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A SCANA COMPANY

August 15, 2008
RC-08-0106

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

ATTN: R. E. Martin

Dear Mr. Martin:

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS)
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
SUPPLEMENTAL REVISION TO LICENSE AMENDMENT REQUEST
LAR 03-01931-20

Reference: J. B. Archie, SCE&G, Letter RC-08-0007 to the Document Control Desk, dated January 17, 2008, "License Amendment Request - LAR 03-01931-20, Application To Revise Technical Specifications Regarding Control Room Envelope Habitability In Accordance With TSTF-448, Revision 3, Using Consolidated Line Item Improvement Process"

South Carolina Electric & Gas Company (SCE&G), acting for itself and as agent for South Carolina Public Service Authority, previously submitted a request for an amendment to the Virgil C. Summer Nuclear Station (VCSNS) Technical Specifications (TS) per the referenced letter. This proposed amendment will modify TS requirements related to control room envelope habitability in accordance with TSTF-448, Revision 3.

During NRC review of this amendment request, it was questioned if VCSNS had incorporated TSTF-51, "Revise Containment Requirements During Handling Irradiated Fuel and Core Alterations", because the term "recently" irradiated fuel is used in the amendment request. Although this term is used in TSTF-448, it is only defined in TSTF-51. Based on a review of the current licensing basis for VCSNS, TSTF-51 has not been incorporated into the Technical Specifications. Per a telephone conversation with the NRC staff on August 1, 2008, it was agreed that all references to "recently" when discussing movement of irradiated fuel should be deleted. This is a minor change which does not affect the basis for the license amendment submittal. Deletion of the term "recently" will maintain consistent terminology throughout the VCSNS Technical Specifications. Please replace the attached marked up pages which have the term "recently" deleted with the associated pages in License Amendment Request – LAR 03-01931-20.

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

A001
NRR

If you have any questions or require additional information, please contact Mr. Bruce L. Thompson at (803) 931-5042.

Very truly yours,

Jeffrey B. Archie

Attachments:

I Marked Up Pages
- Att. II, Page 10 of 15
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II Retyped Pages
- Att. II, Page 10 of 15
- Att. IV, Page 5 of 9
- Att. IV, Page 7 of 9
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c:
- K. B. Marsh
- S. A. Byrne
- N. S. Carns
- J. H. Hamilton
- R. J. White
- K. J. Browne
- L. A. Reyes
- R. E. Martin
- NRC Resident Inspector
- P. Ledbetter
- K. M. Sutton
- T. P. O'Kelley
- NSRC
- CR (LAR 03-01931-20)
- File (813.20)
- PRSF (RC-08-0106)

ATTACHMENT I

PROPOSED CHANGES TO LICENSE AMENDMENT REQUEST LAR-03-01931-20 TO REMOVE THE TERM "RECENTLY" (MARKED-UP)

INSERT 3.7.6 (a)

1. With one CREFS train inoperable for reasons other than ACTION 3.7.6.a.2, restore the inoperable train to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

2. With one or more CREFS trains inoperable due to an inoperable control room envelope (CRE) boundary, immediately initiate action to implement mitigating actions and verify within 24 hours that the mitigating actions ensure CRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits and restore CRE boundary to OPERABLE status within 90 days. Otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

3. With both CREFS trains inoperable for reasons other than ACTION 3.7.6.a.2, immediately enter LCO 3.0.3.

INSERT 3.7.6 (b)

1. With one CREFS train inoperable for reasons other than an inoperable CRE boundary, restore the inoperable train to OPERABLE status within 7 days, or immediately place the OPERABLE CREFS train in the emergency mode of operation or immediately suspend movement of recently irradiated fuel assemblies.

2. With both CREFS trains inoperable or one or more CREFS trains inoperable due to an inoperable CRE boundary, immediately suspend movement of recently irradiated fuel assemblies.

INSERT 4.7.6

c. By performing required CREFS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).

d. At least once per 18 months by verifying that on a simulated SI or high radiation test signal, each CREFS train automatically switches into an emergency mode of operation with flow through the HEPA filters and charcoal adsorber banks.

e. By performing required CRE unfiltered air inleakage testing in accordance with the Control Room Habitability Program.

