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NND-16-0080
10 CFR 50.90
10 CFR 52.63

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3
Combined License Nos. NPF-93 and NPF-94
Docket Nos. 52-027 & 52-028

Subject: VCSNS Units 2 & 3 LAR 15-05: Request for License Amendment and Exemption: Tier 1 Editorial and Consistency Changes

In accordance with the provisions of 10 CFR 50.90, South Carolina Electric & Gas Company (SCE&G) , acting on behalf of itself and the South Carolina Public Service Authority (Santee Cooper), requests an amendment to the Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3 combined license (COL) numbers NPF-93 and NPF-94, respectively. Because the proposed changes impact Tier 1 of the Plant-Specific DCD, with corresponding changes to the associated COL Appendix C information, this activity has been determined to require prior NRC approval. Also, because the change requires a departure from Tier 1 information, an exemption is requested from the requirements of the Generic AP1000 DCD Tier 1 pursuant to the provisions of 10 CFR 52.63(b) and 10 CFR 52.7. One of the proposed changes to plant-specific Tier 1 information, and its corresponding change to COL Appendix C, will require an involved change to UFSAR Tier 2 information. The requested amendment also contains a proposed editorial correction to COL paragraph 2.D.

The description, technical evaluation, regulatory evaluation (including the significant hazards consideration determination), and environmental considerations for the proposed changes in the License Amendment Request (LAR) are contained in Enclosure 1 to this letter. Enclosure 2 includes an exemption request to support the proposed departures from Tier 1 material, which includes the background and supporting basis for this requested exemption. Enclosure 3 provides markups depicting the requested changes to the plant-specific licensing basis documents. **Enclosure 3A includes a figure discussed in Enclosure 1. This figure is withheld from public disclosure as Security-Related Information (SRI), also referred to as sensitive unclassified non-safeguards information (SUNSI), protected and requested to be withheld under the provisions of 10 CFR 2.390(d).**

In order to support the VCSNS Unit 2 construction schedule, SCE&G requests NRC staff review and approval of the license amendment and exemption no later than November 16, 2016. Approval by this date will allow sufficient time to implement

licensing basis changes prior to affected construction and associated ITAAC activities. SCE&G expects to implement the proposed amendment within twenty days of approval.

In accordance with 10 CFR 50.91, SCE&G is notifying the State of South Carolina of this LAR by transmitting a copy of this letter and publicly-available enclosures to the designated State Official.

Should you have any questions, please contact Mr. Justin Bouknight by telephone at (803) 941-9828, or by email at justin.bouknight@scana.com.

This letter contains no regulatory commitments.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 16th day of May, 2016.

Sincerely,

April R. Rice
Manager
New Nuclear Licensing

MHK/ARR/mhk

Enclosure 1:	License Amendment Request: Tier 1 Editorial and Consistency Changes (LAR 15-05)
Enclosure 2:	Exemption Request: Tier 1 Editorial and Consistency Changes (LAR 15-05)
Enclosure 3:	Proposed Changes to Licensing Basis Documents (LAR 15-05)
Enclosure 3A:	Proposed Changes to Licensing Basis Documents (LAR 15-05) Security-Related Information (SUNSI) – Withhold from Public Disclosure Under 10 CFR 2.390(d)

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South Carolina Electric and Gas Company
Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3

NND-16-0080

Enclosure 1

License Amendment Request

Tier 1 Editorial and Consistency Changes

(LAR 15-05)

(This enclosure contains 12 pages, including this cover sheet.)

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1. SUMMARY DESCRIPTION

The proposed changes would revise the Combined Licenses (COLs) by making various nontechnical changes to COL Appendix C and the corresponding plant-specific Tier 1 information along with one involved Updated Final Safety Analysis Report (UFSAR) Tier 2 change and one typographical change to COL paragraph 2.D. The proposed changes would resolve inconsistencies (e.g., inconsistencies between UFSAR Tier 2, Tier 1 information, and the system design documentation). No structure, system, component (SSC), design function or analysis as described in the UFSAR would be affected.

For each of the COL Appendix C changes proposed below, the corresponding change to plant-specific Tier 1 is also requested. This enclosure requests approval of the license amendment necessary to implement COL Appendix C, COL paragraph 2.D, and involved UFSAR Tier 2 changes. Enclosure 2 requests the exemption necessary to implement the associated changes to the plant-specific Tier 1 information.

2. DETAILED DESCRIPTION and TECHNICAL EVALUATION

UFSAR Tier 2 design descriptions are derived from plant design documents. 10 CFR 52, Appendix D, Section II.D states that Tier 1 design information is "derived from Tier 2 information." However, certain specific occurrences have been identified in which plant-specific Tier 1 information is not consistent with its associated UFSAR design information. In addition, a number of editorial errors in Tier 1 need to be corrected. In each of the proposed changes described and evaluated below, with the exception of item k, the UFSAR (Tier 2) design information is correct and consistent with the actual design.

COL Appendix C and Corresponding Tier 1 Changes

a. Table 2.1.2-1 – As shown in UFSAR Tier 2 Table 3.11-1 (Sheet 12 of 53), flow sensors RCS-JE-FT101A/B/C/D and RCS-JE-FT102A/B/C/D are required to be environmentally qualified for harsh environment. Additionally, the underlying design requires that these sensors be qualified for harsh environment. Tier 1 Table 2.1.2-1 lists equipment and sensors associated with the Reactor Coolant System (RCS) and includes a column identifying whether a listed component is Class 1E and qualified for a harsh environment. For these flow sensors, the table correctly identifies that the equipment is Class 1E but incorrectly indicates that they are not qualified for harsh environment. It is proposed that COL Appendix C (and plant-specific Tier 1) Table 2.1.2-1 be revised to identify these flow sensors as environmentally qualified for harsh environments.

b. Table 2.2.1-1 – There are two proposed changes to Table 2.2.1-1. First, as shown UFSAR Table 3.2-3 (Sheet 6 of 81) and 6.2.3-1 (Sheet 1 of 4), and Tier 1 Table 2.1.1-2, the tag number for the Fuel Transfer Tube is FHS-FT-01. However, Tier 1 Table 2.2.1-1 identifies this tag with an extra "0," "FHS-FT-001".

Thus, a change is proposed to revise the tag number in COL Appendix C (and plant-specific Tier 1) Table 2.2.1-1 from “FHS-FT-001” to “FHS-FT-01.”

