently reflect detailed system configurations and operating characteristics for all reactor designs. As such, the generic bases presented in NUREG-1431 provide an abundance of information regarding the extent to which the STS present requirements that are necessary to protect public health and safety.

On July 22, 1993, the Commission issued its Final Policy Statement, expressing the view that satisfying the guidance in the policy statement also satisfies Section 182a of the Act and 10 CFR 50.36. The Final Policy Statement described the safety benefits of the STS and encouraged licensees to use the STS as the basis for plant-specific TS amendments and for complete conversions to improved technical specifications (ITS) based on the STS. In addition, the Final Policy Statement gave guidance for evaluating the required scope of the TS and defined the guidance criteria to be used in determining which of the LCOs and associated SRs should remain in the TS. The Commission noted that, in allowing certain items to be relocated to licensee-controlled documents while requiring that other items be retained in the TS, it was adopting the qualitative standard enunciated by the Atomic Safety and Licensing Appeal Board in *Portland General Electric Company* (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). There, the Appeal Board observed:

[T]here is neither a statutory nor a regulatory requirement that every operational detail set forth in an applicant's safety analysis report (or equivalent) be subject to a technical specification, to be included in the license as an absolute condition of operation which is legally binding upon the licensee unless and until changed with specific Commission approval. Rather, as best we can discern it, the contemplation of both the Act and the regulations is that technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety.

By this approach, existing LCO requirements that fall within or satisfy any of the criteria in the Final Policy Statement should be retained in the TS; those LCO requirements that do not fall within or satisfy these criteria may be relocated to licensee-controlled documents. The Commission codified the four criteria in 10 CFR 50.36 (60 FR 36953, July 19, 1995). The four criteria, as stated in 10 CFR 50.36(c)(2)(ii) subparagraphs (A), (B), (C), and (D), are as follows:

- Criterion 1 Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
- Criterion 2 A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- Criterion 3 A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design

basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

- Criterion 4 A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Part 4.0 of this Safety Evaluation explains the NRC staff's determination that the VCSNS TS based on STS is consistent with the proposed incorporation of WCAP-17524-P-A, Revision 1, in the VCSNS licensing basis documents, the requirements and guidance of the Final Policy Statement, and 10 CFR 50.36 and 10 CFR 50.36a.

4.0 TECHNICAL EVALUATION

In its review of the LAR for the incorporation of WCAP-17524-P-A, Revision 1, into the plant-specific licensing bases, the NRC staff evaluated the resulting proposed changes to various sections of the TS and Bases. The proposed changes are discussed below.

Proposed Changes to the UFSAR

The July 12, 2016, letter specifies how Tier 2 and Tier 2* information in WCAP-17524-P-A, Revision 1 will be incorporated in the UFSAR for VCSNS Units 2 and 3. The licensee states that SCE&G will incorporate the blue text added and remove the red boxed text deleted by WCAP-17524-P-A verbatim into the VCSNS 2 and 3 UFSAR for Chapters 1, 4, 6, 12, and 15. Additionally, all figures updated by WCAP-17524-P-A will be incorporated into the VCSNS Units 2 and 3 UFSAR in their entirety, unmodified, except UFSAR Figure 4.2-8 (same figures as provided in WCAP-17524-P-A, but redrawn to remove stray marks). The staff finds the licensee's proposal to implement the WCAP-17524-P-A acceptable.

Proposed Changes to the TS

WCAP-17524-P-A, Revision 1 included the following proposed TS changes:

- “Rod drop time requirement [in surveillance requirement (SR) 3.1.4.3] is increased for consistency with the assumption used throughout the revised DCD Chapter 15 Safety Analysis.”

This proposed change is consistent with the WCAP-17524-P-A, Revision 1 change. Minor administrative differences between the DCD, Revision 19 TS and the plant-specific TS do not impact this change.

- “Consistent with the revised core, fuel and safety analysis, LCO 3.2.1 is revised to reflect a Constant Axial Offset Control technical specification limit with FQ(Z) measurements following the standard specification description in NUREG-1431, Revision 3.”