LCO

Two independent and redundant CREFS trains are required to be OPERABLE to ensure that at least one is available if a single active failure disables the other train. Total system failure, such as from a loss of both ventilation trains or from an inoperable CRE boundary, could result in exceeding a dose of 5 rem whole body or its equivalent to any part of the body to the CRE occupants in the event of a large radioactive release.

Each CREFS train is considered OPERABLE when the individual components necessary to limit CRE occupant exposure are OPERABLE. A CREFS train is OPERABLE when the associated:

a. Fan is OPERABLE,

b. HEPA filters and charcoal adsorbers are not excessively restricting flow, and are capable of performing their filtration functions, and

c. Ductwork, valves, and dampers are OPERABLE, and air circulation can be maintained.

In order for the CREFS trains to be considered OPERABLE, the CRE boundary must be maintained such that the CRE occupant dose from a large radioactive release does not exceed the calculated dose in the licensing basis consequence analyses for DBAs, and that CRE occupants are protected from hazardous chemicals and smoke.

The LCO is modified by a Note allowing the CRE boundary to be opened intermittently under administrative controls. This Note only applies to openings in the CRE boundary that can be rapidly restored to the design condition, such as doors, hatches, floor plugs, and access panels. For entry and exit through doors, the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls should be proceduralized and consist of stationing a dedicated individual at the opening who is in continuous communication with the operators in the CRE. This individual will have a method to rapidly close the opening and to restore the CRE boundary to a condition equivalent to the design condition when a need for CRE isolation is indicated.

APPLICABILITY

In MODES 1, 2, 3, and 4, and during movement of recently irradiated fuel assemblies, the CREFS must be OPERABLE to ensure that the CRE will remain habitable during and following a DBA.

In MODES 5 and 6, the CREFS is required to cope with the release from the rupture of an outside waste gas tank.

During movement of recently irradiated fuel assemblies, the CREFS must be OPERABLE to cope with the release from a fuel handling accident.

3.7.6.a.3

If both CREFS trains are inoperable in MODE 1, 2, 3, or 4 for reasons other than an inoperable CRE boundary (i.e., LCO ACTION 3.7.6.a.2), the CREFS may not be capable of performing the intended function and the unit is in a condition outside the accident analyses. Therefore, LCO 3.0.3 must be entered immediately.

3.7.6.b.1

In MODE 5 or 6, or during movement of recently irradiated fuel assemblies, if the inoperable CREFS train cannot be restored to OPERABLE status within the required AOT, action must be taken to immediately place the OPERABLE CREFS train in the emergency mode. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure would be readily detected.

An alternative to Required Action 3.7.6.b.1 is to immediately suspend activities that could result in a release of radioactivity that might require isolation of the CRE. This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

3.7.6.b.2

In MODE 5 or 6, or during movement of recently irradiated fuel assemblies, with two CREFS trains inoperable or with one or more CREFS trains inoperable due to an inoperable CRE boundary, action must be taken immediately to suspend activities that could result in a release of radioactivity that might require isolation of the CRE. This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

SURVEILLANCE REQUIREMENTS

SR 4.7.6.a

The control room temperature should be checked periodically to ensure that the ambient air temperature does not exceed the allowable temperature for continuous duty rating for the equipment and instrumentation cooled by the CREFS and that the control room will remain habitable for operations personnel during and following all credible accident conditions.

3/4.7.6 CONTROL ROOM EMERGENCY FILTRATION SYSTEM (CREFS)

LIMITING CONDITION FOR OPERATION

3.7.6 Two CREFS trains shall be OPERABLE.*

APPLICABILITY: ALL MODES

ACTION:

a. MODES 1, 2, 3 and 4:

1. With one CREFS train inoperable for reasons other than ACTION 3.7.6.a.2, restore the inoperable train to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

2. With one or more CREFS trains inoperable due to an inoperable control room envelope (CRE) boundary, immediately initiate action to implement mitigating actions and verify within 24 hours that the mitigating actions ensure CRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits and restore CRE boundary to OPERABLE status within 90 days. Otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

3. With both CREFS trains inoperable for reasons other than ACTION 3.7.6.a.2, immediately enter LCO 3.0.3.

b. MODES 5 and 6:

1. With one CREFS train inoperable for reasons other than an inoperable CRE boundary, restore the inoperable train to OPERABLE status within 7 days, or immediately place the OPERABLE CREFS train in the emergency mode of operation or immediately suspend movement of recently irradiated fuel assemblies.