Second, a change is proposed to revise COL Appendix C (and plant-specific Tier 1) Table 2.2.1-1 to include the motor-operated valve (MOV) designation for two valves, VFS-PL-V800A and VFS-PL-V800B. As indicated in UFSAR (plant-specific Tier 2) Tables 3.9-16 (Sheet 19 of 21) and 3.11-1 (Sheet 31 of 53), these valves are motor-operated valves, but are not identified as such in Tier 1 Table 2.2.1-1, unlike other motor-operated valves in the table. Additionally, the current underlying design and the design at the time of certification included a requirement that these valves be motor-operated. Updating the designation is consistent with the Tier 1 identification convention.

c. Table 2.2.1-3 – The Inspections, Tests, and Analyses for ITAAC 2.2.01.07.ii in Tier 1 Table 2.2.1-3 requires that testing will be performed to demonstrate that remotely operated containment isolation valves close within the required response times in order to support the design commitment for safety-related containment isolation. The corresponding Acceptance Criteria identifies that the containment purge isolation valves (VFS-PL-V003, -V004, -V009, and -V010) close within 20 seconds. However, UFSAR (plant-specific Tier 2) Table 14.3-7 (Sheet 1 of 3), UFSAR Table 6.2.3-1 (Sheet 3 of 4), Technical Specifications (TS) Bases B 3.6.3, and the underlying AP1000 design documentation identify that the maximum closure time for these valves is 10 seconds. This presents the potential for the as-built plant to meet the ITAAC but not the underlying UFSAR and design requirements. Because the ITAAC does not provide the appropriate maximum stroke time, a change to align COL Appendix C (and plant-specific Tier 1) Table 2.2.1-3 with the corresponding UFSAR, Technical Specifications, and the underlying design is appropriate.

d. Table 2.2.2-1 – Similar to item b described above, a consistency change is proposed to COL Appendix C (and plant-specific Tier 1) Table 2.2.2-1 to identify PCS-PL-V001C as “PCCWST Isolation Valve MOV.” UFSAR Tables 3.9-16 (Sheet 5 of 21), 3.11-1 (Sheet 19 of 53), and 6.2.2-3 identify PCS-PL-V001C as a motor-operated valve. Additionally, the current underlying design and the design at the time of certification include a requirement that these valves be motor-operated. Updating the designation is consistent with the Tier 1 identification convention.

e. Table 2.2.5-5 – There are two proposed changes to Table 2.2.5-5. First, a change is proposed to COL Appendix C (and plant-specific Tier 1) Table 2.2.5-5, ITAAC 2.2.05.07d, to change the Design Commitment identifier from “7d)” to read "7.d)" to be consistent with the format currently used for Design Commitments throughout Tier 1 and COL Appendix C.
Second, in the “Inspections, Tests, Analyses” column of Table 2.2.5-5 and relevant to ITAAC 2.2.05.07d, the existing text states: “Testing will be performed

to confirm that the required amount of air flow circulates through the MCR passive filtration system,". An editorial change is proposed for COL Appendix C (and plant-specific Tier 1) Table 2.2.5-5 to correct this sentence by replacing the comma at the end of the sentence with a period.

Both of these changes are editorial and neither affect the ITAAC performance itself or the underlying technical information.

f. Table 2.3.10-3 – This item proposes a change to COL Appendix C (and plant-specific Tier 1) Table 2.3.10-3 to revise the title of the column "Control Function" to "Active Function." Tier 1, Section 2.3.10, Design Description paragraph 8, and the associated ITAAC 2.3.10.08, which reference the information in this column of Table 2.3.10-3, refer to the performance of an "active function," but Tier 1 Table 2.3.10-3 lists "Control Function." A consistency change is proposed to adopt the use of the term "Active Function" in the column header for COL Appendix C (and plant-specific Tier 1) Table 2.3.10-3.

g. Table 2.5.1-3 – Tier 1 Table 2.5.1-3 lists the equipment names and tag numbers for each of the sensor/display pairs providing plant parameters that are input to the Diverse Actuation System (DAS) and that are separate from those being used by the Protection and Safety Monitoring System (PMS) and plant control system (PLS). Table 2.5.1-3 identifies two entries for "Rod Control Motor Generator Voltage;" PLS-ET001 and PLS-ET002. Design documents identify these sensors/displays with the equipment tag numbers PLS-001 and PLS-002. Therefore, an editorial change is proposed to COL Appendix C (and plant-specific Tier 1) Table 2.5.1-3 by changing the tag numbers of "PLS-ET001" and "PLS-ET002" to "PLS-001" and "PLS-002."

h. Figure 2.7.1-1 – Tier 1 Figure 2.7.1-1, Sheet 1, illustrates the functional arrangement of the Nuclear Island Nonradioactive Ventilation System (VBS). Valves VBS-PL-V188 and VBS-PL-V189 are a pair of identical MCR Isolation Valves that perform the same design basis function and are of the same safety classification. This figure currently depicts valve VBS-PL-V188 as being upstream of valve VBS-PL-V189. However, the underlying UFSAR (plant-specific Tier 2) Figure 9.4.1-1 (Sheet 5 of 7) illustrates the opposite, that VBS-PL-V189 is upstream of VBS- PL-V188. Additionally, the underlying AP1000 design documentation in effect at the time of DCD certification and the current design documentation further identify that VBS-PL-V189 is upstream of valve VBS-PL-V188. Thus, a change is proposed to revise the tag numbers in COL Appendix C (and plant-specific Tier 1) Figure 2.7.1-1 to depict VBS-PL-V189 upstream of VBS-PL-V188 for consistency with the underlying UFSAR detailed information and the underlying system design.

i. Table 3.2-1 – Tier 1 Table 3.2-1, ITAAC 3.2.00.01.b, Acceptance Criteria 1.b provides an obsolete reference to the acceptance criteria of Design Commitment

3 in Acceptance Criterion 1.b. The reference to Design Commitment 3 was a carry-over from an ITAAC on the Human System Interface (HSI) design evaluation, which was removed during Revision 17 of the AP1000 DCD. The Acceptance Criteria for the HSI that referenced Design Commitment 3 in DCD Revision 15 required that the HSI design be performed for the operational and control system in accordance with the HSI design implementation plan and identified specific documents to be included in the report that is used to close the HSI design implementation plan ITAAC. However, based on the completed documents referenced in TR-82 (APP-GW-GLR-082, Revision 0, "Execution and Documentation of the Human System Interface Design Implementation Plan") and the Westinghouse response to Request for Additional Information RAI-SRP18-COLP-05 and Open Item OI-SRP18-COLP-01A, it was concluded that these documents appropriately implement the HSI design implementation plan. Because the change to delete Design Commitment 3 of the ITAAC is supported by the quality of the design documents produced, and the design documents provide the level of detail needed to provide reasonable assurance that the HFE design will be effectively implemented within the control room, remote shutdown station, and local control stations, Design Commitment 3 in ITAAC Table 3.2-1 (DCD Revision 15) was closed in NUREG-1793, "Final Safety Evaluation Report [FSER] Related to Certification of the AP1000 Standard Plant Design Docket No. 52-006," Supplement 2. Thus, a change is proposed to COL Appendix C (and plant-specific Tier 1) Table 3.2-1 to remove the unnecessary parenthetical phrase referring to the acceptance criteria of Design Commitment 3. This change is justified because the parenthetical phrase is obsolete based on closure of Design Commitment 3 in the AP1000 FSER.

