SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL℠ Company

Dwight E. Nunn
Vice President

October 6, 2000

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Gentlemen:

Subject: **Docket Nos. 50-361 and 50-362**
Amendment Application Numbers 203 and 188
Change to Technical Specification 3.7.11
"Control Room Emergency Air Cleanup System (CREACUS)"
San Onofre Nuclear Generating Station Units 2 and 3

Reference:

Enclosed are Amendment Application Number 203 to Facility Operating License NPF-10, and Amendment Application Number 188 to Facility Operating License NPF-15, for the San Onofre Nuclear Generating Station, Units 2 and 3, respectively. The Amendment Applications consist of Proposed Technical Specification Change Number (PCN)-518 which is provided in the Enclosure to this letter.

PCN-518 is a request to revise Technical Specification (TS) 3.7.11, "Control Room Emergency Air Cleanup System (CREACUS)" consistent with generic industry changes recently approved by the NRC in TSTF-287. These changes will allow up to 24 hours to restore the Control Room Pressure Boundary (CRPB) to operable status when two CREACUS trains are inoperable due to an inoperable CRPB in MODES 1, 2, 3, or 4. In addition, a Limiting Condition for Operation note is added to allow intermittent opening of the CRPB under administrative controls without entering the Actions.

The Southern California Edison Company requests this amendment be issued effective as of its date of issuance, to be implemented within 30 days from the date of issuance. This will provide adequate time for the necessary procedure changes and training on the new Technical Specifications.

If you would like additional information regarding this proposed technical specification change, please contact me or Mr. Jack L. Rainsberry (949) 368-7420.

Sincerely,

Enclosure

cc: E. W. Merschoff, Regional Administrator, NRC Region IV
J. A. Sloan, NRC Senior Resident Inspector, San Onofre Units 2 & 3
L. Raghavan, NRC Project Manager, San Onofre Units 2 and 3
S. Y. Hsu, Department of Health Services, Radiologic Health Branch

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. for a Class 103 License to Acquire, Possess, and Use a Utilization Facility as Part of Unit No. 2 of the San Onofre Nuclear Generating Station	))))))	Docket No. 50-361 Amendment Application No. 203

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 203. This amendment application consists of Proposed Technical Specification Change Number 518 to Facility Operating License NPF-10.

Proposed Technical Specification Change Number 518 is a request to revise Limiting Condition For Operation 3.7.11, "Control Room Emergency Air Cleanup System (CREACUS)" to allow 24 hours to restore the capability to maintain proper pressure before requiring the unit to perform an orderly shutdown and to clarify that the Action Statements need not be entered when intermittent opening of the control room barrier is conducted under administrative control.

Subscribed on this 6th day of October, 2000.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: _____
Dwight E. Nunn
Vice President
Engineering &Technical Services

State of California
County of San Diego
On 10/6/2000 before me, Mariane Sanchez,
personally appeared Dwight E. Nunn, personally known
to me to be the person whose name is subscribed to the within instrument and acknowledged
to me that he executed the same in his authorized capacity, and that by his signature on the
instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature _____

MARIANE SANCHEZ
Commission #1196482
Notary Public - California
San Diego County
My Comm. Expires Oct 14, 2002

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. for a Class 103 License to Acquire, Possess, and Use a Utilization Facility as Part of Unit No. 3 of the San Onofre Nuclear Generating Station	))))))	Docket No. 50-362 Amendment Application No. 188.

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 188. This amendment application consists of Proposed Technical Specification Change Number 518 Facility Operating License NPF-15.

Proposed Technical Specification Change Number 518 is a request to revise Limiting Condition For Operation 3.7.11, "Control Room Emergency Air Cleanup System (CREACUS)" to allow 24 hours to restore the capability to maintain proper pressure before requiring the unit to perform an orderly shutdown and to clarify that the Action Statements need not be entered when intermittent opening of the control room barrier is conducted under administrative control.

Subscribed on this 6th day of October, 2000.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: Dwight E. Nunn
Dwight E. Nunn
Vice President
Engineering &Technical Services

State of California
County of San Diego
On 10/6/2000 before me Mariane Sanchez,
personally appeared DWIGHT E. NUNN, personally known
to me to be the person whose name is subscribed to the within instrument and acknowledged
to me that he executed the same in his authorized capacity, and that by his signature on the
instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Mariane Sanchez

MARIANE SANCHEZ
Commission #1196482
Notary Public - California
San Diego County
My Comm. Expires Oct 14, 2002

DESCRIPTION AND SAFETY ANALYSIS OF PROPOSED CHANGE NPF-10/15-518

This is a request to revise Limiting Condition of Operation (LCO) 3.7.11, "Control Room Emergency Air Cleanup System (CREACUS)" of the Technical Specifications for San Onofre Nuclear Generating Station (SONGS), Units 2 and 3 and the associated Bases to allow 24 hours to restore the capability to maintain proper pressure before requiring the unit to perform an orderly shutdown and to clarify that the Action Statements need not be entered when intermittent opening of the control room boundary is conducted under administrative control.

Existing Technical Specifications and Bases:

Unit 2: See Attachment A

Unit 3: See Attachment B

Proposed Technical Specifications and Bases: (Redline and Strikeout)

Unit 2: See Attachment C

Unit 3: See Attachment D

Proposed Technical Specifications and Bases:

Unit 2: See Attachment E

Unit 3: See Attachment F

Technical Specification Task Force (TSTF) Change 287, Rev. 5

See Attachment G

Description of Changes:

This change establishes action to be taken for inoperable control room ventilation systems due to a degraded Control Room Pressure Boundary (CRPB). Technical Specification Surveillance Requirement (TSSR) 3.7.11.4 tests the integrity of the control room boundary. This test requires a positive pressure limit to be satisfied with one ventilation train operating. While other surveillance requirements in the same specification test the operability and function of the ventilation train, the pressure test ensures that the control room pressure boundary leak tightness is adequate to meet the design assumptions for post accident operator doses. Currently, there are no corresponding permanent conditions, required actions, or completion times specified in LCO 3.7.11 should the control room pressure boundary surveillance not be met. Under

the existing specifications, LCO 3.0.3 must be entered (for two-train inoperability). Requiring both Units to enter LCO 3.0.3 when the ventilation boundary is not intact does not provide time to effect any required repairs, perform corrective maintenance activities, or implement TS related surveillance testing.

The proposed Bases for this Action (B.1) require that during the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of General Design Criterion (GDC)19) be utilized to protect control room operators. The compensatory measures to minimize operator dose consistent with the intent of GDC 19 include the supply of protective clothing, and self contained breathing apparatus adequate for at least nine persons within the control room envelope.

In addition, the present LCO Bases to utilize administrative controls for maintaining the CRPB OPERABLE will be clarified by the addition of a Note to the LCO. This note to the LCO precludes entering the Action Statement for intermittent opening of the CRPB while under administrative controls to promptly restore the boundary upon isolation indication. The corresponding administrative controls required to maintain the CRPB OPERABLE are added to the Bases of the LCO. However, the Bases have been modified from TSTF-287, Rev. 5, to provide for the establishment of a communication method instead of the need to maintain continuous communication. To maintain continuous communication is burdensome because it is a labor intensive function that does not significantly expedite notification. The proposed Bases are being provided for information only.

