



**Ronald A. Jones**  
Vice President  
New Nuclear Operations

October 22, 2015  
NND-15-0590  
10 CFR 50.90

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

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

Subject: Request for License Amendment: Proposed Revision to Technical Specifications (TS) Section 5.0 Regarding Shift Supervisor Title Change (LAR 15-19)

In accordance with the provisions of 10 CFR 50.90, South Carolina Electric & Gas Company (SCE&G), the licensee for Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3, hereby requests an amendment to the combined licenses (COLs) for VCSNS Units 2 and 3, COL Numbers NPF-93 and NPF-94, respectively.

The proposed amendment will change Technical Specifications (TS) Section 5.0, "Administrative Controls" by revising the Shift Supervisor title to Shift Manager. The bases and evaluation for the proposed changes are included as Enclosure 1. The proposed changes to TS Section 5.0 are included in Enclosure 2.

This letter contains no regulatory commitments.

SCE&G requests staff approval of the license amendment and exemption by October 15, 2016. SCE&G expects to implement the proposed amendment within 30 days of approval of the requested changes.

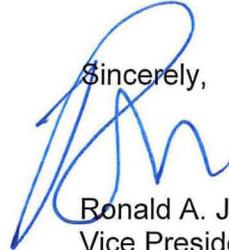
In accordance with 10 CFR 50.91, SCE&G is notifying the State of South Carolina of this LAR by transmitting a copy of this letter and enclosures to the designated State Official.

Should you have any questions, please contact April Rice by telephone at (803) 941-9858, or by email at [arice@scana.com](mailto:arice@scana.com).

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

Executed on this 22<sup>ND</sup> day of October, 2015.

Sincerely,



Ronald A. Jones  
Vice President  
New Nuclear Operations

BB/RAJ/bb

Enclosures:

Enclosure 1: Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3 - Evaluation of the Proposed Revision to Technical Specifications (TS) Section 5.0 - (LAR 15-19)

Enclosure 2: Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3 - Licensing Basis Documents - Proposed Changes Regarding Revision to Technical Specifications (TS) Section 5.0 - (LAR 15-19)

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**South Carolina Electric & Gas Company**

**NND-15-0590**

**Enclosure 1**

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

**Evaluation of the Proposed Revision to Technical Specifications (TS) Section 5.0  
(LAR 15-19)**

**(Enclosure 1 consists of 9 pages, including this cover page)**

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Pursuant to 10 CFR 50.90, South Carolina Electric & Gas Company (SCE&G) hereby requests an amendment to Combined License (COL) Nos. NPF-93 and NPF-94 for Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3, respectively. This evaluation supports a request to amend COL Appendix A, Technical Specifications (TS) Section 5.0, "Administrative Controls" by revising the "Shift Supervisor" title to "Shift Manager".

## 1. Summary Description

These proposed changes are to be implemented based on recommendations from Institute of Nuclear Power Operations (INPO) within Significant Operating Experience Report (SOER) 96-1, Control Room Supervision Operational Decision-Making and Teamwork dated September 27, 1996 and ACAD 97-004, Guidelines for Shift Manager Selection, Training and Qualification, and Professional Development dated April 1997. The requested change is administrative in nature and will not alter the qualifications, functions, responsibilities or authorizations previously established by 10 CFR 50.36, 10 CFR 50.54 and 10 CFR 55. The proposed change to the Shift Supervisor title in TS Section 5.0 is similar to VCSNS Unit 1 license amendment request 14-02981 dated July 22, 2015 (Reference 16) currently under review by NRC.

## 2. Detailed Description

This amendment request is to revise TS section 5.0, "Administrative Controls," for the generic position title Shift Supervisor to Shift Manager. Specifically, the title of Shift Supervisor is proposed to be changed to Shift Manager in TS Sections 5.1.2 and 5.7.2. This change has been recommended by INPO within SOER 96-1 dated September 27, 1996. The SOER discusses events caused by deficiencies in supervisory oversight, reactivity control, teamwork, and crew decision-making. Observations of control room operating crews showed that performance is affected by the leadership of the Shift Supervisor and Control Room Supervisor. The individuals filling the roles of supervisors must function as team leaders and maintain close oversight of control room activities to detect errors or lapses in judgment or a breakdown in role responsibilities by other crew members. The supervisors must remain fully involved in all control room evolutions and be prepared to assert their authority for command and control whenever high standards are not being maintained. The change in position title Shift Supervisor to Shift Manager is intended to integrate the senior licensed shift crew member into the plant management team.