j. Figure 3.3-14 – Tier 1 Table 3.3-5 identifies the key dimensions of the nuclear island features. One of these key dimensions, identified in the Table as "X6" is the distance between the outer surface of the shield wall building to the shield building centerline when measured on the west edge of the Shield Building. Tier 1 Figure 3.3-14 depicts this dimension as measured between the centerline and the inner surface of the shield wall, contrary to the description in Tier 1 Table 3.3-5. Revision 19 of the DCD correctly identifies this dimension, and it appears that a prior license amendment, VCSNS Amendment No. 23, inadvertently introduced the inconsistency. Additionally, the underlying design documentation makes clear that the measurement that corresponds with the X6, 72'-6" dimension is from the centerline to the outer surface of the shield building. Thus, a change is proposed to revise COL Appendix C (and plant-specific Tier 1) Figure 3.3-14 to eliminate the inconsistency with Table 3.3-5 and accurately depict this dimension extending to the outer surface of the shield building.

k. Table 3.7-1 – Editorial updates are proposed to COL Appendix C (and plant-specific Tier 1) Table 3.7-1 by changing RCS-MN-01 to RXS-MN-01 and OCS-JC-020, OCS-JC-010, and OCS-JC-011 to OCS-JC-20, -10, and -11, respectively. The proposed editorial updates to COL Appendix C (and plant-

specific Tier 1) Table 3.7-1 also involve a change to UFSAR Tier 2 Table 17.4-1.

The tag number for the Reactor Vessel Insulation Water Inlet and Steam Vent Devices component(s), RXS-MN-01, is listed as RCS-MN-01 in COL Appendix C and the plant-specific Tier 1, Table 3.7-1, "Risk-Significant Components." While the full name is not utilized in Tier 2, the insulation, which includes the integrated inlet and steam vent devices, is correctly identified in Tier 2 Table 3.2-3 (Sheet 39 of 81) as “RXS-MN-01.” Therefore, to correct this inconsistency and to utilize the correct system acronym for the Reactor System (RXS), a change is proposed to update the tag number in Tier 1 to match the correct system designator.

Additionally, the tag number for both the DAS Processor Cabinet and Control Panel, OCS-JC-20, is listed as “OCS-JC-020” and the MCR 1E Displays and System Level Controls, OCS-JC-10 and -11 are listed as “OCS-JC-010, -011,” in COL Appendix C and the plant-specific Tier 1, Table 3.7-1, "Risk-Significant Components". The underlying design documentation identifies these tags without the “0” preceding the two-digit equipment identifier, and therefore, this change to Tier 1 Table 3.7-1 is proposed to match the tag numbers in the underlying design documentation. No change is made to the design or the components themselves with this change.

The changes described above to COL Appendix C (and plant-specific Tier 1) Table 3.7-1 require an involved change to Tier 2. This involved change requires similar editorial changes to UFSAR (and plant-specific Tier 2) Table 17.4-1, where the same issue exists. No change is made to the design of these components, only to the tag number listed in the UFSAR.

COL Paragraph 2.D Change

a. COL Paragraph 2.D – COL Paragraph 2.D(12)(f) describes various license commitments that must be met prior to initial fuel load. COL 2.D(12)(f)1 states the Licensee shall: “Update the seismic interaction analysis in AP1000 DCD, Rev. 19, Section 3.7.3.5 to reflect as-built information, which must be based on as-procured data, as well as the as-constructed condition.” This reference to Section 3.7.3.5, "Equivalent Static Load Method of Analysis," is incorrect, and should be changed to correctly refer to Section 3.7.5.3, "Seismic Interaction Review.” Thus a change is proposed to revise COL 2.D(12)(f)1 reference "3.7.3.5" to "3.7.5.3."

The above proposed changes make no technical change (i.e., existing design is unaffected) and maintain consistency between UFSAR (Tier 2) and plant-specific Tier 1 design descriptions, tables and figures. No structure, system or component (SSC) design function or analysis as described in the UFSAR is affected. No defense-in-depth safety function is affected. No plant-specific ITAAC line item would be technically changed.

The plant-specific Tier 1 information is the design information and functions subject to verification by the Tier 1 ITAAC closure process. The proposed changes neither affect the ability to meet design criteria or functions, nor involve a decrease in the safety provided by the associated systems. Plant-specific Tier 1 information and ITAAC would continue to adequately validate their corresponding UFSAR (Tier 2) design commitments. Accordingly, application of the generic certified design information in Tier 1 as required by 10 CFR 52, Appendix D, Section III.B, in the particular circumstances discussed in this exemption request is not necessary to achieve the underlying purpose of the rule.

The proposed changes do not affect an SSC, function or feature used for the prevention or mitigation of accidents or their safety / design analyses. The changes do not affect any SSC accident initiator or initiating sequence of events, or involve any safety-related SSC or function used to mitigate an accident.

The proposed changes do not involve a change to a fission product barrier. The changes cannot result in a new failure mode, malfunction or sequence of events that could affect safety. The changes would not allow for a new fission product release path, result in a new fission product barrier failure mode, or create a new sequence of events that would result in significant fuel cladding failures.

The proposed changes do not affect any safety-related equipment, design code limit, safety-related function, safety-related design analysis, safety analysis input or result, or design or safety margin. No safety analysis or design basis acceptance limit or criterion would be challenged or exceeded.

In conclusion, the proposed changes do not involve a technical (design, analysis, function or qualification) change (e.g., there is no change to an associated calculation, design parameter or design requirement). Therefore, the changes would not result in a decrease in plant safety.

The proposed changes within this license amendment request do not affect the containment, control, channeling, monitoring, processing or releasing of radioactive and non-radioactive materials. No effluent release path is involved. The types and quantities of expected effluents are not changed. Therefore, radioactive or non-radioactive material effluents are not affected.

Plant radiation zones (as described in UFSAR Section 12.3) control under 10 CFR 20, and expected amounts and types of radioactive materials are not affected by the proposed changes. Therefore, individual and cumulative radiation exposures are not changed.

3. TECHNICAL EVALUATION (Contained within Section 2)

4. REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

10 CFR 52.98(f) requires NRC approval for any modification to, addition to, or deletion from the terms and conditions of a COL. This activity involves a departure from plant-specific Tier 1 information, and corresponding changes to COL Appendix C, Inspections, Tests, Analyses and Acceptance Criteria information along with one editorial change to COL paragraph 2.D; therefore, this activity requires a proposed amendment to the COL. Accordingly, NRC approval is required prior to making the plant-specific changes in this license amendment request.

