



November 10, 2000
RC-00-0351

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

Attention: Ms. K. R. Cotton

Gentlemen:

Stephen A. Byrne
Vice President
Nuclear Operations
803.345.4622

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
TECHNICAL SPECIFICATION CHANGE REQUEST - TSP 00-0256
A. C. SOURCES - Revising The Fuel Storage System Volume

South Carolina Electric & Gas Company (SCE&G), acting for itself and as agent for South Carolina Public Service Authority, hereby requests an amendment to the Virgil C. Summer Nuclear Station (VCSNS) Technical Specifications (TS). This request is being submitted pursuant to 10 CFR 50.90.

South Carolina Electric & Gas Co.
Virgil C. Summer Nuclear Station
P. O. Box 88
Jenkinsville, South Carolina
29065

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803.635.1461

The proposed changes will revise the minimum volume requirements for the Emergency Diesel Generator (EDG) fuel storage system located in TS 3.8.1.1 and 3.8.1.2. The TS are being revised to reflect design basis calculation revisions for load requirements following a design basis accident. This change raises the minimum TS fuel oil storage volume to 48,500 gallons for Modes 1-4, raises the minimum TS fuel oil storage volume to 42,500 gallons for Modes 5 and 6, and raises the day fuel tank minimum volume to 360 gallons for Modes 1-6. Additionally, SCE&G is requesting review of a proposed change to the Technical Specification Bases for the minimum required fuel oil storage volume for Modes 1-4. VCSNS would have inadequate operating and testing margin in the EDG Fuel Oil Storage Tank, if the Regulatory Guide 1.137, Revision 1, "Fuel Oil Systems for Standby Diesel Generators," position C.1.c.(2) fuel margin of 10% is applied. SCE&G is requesting an exception to the recommended margin of Regulatory Guide 1.137, Revision 1, to ensure that proper margin exists for normal testing and operation of the EDGs and prudent precautions exist to prevent spillage during tank filling and to allow for thermal expansion. Specifically, SCE&G requests to maintain at least a 2% margin above the seven day requirement for Modes 1-4 instead of the 10% margin specified in Section 5.4 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators."

SCE&G desires approval for this change by December 18, 2000, to preclude delaying entry into Mode 4 upon completion of our current refueling outage (RF-12).

A001

NUCLEAR EXCELLENCE - A SUMMER TRADITION!

The TS change request is contained in the following attachments:

Attachment I	Remove/Insert Page Table Explanation of Changes Summary Marked-up Technical Specification Pages Revised Technical Specification Pages
Attachment II	Safety Evaluation
Attachment III	No Significant Hazards Evaluation

This proposal is similar to the request by Entergy Operations, Inc. for Waterford Steam Generating Station, Unit 3 of March 3, 1999 (TAC NO. MA4940).

This proposed TS amendment request has been reviewed by both the Plant Safety Review Committee and the Nuclear Safety Review Committee.

There are no other TS changes in process that will affect or be affected by this change request.

There are no significant changes to any FSAR or FPER sections. FSAR Sections 8.3.1 and 9.5.4 were reviewed. The FPER was reviewed but was not applicable.

A Plant Enhancement (ECR-50335) is in progress to upgrade the current non nuclear safety cross-tie piping to Safety Class 2b, Seismic Category I and will be completed prior to Mode 4 entry as RF-12 draws to a close. There are no other commitments proposed as a result of this change request.

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

Should you have questions, please call Mr. Michael J. Zaccone at (803) 345-4328.

Very truly yours,


Stephen A. Byrne

MJZ/SAB/dr
Attachments (3)

c: N. O. Lorick
N. S. Carns
T. G. Eppink (w/o Attachment)
R. J. White
L. A. Reyes
NRC Resident Inspector
Paulett Ledbetter
J. B. Knotts, Jr.
T. P. O'Kelley
RTS (TSP 00-0256)
File (813.20)
DMS (RC-00-0351)

STATE OF SOUTH CAROLINA :
 :
COUNTY OF FAIRFIELD :

TO WIT :

I hereby certify that on the 10th day of November 2000 before me, the subscriber, a Notary Public of the State of South Carolina personally appeared Bruce C. Williams, being duly sworn, and states that he has signature authority for the Vice President, Nuclear Operations of the South Carolina Electric & Gas Company, a corporation of the State of South Carolina, that he provides the foregoing response for the purposes therein set forth, that the statements made are true and correct to the best of his knowledge, information, and belief, and that he was authorized to provide the response on behalf of said Corporation.

WITNESS my Hand and Notarial Seal



Notary Public

My Commission Expires

My Commission Expires July 13, 2005

Date



Attachment To License Amendment No. XXX
To Facility Operating License No. NPF-12
Docket No. 50-395

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

<u>Remove Pages</u>	<u>Insert Pages</u>
3/4 8-1	3/4 8-1
3/4 8-8	3/4 8-8
B 3/4 8-1	B 3/4 8-1
B 3/4 8-2	B 3/4 8-2

SCE&G -- EXPLANATION OF CHANGES SUMMARY

<u>Page</u>	<u>Affected Section</u>	<u>Bar #</u>	<u>Description of Change</u>	<u>Reason for Change</u>
3/4 8-1	3.8.1.1	1	Revised 3.8.1.1.b.1 day fuel tank minimum volume to 360 gallons. Revised 3.8.1.1.b.2 fuel storage system minimum volume to 48,500 gallons.	Volume revised due to design basis calculation changes.
3/4 8-8	3.8.1.2	1	Revised 3.8.1.2.b.1 day fuel tank minimum volume to 360 gallons. Revised 3.8.1.2.b.2 fuel storage system minimum volume to 42,500 gallons.	Volume revised due to design basis calculation changes.
B 3/4 8-1	B 3/4.8.1 thru B 3/4.8.3	1	Added revision to basis for Surveillance Requirements to add date of current amendment request	Update TS Bases to reflect NRC review and approval of current amendment request.
B 3/4 8-1	B 3/4.8.1 thru B 3/4.8.3	2	Added revision to basis for 3.8.1.1.b.2 and 3.8.1.2.b.2 fuel storage system minimum volumes.	Volumes revised due to design basis calculation changes and describe exception to the recommended margin of Regulatory Guide 1.137, Revision 1.
B 3/4 8-2	B 3/4.8.1 thru B 3/4.8.3	1	Same as above – continued from previous page.	Continuation of previous page.

