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July 11, 2013
NND-13-0402
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 & 3
Combined License Nos. NPF-93 and NPF-94
Docket Nos. 52-027 and 52-028

Subject: Supplement 1 to LAR 13-07, License Amendment Request and
Exemption: Changes to the Chemical and Volume Control System (CVS)

Reference: 1. South Carolina Electric and Gas Company (SCE&G), LAR 13-07,
License Amendment Request and Exemption: Changes to the Chemical
and Volume Control System (CVS) (NND-13-0085), dated March 13, 2013
(ML13074A698).

2. Southern Nuclear Operating Company (SNC), Vogtle Electric
Generating Plant Units 3 and 4 Request for License Amendment and
Exemption: Changes to the Chemical and Volume Control System (CVS)
(LAR-13-002S2) Supplement 2 (ND-13-1185) dated June 11, 2013
(ML13163A356).

In accordance with provisions of 10 CFR 50.90, South Carolina Electric & Gas Company (SCE&G) requested an amendment to Virgil C. Summer Nuclear Station (VCSNS) Units 2 & 3 combined license (COL) numbers NPF-93 and NPF-94 respectively (Reference 1). The proposed amendment would allow changes to the Chemical and Volume Control System (CVS) to introduce a spring assisted check valve, replace a valve with a combination of two different types of valves, and separate the zinc and hydrogen injection paths.

Enclosure 1, included with Reference 1, provides the description, technical evaluation, and regulatory evaluation (including the Significant Hazards Consideration determination) for the proposed changes. Enclosure 2, included with Reference 1, provides the background and supporting basis for the requested exemption. Enclosure 3, included with Reference 1, provides markups depicting the requested changes to plant-specific DCD Tier 1 information, the corresponding changes to COL Appendix C, and UFSAR text, tables, and figures. Enclosure 4 provides a revised page to replace

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the corresponding page of Enclosure 3 to Reference 1 (page 23 of 40) to identify the sheet number of the table. Enclosure 5 provides a response to an NRC comment made during a public conference call on May 9, 2013. This response is consistent and identical in technical detail to the supplemental response provided by SNC (Reference 2). Enclosure 6 provides a revised page to replace the corresponding page of Enclosure 3 to Reference 1 (page 16 of 40).

The information provided in Enclosures 4, 5 and 6 does not change the scope of the amendment request submitted on March 13, 2013. Consequently, because the LAR text accurately described the proposed changes, this supplement does not require a revised Significant Hazards Consideration determination.

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 enclosures to the designated State Official.

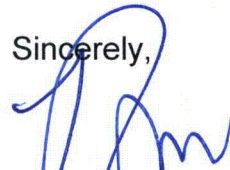
This letter contains no regulatory commitments.

Should you have any questions, please contact Alfred M. Paglia by telephone at (803) 941-9876, or by email at apaglia@scana.com.

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

Executed on this 11th day of July, 2013.

Sincerely,



Ronald A. Jones
Vice President,
New Nuclear Operations

JGE/AMP/je

Enclosure 4: Virgil C. Summer Nuclear Station Units 2 & 3 – Supplement to License Amendment Request Regarding Changes to the CVS: Corrected Page 23 of 40 of Enclosure 3

Enclosure 5: Virgil C. Summer Nuclear Station Units 2 & 3 – Supplement to License Amendment Request Regarding Changes to the CVS: Response to May 9, 2013 Public Conference Call NRC Comment

Enclosure 6: Virgil C Summer Nuclear Station Units 2 & 3 – Supplement to License
Amendment Request Regarding Changes to the CVS: Revised Page 16
of 40 of Enclosure 3

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South Carolina Electric & Gas Company

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Enclosure 4

Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3

**Supplement to License Amendment Request Regarding Changes to the CVS:
Corrected Page 23 of 40 of Enclosure 3
(LAR 13-07 S1)**

Note:

**Enclosures 1 through 3 were provided with the original submittal of
LAR 13-07 by South Carolina Electric & Gas Company (Reference 1)**