These changes are consistent with the generic changes proposed by Technical Specification Task Force (TSTF)-287, Revision 5. That TSTF justifies the proposed changes based on the low probability of a Design Basis Accident occurring during the 24 hour allowed outage time or while the CRPB is opened intermittently under administrative controls.

Although TSTF-287 identifies changes to Specifications 3.7.13, "Emergency Core Cooling System Pump Room Exhaust Air Cleanup System," and Specification 3.7.14, "Fuel Building Air Cleanup System," these specifications are not applicable to SONGS, Units 2 and 3.

Background:

System Description

The CREACUS is shared between Units 2 and 3 and consists of two redundant safety related trains. The system's purpose is to provide emergency ventilation requirements for the Control Room. During an emergency, each CREACUS train can draw outside air through its own filters and activated charcoal adsorber for use in pressurizing the Control Room. This pressurization function ensures that radiation dose to the Control Room operators from airborne radioactive material released during a design basis accident is

less than the appropriate acceptance criteria. Two independent and redundant CREACUS trains are required to be OPERABLE to ensure that at least one is available to pressurize the Control Room if needed, assuming a single failure disables the other train. In addition, to ensure adequate Control Room pressurization during an event, the CRPB must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors.

Licensing Basis History

In the Safety Evaluation Report (SER), NUREG-0712, issued by the NRC on February 1, 1981, the staff completed its review of San Onofre 2 and 3 control room habitability. The review was conducted in accordance with Standard Review Plan (SRP) Section 6.4 and Item III.D.3.4 of NUREG-0737 and there were no open items. Also, as noted in Section 16.0 of the SER, the San Onofre Units 2 and 3 technical specifications were based upon NUREG-0212, "Standard Technical Specifications for Combustion Engineering Pressurized Water Reactors."

In August 1996, Southern California Edison (SCE) implemented new Technical Specifications (TS) by means of the Technical Specification Improvement Program (TSIP). Before then, TS 3/4.7.5 required SCE to have two independent control room emergency air cleanup systems operable during all modes or during movement of irradiated fuel assemblies. If both trains are not operable, immediate entry into TS 3.0.3 was required. These TS requirements were transferred to TS 3.7.11 during TSIP and the provision to administratively control the control room boundary was included in the Bases for LCO 3.7.11.

No Significant Hazards Considerations:

This is a request to revise Limiting Condition of Operation (LCO) 3.7.11, "Control Room Emergency Air Cleanup System (CREACUS)" of the Technical Specifications for San Onofre Nuclear Generating Station, Units 2 and 3 and the associated Bases to allow 24 hours to restore the capability to maintain proper pressure before requiring the unit to perform an orderly shutdown and to clarify that the Action Statements need not be entered when intermittent opening of the control room boundary is conducted under administrative control.

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92. A proposed amendment to an operating license for facility involves no significant hazards consideration if operation of the facility in accordance with a proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. A discussion of these standards as they relate to this amendment request follows to show that operation of the facility in accordance with this proposed amendment does not:

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

   Response: No

   The Control Room Area Ventilation System and Control Room boundary are not assumed to be an initiator of any analyzed accident; they are provided to minimize doses to the control room operators during an accident. Therefore, these proposed changes have no impact on the probability of occurrence of any previously analyzed accident.

   The proposed changes also have no impact on offsite dose consequences. The control room ventilation system and control room boundary provide protection for control room personnel and do not mitigate radiological effluents released offsite. With the control room boundary inoperable and not pressurized, the accident analyses assume unfiltered air would enter the control room and operator doses would be significantly increased. Conservative accident analysis assumptions do not take credit for available compensatory measures to mitigate operator dose. Compensatory measures include the supply of protective clothing, and self contained breathing apparatus adequate for at least nine persons within the control room envelope.

   Additionally, for cases where the control room boundary is opened under administrative control, appropriate administrative measures ensure the boundary can be rapidly restored. Based on the compensatory measures available to the control room operator to minimize dose (to be consistent with the intent of General Design Criterion 19), the administrative controls required to rapidly restore an opened boundary, and considering the low probability of an event occurring in this short time period, the consequences are not considered to be significantly increased. Operators maintain the ability to mitigate a design basis event.

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

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

   Response: No

   No changes are being made to actual plant hardware which will result in any new accident causal mechanisms. Therefore, no new accident causal mechanisms will be generated.

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

3. Involve a significant reduction in a margin of safety?

Response: No

Margin of safety is related to the ability of the fission product barriers to perform their design functions during and following accident conditions. These barriers include the fuel cladding, the reactor coolant system, and the containment system. The performance of these barriers will not be degraded by the proposed changes. The Control Room Ventilation System and control room boundary provide a protected environment for the control room operators during analyzed events. The proposed change would allow the boundary to be degraded for a limited period of time. However, administrative controls would be in place to rapidly restore an opened boundary and existing compensatory measures (e.g., protective clothing and self contained breathing apparatus) would be implemented to minimize operator dose. Therefore, it is expected that operators would maintain the ability to mitigate design basis events and none of the fission product barriers would be affected by this change.

Therefore, this change does <u>not</u> involve a significant reduction in a margin of safety.

Based on the responses to these three criteria, Southern California Edison (SCE) has concluded that the proposed amendment involves no significant hazards consideration.

Environmental Consideration:

The proposed Technical Specification amendment has been reviewed against the criteria of 10 CFR 51.22 for environmental considerations. SCE has determined that the proposed amendment involves no changes in the amount or type of effluent that may be released offsite, and results in no increase in individual or cumulative occupational radiation exposure. As described above, the proposed TS amendment involves no significant hazards consideration and, as such, meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9).

Attachment A

(Existing Pages)

SONGS Unit 2

3.7 PLANT SYSTEMS

3.7.11 Control Room Emergency Air Cleanup System (CREACUS)

LCO 3.7.11 Two CREACUS trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,
During movement of irradiated fuel assemblies.

ACTIONS

----------NOTES----------

1. The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration.

2. Each Unit shall enter applicable ACTIONS separately.

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One CREACUS train inoperable.	A.1	Restore CREACUS train to OPERABLE status.	7 days
B. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, 3, or 4.	B.1	Be in MODE 3.	6 hours
	AND		
	B.2	Be in MODE 5.	36 hours
C. Required Action and associated Completion Time of Condition A not met in MODES 5 or 6, or during movement of irradiated fuel assemblies.	C.1	Place OPERABLE CREACUS train in emergency radiation protection mode.	Immediately
	OR		
			(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (continued)	C.2.1 Suspend CORE ALTERATIONS. AND C.2.2 Suspend movement of irradiated fuel assemblies.	Immediately Immediately
D. Two CREACUS trains inoperable in MODE 1, 2, 3, or 4.	D.1 Enter LCO 3.0.3.	Immediately
E. Two CREACUS trains inoperable in MODES 5 or 6, or during movement of irradiated fuel assemblies.	E.1 Suspend CORE ALTERATIONS. AND E.2 Suspend movement of irradiated fuel assemblies.	Immediately Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.11.1	Operate each CREACUS train for ≥ 2 hours.	31 days
SR 3.7.11.2	Perform required CREACUS filter testing in accordance with Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP (continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.11.3	Verify each CREACUS train actuates on an actual or simulated actuation signal.	24 months
SR 3.7.11.4	Verify each CREACUS train can maintain a positive pressure of ≥ 0.125 inches water gauge, relative to the atmosphere during the emergency radiation state of the emergency mode of operation.	24 months

BASES

LCO (continued)

In addition, the control room boundary must be maintained, or administratively controlled, including the integrity of the walls, floors, ceilings, ductwork, and access doors.