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and
- b. Two separate and independent Emergency Diesel Generators (EDG), each with:
 1. A separate day fuel tank containing a minimum volume of ³⁶⁰~~300~~ gallons of fuel,
 2. A separate fuel storage system containing a minimum volume of ^{48,500}~~47,100~~ gallons of fuel, and
 3. A separate fuel transfer pump.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one offsite circuit of 3.8.1.1.a inoperable:
 1. Demonstrate the OPERABILITY of the remaining offsite A.C. sources by performing Surveillance Requirement 4.8.1.1.1 within 1 hour and at least once per 8 hours thereafter, and
 2. If either EDG has not been successfully tested within the past 24 hours, demonstrate its OPERABILITY by performing Surveillance Requirement 4.8.1.1.2.a.3 separately for each such EDG within 24 hours unless the diesel is already operating, and
 3. Restore the offsite circuit to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.
- b. With one EDG of 3.8.1.1.b inoperable:
 1. Demonstrate the OPERABILITY of the A.C. offsite sources by performing Surveillance Requirement 4.8.1.1.1 within 1 hour and at least once per 8 hours thereafter, and
 2. If the EDG became inoperable due to any cause other than preplanned preventive maintenance or testing, demonstrate the OPERABILITY of the remaining EDG by performing Surveillance Requirements 4.8.1.1.2.a.3 within 24 hours*, and

*This test is required to be completed regardless of when the inoperable EDG is restored to OPERABILITY.

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. One circuit between the offsite transmission network and the onsite Class 1E distribution system, and
- b. One diesel generator* with:
 1. A day fuel tank containing a minimum volume of ³⁶⁰~~300~~ gallons of fuel,
 2. A fuel storage system containing a minimum volume of ^{42,500}~~28,200~~ gallons of fuel, and
 3. A fuel transfer pump,

APPLICABILITY: MODES 5 and 6.

ACTION:

With less than the above minimum required A.C. electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS positive reactivity changes, movement of irradiated fuel, or crane operation with loads over the fuel storage pool. In addition, when in MODE 5 with the Reactor Coolant loops not filled, or in MODE 6 with the water level less than 23 feet above the reactor vessel flange, immediately initiate corrective action to restore the required sources to OPERABLE status as soon as possible.

SURVEILLANCE REQUIREMENTS

4.8.1.2 The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the Surveillance Requirements of 4.8.1.1.1 and 4.8.1.1.2 (with the exception of 4.8.1.1.2.a.4).

* ESF load sequencer may be deenergized in Modes 5 and 6 provided that the loss of voltage and degraded voltage relays are disabled.

3/4.8 ELECTRICAL POWER SYSTEMS

BASES

3/4.8.1, 3/4.8.2, AND 3/4.8.3 A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION SYSTEMS

The OPERABILITY of the A.C. and D.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment required for 1) the safe shutdown of the facility and 2) the mitigation and control of accident conditions within the facility. The minimum specified independent and redundant A.C. and D.C. power sources and distribution systems satisfy the requirements of General Design Criterion 17 of Appendix "A" to 10 CFR 50.

The ACTION requirements specified for the levels of degradation of the power sources provide restriction upon continued facility operation commensurate with the level of degradation. The OPERABILITY of the power sources are consistent with the initial condition assumptions of the safety analyses and are based upon maintaining at least one redundant set of onsite A.C. and D.C. power sources and associated distribution systems OPERABLE during accident conditions coincident with an assumed loss of offsite power and single failure of the other onsite A.C. source. The A.C. and D.C. source allowable out-of-service times are based on Regulatory Guide 1.93, "Availability of Electrical Power Sources," December 1974. When one diesel generator is inoperable, there is an additional ACTION requirement to verify that all required systems, subsystems, trains, components and devices, that depend on the remaining OPERABLE diesel generator as a source of emergency power, are also OPERABLE, and that the steam-driven auxiliary feedwater pump is OPERABLE. This requirement is intended to provide assurance that a loss of offsite power event will not result in a complete loss of safety function of critical systems during the period one of the diesel generators is inoperable. The term verify as used in this context means to administratively check by examining logs or other information to determine if certain components are out-of-service for maintenance or other reasons. It does not mean to perform the surveillance requirements needed to demonstrate the OPERABILITY of the component.

The OPERABILITY of the minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that 1) the facility can be maintained in the shutdown or refueling condition for extended time periods and 2) sufficient instrumentation and control capability is available for monitoring and maintaining the unit status.

The Surveillance Requirements for demonstrating the OPERABILITY of the diesel generators are in accordance with the recommendations of Regulatory Guides 1.9, "Selection of Diesel Generator Set Capacity for Standby Power Supplies," March 10, 1971, and 1.137, "Fuel-Oil Systems for Standby Diesel Generators," Revision 1, October 1979, as modified by the NRC's review and approval of South Carolina Electric & Gas Company's June 10, 1985, and December 6, 1985 amendment requests.

and November 10, 2000
The fuel storage system minimum volume of fuel to demonstrate operability of the diesel generators was based on fuel consumption determined from time dependent loads following a design basis accident and a loss of off-site power as listed in FSAR Table 8.3-3 for seven days plus a 10% fuel margin as recommended in Regulatory Guide 1.137, Revision 2, "Fuel-Oil Systems for Standby Diesel Generators," position C.1.C(2).

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INSERT A to Bases Page B 3/4 8-1

The fuel storage system minimum volume of fuel to demonstrate operability of the diesel generators was based on fuel consumption determined from the development of time dependent loads following a design basis accident and a loss of off-site power utilizing FSAR Table 8.3-3 for seven days.