This proposed change is consistent with the WCAP-17524-P-A, Revision 1 change. Minor administrative differences between the DCD, Revision 19 TS and the plant-specific TS do not impact this change.

- “Consistent with the revised core, fuel and safety analysis, TS 3.2.3 is revised to reflect a Constant Axial Offset Control technical specification limit with FQ(Z)

measurements following the standard specification description in NUREG-1431, Revision 3.”

This proposed change is consistent with the WCAP-17524-P-A, Revision 1 change. Minor administrative differences between the DCD, Revision 19 TS and the plant-specific TS do not impact this change.

Evaluation of TS Changes

The staff evaluated the above three changes to the TS, comparing them to the STS version utilizing the Constant Axial Offset Control Methodology. The staff also reviewed the provided markups for completion and accuracy. Based on the staff’s review of the information, the staff finds the above proposed changes acceptable.

Differences Between WCAP-17524-P-A, Revision 1 TS Changes and LAR TS Changes

The licensee also noted that there were differences between the proposed TS changes made by incorporating WCAP-17524-P-A, Revision 1, and the proposed TS changes in the LAR. These differences are editorial in nature and align the VCSNS TS with the STS and the guidance contained in the “Writer’s Guide for Improved Plant-Specific Technical Specifications.” These differences between WCAP-17524-P-A, Revision 1, and the proposed plant-specific TS are summarized below.

Page	Location	Difference
3.2.1-1	3.2.1 Title	Changed lowercase z to uppercase Z
3.2.1-1	3.2.1 Title	Removed “-” between CAOC and W(Z)
3.2.1-1 to 3.2.1-5	3.2.1 Header	Changed to CAOC W(Z)
3.2.1-2	3.2.1 Required Action B.3	Removed extra period at end of sentence
3.2.3-1 to 3.2.3-4	3.2.3 Header	Changed to CAOC
3.2.3-1	LCO 3.2.3, a and b	Sentences restructured (combined)
3.2.3-2	3.2.3 Condition C	Underlined “OR” connector and added units of “RTP” following 50%
3.2.3-3	3.2.3 Required Action D.1	Changed “<” to “≤”
3.2.3-4	SR 3.2.3.1 to 3.2.3.3	Relocated plant-specific TS SR 3.2.3.1 NOTE to General SR NOTE for all SRs
3.2.3-4	SR 3.2.3.3	Relocated NOTE next to SR#
5.6-2	5.6.3a	Updated titles for 3.2.1 and 3.2.3
5.6-3	5.6.3b.3	Deleted WCAP-10216-P-A from 3.2.3
5.6-3	5.6.3b.3	Subscripted “Q”

Evaluation of Differences between WCAP-17524-P-A, Revision 1 TS Changes and LAR TS Changes

The staff evaluated the above editorial changes to the TS, comparing them to the STS and the “Writer’s Guide for Improved Plant-Specific Technical Specifications,” as applicable. The staff also reviewed the provided markups for completion and accuracy. Based on the staff’s review of the information, the staff finds the above proposed changes acceptable.

Proposed Changes to the TS Bases

WCAP-17524-P-A, Revision 1 included the following proposed TS Bases changes:

- “Rod drop time requirement [in surveillance requirement (SR) 3.1.4.3] is increased for consistency with the assumption used throughout the revised DCD Chapter 15 Safety Analysis.”

As discussed in Section 5.4 of WCAP-17524-P-A, Revision 1, consistent with NUREG-1793 Supplement 2, Section 15.2.4.8.2, the interim acceptance criteria specified in Appendix B to NUREG-0800 Section 4.2, Revision 3, has been followed for the analysis of the RCCA ejection accident. This requires that the Bases specifying a limit on energy deposition to the fuel for an ejected rod accident be revised to reflect the new limits and reference.

As identified in Appendix C of WCAP-17524-P-A, Revision 1, Bases 3.1.1 are modified to include reference to NUREG-0800 Section 4.2, Revision 3 (included as Reference 4). In the Applicable Safety Analysis of Bases 3.1.1, under item a., WCAP-17524-P-A, Revision 1 states “reference 4”. However, incorporation of this reference into the plant-specific Bases 3.1.1 is proposed to read instead as “Ref. 4”, for consistency with other Bases references. This change is strictly editorial in nature and has no technical impact to the TS. This is the standard TS format.