APPLICABILITY

In MODES 1, 2, 3, and 4, the CREACUS must be OPERABLE to limit operator exposure during and following a DBA.

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

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

ACTIONS

ACTION statements are modified by two NOTES. NOTE 1 says: "The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration."

Specification 3.0.4 establishes that entry into an operational mode or other specified condition shall not be made unless the conditions of the LCO are met. Applicability statement "During movement of irradiated fuel assemblies" ensures the OPERABILITY of both CREACUS trains prior to the start of movement of irradiated fuel assemblies.

NOTE 2 says: "Each Unit shall enter applicable ACTIONS separately." CREACUS is a shared system between Unit 2 and Unit 3. LCO doesn't address the operational situation when the Units are in different operational MODES. Without this NOTE it may not be clear what ACTIONS should be taken.

A.1

With one CREACUS train inoperable, action must be taken to restore OPERABLE status within 7 days. In this Condition, the remaining OPERABLE CREACUS subsystem is adequate to perform control room radiation protection function.

(continued)

BASES

ACTIONS (continued)

A.1

However, the overall reliability is reduced because a single failure in the OPERABLE CREACUS train could result in loss of CREACUS function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and the ability of the remaining train to provide the required capability.

B.1 and B.2

If the inoperable CREACUS cannot be restored to OPERABLE status within the required Completion Time in MODE 1, 2, 3, or 4, the unit must be placed in a MODE that minimizes the accident risk. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

C.1, C.2.1, and C.2.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, if Required Action A.1 cannot be completed within the required Completion Time, the OPERABLE CREACUS train must be immediately placed in the emergency mode of operation. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure will be readily detected.

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

D.1

If both CREACUS trains are inoperable in MODE 1, 2, 3, or 4, the CREACUS 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.

(continued)

BASES

ACTIONS (continued)

E.1 and E.2

When in MODES 5 or 6, or during movement of irradiated fuel assemblies with two trains inoperable, action must be taken immediately to suspend activities that could result in a release of radioactivity that might enter the control room.

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 3.7.11.1

Standby systems should be checked periodically to ensure that they function properly. Since the environment and normal operating conditions on this system are not severe, testing each train once every month provides an adequate check on this system.

Cumulative operation of the system for at least 2 hours over a 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filtes. The 2 hour time frame is based on a conservative engineering evaluation which calculated the time required to evaporate the moisture contained in the air trapped inside the CREACUS duct upstream of charcoal beds. The 31 day Frequency is based on the known reliability of the equipment, and the two train redundancy available.

SR 3.7.11.2

This SR verifies that the required CREACUS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The CREACUS filter tests are based on Regulatory Guide 1.52 (Ref. 3). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of theactivated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.11.2

The filtration efficiency only apply to the emergency recirculation air conditioning units E418 and E419. Therefore, testing for filtration efficiency is not required for the emergency ventilation supply units A206 and A207.

However, the specified air flow from the emergency ventilation units is required during the filtration efficiency testing of the emergency recirculation air conditioning units. Also, the air flow requirements which are specified in the VFTP apply to the emergency ventilation and emergency air conditioning units.

SR 3.7.11.3

This SR verifies each CREACUS train starts and operates on an acutual or simulated actuation signal. The Frequency of 24 months is consistent with that specified in Reference 3.

SR 3.7.11.4

This SR verifies the integrity of the control room enclosure and the assumed inleakage rates of potentially contaminated air. The control room positive pressure, with respect to potentially contaminated atmosphere, is periodically tested to verify proper function of the CREACUS. During the emergency radiation state of the emergency mode of operation, the CREACUS is designed to pressurize the control room ≥ 0.125 inches water gauge positive pressure with respect to the atmosphere in order to prevent unfiltered inleakage. The CREACUS is designed to maintain this positive pressure with one train.

REFERENCES

1. UFSAR, Section 9.4.

2. UFSAR, Chapter 15.

3. Regulatory Guide 1.52 (Rev. 2).

Attachment B

(Existing Pages)

SONGS Unit 3

3.7 PLANT SYSTEMS

3.7.11 Control Room Emergency Air Cleanup System (CREACUS)

LCO 3.7.11 Two CREACUS trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,
During movement of irradiated fuel assemblies.

ACTIONS

----------NOTES----------

1. The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration.

2. Each Unit shall enter applicable ACTIONS separately.

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One CREACUS train inoperable.	A.1	Restore CREACUS train to OPERABLE status.	7 days
B. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, 3, or 4.	B.1	Be in MODE 3.	6 hours
	AND		
	B.2	Be in MODE 5.	36 hours
C. Required Action and associated Completion Time of Condition A not met in MODES 5 or 6, or during movement of irradiated fuel assemblies.	C.1	Place OPERABLE CREACUS train in emergency radiation protection mode.	Immediately
	OR		
			(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (continued)	C.2.1 Suspend CORE ALTERATIONS. AND C.2.2 Suspend movement of irradiated fuel assemblies.	Immediately Immediately
D. Two CREACUS trains inoperable in MODE 1, 2, 3, or 4.	D.1 Enter LCO 3.0.3.	Immediately
E. Two CREACUS trains inoperable in MODES 5 or 6, or during movement of irradiated fuel assemblies.	E.1 Suspend CORE ALTERATIONS. AND E.2 Suspend movement of irradiated fuel assemblies.	Immediately Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.11.1	Operate each CREACUS train for ≥ 2 hours.	31 days
SR 3.7.11.2	Perform required CREACUS filter testing in accordance with Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP (continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.11.3	Verify each CREACUS train actuates on an actual or simulated actuation signal.	24 months
SR 3.7.11.4	Verify each CREACUS train can maintain a positive pressure of ≥ 0.125 inches water gauge, relative to the atmosphere during the emergency radiation state of the emergency mode of operation.	24 months

BASES

LCO (continued)

In addition, the control room boundary must be maintained, or administratively controlled, including the integrity of the walls, floors, ceilings, ductwork, and access doors.

APPLICABILITY

In MODES 1, 2, 3, and 4, the CREACUS must be OPERABLE to limit operator exposure during and following a DBA.

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

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

ACTIONS

ACTION statements are modified by two NOTES. NOTE 1 says: "The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration."

Specification 3.0.4 establishes that entry into an operational mode or other specified condition shall not be made unless the conditions of the LCO are met. Applicability statement "During movement of irradiated fuel assemblies" ensures the OPERABILITY of both CREACUS trains prior to the start of movement of irradiated fuel assemblies.

NOTE 2 says: "Each Unit shall enter applicable ACTIONS separately." CREACUS is a shared system between Unit 2 and Unit 3. LCO doesn't address the operational situation when the Units are in different operational MODES. Without this NOTE it may not be clear what ACTIONS should be taken.

A.1

With one CREACUS train inoperable, action must be taken to restore OPERABLE status within 7 days. In this Condition, the remaining OPERABLE CREACUS subsystem is adequate to perform control room radiation protection function.