All safety-related portions of the VCSNS diesel engine fuel oil storage and transfer system, are Seismic Category I, Safety Class 2b, and designed to ANSI Standard N195-1976 with the provision listed below:

VCSNS will maintain at least 2% margin above the minimum calculated seven day required volume during Modes 1-4. This is an exception to ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators," Section 5.4, during Modes 1-4. EDG fuel replenishment is available from multiple sources, including off-site suppliers, on-site non safety storage in the Auxiliary Boiler Fuel Tank, and the ability to provide fuel from the opposite train EDG Fuel Oil Storage Tank via the fuel oil and transfer system cross-tie.

The 10% fuel margin as recommended in Regulatory Guide 1.137, Revision 1, "Fuel-Oil Systems for Standby Diesel Generators," position C.1.c.(2) will be met during Modes 5 and 6.

ELECTRIC POWER SYSTEMS

BASES

A.C. SOURCES, D.C. SOURCES AND ONSITE POWER DISTRIBUTION SYSTEMS (Continued)

The Surveillance Requirement for demonstrating the OPERABILITY of the Station batteries are based on the recommendations of Regulatory Guide 1.129, "Maintenance Testing and Replacement of Large Lead Storage Batteries for Nuclear Power Plants," February 1978, and IEEE Std 450-1987, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations."

Continuation
of Insert
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Verifying average electrolyte temperature above the minimum for which the battery was sized, total battery terminal voltage onfloat charge, connection resistance values and the performance of battery service and discharge tests ensures the effectiveness of the charging system, the ability to handle high discharge rates and compares the battery capacity at that time with the rated capacity.

Table 4.8-2 specifies the normal limits for each designated pilot cell and each connected cell for electrolyte level, float voltage and specific gravity. The limits for the designated pilot cells float voltage and specific gravity, greater than 2.13 volts and .015 below the manufacturer's full charge specific gravity or a battery charger current that had stabilized at a low value, is characteristic of a charged cell with adequate capacity. The normal limits for each connected cell for float voltage and specific gravity, greater than 2.13 volts and not more than .020 below the manufacturer's full charge specific gravity with an average specific gravity of all the connected cells not more than .010 below the manufacturer's full charge specific gravity, ensures the OPERABILITY and capability of the battery.

Operation with a battery cell's parameter outside the normal limit but within the allowable value specified in Table 4.8-2 is permitted for up to 7 days. During this 7 day period: (1) the allowable values for electrolyte level ensures no physical damage to the plates with an adequate electron transfer capability; (2) the allowable value for the average specific gravity of all the cells, not more than .020 below the manufacturer's recommended full charge specific gravity, ensures that the decrease in rating will be less than the safety margin provided in sizing; (3) the allowable value for an individual cell's specific gravity, ensures that an individual cell's specific gravity will not be more than .040 below the manufacturer's full charge specific gravity and that the overall capability of the battery will be maintained within an acceptable limit, and (4) the allowable value for an individual cell's float voltage, greater than 2.07 volts, ensures the battery's capability to perform its design function.

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and
- b. Two separate and independent Emergency Diesel Generators (EDG), each with:
 1. A separate day fuel tank containing a minimum volume of 360 gallons of fuel,
 2. A separate fuel storage system containing a minimum volume of 48,500 gallons of fuel, and
 3. A separate fuel transfer pump.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one offsite circuit of 3.8.1.1.a inoperable:
 1. Demonstrate the OPERABILITY of the remaining offsite A.C. sources by performing Surveillance Requirement 4.8.1.1.1 within 1 hour and at least once per 8 hours thereafter, and
 2. If either EDG has not been successfully tested within the past 24 hours, demonstrate its OPERABILITY by performing Surveillance Requirement 4.8.1.1.2.a.3 separately for each such EDG within 24 hours unless the diesel is already operating, and
 3. Restore the offsite circuit to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.
- b. With one EDG of 3.8.1.1.b inoperable:
 1. Demonstrate the OPERABILITY of the A.C. offsite sources by performing Surveillance Requirement 4.8.1.1.1 within 1 hour and at least once per 8 hours thereafter, and
 2. If the EDG became inoperable due to any cause other than preplanned preventive maintenance or testing, demonstrate the OPERABILITY of the remaining EDG by performing Surveillance Requirements 4.8.1.1.2.a.3 within 24 hours*, and

* This test is required to be completed regardless of when the inoperable EDG is restored to OPERABILITY.

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. One circuit between the offsite transmission network and the onsite Class 1E distribution system, and
- b. One diesel generator* with:
 1. A day fuel tank containing a minimum volume of 360 gallons of fuel,
 2. A fuel storage system containing a minimum volume of 42,500 gallons of fuel, and
 3. A fuel transfer pump,

APPLICABILITY: MODES 5 and 6.

ACTION:

With less than the above minimum required A.C. electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS positive reactivity changes, movement of irradiated fuel, or crane operation with loads over the fuel storage pool. In addition, when in MODE 5 with the Reactor Coolant loops not filled, or in MODE 6 with the water level less than 23 feet above the reactor vessel flange, immediately initiate corrective action to restore the required sources to OPERABLE status as soon as possible.

SURVEILLANCE REQUIREMENTS

4.8.1.2 The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the Surveillance Requirements of 4.8.1.1.1 and 4.8.1.1.2 (with the exception of 4.8.1.1.2.a.4).

* ESF load sequencer may be deenergized in Modes 5 and 6 provided that the loss of voltage and degraded voltage relays are disabled.

3/4.8 ELECTRICAL POWER SYSTEMS

BASES

3/4.8.1, 3/4.8.2 AND 3/4.8.3 A.C. SOURCES, D.C. SOURCES AND ONSITE POWER DISTRIBUTION SYSTEMS

The OPERABILITY of the A.C. and D.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment required for 1) the safe shutdown of the facility and 2) the mitigation and control of accident conditions within the facility. The minimum specified independent and redundant A.C. and D.C. power sources and distribution systems satisfy the requirements of General Design Criterion 17 of Appendix "A" to 10 CFR 50.