UFSAR Table 3.11-1 (Sheet 19 of 51)
Environmentally Qualified Electrical and Mechanical Equipment

| Description | AP1000 Tag No. | Envir. Zone (Note 2) | Function (Note 1) | Operating Time Required (Note 5) | Qualification Program (Note 6) |
|---|----------------------|----------------------------|----------------------|---|--------------------------------------|
| Makeup Line Containment Isolation | CVS-PL-V091 | 1 | ESF | 5 min | M * |
| Limit Switch | CVS-PL-V091-L | 1 | PAMS | 1 yr | E * |
| Motor Operator | CVS-PL-V091-M | 1 | ESF | 5 min | E * |
| Hydrogen Addition <u>Zinc Injection</u> Containment Isolation | CVS-PL-V092 | 10 | ESF | 5 min | M * |
| Limit Switch | CVS-PL-V092-L | 10 | PAMS | 2 wks | E * |
| Solenoid Valve | CVS-PL-V092-S | 10 | ESF | 5 min | E * |
| Hydrogen Addition <u>Zinc Injection</u> Containment Isolation <u>IRC</u> | CVS-PL-V094 | 1 | ESF | 5 min | M * |
| <u>Limit Switch</u> | <u>CVS-PL-V094-L</u> | <u>1</u> | <u>PAMS</u> | <u>1 yr</u> | <u>E*</u> |
| <u>Solenoid Valve</u> | <u>CVS-PL-V094-S</u> | <u>1</u> | <u>ESF</u> | <u>5 min</u> | <u>E*</u> |
| <u>Zinc</u> Hydrogen Addition Line <u>Injection Containment</u> <u>Isolation Thermal</u> <u>Overpressurization</u> <u>Relief Valve</u> | <u>CVS-PL-V098</u> | <u>1</u> | <u>ESF</u> | <u>24 hrs</u> | <u>M*</u> |
| Makeup Containment Isolation | CVS-PL-V100 | 1 | ESF | 24 hrs | M * |
| *** | | | | | |
| Demineralized Water System Isolation | CVS-PL-V136B | 7 | ESF | 5 min | M ** |
| Limit Switch | CVS-PL-V136B-L | 7 | PAMS | 2 wks | E ** |
| Solenoid Valve | CVS-PL-V136B-S | 7 | ESF | 5 min | E ** |
| <u>Hydrogen Injection Cont Isolation</u> <u>Check IRC</u> | <u>CVS-PL-V217</u> | <u>1</u> | <u>PB</u> | <u>1 yr</u> | <u>M</u> |
| <u>Hydrogen Injection Containment</u> <u>Isolation</u> | <u>CVS-PL-V219</u> | <u>10</u> | <u>ESF</u> | <u>5 min</u> | <u>M*</u> |
| <u>Limit Switch</u> | <u>CVS-PL-V219-L</u> | <u>10</u> | <u>PAMS</u> | <u>2 wks</u> | <u>E*</u> |
| <u>Solenoid Valve</u> | <u>CVS-PL-V219-S</u> | <u>10</u> | <u>ESF</u> | <u>5 min</u> | <u>E*</u> |
| Demin Water Supply Containment Isolation – Inside | DWS-PL-V245 | 1 | PB | 1 yr | M * |
| *** | | | | | |
| Fire Water Containment Supply Isolation – Inside | FPS-PL-V052 | 1 | PB | 1 yr | M * |

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Enclosure 5

Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3

**Supplement to License Amendment Request Regarding Changes to the CVS:
Response to May 9, 2013 Public Conference Call NRC Comment
(LAR 13-07 S1)**

Note:

**Enclosures 1 through 3 were provided with the original submittal of
LAR 13-07 by South Carolina Electric & Gas Company (Reference 1)**

On March 13, 2013, South Carolina Electric & Gas Company (SCE&G) requested an amendment to the combined licenses (COLs) for Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3 (License Nos. NFP-93 and NFP-94, respectively) (Reference 1). The license amendment request (LAR-13-07) proposed departures to change the Chemical and Volume Control System (CVS) design. This enclosure summarizes a comment provided by NRC staff in a public conference call on May 9, 2013 and provides the SNC response to the comment provided in a letter dated June 11, 2013 (Reference 2) as well as the associated SCE&G response.

NRC Comment

Vogtle LAR 13-002 proposes to modify UFSAR Table 3.9-16, "Valve Inservice Test Requirements," to include CVS-PL-V067, "Makeup Return Line Bypass Check Valve." The modified table specifies this check valve as an ASME OM Code Category C valve. The modified table includes leak testing provisions for this check valve. The NRC staff requests the licensee to justify the basis for not specifying this check valve as a Category AC valve.