As a member of station management, the Shift Supervisor is central to the operating organization's ability to safely operate the station and meet the demands of the operations mission in accordance with station management's expectations. Shift Supervisors fully integrated into the management team are better able to internalize the station's goals, articulate those goals to their operating crews, and ensure all on-shift operations and support personnel work toward achieving those goals. The Shift Supervisor's management role is to facilitate and champion the practical application of the principles of safe and reliable station operation while holding operations and support personnel accountable to the high standards of performance expected by station management. The change in generic title to Shift Manager is still representative for the title of the senior licensed shift crew member. This proposed change reflects the practice adopted by several licensees to emphasize the scope and significance of the responsibilities for this position.

### 3. Technical Evaluation

Organizational structure and the conduct of operations of VCSNS Units 2 and 3 are discussed in the Updated Final Safety Analysis Report (UFSAR) Chapter 13. The Shift Supervisor is directly responsible for the safe and efficient operation of the plant. As described in UFSAR Section 13.1.2.1.1.3.2.1, the Shift Supervisor is a licensed Senior Reactor Operator (SRO) responsible for the control room command function, and is the General Manager Nuclear Plant Operations direct management representative for the conduct of operations.

The Shift Supervisor has the responsibility and authority to direct the activities and personnel onsite as required to:

- Protect the health and safety of the public, the environment, and personnel on the plant site.
- Protect the physical security of the plant.
- Prevent damage to site equipment and structures.
- Comply with the operating license.

The shift supervisor retains this responsibility and authority until formally relieved of operating responsibilities by a licensed SRO. Additional responsibilities of the shift supervisor include:

- Directing nuclear plant employees to report to the plant for response to potential and real emergencies.
- Seeking the advice and guidance of the shift technical advisor and others in executing the duties of the shift supervisor whenever in doubt as to the proper course of action.
- Promptly informing responsible supervisors of significant actions affecting their responsibilities.

The proposed title change from Shift Supervisor to Shift Manager does not alter any of these responsibilities described in UFSAR Chapter 13.

The Minimum On-Duty Operations Shift Organization for VCSNS Units 2 and 3 is described in UFSAR Table 13.1-202:

<b>Units Operating</b>	<b>Two Units Two Control Rooms</b>
All Units Shutdown	1 shift supervisor (SRO) 2 RO 3 nonlicensed operator
One Unit Operating	1 shift supervisor (SRO) 1 SRO 3 RO 3 nonlicensed operator
Two Units Operating	1 shift supervisor (SRO) 2 SRO 4 RO 4 nonlicensed operator

In addition, one Shift Technical Advisor (STA) is assigned per shift during plant operation. A Shift Supervisor or another SRO on shift, who meets the qualifications as specified for option 1 of Generic Letter 86-04, may also serve as the STA. A Shift Supervisor shall be on site at all times when at least one unit is loaded with fuel. The proposed title change from Shift Supervisor to Shift Manager does not alter any of the minimum on-duty operations shift organization requirements in UFSAR Chapter 13, and does not reduce any commitment made in the VCSNS Units 2 and 3 licensing basis.

UFSAR section 13.1.3.1 provides a general discussion of the qualification requirements for nuclear plant personnel. VCSNS Units 2 and 3 is committed to Regulatory Guide (RG) 1.8, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants" Revision 3, which endorses ANSI/ANS-3.1-1993 with certain clarifications, additions, and exceptions. Section 2.8 within RG 1.8 refers to one of those exceptions to Section 4.4.1 of ANSI/ANS-3.1-1993, and uses the generic title of "Shift Supervisor". The proposed title change from Shift Supervisor to Shift Manager is considered an administrative change. There are no impacts to any of the qualification requirements committed to in the license, and regulatory compliance with RG 1.8 will continue to be maintained.