The ACTION requirements specified for the levels of degradation of the power sources provide restriction upon continued facility operation commensurate with the level of degradation. The OPERABILITY of the power sources are consistent with the initial condition assumptions of the safety analyses and are based upon maintaining at least one redundant set of onsite A.C. and D.C. power sources and associated distribution systems OPERABLE during accident conditions coincident with an assumed loss of offsite power and single failure of the other onsite A.C. source. The A.C. and D.C. source allowable out-of-service times are based on Regulatory Guide 1.93, "Availability of Electrical Power Sources," December 1974. When one diesel generator is inoperable, there is an additional ACTION requirement to verify that all required systems, subsystems, trains, components and devices, that depend on the remaining OPERABLE diesel generator as a source of emergency power, are also OPERABLE, and that the steam-driven auxiliary feedwater pump is OPERABLE. This requirement is intended to provide assurance that a loss of offsite power event will not result in a complete loss of safety function of critical systems during the period one of the diesel generators is inoperable. The term verify as used in this context means to administratively check by examining logs or other information to determine if certain components are out-of-service for maintenance or other reasons. It does not mean to perform the surveillance requirements needed to demonstrate the OPERABILITY of the component.

The OPERABILITY of the minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that 1) the facility can be maintained in the shutdown or refueling condition for extended time periods and 2) sufficient instrumentation and control capability is available for monitoring and maintaining the unit status.

The Surveillance Requirements for demonstrating the OPERABILITY of the diesel generators are in accordance with the recommendations of Regulatory Guides 1.9, "Selection of Diesel Generator Set Capacity for Standby Power Supplies," March 10, 1971, and 1.137, "Fuel-Oil Systems for Standby Diesel Generators," Revision 1, October 1979, as modified by the NRC's review and approval of South Carolina Electric & Gas Company's June 10, 1985, December 6, 1985 and November 10, 2000 amendment requests.

The fuel storage system minimum volume of fuel to demonstrate operability of the diesel generators was based on fuel consumption determined from the development of time dependent loads following a design basis accident and a loss of off-site power utilizing FSAR Table 8.3-3 for seven days.

ELECTRIC POWER SYSTEMS

BASES

A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION SYSTEMS (Continued)

All safety-related portions of the VCSNS diesel engine fuel oil storage and transfer system, are Seismic Category I, Safety Class 2b, and designed to ANSI Standard N195-1976 with the provision listed below:

VCSNS will maintain at least 2% margin above the minimum calculated seven day required volume during Modes 1-4. This is an exception to ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators," Section 5.4, during Modes 1-4. EDG fuel replenishment is available from multiple sources, including off-site suppliers, on-site non safety storage in the Auxiliary Boiler Fuel Tank, and the ability to provide fuel from the opposite train EDG Fuel Oil Storage Tank via the fuel oil and transfer system cross-tie.

The 10% fuel margin as recommended in Regulatory Guide 1.137, Revision 1, "Fuel-Oil Systems for Standby Diesel Generators," position C.1.c.(2) will be met during Modes 5 and 6.

The Surveillance Requirement for demonstrating the OPERABILITY of the Station batteries are based on the recommendations of Regulatory Guide 1.129, "Maintenance Testing and Replacement of Large Lead Storage Batteries for Nuclear Power Plants," February 1978, and IEEE Std 450-1987, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations."

Verifying average electrolyte temperature above the minimum for which the battery was sized, total battery terminal voltage and float charge, connection resistance values and the performance of battery service and discharge tests ensures the effectiveness of the charging system, the ability to handle high discharge rates and compares the battery capacity at that time with the rated capacity.

Table 4.8-2 specifies the normal limits for each designated pilot cell and each connected cell for electrolyte level, float voltage and specific gravity. The limits for the designated pilot cells float voltage and specific gravity, greater than 2.13 volts and .015 below the manufacturer's full charge specific gravity or a battery charger current that had stabilized at a low value, is characteristic of a charged cell with adequate capacity. The normal limits for each connected cell for float voltage and specific gravity, greater than 2.13 volts and not more than .020 below the manufacturer's full charge specific gravity with an average specific gravity of all the connected cells not more than .010 below the manufacturer's full charge specific gravity, ensures the OPERABILITY and capability of the battery.

Operation with a battery cell's parameter outside the normal limit but within the allowable value specified in Table 4.8-2 is permitted for up to 7 days. During this 7 day period: (1) the allowable values for electrolyte level ensures no physical damage to the plates with an adequate electron transfer capability; (2) the allowable value for the average specific gravity of all the cells, not more than .020 below the manufacturer's recommended full charge specific gravity, ensures that the decrease in rating will be less than the safety margin provided in sizing; (3) the allowable value for an individual cell's specific gravity, ensures that an individual cell's specific gravity will not be more than .040 below the manufacturer's full charge specific gravity and that the overall capability of the battery will be maintained within an acceptable limit, and (4) the allowable value for an individual cell's float voltage, greater than 2.07 volts, ensures the battery's capability to perform its design function.

SAFETY EVALUATION
FOR REVISING THE MINIMUM FUEL SYSTEM VOLUME REQUIREMENTS
FOR THE EMERGENCY DIESEL GENERATOR FUEL OIL STORAGE TANKS
FOR THE VIRGIL C. SUMMER NUCLEAR STATION
TECHNICAL SPECIFICATIONS

Description of Amendment Request

1.0 INTRODUCTION

The Virgil C. Summer Nuclear Station (VCSNS) Technical Specifications (TS) are being revised to reflect design basis calculation revisions for load requirements following a design basis accident. This change raises the minimum TS fuel oil storage volume to 48,500 gallons for Modes 1-4, raises the minimum TS fuel oil storage volume to 42,500 gallons for Modes 5 and 6, and raises the day fuel tank minimum volume to 360 gallons for Modes 1-6.

Additionally, the Technical Specifications Bases section for the TS minimum fuel oil storage volume is being revised to reflect margins above the minimum calculated required volume as an exception to the ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators" fuel margin requirement of 10%. Specifically, SCE&G requests to maintain at least a 2% margin above the seven day requirement for Modes 1-4 instead of the 10% margin specified in Section 5.4 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators."