- “Consistent with the revised core, fuel and safety analysis, LCO 3.2.1 is revised to reflect a Constant Axial Offset Control technical specification limit with FQ(Z) measurements following the standard specification description in NUREG-1431 Revision 3.”

The following changes from WCAP-17524-P-A, Revision 1 are being made to the TS 3.2.1 Bases:

- a. In the SR 3.2.1.2 and 3.2.1.4 discussion of the Bases, WCAP-17524-P-A, Revision 1 did not subscript the first “Q” in the following sentence: “If the two most recent FQ(Z) evaluations show an increase in FQ C (Z), it is required to meet the FQ(Z) limit with the last...” Additionally, Reference 5 in Bases 3.2.1 contains the title to WCAP-10216-P-A as “Relaxation of Constant Axial Offset Control FQ Surveillance Technical Specification”. For consistency with the TS and Bases, the “Q” should be subscripted, such that the title reads “Relaxation of Constant Axial Offset Control FQ Surveillance Technical Specification”. The changes are made for consistency with the changes to TS 3.2.1 included in WCAP-17524-P-A, Revision 1 and have no technical impact to the TS or Bases.
 - b. In the SR 3.2.1.2 and SR 3.2.1.4 discussion of the Bases, WCAP-17524-P-A, Revision 1 shows an instance of FQ C (Z) as “italicized” text (more specifically, as Cambria Math font type, which is the default of the Equation Editor). There is no significance to the font shown in WCAP-17524-P-A, Revision 1. It is therefore proposed to change the font of the FQ C (Z) term to Arial (and thus, de-italicize), consistent with the font of the TS and Bases. This change is editorial in nature and has no technical impact to the TS or Bases.
- “Consistent with the revised core, fuel and safety analysis, TS 3.2.3 is revised to

reflect a Constant Axial Offset Control technical specification limit with FQ(Z) measurements following the standard specification description in NUREG-1431, Revision 3.”

The following changes from WCAP-17524-P-A, Revision 1 are being made to the TS 3.2.3 Bases:

- a. Proposed change 2.2.d discusses correcting the action to match the applicability of TS 3.2.3. There are three places in the 3.2.3 Bases where changes are needed for consistency. First, in the second to last paragraph (newly added by WCAP-17524-P-A, Revision 1) of the LCO discussion in the Bases ($<$ to \leq). Second, in the APPLICABILITY discussion, last paragraph (newly added by WCAP-17524-P-A, Revision 1), it is stated that “Low signal levels in the excore channels may preclude obtaining valid AFD signals below 15% RTP” – this should be changed to “at or below 15% RTP.” Lastly, under the Required Action D.1 discussion in the Bases, “Reducing the power level to $<$ 15% RTP...” should be changed to “Reducing the power level to \leq 15% RTP...”. These changes are all consistent with the Applicability of the TS as stated in the TS itself.
- b. WCAP-17524-P-A, Revision 1 added a paragraph to the end of the LCO discussion of Bases 3.2.3. The last sentence of the newly added paragraph reads: “This calibration is performed every 92 days.” However, per the Surveillance Requirements of TS 3.2.3, this should be “every 92 effective full power days”. Therefore, the sentence is changed to read: “This calibration is performed every 92 effective full power days (EFPD).” This change is made for consistency with the SR, is editorial in nature, and has no technical impact to the TS or Bases.
- c. WCAP-17524-P-A, Revision 1 added a discussion on Action C.1 in the TS 3.2.3 Bases. The first sentence of the discussion states that “...operation with the AFD outside the target band is allowed for up to 1 hour if the AFD is within the acceptable operation limits...”. As stated in the Background of B 3.2.3, “during operation at THERMAL POWER levels $<$ 90% but $>$ 15%, the computer sends an alarm message when the cumulative penalty deviation time is $>$ 1 hour in the previous 24 hours.” To improve operator understanding of the Action C.1 discussion in Bases 3.2.3, the first sentence is changed to clarify that operation is acceptable for up to 1 hour “during preceding 24 hours”. The first sentence of Action C.1 in Bases 3.2.3 is therefore modified to read: “...operation with the AFD outside the target band is allowed for up to 1 hour within the preceding 24 hours if the AFD is within the acceptable operation limits...” This change is made for consistency with the Action as stated in the TS, as well as other material in Bases 3.2.3.
- d. The plant-specific TS SR 3.2.3.1 was previously revised to include a NOTE providing a time period to perform the surveillance if the Applicability was entered due to On-Line Power Distribution Monitoring System not monitoring parameters it typically monitors. The Bases for this NOTE also applies to the two new SRs (3.2.3.2 and 3.2.3.3). As such, the Bases NOTE discussion is removed from SR 3.2.3.1 and made generic to all TS 3.2.3 SRs by placing prior to all three of the surveillance requirement discussions.