2. With both CREFS trains inoperable or one or more CREFS trains inoperable due to an inoperable CRE boundary, immediately suspend movement of recently irradiated fuel assemblies.

SURVEILLANCE REQUIREMENTS

4.7.6 Each CREFS train shall be demonstrated OPERABLE:

a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 85ºF.

b. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the CREFS train operates for at least 15 minutes.

c. By performing required CREFS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).

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* The control room envelope (CRE) boundary may be opened intermittently under administrative control.

ATTACHMENT II

PROPOSED CHANGES TO LICENSE AMENDMENT REQUEST LAR-03-01931-20 TO REMOVE THE TERM "RECENTLY" (RETYPED)

INSERT 3.7.6 (a)

1. With one CREFS train inoperable for reasons other than ACTION 3.7.6.a.2, restore the inoperable train to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

2. With one or more CREFS trains inoperable due to an inoperable control room envelope (CRE) boundary, immediately initiate action to implement mitigating actions and verify within 24 hours that the mitigating actions ensure CRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits and restore CRE boundary to OPERABLE status within 90 days. Otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

3. With both CREFS trains inoperable for reasons other than ACTION 3.7.6.a.2, immediately enter LCO 3.0.3.

INSERT 3.7.6 (b)

1. With one CREFS train inoperable for reasons other than an inoperable CRE boundary, restore the inoperable train to OPERABLE status within 7 days, or immediately place the OPERABLE CREFS train in the emergency mode of operation or immediately suspend movement of irradiated fuel assemblies.

2. With both CREFS trains inoperable or one or more CREFS trains inoperable due to an inoperable CRE boundary, immediately suspend movement of irradiated fuel assemblies.

INSERT 4.7.6

c. By performing required CREFS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).

d. At least once per 18 months by verifying that on a simulated SI or high radiation test signal, each CREFS train automatically switches into an emergency mode of operation with flow through the HEPA filters and charcoal adsorber banks.

e. By performing required CRE unfiltered air inleakage testing in accordance with the Control Room Habitability Program.

LCO

Two independent and redundant CREFS trains are required to be OPERABLE to ensure that at least one is available if a single active failure disables the other train. Total system failure, such as from a loss of both ventilation trains or from an inoperable CRE boundary, could result in exceeding a dose of 5 rem whole body or its equivalent to any part of the body to the CRE occupants in the event of a large radioactive release.

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In order for the CREFS trains to be considered OPERABLE, the CRE boundary must be maintained such that the CRE occupant dose from a large radioactive release does not exceed the calculated dose in the licensing basis consequence analyses for DBAs, and that CRE occupants are protected from hazardous chemicals and smoke.

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APPLICABILITY

In MODES 1, 2, 3, and 4, and during movement of irradiated fuel assemblies, the CREFS must be OPERABLE to ensure that the CRE will remain habitable during and following a DBA.

In MODES 5 and 6, the CREFS is required to cope with the release from the rupture of an outside waste gas tank.

During movement of irradiated fuel assemblies, the CREFS must be OPERABLE to cope with the release from a fuel handling accident.

3.7.6.a.3

If both CREFS trains are inoperable in MODE 1, 2, 3, or 4 for reasons other than an inoperable CRE boundary (i.e., LCO ACTION 3.7.6.a.2), the CREFS may not be capable of performing the intended function and the unit is in a condition outside the accident analyses. Therefore, LCO 3.0.3 must be entered immediately.

3.7.6.b.1

In MODE 5 or 6, or during movement of irradiated fuel assemblies, if the inoperable CREFS train cannot be restored to OPERABLE status within the required AOT, action must be taken to immediately place the OPERABLE CREFS train in the emergency mode. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure would be readily detected.

An alternative to Required Action 3.7.6.b.1 is to immediately suspend activities that could result in a release of radioactivity that might require isolation of the CRE. This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

3.7.6.b.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, with two CREFS trains inoperable or with one or more CREFS trains inoperable due to an inoperable CRE boundary, action must be taken immediately to suspend activities that could result in a release of radioactivity that might require isolation of the CRE. This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

SURVEILLANCE REQUIREMENTS

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