For Reactor Operators, Senior Reactor Operators, fuel handlers, fire protection personnel, and positions specified in 10 CFR 50.120, programs are developed, established, implemented and maintained using a systems (or systematic) approach to training (SAT) as defined by 10 CFR 55.4 and ANSI/ANS-3.1-1993 as endorsed RG 1.8. The title of Shift Supervisor is categorized within 10 CFR 50.120 but is not defined. NUREG-0578 makes a reference to the Shift Supervisor's command function or position as that of a "manager" or "commander" of shift operations and the latest draft revision of the Standard Review Plan Chapter 13.1.2 (Draft Revision 7) section 3.C.iii uses the title interchangeably with Shift Manager.

SCE&G is committed to NQA-1-1994, Parts I, II, and III. The Shift Supervisor position is discussed within various types of procedures used by SCE&G to govern the design, operation, and maintenance of its nuclear generating plants. SCE&G follows the guidance of Appendix A to Regulatory Guide 1.33 Revision 2 in identifying the types of activities that should have procedures or instructions to control the activity. The proposed change for this amendment impacts the title only and, therefore, the change will not alter the qualifications, functions, responsibilities or authorizations previously established.

This proposed change will not lower the safety or effectiveness of the organization. The title change from Shift Supervisor to Shift Manager does not change the intent of the Technical Specifications or the qualifications, functions, responsibilities and authorizations previously established by 10 CFR 50.36, 10 CFR 50.54 and 10 CFR 55. This proposed change reflects the practice adopted by several licensees to emphasize the scope and significance of the responsibilities for this position.

## 4. Regulatory Evaluation

### 4.1 Applicable Regulatory Requirements/Criteria

10 CFR 50.34

(b)(6)(i) requires that the FSAR for a license to operate a nuclear power plant include information concerning the organizational structure, personnel qualifications, and related matters.

10 CFR 50.36

(c)(5) requires administrative controls related to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner to be in the Technical Specifications. The details of the organization and management that are required to be in the Technical Specifications were delineated in Generic Letter (GL) 88-06, "Removal of Organization Charts From Technical Specifications Administrative Control Requirements," dated March 22, 1988. These details included the "Designation of those positions in the onsite organization that require a senior reactor operator (SRO) or reactor operator (RO) license."

10 CFR 50.54

(l) The licensee shall designate individuals to be responsible for directing the licensed activities of licensed operators. These individuals shall be licensed as senior operators pursuant to part 55 of this chapter.

10 CFR 55.4 Definitions

Senior operator means any individual licensed under this part to manipulate the controls of a facility and to direct the licensed activities of licensed operators.

SRP-800 Chapter 13.1.2 (Draft Revision 7)

3.C.iii operating Shift Supervisors/managers.

NUREG-0578

"TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations," section 2.2 "Operations."

NUREG-0737 and Supplement 1,

"Clarification of TMI Action Plan Requirements," Items I.A.1.1, "Shift Technical Advisor," and I.A.1.3, "Shift Manning."

NUREG-1791

"Guidance for Assessing Exemption Requests from the Nuclear Power Plant Licensed Operator Staffing Requirements Specified in 10 CFR 50.54(m)".

### 4.2 Precedent

- 4.2.1** Letter from K. Young (Calloway Plant) to Document Control Desk (NRC), "Proposed Revision to Technical Specification 5.0 'Administrative Controls'"

(License Amendment Request OL 1267),” dated March 28, 2006 [ML061020060]. Calloway received their SER on July 11, 2006 [ML061250207]. The changes proposed within the Calloway submittal are similar in the change in title for the Shift Supervisor to Shift Manager.

### **4.3 Significant Hazards Consideration Determination**

#### **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 changes to the Technical Specifications regarding the Shift Supervisor to Shift Manager title are administrative changes. It has no impact on accident initiators or plant equipment and thus does not affect the probability or consequences of an accident.

#### **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 change does not involve a change to the design of the physical plant or operations. This is an administrative title change that does not contribute to accident initiation. Therefore, it does not produce a new accident scenario or produce a new type of equipment malfunction.

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

Response: No

Since the change is administrative and changes no previously evaluated accidents or creates no possibility for any new unevaluated accidents to occur, there is no reduction in the margin of safety. This change also does not affect plant equipment or operation and therefore does not affect safety limits or limiting safety systems settings.

