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March 2, 2009  
RC-09-0012



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

ATTN: R. E. Martin

Dear Sir / Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS)  
DOCKET NO. 50/395  
OPERATING LICENSE NO. NPF-12  
LICENSE AMENDMENT REQUEST - LAR 08-01332  
LICENSE AMENDMENT REQUEST FOR ADOPTION OF TSTF-511, REV. 0,  
"ELIMINATE WORKING HOUR RESTRICTIONS FROM TS 5.2.2 TO SUPPORT  
COMPLIANCE WITH 10 CFR 26."

In accordance with the provisions of Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR), SCE&G is submitting a request for an amendment to the Technical Specifications (TS) for VCSNS, UNIT 1.

The proposed amendment would delete those portions of TS superseded by 10 CFR Part 26, Subpart I. This change is consistent with NRC approved Revision 0 to Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-511, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26." The specific section to be deleted in the VCSNS Technical Specifications is TS 6.2.2.e. The availability of this TS improvement was announced in the **Federal Register** on December 30, 2008 (73 FR 79923) as part of the consolidated line item improvement process (CLIIIP).

Attachment I provides an evaluation of the proposed change. Attachment II provides the existing TS pages marked up to show the proposed change. Attachment III provides the proposed TS changes in final typed format. Attachment IV provides the regulatory commitment.

SCE&G requests approval of the proposed license amendment by July 1, 2009, to support implementation of TS changes concurrent with implementation of the new 10 CFR 26, Subpart I requirements by October 1, 2009.

This letter contains one regulatory commitment as identified in Attachment IV.

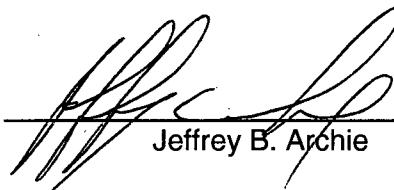
In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated South Carolina Official.

This proposed change has been reviewed and approved by both the Plant Safety Review Committee and the Nuclear Safety Review Committee.

If you should have any questions regarding this submittal, please contact Mr. Bruce L. Thompson at (803) 931-5042.

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

3/2/09  
Executed on \_\_\_\_\_

  
Jeffrey B. Archie

JHW/JBA/dr

Attachments: (4)

- I Evaluation of Proposed Change
- II Proposed Technical Specification Change (Mark-Up)
- III Proposed Technical Specification Change (Re-Typed)
- IV List of Regulatory Commitments

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Attachment I

LAR 08-01332

RC-09-0012

Page 1 of 5

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**ATTACHMENT I**

**EVALUATION OF PROPOSED CHANGE**

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## **1.0 Description**

The proposed amendment would delete those portions of TS superseded by 10 CFR Part 26, Subpart I. This change is consistent with NRC approved Revision 0 to Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-511, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26." Minor differences between the proposed plant specific TS changes, and the changes proposed by TSTF-511 are listed in section 2.0. The availability of this TS improvement was announced in the **Federal Register** on December 30, 2008 (73 FR 79923) as part of the consolidated line item improvement process (CLIIP).

## **2.0 Proposed Changes**

Consistent with the NRC approved Revision 0 of TSTF-511, the proposed TS changes delete those portions of TS superseded by 10 CFR Part 26, Subpart I. This application is being made in accordance with the CLIIP. SCE&G is proposing one variation or deviation from the TS changes described in TSTF-511, Revision 0, or the NRC staff's model safety evaluation (SE) published on December 30, 2008 (73 FR 79923) as part of the CLIIP Notice of Availability. VCSNS TS working hour restrictions to be deleted are located in paragraph e. of TS 6.2.2 vice TS 5.2.2. This deviation has no impact on the NRC staff's model SE.

## **3.0 Background**

The NRC issued a **Federal Register** notice (73 FR 16966, March 31, 2008) of the issuance of a final rule that amended 10 CFR Part 26. The revised regulations in 10 CFR Part 26, Subpart I supersede working hour restrictions contained in paragraph e. of TS 6.2.2. The background for this application is adequately addressed by the NRC Notice of Availability published on December 30, 2008 (73 FR 79923).