(continued)

BASES

ACTIONS (continued)

A.1

However, the overall reliability is reduced because a single failure in the OPERABLE CREACUS train could result in loss of CREACUS function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and the ability of the remaining train to provide the required capability.

B.1 and B.2

If the inoperable CREACUS cannot be restored to OPERABLE status within the required Completion Time in MODE 1, 2, 3, or 4, the unit must be placed in a MODE that minimizes the accident risk. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

C.1, C.2.1, and C.2.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, if Required Action A.1 cannot be completed within the required Completion Time, the OPERABLE CREACUS train must be immediately placed in the emergency mode of operation. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure will be readily detected.

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

D.1

If both CREACUS trains are inoperable in MODE 1, 2, 3, or 4, the CREACUS 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.

(continued)

BASES

ACTIONS (continued)

E.1 and E.2

When in MODES 5 or 6, or during movement of irradiated fuel assemblies with two trains inoperable, action must be taken immediately to suspend activities that could result in a release of radioactivity that might enter the control room.

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 3.7.11.1

Standby systems should be checked periodically to ensure that they function properly. Since the environment and normal operating conditions on this system are not severe, testing each train once every month provides an adequate check on this system.

Cumulative operation of the system for at least 2 hours over a 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filtes. The 2 hour time frame is based on a conservative engineering evaluation which calculated the time required to evaporate the moisture contained in the air trapped inside the CREACUS duct upstream of charcoal beds. The 31 day Frequency is based on the known reliability of the equipment, and the two train redundancy available.

SR 3.7.11.2

This SR verifies that the required CREACUS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The CREACUS filter tests are based on Regulatory Guide 1.52 (Ref. 3). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.11.2

The filtration efficiency only apply to the emergency recirculation air conditioning units E418 and E419. Therefore, testing for filtration efficiency is not required for the emergency ventilation supply units A206 and A207.

However, the specified air flow from the emergency ventilation units is required during the filtration efficiency testing of the emergency recirculation air conditioning units. Also, the air flow requirements which are specified in the VFTP apply to the emergency ventilation and emergency air conditioning units.

SR 3.7.11.3

This SR verifies each CREACUS train starts and operates on an acutual or simulated actuation signal. The Frequency of 24 months is consistent with that specified in Reference 3.

SR 3.7.11.4

This SR verifies the integrity of the control room enclosure and the assumed inleakage rates of potentially contaminated air. The control room positive pressure, with respect to potentially contaminated atmosphere, is periodically tested to verify proper function of the CREACUS. During the emergency radiation state of the emergency mode of operation, the CREACUS is designed to pressurize the control room ≥ 0.125 inches water gauge positive pressure with respect to the atmosphere in order to prevent unfiltered inleakage. The CREACUS is designed to maintain this positive pressure with one train.

REFERENCES

1. UFSAR, Section 9.4.

2. UFSAR, Chapter 15.

3. Regulatory Guide 1.52 (Rev. 2).

Attachment C

(Proposed Pages)

(Redline and Strikeout)

SONGS Unit 2

3.7 PLANT SYSTEMS

3.7.11 Control Room Emergency Air Cleanup System (CREACUS)

LCO 3.7.11 Two CREACUS trains shall be OPERABLE.

----------NOTE----------
The control room boundary may be opened intermittently under administrative control.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,
During movement of irradiated fuel assemblies.

ACTIONS

----------NOTES----------
1. The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration.

2. Each Unit shall enter applicable ACTIONS separately.

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One CREACUS train inoperable.	A.1	Restore CREACUS train to OPERABLE status.	7 days
B. Two CREACUS trains inoperable due to inoperable control room boundary in Modes 1, 2, 3, or 4.	B.1	Restore control room boundary to OPERABLE status.	24 hours
~~B~~ C. Required Action and associated Completion Time of Condition A or ~~B~~ not met in MODE 1, 2, 3, or 4.	~~B~~C.1	Be in MODE 3.	6 hours
	AND		
	~~B~~C.2	Be in MODE 5.	36 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
~~C~~ D. Required Action and associated Completion Time of Condition A not met in MODES 5 or 6, or during movement of irradiated fuel assemblies.	~~C~~ D.1	Place OPERABLE CREACUS train in emergency radiation protection mode.	Immediately
	OR		
~~C. (continued)~~	~~C~~D.2.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	~~C~~D.2.2	Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREACUS trains inoperable in MODES 5 or 6, or during movement of irradiated fuel assemblies.	E.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	E.2	Suspend movement of irradiated fuel assemblies.	Immediately
~~D~~ F. Two CREACUS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B.	~~D~~F.1	Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.11.1	Operate each CREACUS train for ≥ 2 hours.	31 days
SR 3.7.11.2	Perform required CREACUS filter testing in accordance with Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP ~~(continued)~~
SR 3.7.11.3	Verify each CREACUS train actuates on an actual or simulated actuation signal.	24 months
SR 3.7.11.4	Verify each CREACUS train can maintain a positive pressure of ≥ 0.125 inches water gauge, relative to the atmosphere during the emergency radiation state of the emergency mode of operation.	24 months

BASES

LCO (continued)

In addition, the control room boundary must be maintained, ~~or administratively controlled,~~ including the integrity of the walls, floors, ceilings, ductwork, and access doors.

The LCO is modified by a Note allowing the control room boundary to be opened intermittently under administrative controls. 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 consist of stationing a dedicated individual at the opening who has established a communication method with the control room. This individual will have a method to rapidly close the opening when a need for control room isolation is indicated.

APPLICABILITY

In MODES 1, 2, 3, and 4, the CREACUS must be OPERABLE to limit operator exposure during and following a DBA.

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

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

ACTIONS

ACTION statements are modified by two NOTES. NOTE 1 says: "The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration."

Specification 3.0.4 establishes that entry into an operational mode or other specified condition shall not be made unless the conditions of the LCO are met. Applicability statement "During movement of irradiated fuel assemblies" ensures the OPERABILITY of both CREACUS trains prior to the start of movement of irradiated fuel assemblies.

NOTE 2 says: "Each Unit shall enter applicable ACTIONS separately." CREACUS is a shared system between Unit 2 and Unit 3. LCO doesn't address the operational situation when the Units are in different operational MODES. Without this NOTE it may not be clear what ACTIONS should be taken.

(continued)

BASES

ACTIONS (continued)

A.1

With one CREACUS train inoperable, action must be taken to restore OPERABLE status within 7 days. In this Condition, the remaining OPERABLE CREACUS subsystem is adequate to perform control room radiation protection function.

However, the overall reliability is reduced because a single failure in the OPERABLE CREACUS train could result in loss of CREACUS function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and the ability of the remaining train to provide the required capability.

B.1

If the control room boundary is inoperable in MODES 1, 2, 3, or 4, the CREACUS trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the control room boundary.

~~B~~C.1 and ~~B~~C.2

If the inoperable CREACUS or control room boundary cannot be restored to OPERABLE status within the associated ~~required~~ Completion Time in MODE 1, 2, 3, or 4, the unit must be placed in a MODE that minimizes the accident risk. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

(continued)

BASES

ACTIONS (continued)

~~C~~D.1, ~~C~~D.2.1, and ~~C~~D.2.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, if Required Action ~~A~~D.1 cannot be completed within the required Completion Time, the OPERABLE CREACUS train must be immediately placed in the emergency mode of operation. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure will be readily detected.