10 CFR 52, Appendix D, Section VIII.B.5.a allows an applicant or licensee who references this appendix to depart from Tier 2 information, without prior NRC approval, unless the proposed departure involves a change to or departure from Tier 1 information, Tier 2* information, or the Technical Specifications, or requires a license amendment under paragraphs B.5.b or B.5.c of the section. This change involves a revision to plant-specific Tier 2 information, and thus requires NRC approval for the Tier 2 departure and the involved Tier 1 and corresponding COL Appendix C information.

4.2 Precedent

No precedent is identified.

4.3 Significant Hazards Consideration

The proposed changes would revise the Combined Licenses (COL) by making editorial corrections for consistency between COL Appendix C, and associated plant-specific Tier 1 information, and information in the Updated Final Safety Analysis Report (UFSAR) along with one editorial change to COL paragraph 2.D.

An evaluation to determine whether or not a significant hazards consideration is involved with the proposed amendment was completed by focusing on the three standards set forth in 10 CFR 50.92, “Issuance of amendment,” as discussed below:

4.3.1 Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed consistency and editorial Combined License (COL) Appendix C (and plant-specific Tier 1) and involved Tier 2 changes, along with one COL paragraph 2.D change, do not involve a technical change, (e.g. there is no design parameter or requirement, calculation, analysis,

function or qualification change). No structure, system, component design or function would be affected. No design or safety analysis would be affected. The proposed changes do not affect any accident initiating event or component failure, thus the probabilities of the accidents previously evaluated are not affected. No function used to mitigate a radioactive material release and no radioactive material release source term is involved, thus the radiological releases in the accident analyses are not affected.

Therefore, the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

4.3.2 Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed consistency and editorial COL Appendix C (and plant-specific Tier 1) and involved Tier 2 changes, along with one COL paragraph 2.D change, would not affect the design or function of any structure, system, component (SSC), but will instead provide consistency between the SSC designs and functions currently presented in the Updated Final Safety Analysis Report (UFSAR) and the Tier 1 information. The proposed changes would not introduce a new failure mode, fault or sequence of events that could result in a radioactive material release. Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

4.3.3 Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No

The proposed consistency and editorial COL Appendix C (and plant-specific Tier 1) and involved Tier 2 update, along with one COL paragraph 2.D change, is non-technical, thus would not affect any design parameter, function or analysis. There would be no change to an existing design basis, design function, regulatory criterion, or analysis. No safety analysis or design basis acceptance limit/criterion is involved. Therefore, the proposed amendment does not involve a significant reduction in a margin of safety.

Based on the above, it is concluded that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10

CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

4.4 Conclusions

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) 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. Pursuant to 10 CFR 50.92, the requested change does not involve a Significant Hazards Consideration.

5. ENVIRONMENTAL CONSIDERATION

This review supports a request to amend the Combined Licenses (COLs) to allow departure from various elements of the certification information in COL Appendix C (and plant-specific Tier 1), involved changes to UFSAR Tier 2, and a change to COL paragraph 2.D. The proposed changes would make various non-technical changes to Tier 1 information. The proposed changes involve editorial corrections and correct consistency errors within Tier 1. No structure, system, component (SSC), design function or analysis as described in the UFSAR would be affected.

The Licensee has determined that the anticipated construction and operational effects of the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9), in that:

(i) There is no significant hazards consideration.

As documented in Section 4.3, Significant Hazards Consideration Determination, of this license amendment request, an evaluation was completed to determine whether or not a significant hazards consideration is involved by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment." The Significant Hazards Consideration determined that (1) the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated; (2) the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated; and (3) the proposed amendment does not involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly, a finding of "no significant hazards consideration" is justified.

(ii) There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

The proposed amendment makes one COL paragraph 2.D editorial change and COL Appendix C (and plant-specific Tier 1) consistency and editorial changes along with one involved UFSAR Tier 2 departure. The proposed changes are unrelated to any aspect of plant construction or operation that would introduce any change to effluent types (e.g., effluents containing chemicals or biocides, sanitary system effluents, and other effluents), or affect any plant radiological or non-radiological effluent release quantities. Furthermore, the proposed changes do not affect any effluent release path or diminish the functionality of any design or operational features that are credited with controlling the release of effluents during plant operation. Therefore, it is concluded that the proposed amendment does not involve a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite.

(iii) There is no significant increase in individual or cumulative occupational radiation exposure.

The proposed amendment makes one COL paragraph 2.D editorial change and COL Appendix C (and plant-specific Tier 1) consistency and editorial changes along with one involved UFSAR Tier 2 departure. Plant radiation zones (addressed in UFSAR Section 12.3) are not affected, and controls under 10 CFR 20 preclude a significant increase in occupational radiation exposure. Therefore, the proposed amendment does not involve a significant increase in individual or cumulative occupational radiation exposure.

Based on the above review of the requested amendment, it has been determined that anticipated construction and operational effects of the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in the individual or cumulative occupational radiation exposure. Accordingly, the requested amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment of the proposed exemption is not required.

6. REFERENCES

1. NUREG-1793, “Final Safety Evaluation Report [FSER] Related to Certification of the AP1000 Standard Plant Design Docket No. 52-006”
2. TR-82: WCAP-16801-NP, WCAP-16801-P, APP-GW-GLR-082, Revision 0, “Execution and Documentation of the Human System Interface Design Implementation Plan,” Westinghouse Electric Company LLC. May 2007. Accession Number ML071590190

South Carolina Electric and Gas Company
Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3

NND-16-0080

Enclosure 2

Exemption Request

Tier 1 Editorial and Consistency Changes

(LAR 15-05)

(This enclosure contains 7 pages, including this cover sheet.)

1.0 Purpose

South Carolina Electric and Gas Company (SCE&G), the Licensee, acting on behalf of itself and the South Carolina Public Service Authority (Santee Cooper), requests a permanent exemption from the provisions of 10 CFR 52, Appendix D, Section III.B, "Design Certification Rule for the AP1000 Design, Scope and Contents," to allow a departure from elements of the certification information in Tier 1 of the generic AP1000 Design Control Document (DCD). The regulation, 10 CFR 52, Appendix D, Section III.B, requires an applicant or licensee referencing Appendix D to 10 CFR Part 52 to incorporate by reference and comply with the requirements of the Appendix, including certified information in DCD Tier 1. The Tier 1 information for which a plant-specific departure and exemption is being requested includes various information specified in Tier 1 Tables and Tier 1 Figures.