## **4.0 Technical Analysis**

SCE&G has reviewed the SE published on December 30, 2008 (73 FR 79923) as part of the CLIIP Notice of Availability. SCE&G has concluded that the technical justifications presented in the SE prepared by the NRC staff are applicable to VCSNS, UNIT 1.

10 CFR Part 26, Subpart I, supersedes existing worker fatigue guidance. 10 CFR Part 26, Subpart I, distinguishes between work hour controls and fatigue management and strengthens the requirements for both. Under the new rule, work hour restrictions include not only work hour limitations for rolling 24-hour, 48-hour, and 7-day periods, but also include a required minimum break between work periods and varying required minimum days off. Additionally, Subpart I confines the use of waivers (deviations from restrictions) to situations where overtime is necessary to mitigate or prevent a condition adverse to safety or necessary to maintain the security of the facility. Subpart I also strengthens reporting requirements. Finally, the new rule's work hour control scope includes certain operating and maintenance personnel, as well as individuals directing those operating and maintenance personnel, health physics and chemistry personnel who are a part of the on-site emergency response organization minimum shift complement, the fire brigade member who is responsible for understanding the effects of fire and fire suppressants on safe shutdown capability, and certain security personnel.

The proposed change removes working hour limits imposed in the Technical Specifications in order to support compliance with 10 CFR Part 26, Subpart I. Work hour controls and fatigue management requirements have been incorporated into the NRC's regulations; therefore, it is unnecessary to have work hour control requirements in the Technical Specifications.

Removal of the Technical Specification requirements will be performed concurrently with the implementation of the 10 CFR Part 26, Subpart I, requirements, even if the Technical Specification change is implemented prior to the October 1, 2009 deadline. Along with this LAR, SCE&G has submitted a commitment to comply with 10 CFR Part 26 concurrently with the implementation of the Technical Specification change.

## **5.0 Regulatory Analysis**

### **5.1 No Significant Hazards Consideration**

SCE&G has reviewed the no significant hazards determination published on December 30, 2008 (73 FR 79923) as part of the CLIIP Notice of Availability. SCE&G has concluded that the determination presented in the notice is applicable to VCSNS, UNIT 1. SCE&G has evaluated the proposed changes to the TS using the criteria in 10 CFR 50.92 and has determined that the proposed changes do not involve a significant hazards consideration. An analysis of the issue of no significant hazards consideration is presented below:

#### **Criterion 1: The Proposed Change Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated**

The proposed change removes Technical Specification restrictions on working hours for personnel who perform safety related functions. The Technical Specification restrictions are superseded by the worker fatigue requirements in 10 CFR Part 26. Removal of the Technical Specification requirements will be performed concurrently with the implementation of the 10 CFR Part 26, Subpart I, requirements. The proposed change does not impact the physical configuration or function of plant structures, systems, or components (SSCs) or the manner in which SSCs are operated, maintained, modified, tested, or inspected. Worker fatigue is not an initiator of any accident previously evaluated. Worker fatigue is not an assumption in the consequence mitigation of any accident previously evaluated.

Therefore, it is concluded that this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

#### **Criterion 2: The Proposed Change Does Not Create the Possibility of a New or Different Kind of Accident From Any Accident Previously Evaluated**

The proposed change removes Technical Specification restrictions on working hours for personnel who perform safety related functions. The Technical Specification restrictions are superseded by the worker fatigue requirements in 10 CFR Part 26. Working hours will continue to be controlled in accordance with NRC requirements. The new rule allows for deviations from controls to mitigate or prevent a condition adverse to safety or as necessary to maintain the security of the facility. This ensures that the new rule will not unnecessarily restrict working hours and thereby create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change does not alter the plant configuration, require new plant equipment to be installed, alter accident analysis assumptions, add any initiators, or affect the function of plant systems or the manner in which systems are operated, maintained, modified, tested, or inspected.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

#### Criterion 3: The Proposed Change Does Not Involve a Significant Reduction in a Margin of Safety

The proposed change removes Technical Specification restrictions on working hours for personnel who perform safety related functions. The Technical Specification restrictions are superseded by the worker fatigue requirements in 10 CFR Part 26. The proposed change does not involve any physical changes to the plant or alter the manner in which plant systems are operated, maintained, modified, tested, or inspected. The proposed change does not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The safety analysis acceptance criteria are not affected by this change. The proposed change will not result in plant operation in a configuration outside the design basis. The proposed change does not adversely affect systems that respond to safely shutdown the plant and to maintain the plant in a safe shutdown condition.