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

E.1 and E.2

When in MODES 5 or 6, or during movement of irradiated fuel assemblies with two trains inoperable, action must be taken immediately to suspend activities that could result in a release of radioactivity that might enter the control room.

This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

~~D~~F.1

If both CREACUS trains are inoperable in MODE 1, 2, 3, or 4 for reasons other than an inoperable control room boundary (i.e., Condition B), the CREACUS 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.

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.11.1

Standby systems should be checked periodically to ensure that they function properly. Since the environment and normal operating conditions on this system are not severe, testing each train once every month provides an adequate check on this system.

Cumulative operation of the system for at least 2 hours over a 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The 2 hour time frame is based on a conservative engineering evaluation which calculated the time required to evaporate the moisture contained in the air trapped inside the CREACUS duct upstream of charcoal beds. The 31 day Frequency is based on the known reliability of the equipment, and the two train redundancy available.

SR 3.7.11.2

This SR verifies that the required CREACUS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The CREACUS filter tests are based on Regulatory Guide 1.52 (Ref. 3). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of theactivated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

The filtration efficiency only apply to the emergency recirculation air conditioning units E418 and E419. Therefore, testing for filtration efficiency is not required for the emergency ventilation supply units A206 and A207.

However, the specified air flow from the emergency ventilation units is required during the filtration efficiency testing of the emergency recirculation air conditioning units. Also, the air flow requirements which are specified in the VFTP apply to the emergency ventilation and emergency air conditioning units.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.11.3

This SR verifies each CREACUS train starts and operates on an acutual or simulated actuation signal. The Frequency of 24 months is consistent with that specified in Reference 3.

SR 3.7.11.4

This SR verifies the integrity of the control room enclosure and the assumed inleakage rates of potentially contaminated air. The control room positive pressure, with respect to potentially contaminated atmosphere, is periodically tested to verify proper function of the CREACUS. During the emergency radiation state of the emergency mode of operation, the CREACUS is designed to pressurize the control room ≥ 0.125 inches water gauge positive pressure with respect to the atmosphere in order to prevent unfiltered inleakage. The CREACUS is designed to maintain this positive pressure with one train.

REFERENCES

1. UFSAR, Section 9.4.

2. UFSAR, Chapter 15.

3. Regulatory Guide 1.52 (Rev. 2).

Attachment D

(Proposed Pages)

(Redline and Strikeout)

SONGS Unit 3

3.7 PLANT SYSTEMS

3.7.11 Control Room Emergency Air Cleanup System (CREACUS)

LCO 3.7.11 Two CREACUS trains shall be OPERABLE.

----------NOTE----------
The control room boundary may be opened intermittently under administrative control.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,
During movement of irradiated fuel assemblies.

ACTIONS

----------NOTES----------
1. The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration.

2. Each Unit shall enter applicable ACTIONS separately.

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One CREACUS train inoperable.	A.1	Restore CREACUS train to OPERABLE status.	7 days
B. Two CREACUS trains inoperable due to inoperable control room boundary in Modes 1, 2, 3, or 4.	B.1	Restore control room boundary to OPERABLE status.	24 hours
~~B~~ C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, 3, or 4.	~~B~~C.1	Be in MODE 3.	6 hours
	AND		
	~~B~~C.2	Be in MODE 5.	36 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
~~C~~ D. Required Action and associated Completion Time of Condition A not met in MODES 5 or 6, or during movement of irradiated fuel assemblies.	~~C~~ D.1	Place OPERABLE CREACUS train in emergency radiation protection mode.	Immediately
	OR		
~~C. (continued)~~	~~C~~D.2.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	~~C~~D.2.2	Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREACUS trains inoperable in MODES 5 or 6, or during movement of irradiated fuel assemblies.	E.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	E.2	Suspend movement of irradiated fuel assemblies.	Immediately
~~D~~ F. Two CREACUS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B).	~~D~~F.1	Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.11.1	Operate each CREACUS train for ≥ 2 hours.	31 days
SR 3.7.11.2	Perform required CREACUS filter testing in accordance with Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP ~~(continued)~~
SR 3.7.11.3	Verify each CREACUS train actuates on an actual or simulated actuation signal.	24 months
SR 3.7.11.4	Verify each CREACUS train can maintain a positive pressure of ≥ 0.125 inches water gauge, relative to the atmosphere during the emergency radiation state of the emergency mode of operation.	24 months

BASES

LCO (continued)

In addition, the control room boundary must be maintained, ~~or administratively controlled,~~ including the integrity of the walls, floors, ceilings, ductwork, and access doors.

The LCO is modified by a Note allowing the control room boundary to be opened intermittently under administrative controls. 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 consist of stationing a dedicated individual at the opening who has established a communication method with the control room. This individual will have a method to rapidly close the opening when a need for control room isolation is indicated.

APPLICABILITY

In MODES 1, 2, 3, and 4, the CREACUS must be OPERABLE to limit operator exposure during and following a DBA.

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

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

ACTIONS

ACTION statements are modified by two NOTES. NOTE 1 says: "The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration."

Specification 3.0.4 establishes that entry into an operational mode or other specified condition shall not be made unless the conditions of the LCO are met. Applicability statement "During movement of irradiated fuel assemblies" ensures the OPERABILITY of both CREACUS trains prior to the start of movement of irradiated fuel assemblies.

NOTE 2 says: "Each Unit shall enter applicable ACTIONS separately." CREACUS is a shared system between Unit 2 and Unit 3. LCO doesn't address the operational situation when the Units are in different operational MODES. Without this NOTE it may not be clear what ACTIONS should be taken.

(continued)

BASES

ACTIONS (continued)

A.1

With one CREACUS train inoperable, action must be taken to restore OPERABLE status within 7 days. In this Condition, the remaining OPERABLE CREACUS subsystem is adequate to perform control room radiation protection function.

However, the overall reliability is reduced because a single failure in the OPERABLE CREACUS train could result in loss of CREACUS function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and the ability of the remaining train to provide the required capability.

B.1

If the control room boundary is inoperable in MODES 1, 2, 3, or 4, the CREACUS trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the control room boundary.

~~B~~C.1 and ~~B~~C.2

If the inoperable CREACUS or control room boundary cannot be restored to OPERABLE status within the associated ~~required~~ Completion Time in MODE 1, 2, 3, or 4, the unit must be placed in a MODE that minimizes the accident risk. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

(continued)

BASES

ACTIONS (continued)

~~C~~D.1, ~~C~~D.2.1, and ~~C~~D.2.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, if Required Action ~~A~~D.1 cannot be completed within the required Completion Time, the OPERABLE CREACUS train must be immediately placed in the emergency mode of operation. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure will be readily detected.

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

E.1 and E.2

When in MODES 5 or 6, or during movement of irradiated fuel assemblies with two trains inoperable, action must be taken immediately to suspend activities that could result in a release of radioactivity that might enter the control room.

This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

~~D~~F.1

If both CREACUS trains are inoperable in MODE 1, 2, 3, or 4 for reasons other than an inoperable control room boundary (i.e., Condition B), the CREACUS 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.