2.0 BACKGROUND

There are two emergency diesel generators (EDGs) for Virgil C. Summer Nuclear Station (VCSNS). Each EDG is equipped with a fuel oil storage and transfer system, which consists of a day fuel tank, a fuel oil storage tank, a fuel oil transfer pump, and its associated piping, valves, instrumentation and controls. Each EDG Fuel Oil Storage Tank has a usable capacity of 51,082 gallons. Each day tank, which has a capacity of 550 gallons, is automatically filled from its own EDG Fuel Oil Storage Tank by its own EDG fuel oil transfer pump. A cross-tie, with two normally-closed valves, is provided between the EDG fuel oil storage and transfer systems to enable the fuel oil transfer pump of either EDG to fill either or both day tanks from either Fuel Oil Storage Tank. All portions of the EDG fuel oil storage and transfer systems are safety related and Seismic Category I designed, except the cross-tie piping, which presently meets anti-falldown criteria; however, a Plant Enhancement (ECR-50335) is in progress to upgrade the current non nuclear safety cross-tie piping to Safety Class 2b, Seismic Category I and will be completed prior to Mode 4 entry as RF-12 draws to a close.

Current VCSNS TS require a minimum of 47,100 gallons of fuel oil to be maintained in the Fuel Oil Storage Tank for each EDG. The fuel storage system minimum volume of fuel to demonstrate the operability of the diesel generators was based on fuel consumption

determined from time dependent loads following a design basis accident and a loss of off-site power as listed in FSAR Table 8.3-3 for seven days plus a 10% fuel margin as recommended in Regulatory Guide 1.137, Revision 1, "Fuel Oil System for Standby Diesel Generators," position C.1.c.(2).

Regulatory Guide (RG) 1.137, Revision 1, "Fuel Oil System for Standby Diesel Generators," endorses ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators," which requires the on-site fuel oil storage be sufficient to operate the minimum number of EDGs following the limiting design basis accident (DBA) for seven days. The minimum fuel oil storage capacity is to be based on a seven day time-dependent load calculation including an explicit allowance for fuel consumption required by periodic testing, increased by a minimum margin of 10%. The current VCSNS EDG fuel oil storage and transfer system does not include an explicit allowance for fuel consumption required by periodic testing. No other exceptions to ANSI N195-1976, Section 5.4 were identified.

SCE&G recently performed an engineering evaluation of the EDG Fuel Oil Consumption Design Basis Calculations. Results of the engineering evaluation indicate that the usable capacity of each Fuel Oil Storage Tank is sufficient to contain the required fuel oil for each EDG to run for seven days (using time-dependent loading methods), plus a 10% fuel margin. However, to ensure that an explicit allowance for fuel consumption required by periodic testing exists, as well as operating margin including prudent precautions to prevent spillage during tank filling and to allow for thermal expansion, SCE&G is requesting an exception to the 10% margin requirement as specified in Section 5.4 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators."

The engineering evaluation also determined that the minimum required fuel oil storage volume for Modes 5 and 6 will be met if the current TS limit is increased to 42,500 gallons, which includes the Regulatory Guide 1.137, Revision 1, "Fuel Oil Systems for Standby Diesel Generators," position C.1.c.(2) fuel margin of 10%. This volume is well within the current EDG Fuel Oil Storage Tank usable volume.

Additionally, a separate engineering evaluation conducted as follow-up to the Fuel Oil Storage Tank issue determined that the minimum required day fuel tank volume for Modes 1-6 will be met if the current TS limit is increased to 360 gallons, which includes the ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators" fuel margin of 10%. This volume is well within the current EDG day fuel tank usable volume.

This proposal is similar to the request by Entergy Operations, Inc. for Waterford Steam Generating Station, Unit 3 of March 3, 1999 (TAC NO. MA4940).

VCSNS proposes, with justifications, to increase the current TS minimum fuel oil required to be maintained in each of the Fuel Oil Storage Tanks during Modes 1-4 and maintain at least 2% margin above the minimum calculated seven day required volume. Additionally, the minimum fuel oil required to be maintained in each of the Fuel Oil Storage Tanks during Modes 5 and 6 will be increased to comply with the ANSI N195-1976 margin requirement of at least 10%.

Subsequently, the licensee proposes to revise the TS Bases by adding the following to Section 3/4.8 ELECTRICAL POWER SYSTEMS, BASES, 3/4.8.1, 3/4.8.2 and 3/4.8.3 A.C. SOURCES, D.C. SOURCES AND ONSITE POWER DISTRIBUTION SYSTEMS to reflect the above proposals:

The fuel storage system minimum volume of fuel to demonstrate operability of the diesel generators was based on fuel consumption determined from the development of time dependent loads following a design basis accident and a loss of off-site power utilizing FSAR Table 8.3-3 for seven days.

All safety-related portions of the VCSNS diesel engine fuel oil storage and transfer system, are Seismic Category I, Safety Class 2b, and designed to ANSI Standard N195-1976 with the provision listed below:

VCSNS will maintain at least 2% margin above the minimum calculated seven day required volume during Modes 1-4. This is an exception to ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators," Section 5.4, during Modes 1-4. EDG fuel replenishment is available from multiple sources, including off-site suppliers, on-site non safety storage in the Auxiliary Boiler Fuel Tank, and the ability to provide fuel from the opposite train EDG Fuel Oil Storage Tank via the fuel oil and transfer system cross-tie.

The 10% fuel margin as recommended in Regulatory Guide 1.137, Revision 1, "Fuel-Oil Systems for Standby Diesel Generators," position C.1.c.(2) will be met during Modes 5 and 6.