- e. WCAP-17524-P-A, Revision 1 added new SR 3.2.3.2 and 3.2.3.3, which are discussed in the TS 3.2.3 Bases under the Surveillance Requirements section. However, WCAP-17524-P-A, Revision 1 did not underline the SR “titles” (i.e., SR 3.2.3.2) in the Bases discussion, per STS convention. Both SR 3.2.3.2 and SR 3.2.3.3 are underlined in the TS 3.2.3 Bases under the Surveillance Requirements section. This change is made for consistency with Bases convention, is editorial in nature, and has no technical impact to the TS or Bases.
- f. WCAP-17524-P-A, Revision 1 added new SR 3.2.3.2, which is discussed in the TS 3.2.3 Bases under the Surveillance Requirements section. The second paragraph of this discussion reads: “Alternatively, linear interpolation between the most recent measurement of the target flux differences and a predicted end of cycle value provides a reasonable update because the [axial flux difference] AFD changes due to burnup tend toward 0% AFD. When the predicted end of cycle AFD from the cycle nuclear design is different from 0%, it may be a better value for the interpolation.” This statement describes an alternative method to perform the monthly update of the target AFD required by SR 3.2.3.2 that does not involve actually taking a flux map measurement. It is proposed that this statement be clarified, however, as follows: “Alternatively, another acceptable method to update the target flux difference is a linear interpolation between the most recent measurement of the target flux difference and a predicted end of cycle value. This is acceptable because the AFD changes due to burnup tend toward 0% AFD. When the predicted end of cycle AFD from the cycle nuclear design is different from 0%, it may be a better value for the interpolation.” The proposed change improves reader understanding by making it clear what the described method is an alternative to and why it is an acceptable method. The change does not modify the meaning of the statement, but instead is made for clarification. The change is editorial and has no technical impact to the TS or Bases.
- As described in WCAP-17524-P-A, Revision 1, the revised spectrum of rod ejection accidents described in Section 15.4.8 of Appendix B to WCAP-17524-P-A, Revision 1, have been updated to address compliance with the acceptance criteria specified in Appendix B to NUREG-0800, Section 4.2, Revision 3. As a result, this section of the Standard Review Plan has been included in the TS Bases as a reference as shown in WCAP-17524-P-A, Revision 1; specifically, Bases 3.1.1, 3.2.1, 3.2.2, 3.2.4, and 3.2.5 added this as a reference. An editorial change is made to the reference to remove the parenthetical acronym “(SRP)”, consistent with other sections of the plant specific Bases.

Review of TS Bases Changes

The staff reviewed the above changes to the Bases, comparing them to the STS Bases version utilizing the Constant Axial Offset Control Methodology. The staff also reviewed the provided markups for completion and accuracy. Following the review, the staff finds the above proposed changes consistent with the changes to the proposed plant-specific TS.