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.11.1

Standby systems should be checked periodically to ensure that they function properly. Since the environment and normal operating conditions on this system are not severe, testing each train once every month provides an adequate check on this system.

Cumulative operation of the system for at least 2 hours over a 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The 2 hour time frame is based on a conservative engineering evaluation which calculated the time required to evaporate the moisture contained in the air trapped inside the CREACUS duct upstream of charcoal beds. The 31 day Frequency is based on the known reliability of the equipment, and the two train redundancy available.

SR 3.7.11.2

This SR verifies that the required CREACUS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The CREACUS filter tests are based on Regulatory Guide 1.52 (Ref. 3). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

The filtration efficiency only apply to the emergency recirculation air conditioning units E418 and E419. Therefore, testing for filtration efficiency is not required for the emergency ventilation supply units A206 and A207.

However, the specified air flow from the emergency ventilation units is required during the filtration efficiency testing of the emergency recirculation air conditioning units. Also, the air flow requirements which are specified in the VFTP apply to the emergency ventilation and emergency air conditioning units.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.11.3

This SR verifies each CREACUS train starts and operates on an acutual or simulated actuation signal. The Frequency of 24 months is consistent with that specified in Reference 3.

SR 3.7.11.4

This SR verifies the integrity of the control room enclosure and the assumed inleakage rates of potentially contaminated air. The control room positive pressure, with respect to potentially contaminated atmosphere, is periodically tested to verify proper function of the CREACUS. During the emergency radiation state of the emergency mode of operation, the CREACUS is designed to pressurize the control room ≥ 0.125 inches water gauge positive pressure with respect to the atmosphere in order to prevent unfiltered inleakage. The CREACUS is designed to maintain this positive pressure with one train.

REFERENCES

1. UFSAR, Section 9.4.

2. UFSAR, Chapter 15.

3. Regulatory Guide 1.52 (Rev. 2).

Attachment E

(Proposed Pages)

SONGS Unit 2

3.7 PLANT SYSTEMS

3.7.11 Control Room Emergency Air Cleanup System (CREACUS)

LCO 3.7.11 Two CREACUS trains shall be OPERABLE.

----------NOTE----------
The control room boundary may be opened intermittently under administrative control.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,
During movement of irradiated fuel assemblies.

ACTIONS

----------NOTES----------
1. The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration.

2. Each Unit shall enter applicable ACTIONS separately.

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One CREACUS train inoperable.	A.1	Restore CREACUS train to OPERABLE status.	7 days
B. Two CREACUS trains inoperable due to inoperable control room boundary in Modes 1, 2, 3, or 4.	B.1	Restore control room boundary to OPERABLE status.	24 hours
C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, 3, or 4.	C.1	Be in MODE 3.	6 hours
	AND		
	C.2	Be in MODE 5.	36 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
D. Required Action and associated Completion Time of Condition A not met in MODES 5 or 6, or during movement of irradiated fuel assemblies.	D.1	Place OPERABLE CREACUS train in emergency radiation protection mode.	Immediately
	OR		
	D.2.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	D.2.2	Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREACUS trains inoperable in MODES 5 or 6, or during movement of irradiated fuel assemblies.	E.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	E.2	Suspend movement of irradiated fuel assemblies.	Immediately
F. Two CREACUS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B.	F.1	Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.11.1	Operate each CREACUS train for ≥ 2 hours.	31 days
SR 3.7.11.2	Perform required CREACUS filter testing in accordance with Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.11.3	Verify each CREACUS train actuates on an actual or simulated actuation signal.	24 months
SR 3.7.11.4	Verify each CREACUS train can maintain a positive pressure of ≥ 0.125 inches water gauge, relative to the atmosphere during the emergency radiation state of the emergency mode of operation.	24 months

BASES

LCO (continued)

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors.

The LCO is modified by a Note allowing the control room boundary to be opened intermittently under administrative controls. 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 consist of stationing a dedicated individual at the opening who has established a communication method with the control room. This individual will have a method to rapidly close the opening when a need for control room isolation is indicated.

APPLICABILITY

In MODES 1, 2, 3, and 4, the CREACUS must be OPERABLE to limit operator exposure during and following a DBA.

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

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

ACTIONS

ACTION statements are modified by two NOTES. NOTE 1 says: "The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration."

Specification 3.0.4 establishes that entry into an operational mode or other specified condition shall not be made unless the conditions of the LCO are met. Applicability statement "During movement of irradiated fuel assemblies" ensures the OPERABILITY of both CREACUS trains prior to the start of movement of irradiated fuel assemblies.

NOTE 2 says: "Each Unit shall enter applicable ACTIONS separately." CREACUS is a shared system between Unit 2 and Unit 3. LCO doesn't address the operational situation when the Units are in different operational MODES. Without this NOTE it may not be clear what ACTIONS should be taken.

(continued)

BASES

ACTIONS (continued)

A.1

With one CREACUS train inoperable, action must be taken to restore OPERABLE status within 7 days. In this Condition, the remaining OPERABLE CREACUS subsystem is adequate to perform control room radiation protection function.

However, the overall reliability is reduced because a single failure in the OPERABLE CREACUS train could result in loss of CREACUS function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and the ability of the remaining train to provide the required capability.

B.1

If the control room boundary is inoperable in MODES 1, 2, 3, or 4, the CREACUS trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the control room boundary.

C.1 and C.2

If the inoperable CREACUS or control room boundary cannot be restored to OPERABLE status within the associated Completion Time in MODE 1, 2, 3, or 4, the unit must be placed in a MODE that minimizes the accident risk. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

(continued)

BASES

ACTIONS (continued)

D.1, D.2.1, and D.2.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, if Required Action D.1 cannot be completed within the required Completion Time, the OPERABLE CREACUS train must be immediately placed in the emergency mode of operation. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure will be readily detected.

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

E.1 and E.2

When in MODES 5 or 6, or during movement of irradiated fuel assemblies with two trains inoperable, action must be taken immediately to suspend activities that could result in a release of radioactivity that might enter the control room.

This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

F.1

If both CREACUS trains are inoperable in MODE 1, 2, 3, or 4 for reasons other than an inoperable control room boundary (i.e., Condition B), the CREACUS 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.

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.11.1

Standby systems should be checked periodically to ensure that they function properly. Since the environment and normal operating conditions on this system are not severe, testing each train once every month provides an adequate check on this system.

Cumulative operation of the system for at least 2 hours over a 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The 2 hour time frame is based on a conservative engineering evaluation which calculated the time required to evaporate the moisture contained in the air trapped inside the CREACUS duct upstream of charcoal beds. The 31 day Frequency is based on the known reliability of the equipment, and the two train redundancy available.

SR 3.7.11.2

This SR verifies that the required CREACUS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The CREACUS filter tests are based on Regulatory Guide 1.52 (Ref. 3). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of theactivated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

The filtration efficiency only apply to the emergency recirculation air conditioning units E418 and E419. Therefore, testing for filtration efficiency is not required for the emergency ventilation supply units A206 and A207.

However, the specified air flow from the emergency ventilation units is required during the filtration efficiency testing of the emergency recirculation air conditioning units. Also, the air flow requirements which are specified in the VFTP apply to the emergency ventilation and emergency air conditioning units.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.11.3

This SR verifies each CREACUS train starts and operates on an acutual or simulated actuation signal. The Frequency of 24 months is consistent with that specified in Reference 3.