Safety Evaluation

3.0 EVALUATION

A. EDG Fuel Oil Storage Tank Not Having Sufficient (10%) Margin for Modes 1-4

The minimum fuel oil required to be maintained in each Fuel Oil Storage Tank per the current TS is sufficient to operate its associated EDG for seven days plus approximately 2% margin. The current TS requirement will be increased to allow for greater than 2% margin while still ensuring adequate operating and testing margin and also ensuring prevention of fuel oil spillage. There are numerous diesel fuel oil vendors in the vicinity of VCSNS. VCSNS will have fuel oil readily available when there is a need for replenishment. Secondly, VCSNS has a cross-tie between the two EDG fuel oil storage and transfer systems which enables either one of the EDGs to be supplied from either one of the EDG Fuel Oil Storage Tanks. With the ability to cross-tie the two EDG fuel oil storage and transfer systems, one EDG would be able to operate continuously for a period of well over seven days. The cross-tie represents a contingency if fuel cannot be obtained from off-site sources within the seven days following an event; the cross-tie will remain in the normally closed condition before and

after any event. The cross-tie piping is being upgraded to Safety Class 2b for additional assurance of its availability if it appears that this contingency plan would need to be invoked. Finally, VCSNS has an Auxiliary Boiler Fuel Tank with a 500,000 gallon nominal capacity, which contains the same grade fuel as the two EDG Fuel Oil Storage Tanks. This tank was available for use as a contingency supply during SCE&G's Steam Generator replacement Outage (RF-8) and during Y2K rollover. Overall, the defense-in-depth to provide the EDG fuel replenishment, from established on-site sources, is considered adequate to ensure that VCSNS will have sufficient fuel oil for EDG operation to power the safety systems required to mitigate design basis accidents well beyond the minimum seven day requirement.

In addition, the licensee performed an analysis to consider the impact of the proposed TS Bases change involving Fuel Oil Storage Tank capacity margin on plant risk. The licensee concluded that the increase in risk resulting from the proposed change to the licensing basis is insignificant. The impact of the proposed TS Bases change on risk is low since the change solely impacts risk during Loss of Offsite Power (LOOP) conditions for a duration of longer than about 7.14 days. When a LOOP of this duration occurs, the TS Bases change will change the operator response time to replenish the Fuel Oil Storage Tank to prevent the loss of a diesel generator from 7.7 days (10% margin) to ≥ 7.14 ($\geq 2\%$ margin) days for each of the EDGs. SCE&G believes that, given the relatively large recovery times, this reduction in response time will not significantly affect the calculated human error probabilities of operator response time. In addition, the change in the probability of recovery of AC power in the time frame between 7.14 days and 7.7 days is small. Therefore, SCE&G concludes that the risk impact of the proposed TS Bases change involving Fuel Oil Storage Tank capacity is small.

B. Allowance of Fuel Oil for Periodic Testing

ANSI N195-1976 requires the fuel oil inventory maintained in Fuel Oil Storage Tanks to include an allowance for fuel consumption required by periodic testing. SCE&G is including an explicit allowance for fuel consumption required for periodic testing for all modes in this proposed change. The test allowance is defined as any amount of fuel oil above the revised TS volume requirements. During or after EDG periodic test runs per the TS Surveillance Requirement (SR), the fuel oil inventory in the Fuel Oil Storage Tanks will remain above the level necessary for the seven-day EDG run time capacity with at least 2% margin for Modes 1-4 and with at least 10% margin for Modes 5 and 6.

C. EDG Day Fuel Tank minimum volume increase for Modes 1-6

ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators," Section 6.1, requires that each diesel shall be equipped with a day tank whose capacity is sufficient to maintain at least 60 minutes of operation at the level where oil is automatically added to the day tank. The capacity is based on the fuel consumption at a load of 100% of the continuous rating of the diesel plus a minimum margin of 10%. The current TS requirement will be increased to ensure that ANSI N195-1976, Section 6.1 is met for Modes 1-6.

4.0 CONCLUSION

Based on its review and the above evaluation, SCE&G concludes that, (1) the fuel oil storage and transfer system for each EDG at VCSNS has a high level of reliability and availability, (2) the design of the fuel oil storage and transfer system and the EDG fuel oil maintained at VCSNS meet the intent of the guidance described in ANS N195-1976, (3) availability of both on-site and off-site sources of supply are adequate to support long-term operation of the EDGs, (4) the day fuel tank will meet the guidance in ANSI N195-1976, Section 6.1 for Modes 1-6, and (5) VCSNS will have adequate and reliable fuel oil inventory in each storage tank for seven days (with at least 2% margin to the calculated minimum required volume) of continuous EDG operation following a LOCA at the VCSNS. Also, for Modes 5 and 6, at least 10% margin above the calculated fuel oil requirement for seven days of EDG operation following a LOOP will be maintained.

NO SIGNIFICANT HAZARDS EVALUATION
FOR REVISING THE MINIMUM FUEL SYSTEM VOLUME REQUIREMENT
FOR THE EMERGENCY DIESEL GENERATOR FUEL OIL STORAGE TANKS
FOR THE VIRGIL C. SUMMER NUCLEAR STATION
TECHNICAL SPECIFICATIONS

Description of Amendment Request

1.0 INTRODUCTION

The Virgil C. Summer Nuclear Station (VCSNS) Technical Specifications (TS) are being revised to reflect design basis calculation revisions for load requirements following a design basis accident. This change raises the minimum TS fuel oil storage volume to 48,500 gallons for Modes 1-4, raises the minimum TS fuel oil storage volume to 42,500 gallons for Modes 5 and 6, and raises the day fuel tank minimum volume to 360 gallons for Modes 1-6.

Additionally, the Technical Specifications Bases section for the TS minimum fuel oil storage volume is being revised to reflect margins above the minimum calculated required volume as an exception to the ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators" fuel margin requirement of 10%. Specifically, SCE&G requests to maintain at least a 2% margin above the seven day requirement for Modes 1-4 instead of the 10% margin specified in Section 5.4 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators."