### **4.4 Conclusions**

Based on the above, SCE&G concludes that the proposed amendment presents no 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.

## 5. Environmental Considerations

SCE&G has determined that this proposed amendment involves no significant hazardous considerations and no significant change in the types of any effluents that may be released off-site and that there is no significant rise in individual or cumulative occupational radiation exposure. Accordingly, this proposed 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 environment assessment need be prepared in connection with this amendment.

## 6. References

1. 10 CFR 50.36, Technical Specifications
2. 10 CFR 50.54, Conditions of Licenses
3. 10 CFR 55.4, Definitions
4. ACAD 97-004 Guidelines for Shift Manager Selection, Training and Qualification, and Professional Development
5. Callaway Plant ULNRC-05267, Proposed Revision to Technical Specification 5.0, "Administrative Controls" (License Amendment Request OL 1267)
6. Generic Letter 88-06, Removal of Organization Charts from Technical Specification Administrative Control Requirements
7. NUREG 0578, TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations
8. NUREG-0800 13.1.2-13.1.3, Standard Review Plan, Operating Organization
9. NUREG 1431, Section 5.0, "Administrative Controls"
10. Regulatory Guide 1.8, Qualification and Training of Personnel for Nuclear Power Plants
11. Regulatory Guide 1.33, Quality Assurance Program Requirements
12. Regulatory Guide 1.114, Guidance to Operators at the Controls and to Senior Operators in the Control Room of a Nuclear Power Unit
13. SOER 96-1, Control Room Supervision, Operational Decision-Making, and Teamwork
14. TSTF-65-A, Improved Standard Technical Specifications Change Traveler
15. WANO OP.1-1, 2014 WANO Area for Improvement

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Enclosure 1

LAR 15-19: Proposed Revision to Technical Specifications (TS) Section 5.0

16. Letter from Thomas D. Gatlin (VC Summer Unit 1) to Document Control Desk (NRC), License Amendment Request LAR 14-02981, Proposed Revision to Technical Specification 6.0, "Administrative Controls", dated July 22, 2015 [ML15205A291].

**South Carolina Electric & Gas Company**

**NND-15-0590**

**Enclosure 2**

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

**Licensing Basis Documents - Proposed Changes  
Regarding Revision to Technical Specifications (TS) Section 5.0  
(LAR 15-19)**

**(Enclosure 2 consist of 3 pages, including this cover page)**

## 5.0 ADMINISTRATIVE CONTROLS

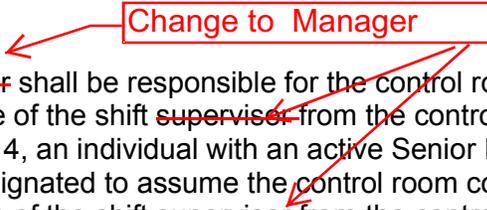
### 5.1 Responsibility

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5.1.1 The Plant Manager shall be responsible for overall unit operations and shall delegate in writing the succession to this responsibility during his absence.

The Plant Manager or his designee shall approve, prior to implementation, each proposed test, experiment or modification to systems or equipment that affect nuclear safety.

Change to Manager



5.1.2 The Shift ~~Supervisor~~ shall be responsible for the control room command function. During any absence of the shift ~~supervisor~~ from the control room while the unit is in MODE 1, 2, 3, or 4, an individual with an active Senior Reactor Operator (SRO) license shall be designated to assume the control room command function. During any absence of the shift ~~supervisor~~ from the control room while the unit is in MODE 5 or 6, an individual with an active SRO license or reactor operator license shall be designated to assume the control room command function.

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## 5.7 High Radiation Area

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### 5.7.1 High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation (continued)

4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,
  - (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or
  - (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with individuals in the area who are covered by such surveillance.
- e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel will receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

### 5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation, but less than 500 rads/hour at 1 Meter from the Radiation Source or from any Surface Penetrated by the Radiation

- a. Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:
  1. All such door and gate keys shall be maintained under the administrative control of the shift ~~supervisor~~, radiation protection manager, or his or her designees, and
  2. Doors and gates shall remain locked except during periods of personnel or equipment entry or exit.

Change to Manager