Differences between WCAP-17524-P-A, Revision 1, TS Bases Changes and LAR Bases Changes

VCSNS also noted that there were differences between the proposed Bases changes made by incorporating WCAP-17524-P-A, Revision 1, and the proposed Bases changes in the LAR. These differences are editorial in nature and align the VCSNS Bases with the STS Bases and

the guidance contained in the “Writer’s Guide for Improved Plant-Specific Technical Specifications.” These differences between WCAP-17524-P-A, Revision 1, and the proposed plant-specific TS Bases are summarized below.

Page	Location	Difference
B 3.1.1-2	B 3.1.1 Safety Analyses	Changed “reference 4” to “Ref.4”
B 3.1.1-5	B 3.1.1 References	Removed “(SRP)” from Reference 4
B 3.2.1-10	B 3.2.1 SR 3.2.1.2	Subscripted “Q”
B 3.2.1-10	B 3.2.1 SR 3.2.1.4	Subscripted “Q”
B 3.2.1-10	B 3.2.1 SR 3.2.1.2	Un-italicized “F(Z)”
B 3.2.1-10	B 3.2.1 SR 3.2.1.4	Un-italicized “F(Z)”
B 3.2.1-10	B 3.2.1 References	Removed “(SRP)” from Reference 2
B 3.2.1-10	B 3.2.1 References	Subscripted “Q” in Reference 5
B 3.2.2-7	B 3.2.2 References	Removed “(SRP)” from Reference 1
B 3.2.3-4	B 3.2.3 LCO	Changed “<” to “≤”
B 3.2.3-4	B 3.2.3 LCO	Changed from "days" to "effective full power days”
B 3.2.3-4	B 3.2.3 Applicability	Changed from “below” to “at or below”
B 3.2.3-5	B 3.2.3 Required Action C.1	Added “during the preceding 24 hours”
B 3.2.3-6	B 3.2.3 Required Action D.1	Changed “<” to “≤”
B 3.2.3-6	SR 3.2.3.1 to 3.2.3.3	Relocated plant-specific TS SR 3.2.3.1 NOTE to General SR NOTE for all SRs
B 3.2.3-6	B 3.2.3 SR 3.2.3.2	Underlined SR 3.2.3.2
B 3.2.3-7	B 3.2.3 SR 3.2.3.2	Modified wording of second paragraph
B 3.2.3-7	B 3.2.3 SR 3.2.3.3	Underlined SR 3.2.3.3
B 3.2.4-6	B 3.2.4 References	Removed “(SRP)” from Reference 2
B 3.2.5-5	B 3.2.5 References	Removed “(SRP)” from Reference 2

Review of Differences between WCAP-17524-P-A, Revision 1, TS Bases Changes and LAR Bases Changes

The staff reviewed the above editorial changes to the Bases, comparing them to the STS Bases and the “Writer’s Guide for Improved Plant-Specific Technical Specifications as applicable.” The staff also reviewed the provided markups for completion and accuracy. Following the review, the staff finds the above proposed changes consistent with the changes to the proposed plant-specific TS.

Overall Evaluation

The staff finds that the proposed changes to the VCSNS Units 2 and 3 UFSAR and TS as a result of the incorporation of WCAP-17524-P-A, Revision 1, into the plant-specific licensing bases are acceptable. The staff also finds the editorial changes made that differ from the changes proposed via the incorporation of WCAP-17524-P-A, Revision 1, acceptable. Further, based on the considerations discussed above, the NRC staff finds that the VCSNS TS satisfy the Commission's Final Policy Statement and 10 CFR 50.36. Based on these findings, the NRC staff has determined and concludes that the proposed TS for VCSNS Units 2 and 3, and proposed changes to the VCSNS Units 2 and 3 UFSAR as documented in the licensee's application and supplemental letters, are acceptable.

5.0 LIMITATIONS AND CONDITIONS

In reviewing the proposed TS for VCSNS, the NRC staff has determined that no commitments

or license conditions are associated with this LAR. Therefore, no new license condition is included in this license amendment.

6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the South Carolina state official was notified of the proposed issuance of the amendment. The State official had no comments.

7.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant change in the types, or no significant increase in the amounts of any effluents that may be released offsite, 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 (81 FR 28900; published on May 10, 2016). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

8.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public 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 the health and safety of the public.