2.0 BACKGROUND

There are two emergency diesel generators (EDGs) for Virgil C. Summer Nuclear Station (VCSNS). Each EDG is equipped with a fuel oil storage and transfer system, which consists of a day fuel tank, a fuel oil storage tank, a fuel oil transfer pump, and its associated piping, valves, instrumentation and controls. Each EDG Fuel Oil Storage Tank has a usable capacity of 51,082 gallons. Each day tank, which has a capacity of 550 gallons, is automatically filled from its own EDG Fuel Oil Storage Tank by its own EDG fuel oil transfer pump. A cross-tie, with two normally-closed valves, is provided between the EDG fuel oil storage and transfer systems to enable the fuel oil transfer pump of either EDG to fill either or both day tanks from either Fuel Oil Storage Tank. All portions of the EDG fuel oil storage and transfer systems are safety related and Seismic Category I designed, except the cross-tie piping, which presently meets anti-falldown criteria; however, a Plant Enhancement (ECR-50335) is in progress to upgrade the current non nuclear safety cross-tie piping to Safety Class 2b, Seismic Category I and will be completed prior to Mode 4 entry as RF-12 draws to a close.

Current VCSNS TS require a minimum of 47,100 gallons of fuel oil to be maintained in the Fuel Oil Storage Tank for each EDG. The fuel storage system minimum volume of fuel to demonstrate the operability of the diesel generators was based on fuel consumption

determined from time dependent loads following a design basis accident and a loss of off-site power as listed in FSAR Table 8.3-3 for seven days plus a 10% fuel margin as recommended in Regulatory Guide 1.137, Revision 1, "Fuel Oil System for Standby Diesel Generators," position C.1.c.(2).

Regulatory Guide (RG) 1.137, Revision 1, "Fuel Oil System for Standby Diesel Generators," endorses ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators," which requires the on-site fuel oil storage be sufficient to operate the minimum number of EDGs following the limiting design basis accident (DBA) for seven days. The minimum fuel oil storage capacity is to be based on a seven day time-dependent load calculation including an explicit allowance for fuel consumption required by periodic testing, increased by a minimum margin of 10%. The current VCSNS EDG fuel oil storage and transfer system does not include an explicit allowance for fuel consumption required by periodic testing. No other exceptions to ANSI N195-1976, Section 5.4 were identified.

SCE&G recently performed an engineering evaluation of the EDG Fuel Oil Consumption Design Basis Calculations. Results of the engineering evaluation indicate that the usable capacity of each Fuel Oil Storage Tank is sufficient to contain the required fuel oil for each EDG to run for seven days (using time-dependent loading methods), plus a 10% fuel margin. However, to ensure that an explicit allowance for fuel consumption required by periodic testing exists, as well as operating margin including prudent precautions to prevent spillage during tank filling and to allow for thermal expansion, SCE&G is requesting an exception to the 10% margin requirement as specified in Section 5.4 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators."

The engineering evaluation also determined that the minimum required fuel oil storage volume for Modes 5 and 6 will be met if the current TS limit is increased to 42,500 gallons, which includes the Regulatory Guide 1.137, Revision 1, "Fuel Oil Systems for Standby Diesel Generators," position C.1.c.(2) fuel margin of 10%. This volume is well within the current EDG Fuel Oil Storage Tank usable volume.

Additionally, a separate engineering evaluation conducted as follow-up to the Fuel Oil Storage Tank issue determined that the minimum required day fuel tank volume for Modes 1-6 will be met if the current TS limit is increased to 360 gallons, which includes the ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators" fuel margin of 10%. This volume is well within the current EDG day fuel tank usable volume.

This proposal is similar to the request by Entergy Operations, Inc. for Waterford Steam Generating Station, Unit 3 of March 3, 1999 (TAC NO. MA4940).

VCSNS proposes, with justifications, to increase the current TS minimum fuel oil required to be maintained in each of the Fuel Oil Storage Tanks during Modes 1-4 and maintain at least 2% margin above the minimum calculated seven day required volume. Additionally, the minimum fuel oil required to be maintained in each of the Fuel Oil Storage Tanks during Modes 5 and 6 will be increased to comply with the ANSI N195-1976 margin requirement of at least 10%.

Subsequently, the licensee proposes to revise the TS Bases by adding the following to Section 3/4.8 ELECTRICAL POWER SYSTEMS, BASES, 3/4.8.1, 3/4.8.2 and 3/4.8.3 A.C. SOURCES, D.C. SOURCES AND ONSITE POWER DISTRIBUTION SYSTEMS to reflect the above proposals:

The fuel storage system minimum volume of fuel to demonstrate operability of the diesel generators was based on fuel consumption determined from the development of time dependent loads following a design basis accident and a loss of off-site power utilizing FSAR Table 8.3-3 for seven days.

All safety-related portions of the VCSNS diesel engine fuel oil storage and transfer system, are Seismic Category I, Safety Class 2b, and designed to ANSI Standard N195-1976 with the provision listed below:

VCSNS will maintain at least 2% margin above the minimum calculated seven day required volume during Modes 1-4. This is an exception to ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators," Section 5.4, during Modes 1-4. EDG fuel replenishment is available from multiple sources, including off-site suppliers, on-site non safety storage in the Auxiliary Boiler Fuel Tank, and the ability to provide fuel from the opposite train EDG Fuel Oil Storage Tank via the fuel oil and transfer system cross-tie.

The 10% fuel margin as recommended in Regulatory Guide 1.137, Revision 1, "Fuel-Oil Systems for Standby Diesel Generators," position C.1.c.(2) will be met during Modes 5 and 6.

Basis for No Significance Hazards Consideration Determination

South Carolina Electric & Gas Company (SCE&G) has evaluated the proposed changes to the VCSNS TS described above against the Significant Hazards Criteria of 10 CFR 50.92 and has determined that the changes do not involve any significant hazard. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

No.

The proposed change raises the minimum required fuel oil storage volume to 48,500 gallons for Modes 1-4 and raises the minimum required fuel oil storage volume to 42,500 gallons for Modes 5 and 6. These new TS volume requirements reflect design basis calculation revisions for load requirements following a design basis accident. The increase in these TS volume requirements ensure that at least 2% margin is maintained above the seven day requirement for Modes 1-4. Also, it

ensures that at least 10% margin is maintained above the seven day requirement for Modes 5 and 6, which meets the 10% margin requirement set forth in Section 5.4 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators." This change also raises the day fuel tank minimum volume to 360 gallons for Modes 1-6, which meets the 10% margin requirement set forth in Section 6.1 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators." These revised TS volume requirements ensure that each EDG can supply the output necessary to assure the operation of the plant equipment required to prevent unacceptable consequences for any plant design basis event or accident condition. Therefore, there is no impact on the consequences of any accident.