SNC Response (See Reference 2):

SNC has determined that CVS-PL-V067, "Makeup Return Line Bypass Check Valve" should be classified as an ASME OM Code Category AC valve. Accordingly, SNC proposes to change the ASME Class / IST Category column entry of UFSAR Table 3.9-16, "Valve Inservice Test Requirements," for CVS-PL-V067 from Category A to Category AC. A revised mark-up of Table 3.9-16 is provided in Enclosure 6.

SNC also determined that this change does not affect any text of the UFSAR.

SCE&G Response

SCE&G has also determined that CVS-PL-V067, "Makeup Return Line Bypass Check Valve" should be classified as an ASME OM Code Category AC valve. As such, the appropriate revision to the UFSAR Table 3.9-16 Markup previously provided in Reference 1 has been provided in Enclosure 6.

South Carolina Electric & Gas Company

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Enclosure 6

Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3

**Supplement to License Amendment Request Regarding Changes to the CVS:
Revised Page 16 of 40 of Enclosure 3
(LAR 13-07 S1)**

Note:

**Enclosures 1 through 3 were provided with the original submittal of
LAR 13-07 by South Carolina Electric & Gas Company (Reference 1)**

UFSAR Table 3.9-16 (Sheet 2 of 26)
Valve Inservice Test Requirements

| Valve Tag Number | Description ⁽¹⁾ | Valve/Actuator Type | Safety-Related Missions | Safety Functions ⁽²⁾ | ASME Class/IST Category | Inservice Testing Type and Frequency | IST Notes |
|-----------------------------|---|-----------------------|---|---|--|--|-----------------------|
| CVS-PL-V001 | RCS Purification Stop | Remote MO GATE | Maintain Close Transfer Close | Active Safety Seat Leakage Remote Position | Class 1 Category B | Remote Position Indication, Exercise/2 Years RCS Isolation Leak Test/Refueling Exercise Full Stroke/Cold Shutdown Operability Test | 6, 31, 32 |
| CVS-PL-V002 | RCS Purification Stop | Remote MO GATE | Maintain Close Transfer Close | Active Safety Seat Leakage Remote Position | Class 1 Category B | Remote Position Indication, Exercise/2 Years RCS Isolation Leak Test/Refueling Exercise Full Stroke/Cold Shutdown Operability Test | 6, 31, 32 |
| *** | | | | | | | |
| CVS-PL-V041 | Resin Flush ORC Isolation | Manual | Maintain Close | Containment Isolation Safety Seat Leakage | Class 2 Category A | Containment Isolation Leak Test | 27 |
| CVS-PL-V042 | Flush Line Containment Isolation Relief | Relief | Maintain Close Transfer Open Transfer Close | Active Containment Isolation Safety Seat Leakage | Class 2 Category AC | Containment Isolation Leak Test Class 2/3 Relief Valve Tests/10 Years and 20% in 4 Years | 27 |
| CVS-PL-V045 | Letdown Containment Isolation IRC | Remote AO GLOBE | Maintain Close Transfer Close | Active-to-Failed Containment Isolation Safety Seat Leakage Remote Position | Class 2 Category A | Remote Position Indication, Exercise/2 Years Containment Isolation Leak Test Exercise Full Stroke/Quarterly Failsafe Test/Quarterly Operability Test | 27, 31 |
| CVS-PL-V047 | Letdown Containment Isolation ORC | Remote AO GLOBE | Maintain Close Transfer Close | Active-to-Failed Containment Isolation Safety Seat Leakage Remote Position | Class 2 Category A | Remote Position Indication, Exercise/2 Years Containment Isolation Leak Test Exercise Full Stroke/Quarterly Failsafe Test/Quarterly Operability Test | 27, 31 |
| CVS-PL-V058 | Letdown Line Containment Isolation Relief | Relief | Maintain Close Transfer Open Transfer Close | Active Containment Isolation Safety Seat Leakage | AC | Containment Isolation Leak Test Class 2/3 Relief Valve Tests/ 10 Years and 20% in 4 years | 27 |
| CVS-PL-V067 | Makeup Return Line Bypass Check Valve | Check | Maintain Close Transfer Open Transfer Close | Active Safety Seat Leakage | Class 1 Category AC | Check Exercise/Cold Shutdown RCS Isolation Leak Test/Refueling | 6, 32 |
| CVS-PL-V080 | RCS Purification Return Line Check Valve | Check | Maintain Close Transfer Close | Active Safety Seat Leakage | Class 3 Category C | Check Exercise/Cold Shutdown RCS Isolation Leak Test/Refueling | 6, 32 |