This request for exemption provides the technical and regulatory basis to demonstrate that 10 CFR 52.63, §52.7, and §50.12 requirements are met and will apply the requirements of 10 CFR 52, Appendix D, Section VIII.A.4 to allow departures from generic Tier 1 information described below:

- Tier 1 Table 2.1.2-1
  - Revise to designate pressure sensors RCS-101A/B/C/D and RCS-102A/B/C/D as having to be environmentally qualified.
- Tier 1 Table 2.2.1-1
  - Revise FHS-FT-001 to FHS-FT-01.
  - Revise to identify valves VFS-PL-V800A and -V800B as MOVs.
- Tier 1 Table 2.2.1-3
  - Revise Acceptance Criteria 7.ii to identify that the containment purge isolation valves close within 10 seconds.
- Tier 1 Table 2.2.2-1
  - Identify PCS-PL-V001C as "PCCWST Isolation Valve MOV"
- Tier 1 Table 2.2.5-5
  - Revise the Design Commitment text to "7.d)".
  - Revise the Inspections, Test, Analyses sentence to end with the correct punctuation: "Testing will be performed to confirm that the required amount of air flow circulates through the MCR passive filtration system."
- Tier 1 Table 2.3.10-3
  - Revise the column header to "Active Function".
- Tier 1 Table 2.5.1-3
  - Revise the Rod Control Motor Generator Voltage tag numbers to "PLS-001" and "PLS-002".
- Tier 1 Figure 2.7.1-1 (Sheet 1 of 2)
  - Revise to depict valve VBS-PL-V189 as upstream of valve VBS-PL-V188.
- Tier 1 Table 3.2-1
  - Revise to eliminate the inconsistent reference to the acceptance criteria of design commitment 3 within 1.b of the Acceptance Criteria.

- Tier 1 Figure 3.3-14
  - Revise to extend the dimension to the outer wall of the shield building.
- Tier 1 Table 3.7-1
  - Change RCS-MN-01 to RXS-MN-01 and OCS-JC-020, -010, and -011 to OCS-JC-20, -10, -11.

2.0 Background

The Licensee is the holder of Combined License Nos. NPF-93 and NPF-94, which authorizes construction and operation of two Westinghouse Electric Company AP1000 nuclear plants, named Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3, respectively.

During the detailed design finalization of the systems, inconsistencies were identified between Tier 1 information and the actual design functions of the systems described in the plant-specific DCD Tier 2 information. This activity requests exemption from the Generic DCD Tier 1 tables and figures which supports the associated COL Appendix C ITAAC.

An exemption from elements of the AP1000 certification (Tier 1) design information to allow a departure from the design description and ITAAC is requested.

3.0 Technical Justification of Acceptability

An exemption is requested to depart from AP1000 generic Design Control Document (DCD) Tier 1 material in regard to the AP1000 by correcting various editorial and consistency issues between Tier 1 and Tier 2 in Tier 1 Tables and Figures. The proposed exemption would allow a change to the plant-specific Tier 1 ITAAC information consistent with existing plant-specific DCD Tier 2 information.

The proposed changes to the description information presented in plant-specific Tier 1 are at a level of detail that is consistent with the information currently provided therein. The proposed changes neither adversely impacts the ability to meet the design functions of the structures, systems, and components (SSCs) nor involve a significant decrease in the level of safety provided by the structures, systems, or components. Because the proposed editorial changes are consistent with plant-specific DCD Tier 2 information and the design, the changes do not affect a structure, system or component. The proposed changes to information in plant-specific DCD Tier 1 continue to provide the detail necessary to implement the corresponding ITAAC. Further, application of the current generic certified design information in Tier 1 as required by 10 CFR Part 52, Appendix D, Section III.B, in the particular circumstances discussed in this request would not serve the underlying purpose of the rule due to the apparent editorial inconsistencies with the existing design information provided in Tier 2 of the plant-specific DCD.

4.0 Justification of Exemption

10 CFR Part 52, Appendix D, Section VIII.A.4 and 10 CFR 52.63(b)(1) govern the issuance of exemptions from elements of the certified design information for AP1000 nuclear power plants. Since the Licensee has identified changes (as discussed in Enclosure 1 of the accompanying License Amendment Request) that impact Tier 1, an exemption to the certified design information in Tier 1 is needed.

10 CFR Part 52, Appendix D, and 10 CFR 50.12, §52.7, and §52.63 state that the NRC may grant exemptions from the requirements of the regulations provided six conditions are met: 1) the exemption is authorized by law [§50.12(a)(1)]; 2) the exemption will not present an undue risk to the health and safety of the public [§50.12(a)(1)]; 3) the exemption is consistent with the common defense and security [§50.12(a)(1)]; 4) special circumstances are present [§50.12(a)(2)(ii)]; 5) the special circumstances outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption [§52.63(b)(1)]; and 6) the design change will not result in a significant decrease in the level of safety [Part 52, App. D, VIII.A.4].

The requested exemption to allow various editorial corrections to plant-specific Tier 1 satisfies the six criteria for granting specific exemptions, as described below.

1. **This exemption is authorized by law**

   The NRC has authority under 10 CFR §§ 50.12, 52.7, and 52.63 to grant exemptions from the requirements of NRC regulations. Specifically, 10 CFR §§50.12 and 52.7 state that the NRC may grant exemptions from the requirements of 10 CFR Part 52 upon a proper showing. No law exists that would preclude the changes covered by this exemption request. Additionally, granting of the proposed exemption does not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations.

   Accordingly, this requested exemption is "authorized by law," as required by 10 CFR 50.12(a)(1).

2. **This exemption will not present an undue risk to the health and safety of the public**

   The proposed exemption from the requirements of 10 CFR Part 52, Appendix D, Section III.B would allow changes to elements of the plant-specific DCD Tier 1 information to depart from the AP1000 certified design information. The plant-specific Tier 1 DCD will continue to reflect the approved licensing basis for the Licensee and will maintain a consistent level of detail with that which is currently provided elsewhere in Tier 1 of the plant-specific DCD.

   These changes will not impact the ability of the components to perform their design functions. There is no change to plant systems or the response of systems to postulated accident conditions. There is no change to the predicted radioactive releases due to postulated accident conditions. The plant response to

previously evaluated accidents or external events is not adversely affected, and the change described does not create any new accident precursors. Therefore, no adverse safety impact that would present any additional risk to the health and safety is present. The affected Design Description in the plant-specific Tier 1 DCD will also continue to provide the detail necessary to support the performance of the associated ITAAC.

Therefore, the requested exemption from 10 CFR 52, Appendix D, Section III.B would not present an undue risk to the health and safety of the public.

3. The exemption is consistent with the common defense and security

The proposed exemption from requirements of 10 CFR Part 52, Appendix D, Section III.B would allow changes to elements of the plant-specific DCD Tier 1 information to depart from the AP1000 certified design. The exemption does not alter the design, function, or operation of any structures or plant equipment that is necessary to maintain a safe and secure status of the plant. The proposed exemption has no impact on plant security or safeguards procedures.

Therefore, the requested exemption is consistent with the common defense and security.

4. Special circumstances are present

10 CFR 50.12(a)(2) lists six "special circumstances" for which an exemption may be granted. Pursuant to the regulation, it is necessary for one of these special circumstances to be present in order for the NRC to consider granting an exemption request. The requested exemption meets the special circumstances of 10 CFR 50.12(a)(2)(ii). That subsection defines special circumstances as when “Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.”