In addition, the licensee performed an analysis to consider the impact of the proposed TS Bases change involving Fuel Oil Storage Tank capacity on plant risk. The licensee concluded that the increase in risk resulting from the proposed change to the licensing basis is insignificant. This change does not involve a significant increase in the probability of an accident previously evaluated since the change solely impacts risk during Loss of Offsite Power (LOOP) conditions for a duration of longer than about 7.14 days. When a LOOP of this duration occurs, the TS Bases change will reduce the operator response time to replenish the Fuel Oil Storage Tank to prevent the loss of a diesel generator from 7.7 days to 7.14 days for each of the EDGs. SCE&G believes that, given the relatively large recovery times, this reduction in response time will not significantly affect the calculated human error probabilities of operator response time. In addition, the change in the probability of recovery of AC power in the time frame between 7.14 days and 7.7 days is small. Therefore, SCE&G concludes that the risk impact of the proposed TS Bases change involving Fuel Oil Storage Tank capacity is small.

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

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

No.

The proposed change raises the minimum required fuel oil storage volume to 48,500 gallons for Modes 1-4 and raises the minimum required fuel oil storage volume to 42,500 gallons for Modes 5 and 6. These new TS volume requirements reflect design basis calculation revisions for load requirements following a design basis accident. The increase in these TS volume requirements ensure that at least 2% margin is maintained above the seven day requirement for Modes 1-4. Also, it ensures that at least 10% margin is maintained above the seven day requirement for Modes 5 and 6, which meets the 10% margin requirement set forth in Section 5.4 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators." This change also raises the day fuel tank minimum volume to 360 gallons for Modes 1-6, which

meets the 10% margin requirement set forth in Section 6.1 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators." These changes are not associated with the possibility to create any new or different accident.

In addition, the proposed TS Bases change involving Fuel Oil Storage Tank capacity margins does not create the possibility of any new or different kind of accident. A single failure, consisting of the loss of one train of EDG fuel oil storage and transfer systems will not result in the loss of minimum diesel generator capacity, which is in accordance with Section 5.2 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators." The on-site oil storage shall remain sufficient to operate the minimum number of diesel-generators following the limiting DBA for 7 days, with at least 2% margin for Modes 1-4 and at least 10% margin for Modes 5 and 6.

3. Does this change involve a significant reduction in margin of safety?

No.

The proposed change raises the minimum required fuel oil storage volume to 48,500 gallons for Modes 1-4 and raises the minimum required fuel oil storage volume to 42,500 gallons for Modes 5 and 6. These new TS volume requirements reflect design basis calculation revisions for load requirements following a design basis accident. The increase in these TS volume requirements ensure that at least 2% margin is maintained above the seven day requirement for Modes 1-4. Also, it ensures that at least 10% margin is maintained above the seven day requirement for Modes 5 and 6, which meets the 10% margin requirement set forth in Section 5.4 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators." This change also raises the day fuel tank minimum volume to 360 gallons for Modes 1-6, which meets the 10% margin requirement set forth in Section 6.1 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators."

In addition, the proposed TS Bases change involving Fuel Oil Storage Tank capacity does not involve a significant reduction in the margin of safety. A single failure, consisting of the loss of one train of EDG fuel oil storage and transfer systems will not result in the loss of minimum diesel generator capacity, which is in accordance with Section 5.2 of ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators." The on-site oil storage shall remain sufficient to operate the minimum number of diesel-generators following the limiting DBA for 7 days, with at least 2% margin for Modes 1-4 and at least 10% margin for Modes 5 and 6.

The licensee performed an analysis to evaluate the impact of the proposed TS Bases change involving Fuel Oil Storage Tank capacity on plant risk. The licensee concluded that the increase in risk resulting from the proposed change to the licensing basis is insignificant. This change does not involve a significant reduction in the margin of safety since the change solely impacts risk during Loss of Offsite Power (LOOP) conditions for a duration of longer than about 7.14 days. When a

LOOP of this duration occurs, the TS Bases change will reduce the operator response time to replenish the Fuel Oil Storage Tank to prevent the loss of a diesel generator from 7.7 days to 7.14 days for each of the EDGs. SCE&G believes that, given the relatively large recovery times, this reduction in response time will not significantly affect the calculated human error probabilities of operator response time. In addition, the change in the probability of recovery of AC power in the time frame between 7.14 days and 7.7 days is small. Therefore, SCE&G concludes that the risk impact of the proposed TS Bases change involving Fuel Oil Storage Tank capacity is small.

Pursuant to 10 CFR 50.91, the preceding analyses provides a determination that the proposed Technical Specifications change poses no significant hazard as delineated by 10 CFR 50.92.

Environmental Assessment

This proposed Technical Specification change has been evaluated against criteria for and identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. It has been determined that the proposed change meets the criteria for categorical exclusion as provided for under 10 CFR 51.22(c)(9). The following is a discussion of how the proposed Technical Specification change meets the criteria for categorical exclusion.

10 CFR 51.22(c)(9): Although the proposed change involves change to requirements with respect to inspection or Surveillance Requirements,

- (i) the proposed change involves No Significance Hazards Consideration (refer to the No Significance Hazards Consideration Determination section of this Technical Specification Change Request);
- (ii) there are no significant changes in the types or significant increase in the amounts of any effluents that may be released offsite since the proposed change does not affect the generation of any radioactive effluents nor does it affect any of the permitted release paths; and
- (iii) there is no significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Based on the aforementioned and pursuant to 10 CFR 51.22 (b), no environmental assessment or environmental impact statement need be prepared in connection with issuance of an amendment to the Technical Specifications incorporating the proposed change.