Removal of plant-specific Technical Specification administrative requirements will not reduce a margin of safety because the requirements in 10 CFR Part 26 are adequate to ensure that worker fatigue is managed.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, SCE&G concludes that the proposed change 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.

#### 5.2 Applicable Regulatory Requirements/Criteria

A description of the proposed TS change and its relationship to applicable regulatory requirements was provided in the NRC Notice of Availability published on December 30, 2008 (73 FR 79923). SCE&G has reviewed the NRC staff's model SE published on December 30, 2008 (73 FR 79923) as part of the CLIIP Notice of Availability and concluded that the regulatory evaluation section is applicable to VCSNS, UNIT 1.

The proposed change eliminates the plant-specific Technical Specification administrative controls on working hours. The Technical Specification guidance has been superseded by 10 CFR Part 26.

10 CFR Part 26, Subpart I, "Managing Fatigue," contains requirements for managing worker fatigue at operating nuclear power plants.

10 CFR 50.36 provides, among other things, the regulatory requirements for the content in the Administrative Controls section of the Technical Specifications. The inclusion of requirements to control working hours and manage fatigue is not required to be in the Administrative Controls by 10 CFR Part 50.36. Because the requirement to control working hours and manage fatigue is provided in 10 CFR Part 26, Subpart I, it is unnecessary for the Technical Specifications to contain similar controls.

## **6.0 Environmental Consideration**

SCE&G has reviewed the environmental evaluation included in the safety evaluation (SE) published on December 30, 2008 (73 FR 79923) as part of the CLIIP Notice of Availability. SCE&G has concluded that the staff's findings presented in that evaluation are applicable to VCSNS, UNIT 1. The proposed amendment changes recordkeeping, reporting, or administrative procedures. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## **7.0 References**

1. **Federal Register** Notice, Final Rule 10 CFR Part 26 published on March 31, 2008.
2. TSTF-511, Revision 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26."
3. **Federal Register** Notice, Notice of Availability published on December 30, 2008 (73 FR 79923)

Document Control Desk

Attachment II

LAR 08-01332

RC-09-0012

Page 1 of 2

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**ATTACHMENT II**

**PROPOSED TECHNICAL SPECIFICATION CHANGE (MARK-UP)**

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## ADMINISTRATIVE CONTROLS

- b. At least one licensed Reactor Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3 or 4, at least one Licensed Senior Reactor Operator shall be in the Control Room.
- c. A health physics technician<sup>#</sup> shall be on site when fuel is in the reactor.
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- e. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g., senior reactor operators, reactor operators, health physicists, auxiliary operators, and key maintenance personnel.

*Delete  
6.2.2.e*

Adequate shift coverage shall be maintained without routine heavy use of overtime. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance or major plant modifications, on a temporary basis, the following guidelines shall be followed:

- a. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.
- b. An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any seven day period, all excluding shift turnover time.
- c. A break of at least eight hours should be allowed between work periods, including shift turnover time.
- d. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the General Manager, Nuclear Plant Operations, or his deputy, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Except during extended shutdown periods, controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the General Manager, Nuclear Plant Operations, or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

<sup>#</sup>The health physics technician composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

Document Control Desk  
Attachment III  
LAR 08-01332  
RC-09-0012  
Page 1 of 2

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**ATTACHMENT III**

**PROPOSED TECHNICAL SPECIFICATION CHANGE (RE-TYPED)**

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## ADMINISTRATIVE CONTROLS

- b. At least one licensed Reactor Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3 or 4, at least one Licensed Senior Reactor Operator shall be in the Control Room.
- c. A health physics technician<sup>#</sup> shall be on site when fuel is in the reactor.
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- e. Deleted.

<sup>#</sup> The health physics technician composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

Document Control Desk  
Attachment IV  
LAR 08-01332  
RC-09-0012  
Page 1 of 1

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**ATTACHMENT IV**

**LIST OF REGULATORY COMMITMENTS**

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Removal of the plant-specific TS requirements will be performed concurrently with the implementation of the 10 CFR Part 26, Subpart I requirements. This commitment will be completed no later than October 1, 2009.