The rule under consideration in this request for exemption is 10 CFR Part 52, Appendix D, Section III.B, which requires that a licensee referencing the AP1000 Design Certification Rule (10 CFR Part 52, Appendix D) shall incorporate by reference and comply with the requirements of Appendix D, including Tier 1 information. The COLs reference the AP1000 Design Certification Rule and incorporate by reference the requirements of 10 CFR Part 52, Appendix D, including Tier 1 information. The underlying purpose of Appendix D, Section III.B is to describe and define the scope and contents of the AP1000 design certification, and to require compliance with the design certification information in Appendix D.

The proposed changes to correct editorial and consistency issues between Tier 1 and Tier 2 maintain the design functions of these systems. This change does not impact the ability of any structures, systems, or components to perform their functions or negatively impact safety. Accordingly, this exemption from the

certification information will enable the Licensee to safely construct and operate the AP1000 facility consistent with the design certified by the NRC in 10 CFR Part 52, Appendix D.

Therefore, special circumstances are present, because application of the current generic certified design information in Tier 1 as required by 10 CFR Part 52, Appendix D, Section III.B, in the particular circumstances discussed in this request is not necessary to achieve the underlying purpose of the rule.

5. **The special circumstances outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption**

   Based on the nature of the changes to the plant-specific Tier 1 information and the understanding that these changes resolve apparent editorial inconsistencies within the design basis, it is likely that other AP1000 licensees will request this exemption. However, if this is not the case, the special circumstances continue to outweigh any decrease in safety from the reduction in standardization because the key design functions of the systems associated with this request will continue to be maintained. This exemption request and the associated marked-up text demonstrate that the functionality of these systems continue to be maintained following implementation of the change from the generic AP1000 DCD, thereby minimizing the safety impact resulting from any reduction in standardization.

   Therefore, the special circumstances associated with the requested exemption outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption.

6. **The design change will not result in a significant decrease in the level of safety.**

   The requested exemption revises the plant-specific DCD Tier 1 information by correcting editorial and consistency issues in various systems. The changes for consistency and clarity do not affect any safety-related equipment or function, and the design functions of the associated systems continue to be met. Because these functions continue to be met, there is no reduction in the level of safety.

5.0 Risk Assessment

A risk assessment was determined to be not applicable to address the acceptability of this request.

6.0 Precedent

No precedent is identified.

7.0 Environmental Consideration

A review of the requested amendment has determined that anticipated construction and operational effects of the proposed amendment do not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in the individual or cumulative occupational radiation exposure. Accordingly, the requested amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment of the proposed amendment and exemption is not required.

8.0 Conclusion

The proposed changes to Tier 1 information are necessary to correct apparent editorial inconsistencies within plant-specific DCD Tier 1. The exemption request meets the requirements of 10 CFR 52.63, "*Finality of Design Certifications,*" 10 CFR 50.12, "*Specific Exemptions,*" and 10 CFR 52 Appendix D, "*Design Certification Rule for the AP1000.*" Specifically, the exemption request meets the criteria of 10 CFR 50.12(a)(1) in that the request is authorized by law, presents no undue risk to public health and safety, and is consistent with the common defense and security. Furthermore, approval of this request does not result in a significant decrease in the level of safety, presents special circumstances, does not present a significant decrease in safety as a result of a reduction in standardization, and meets the eligibility requirements for categorical exclusion.

South Carolina Electric and Gas Company
Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3

NND-16-0080

Enclosure 3

Proposed Changes to Licensing Basis Documents:

Tier 1 Editorial and Consistency Changes

(LAR 15-05)

Insertions Denoted by Blue Underline and Deletions by Red Strikethrough

Figure Changes Contained to Red Bubbled Area

(This enclosure contains 11 pages, including this cover sheet.)

Tier 1 Table 2.1.2-1; COL Appendix C, Table 2.1.2-1

Item a: Revise to designate RCS-101A/B/C/D and RCS-102A/B/C/D as having to be environmentally qualified.

Table 2.1.2-1 (cont.)									
Equipment Name	**Tag No.**	**ASME Code Section III**	**Seismic Cat. I**	**Remotely Operated Valve**	**Class 1E/ Qual. for Harsh Envir.**	**Safety-Related Display**	**Control PMS/ DAS**	**Active Function**	**Loss of Motive Power Position**
RCS Hot Leg 1 Flow Sensor	RCS-101A	-	Yes	-	Yes/~~No~~ Yes	No	-/-	-	-
RCS Hot Leg 1 Flow Sensor	RCS-101B	-	Yes	-	Yes/~~No~~ Yes	No	-/-	-	-
RCS Hot Leg 1 Flow Sensor	RCS-101C	-	Yes	-	Yes/~~No~~ Yes	No	-/-	-	-
RCS Hot Leg 1 Flow Sensor	RCS-101D	-	Yes	-	Yes/~~No~~ Yes	No	-/-	-	-
RCS Hot Leg 2 Flow Sensor	RCS-102A	-	Yes	-	Yes/~~No~~ Yes	No	-/-	-	-
RCS Hot Leg 2 Flow Sensor	RCS-102B	-	Yes	-	Yes/~~No~~ Yes	No	-/-	-	-
RCS Hot Leg 2 Flow Sensor	RCS-102C	-	Yes	-	Yes/~~No~~ Yes	No	-/-	-	-
RCS Hot Leg 2 Flow Sensor	RCS-102D	-	Yes	-	Yes/~~No~~ Yes	No	-/-	-	-

Tier 1 Table 2.2.1-1; COL Appendix C, Table 2.2.1-1

Item b: Revise the tag number for fuel transfer tube from FHS-FT-001 to FHS-FT-01.

Table 2.2.1-1 (cont.)									
Equipment Name	**Tag No.**	**ASME Code Section III**	**Seismic Cat. I**	**Remotely Operated Valve**	**Class 1E/ Qual. for Harsh Envir.**	**Safety-Related Display**	**Control PMS/DAS**	**Active Function**	**Loss of Motive Power Position**
Fuel Transfer Tube	FHS-FT-~~0~~01	Yes	Yes	-	-/-	-	-/-	-	-

Item b: Revise to identify valves VFS-PL-V800A/B as motor-operated valves.

Table 2.2.1-1 (cont.)									
Equipment Name	**Tag No.**	**ASME Code Section III**	**Seismic Cat. I**	**Remotely Operated Valve**	**Class 1E/ Qual. for Harsh Envir.**	**Safety-Related Display**	**Control PMS/DAS**	**Active Function**	**Loss of Motive Power Position**
Vacuum Relief Containment Isolation A **MOV** – ORC	VFS-PL-V800A	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/No	Transfer Closed/ Transfer Open	As Is
Vacuum Relief Containment Isolation B **MOV** – ORC	VFS-PL-V800B	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/No	Transfer Closed/ Transfer Open	As Is

Tier 1 Table 2.2.1-3; COL Appendix C, Table 2.2.1-3

Item c: Revise to identify that the containment purge isolation valves close within 10 seconds.