SR 3.7.11.4

This SR verifies the integrity of the control room enclosure and the assumed inleakage rates of potentially contaminated air. The control room positive pressure, with respect to potentially contaminated atmosphere, is periodically tested to verify proper function of the CREACUS. During the emergency radiation state of the emergency mode of operation, the CREACUS is designed to pressurize the control room ≥ 0.125 inches water gauge positive pressure with respect to the atmosphere in order to prevent unfiltered inleakage. The CREACUS is designed to maintain this positive pressure with one train.

REFERENCES

1. UFSAR, Section 9.4.

2. UFSAR, Chapter 15.

3. Regulatory Guide 1.52 (Rev. 2).

Attachment F

(Proposed Pages)

SONGS Unit 3

3.7 PLANT SYSTEMS

3.7.11 Control Room Emergency Air Cleanup System (CREACUS)

LCO 3.7.11 Two CREACUS trains shall be OPERABLE.

----------NOTE----------
The control room boundary may be opened intermittently under administrative control.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,
During movement of irradiated fuel assemblies.

ACTIONS

----------NOTES----------
1. The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration.

2. Each Unit shall enter applicable ACTIONS separately.

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One CREACUS train inoperable.	A.1	Restore CREACUS train to OPERABLE status.	7 days
B. Two CREACUS trains inoperable due to inoperable control room boundary in Modes 1, 2, 3, or 4.	B.1	Restore control room boundary to OPERABLE status.	24 hours
C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, 3, or 4.	C.1	Be in MODE 3.	6 hours
	AND		
	C.2	Be in MODE 5.	36 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
D. Required Action and associated Completion Time of Condition A not met in MODES 5 or 6, or during movement of irradiated fuel assemblies.	D.1	Place OPERABLE CREACUS train in emergency radiation protection mode.	Immediately
	OR		
	D.2.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	D.2.2	Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREACUS trains inoperable in MODES 5 or 6, or during movement of irradiated fuel assemblies.	E.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	E.2	Suspend movement of irradiated fuel assemblies.	Immediately
F. Two CREACUS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B.	F.1	Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.11.1	Operate each CREACUS train for ≥ 2 hours.	31 days
SR 3.7.11.2	Perform required CREACUS filter testing in accordance with Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.11.3	Verify each CREACUS train actuates on an actual or simulated actuation signal.	24 months
SR 3.7.11.4	Verify each CREACUS train can maintain a positive pressure of ≥ 0.125 inches water gauge, relative to the atmosphere during the emergency radiation state of the emergency mode of operation.	24 months

BASES

LCO (continued)

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors.

The LCO is modified by a Note allowing the control room boundary to be opened intermittently under administrative controls. 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 consist of stationing a dedicated individual at the opening who has established a communication method with the control room. This individual will have a method to rapidly close the opening when a need for control room isolation is indicated.

APPLICABILITY

In MODES 1, 2, 3, and 4, the CREACUS must be OPERABLE to limit operator exposure during and following a DBA.

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

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

ACTIONS

ACTION statements are modified by two NOTES. NOTE 1 says: "The provisions of LCO 3.0.4 are not applicable when entering MODES 5, 6, or defueled configuration."

Specification 3.0.4 establishes that entry into an operational mode or other specified condition shall not be made unless the conditions of the LCO are met. Applicability statement "During movement of irradiated fuel assemblies" ensures the OPERABILITY of both CREACUS trains prior to the start of movement of irradiated fuel assemblies.

NOTE 2 says: "Each Unit shall enter applicable ACTIONS separately." CREACUS is a shared system between Unit 2 and Unit 3. LCO doesn't address the operational situation when the Units are in different operational MODES. Without this NOTE it may not be clear what ACTIONS should be taken.

(continued)

BASES

ACTIONS (continued)

A.1

With one CREACUS train inoperable, action must be taken to restore OPERABLE status within 7 days. In this Condition, the remaining OPERABLE CREACUS subsystem is adequate to perform control room radiation protection function.

However, the overall reliability is reduced because a single failure in the OPERABLE CREACUS train could result in loss of CREACUS function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and the ability of the remaining train to provide the required capability.

B.1

If the control room boundary is inoperable in MODES 1, 2, 3, or 4, the CREACUS trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the control room boundary.

C.1 and C.2

If the inoperable CREACUS or control room boundary cannot be restored to OPERABLE status within the associated Completion Time in MODE 1, 2, 3, or 4, the unit must be placed in a MODE that minimizes the accident risk. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

(continued)

BASES

ACTIONS (continued)

D.1, D.2.1, and D.2.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, if Required Action D.1 cannot be completed within the required Completion Time, the OPERABLE CREACUS train must be immediately placed in the emergency mode of operation. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure will be readily detected.

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

E.1 and E.2

When in MODES 5 or 6, or during movement of irradiated fuel assemblies with two trains inoperable, action must be taken immediately to suspend activities that could result in a release of radioactivity that might enter the control room.

This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

F.1

If both CREACUS trains are inoperable in MODE 1, 2, 3, or 4 for reasons other than an inoperable control room boundary (i.e., Condition B), the CREACUS 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.

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.11.1

Standby systems should be checked periodically to ensure that they function properly. Since the environment and normal operating conditions on this system are not severe, testing each train once every month provides an adequate check on this system.

Cumulative operation of the system for at least 2 hours over a 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The 2 hour time frame is based on a conservative engineering evaluation which calculated the time required to evaporate the moisture contained in the air trapped inside the CREACUS duct upstream of charcoal beds. The 31 day Frequency is based on the known reliability of the equipment, and the two train redundancy available.

SR 3.7.11.2

This SR verifies that the required CREACUS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The CREACUS filter tests are based on Regulatory Guide 1.52 (Ref. 3). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

The filtration efficiency only apply to the emergency recirculation air conditioning units E418 and E419. Therefore, testing for filtration efficiency is not required for the emergency ventilation supply units A206 and A207.

However, the specified air flow from the emergency ventilation units is required during the filtration efficiency testing of the emergency recirculation air conditioning units. Also, the air flow requirements which are specified in the VFTP apply to the emergency ventilation and emergency air conditioning units.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.11.3

This SR verifies each CREACUS train starts and operates on an acutual or simulated actuation signal. The Frequency of 24 months is consistent with that specified in Reference 3.

SR 3.7.11.4

This SR verifies the integrity of the control room enclosure and the assumed inleakage rates of potentially contaminated air. The control room positive pressure, with respect to potentially contaminated atmosphere, is periodically tested to verify proper function of the CREACUS. During the emergency radiation state of the emergency mode of operation, the CREACUS is designed to pressurize the control room ≥ 0.125 inches water gauge positive pressure with respect to the atmosphere in order to prevent unfiltered inleakage. The CREACUS is designed to maintain this positive pressure with one train.