Table 2.2.1-3 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria		
Design Commitment	**Inspections, Tests, Analyses**	**Acceptance Criteria**
7. The CNS provides the safety-related function of containment isolation for containment boundary integrity and provides a barrier against the release of fission products to the atmosphere.	i) A containment integrated leak rate test will be performed. ii) Testing will be performed to demonstrate that remotely operated containment isolation valves close within the required response times.	i) The leakage rate from containment for the integrated leak rate test is less than L_a. ii) The containment purge isolation valves (VFS-PL-V003, -V004, -V009, and -V010) close within ~~20~~**10** seconds, containment vacuum relief isolation valves (VFS-PL-V800A and -V800B) close within 30 seconds, SGS valves SGS-PL-V040A/B and SGS-PL-V057A/B are covered in Tier 1 Material, subsection 2.2.4, Table 2.2.4-4 (item 11.b.ii) and all other containment isolation valves close within 60 seconds upon receipt of an actuation signal.

Tier 1 Table 2.2.2-1; COL Appendix C, Table 2.2.2-1

Item d: Revise to identify PCS-PL-V001C as a motor-operated valve.

Table 2.2.2-1									
Component Name	**Tag No.**	**ASME Code Section III**	**Seismic Cat. I**	**Remotely Operated Valve**	**Class 1E/ Qual. for Harsh Envir.**	**Safety-Related Display**	**Control PMS/ DAS**	**Active Function**	**Loss of Motive Power Position**
PCCWST Isolation Valve	PCS-PL-V001A	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/Yes	Transfer Open	Open
PCCWST Isolation Valve	PCS-PL-V001B	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/Yes	Transfer Open	Open
PCCWST Isolation Valve **MOV**	PCS-PL-V001C	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/Yes	Transfer Open	As Is
PCCWST Isolation Block MOV	PCS-PL-V002A	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/No	Transfer Open	As Is
PCCWST Isolation Block MOV	PCS-PL-V002B	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/No	Transfer Open	As Is
PCCWST Isolation Block MOV	PCS-PL-V002C	Yes	Yes	Yes	Yes/No	Yes (Valve Position)	Yes/No	Transfer Open	As Is

Tier 1 Table 2.2.5-5; COL Appendix C, Table 2.2.5-5

Item e: Revise the Design Commitment text to "7.d)" and the Inspections, Test, Analyses sentence to properly end with the correct punctuation, a period.

Table 2.2.5-5 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria		
Design Commitment	**Inspections, Tests, Analyses**	**Acceptance Criteria**
7.d) The system provides a passive recirculation flow of MCR air to maintain main control room dose rates below an acceptable level during VES operation.	Testing will be performed to confirm that the required amount of air flow circulates through the MCR passive filtration system~~,~~.	The air flow rate at the outlet of the MCR passive filtration system is at least 600 cfm greater than the flow measured by VES-003A/B.

Tier 1 Table 2.3.10-3; COL Appendix C, Table 2.3.10-3

Item f: Revise the column header to "Active" Function.

Table 2.3.10-3			
Equipment Name	**Tag No.**	**Display**	~~**Control**~~ **Active Function**
WLS Effluent Discharge Isolation Valve	WLS-PL-V223	-	Close
Reactor Coolant Drain Tank Level	WLS-JE-LT002	Yes	-
Letdown Flow from CVS to WLS	WLS-JE-FT020	Yes	-

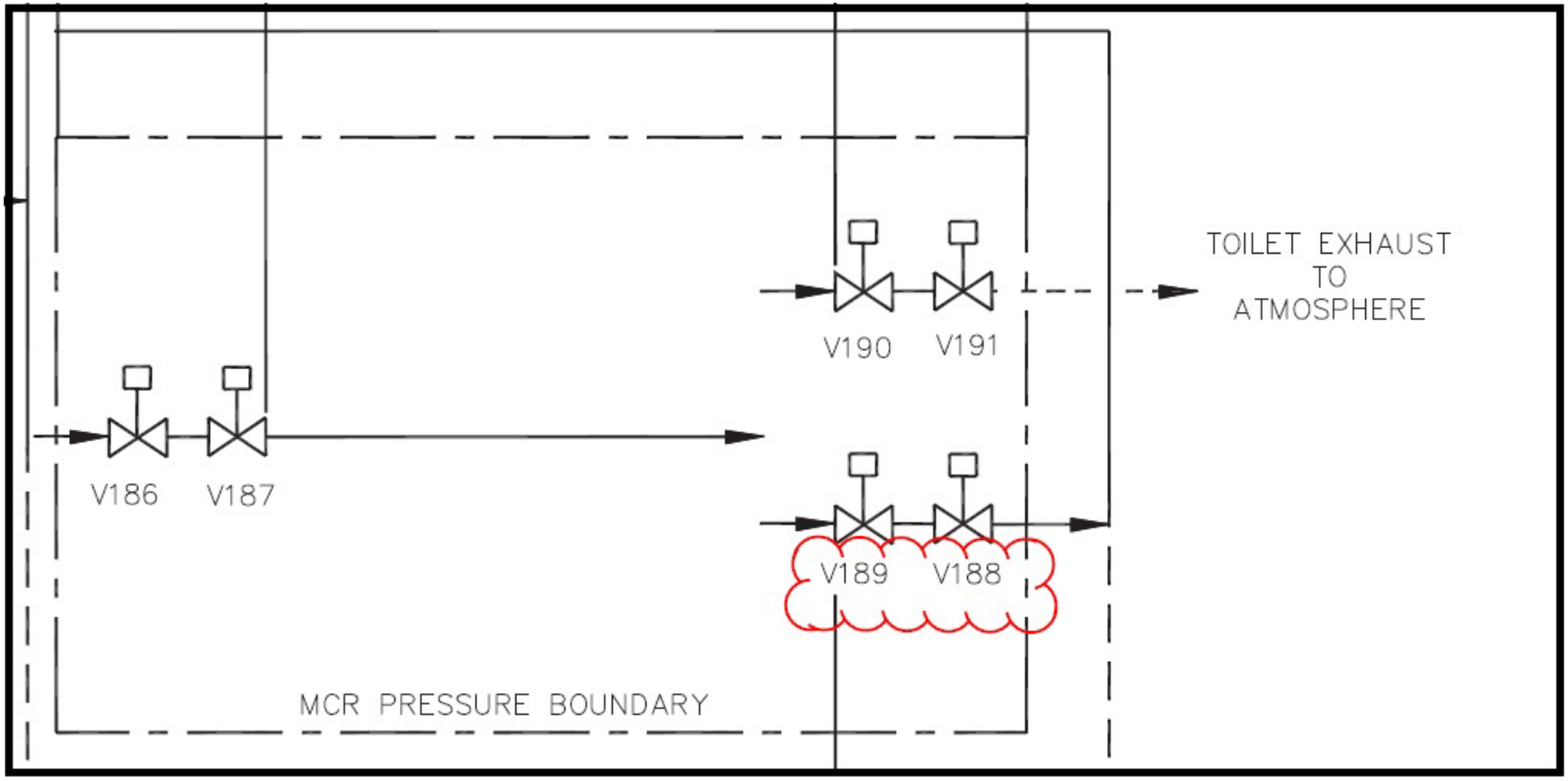
Tier 1 Table 2.5.1-3; COL Appendix C, Table 2.5.1-3

Item g: Revise the Rod Control Motor Generator Voltage tag number to "PLS-001" and "PLS-002".

Table 2.5.1-3 DAS Sensors and Displays	
Equipment Name	**Tag Number**
Rod Control Motor Generator Voltage	PLS-~~ET~~001
Rod Control Motor Generator Voltage	PLS-~~ET~~002

Tier 1 Figure 2.7.1-1 (Sheet 1 of 2); COL Appendix C, Figure 2.7.1-1 (Sheet 1 of 2)

Item h: Revise to depict valve VBS-PL-V189 as upstream of valve VBS-PL-V188.



Tier 1 Table 3.2-1; COL Appendix C, Table 3.2-1

Item i: Revise to eliminate the inconsistent reference to the acceptance criteria of design commitment 3 within 1.b of the Acceptance Criteria.

Table 3.2-1 Inspections, Tests, Analyses, and Acceptance Criteria		
Design Commitment	**Inspections, Tests, Analyses**	**Acceptance Criteria**
1. The HFE verification and validation program is performed in accordance with the HFE verification and validation implementation plan and includes the following activities:		
a) HSI Task support verification	a) An evaluation of the implementation of the HSI task support verification will be performed.	a) A report exists and concludes that: Task support verification was conducted in conformance with the implementation plan and includes verification that the information and controls provided by the HSI match the display and control requirements generated by the function-based task analyses and the operational sequence analyses.
b) HFE design verification	b) An evaluation of the implementation of the HFE design verification will be performed.	b) A report exists and concludes that: HFE design verification was conducted in conformance with the implementation plan and includes verification that the HSI design is consistent with the AP1000 specific design guidelines ~~(compiled as specified in the third acceptance criteria of design commitment 3)~~ developed for each HSI resource.
c) Integrated system validation	c) (i) An evaluation of the implementation of the integrated system validation will be performed.	c) (i) A report exists and concludes that: The test scenarios listed in the implementation plan for integrated system validation were executed in conformance with the plan and noted human deficiencies were addressed.

Tier 1 Table 3.7-1; COL Appendix C, Table 3.7-1

Item k: Revise RCS-MN-01 to RXS-MN-01 and OCS-JC-020, -010, and -011 to OCS-JC-20, -10, -11.

Table 3.7-1 Risk-Significant Components	
Equipment Name	**Tag No.**
Diverse Actuation System (DAS)	
DAS Processor Cabinets and Control Panel (used to provide automatic and manual actuation)	DAS-JD-001 DAS-JD-002 DAS-JD-003 DAS-JD-004 OCS-JC-~~0~~20

Table 3.7-1 (cont.) Risk-Significant Components	
Equipment Name	**Tag No.**
Protection and Monitoring System (PMS)	
PMS Actuation Software (used to provide automatic control functions)	Refer to Tables 2.5.2-2 and 2.5.2-3
PMS Actuation Hardware (used to provide automatic control functions)	Refer to Tables 2.5.2-2 and 2.5.2-3
MCR 1E Displays and System Level Controls	OCS-JC-~~0~~10, -~~0~~11

Table 3.7-1 (cont.) Risk-Significant Components	
Equipment Name	**Tag No.**
Reactor Coolant System (RCS)	
ADS Stage 1/2/3 Valves (MOVs)	RCS-PL-V001A/B, -V011A/B RCS-PL-V002A/B, -V012A/B RCS-PL-V003A/B, -V013A/B
ADS Stage 4 Valves (Squibs)	RCS-PL-V004A/B/C/D
Pressurizer Safety Valves	RCS-PL-V005A/B
Reactor Vessel Insulation Water Inlet and Steam Vent Devices	R~~C~~XS-MN-01

UFSAR Tier 2 Table 17.4-1 (Sheet 1 of 8), Risk-Significant SSCs Within the Scope of D-RAP

Item k: Revise RCS-MN-01 to RXS-MN-01 and OCS-JC-020, -010, and -011 to OCS-JC-20, -10, -11.

System, Structure, or Component (SSC)(1)	Rationale(2)	Insights and Assumptions
System: Diverse Actuation System (DAS)		
DAS Processor Cabinets and Control Panel (used to provide automatic and manual actuation) (DAS-JD-001, -002, -003, -004, OCS-JC-~~0~~20)	RAW	The DAS is diverse from the PMS and provides automatic and manual actuation of selected plant features including control rod insertion, turbine trip, passive residual heat removal (PRHR) heat exchanger actuation, core makeup tank actuation, isolation of critical containment lines, and passive containment cooling system (PCS) actuation.

UFSAR Tier 2 Table 17.4-1 (Sheet 4 of 8)

System, Structure, or Component (SSC)(1)	Rationale(2)	Insights and Assumptions
System: Protection and Safety Monitoring System (PMS)		
PMS Actuation Software	RAW/CCF	The PMS software provides the automatic reactor trip and ESF actuation functions listed in Tables 7.2-2 and 7.3-1.
PMS Actuation Hardware	RAW/CCF	The PMS hardware provides the automatic reactor trip and ESF actuation functions listed in Tables 7.2-2 and 7.3-1.
Main Control Room (MCR) 1E Displays and System Level Controls (OCS-JC-~~0~~10, -~~0~~11)	RAW/CCF	This includes the Class 1E PMS (QDPS) displays and controls. These displays and system level controls provide important plant indications to allow the operator to monitor and control the plant during accidents.
Reactor Trip Switchgear (PMS-JD-RTS A01/02, B01/02, C01/02, D01/02)	RAW/CCF	These breakers open automatically to allow insertion of the control rods.

UFSAR Tier 2 Table 17.4-1 (Sheet 7 of 8)

System, Structure, or Component (SSC)(1)	Rationale(2)	Insights and Assumptions
Reactor Vessel Insulation Water Inlet and Steam Vent Devices (R~~C~~XS-MN-01)	EP	These devices provide an engineered flow path to promote in-vessel retention of the core in a severe accident.

COL 2.D(12)(f)1

Revise COL paragraph 2.D to correct the reference to Section 3.7.5.3.

(f) Before initial fuel load, SCE&G shall:

1. Update the seismic interaction analysis in AP1000 DCD, Rev. 19, Section 3.7.~~3.5~~5.3 to reflect as-built information, which must be based on as-procured data, as well as the as-constructed condition;