REFERENCES

1. UFSAR, Section 9.4.
2. UFSAR, Chapter 15.
3. Regulatory Guide 1.52 (Rev. 2).

Attachment G

For Information

Technical Specification
Task Force Change 287
Revision 5

(Includes only NUREG
1432 changes)

Industry/TSTF Standard Technical Specification Change Traveler

Ventilation System Envelope Allowed Outage Time

Classification: 3) Improve Specifications

NUREGs Affected: ☑ 1430 ☑ 1431 ☑ 1432 ☑ 1433 ☑ 1434

Description:

This change provides specific Conditions and Required Actions for room/barrier degradation (as opposed to ventilation train degradation). The Surveillances that test the integrity of the room/barrier require a positive or negative pressure limit to be satisfied in the area with one required ventilation train operating. While other Surveillances in the same specification test the operability of the ventilation train, these barrier surveillances ensure the envelope leak tightness is adequate to meet the design assumptions. However, there are no corresponding Conditions, Required Actions, or Completion Times associated with failure of these barrier Surveillances. Under existing specifications, LCO 3.0.3 must be entered (for two train inoperability). The proposed change would allow 24 hours (during operating MODES) to restore the capability to maintain proper pressure before requiring the unit to perform an orderly shutdown and also allows intermittent opening of the control room barrier under administrative control.

Justification:

Requiring the plant to enter LCO 3.0.3 when the ventilation envelope is not intact is excessive and, in the case of the FBACS OR FSPVS, is not appropriate. Modeling these specifications on the Shield Building specification (NUREG-1431, LCO 3.6.19) for a Dual or Ice Condenser containment would provide consistency within the NUREG. NUREG-1431 Specification 3.6.19 allows 24 hours to restore the envelope to Operable status before requiring an orderly shutdown from operating conditions (MODE 3 in 6 hours, MODE 5 in 36 hours). This would allow for routine repairs. The proposed change is acceptable because of the low probability of a DBA occurring during the 24 hour AOT. Furthermore, (modeling an allowance on the CIV allowance to intermittently open penetrations that are otherwise required to be closed), an LCO Note is added to allow intermittent opening (e.g. as for entering and exiting) without entering the Actions.

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NRC Contact:	Giardina, Bob	301-314-3152	lbb1@nrc.gov

Revision History

OG Revision 0 Revision Status: Closed

Revision Proposed by: South Texas Project

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 19-Nov-96

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 19-Nov-96

TSTF Review Information

TSTF Received Date: 17-Dec-96 Date Distributed for Review

OG Review Completed: ☐ BWOG ☑ WOG ☐ CEOG ☐ BWROG

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OG Revision 0 Revision Status: Closed

TSTF Comments:

On hold for WOG Mini-Group changes.

TSTF Resolution: Withdrawn Date: 27-Apr-97

OG Revision 1 Revision Status: Closed

Revision Proposed by: WOG

Revision Description:
Complete replacement of WOG-86, Rev. 0

Owners Group Review Information

Date Originated by OG: 27-Apr-97

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 27-Apr-97

TSTF Review Information

TSTF Received Date: 27-Apr-97 Date Distributed for Review 06-Jan-98

OG Review Completed: ☑ BWOG ☑ WOG ☑ CEOG ☑ BWROG

TSTF Comments:

Applicable to all and accepted.

TSTF Resolution: Approved Date: 05-Feb-98

NRC Review Information

NRC Received Date: 29-May-98

NRC Comments:

7/16/98 - The change has merit; however, the staff does not believe that the proposed change has been fully evaluated by the OG. The SR that supposedly tests the integrity of the room/barrier has two acceptance criteria -- a pressure limit (positive or negative) and a system flow limit. While failure of the pressure limit alone would indicate boundary degradation, failure of the pressure and flow limit while performing the SR could indicate system degradation and/or boundary degradation. Under these circumstances, it is conceivable that both Actions A and B would have to be entered. A number of concerns arise from this:

1) What is to prevent the entering and exiting of Actions A or B over an indefinite period of time? Maybe there should be an overall completion time similar to the completion times specified in Actions for STS 3.7.5.

2) In this situation, the implication is that, in order to verify if it is a boundary inoperability or just a system inoperability resulting in the exiting of Action B, the opposite train would be tested. This is something that has been deleted from TS, and not a prudent thing to do. Do we want to begin this back in this case?

3) The wording of the Condition "Two trains inoperable due to inoperable boundary" could lead to confusion as to which Action to enter (Action B or LCO 3.0.3) under this situation in which both trains are inoperable for other reasons as well as failure to meet this SR and the boundary is inoperable. LCO 3.0.3 should probably be entered, but the wording could lead one to enter Action B.

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OG Revision 1 Revision Status: Closed

As additional concern with the change involves the Actions associated with an inoperable boundary during movement of irradiated fuel assemblies and core alterations. The staff does not believe that, in this situation, fuel movement should be allowed for up to 24 hours.

With this potential loss of radiation filtering, Actions should be taken to immediately suspend fuel movement and/or Core Alterations. This change is applicable to the Control Room and Fuel Building Ventilation Specification.

9/24/98 - NRC to consider the TSTF response to NRC's request to modify and contact Bryan Ford by 10/9/98 to discuss further.

11/12/98 - B. Ford and B. Giardina to discuss on 11/19/98.

Final Resolution: Superceded by Revision Final Resolution Date: 16-Jul-98

TSTF Revision 1 Revision Status: Closed

Revision Proposed by: TSTF

Revision Description:
Revised based on NRC comments. The 24 hour Action is limited to operating MODES only and an LCO Note is added to allow intermittent opening in all of MODE 5.

TSTF Review Information

TSTF Received Date: 20-Nov-98 Date Distributed for Review 20-Nov-98

OG Review Completed: ✓ BWOG ✓ WOG ✓ CEOG ✓ BWROG

TSTF Comments:
(No Comments)

TSTF Resolution: Approved Date: 20-Nov-98

NRC Review Information

NRC Received Date: 15-Dec-98

NRC Comments:
(No Comments)

Final Resolution: Superceded by Revision Final Resolution Date:

TSTF Revision 2 Revision Status: Closed

Revision Proposed by: NRC

Revision Description:
Eliminated extraneous "OR" from BWOG page 3.7-31 and CEOG page 3.7-32 (left from previous revision).

TSTF Review Information

TSTF Received Date: 24-Jan-99 Date Distributed for Review 24-Jan-99

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TSTF Revision 2 Revision Status: Closed

OG Review Completed: ✓ BWOG ✓ WOG ✓ CEOG ✓ BWROG

TSTF Comments:

(No Comments)

TSTF Resolution: Approved Date: 24-Jan-99

NRC Review Information

NRC Received Date: 16-Mar-99

NRC Comments:

4/21/99 - In tech branch review (SPLB & SPSB)
6/16/99 - NRC (B. Beckner) stated that TSB will approve separately from other control room issues.
10/3/99 NRC comments:
The staff has completed its review of the latest markup of the Bases for Action B.1 of the Control Room STS contained in this TSTF and conclude that it is acceptable with one exception. Removal of the reference to GDC is unacceptable. We believe that compensatory measures should have some fundamental technical basis, and that for the control room, GDC 19 is the standard for the fundamental technical bases we find acceptable. Compensatory measures that are not consistent with the intent of GDC 19 will likely not provide the protection we believe is necessary. In addition, while this is an acceptable plan for the control room, we believe that a similar compensatory action plan should be provided for all the other buildings, should be consistent with the applicable regulations (GDC 19, Part 100, etc.), and that a similar Bases description should be provided in the other specifications modified by TSTF-287, Revision 2. Following is the proposed Insert 1.

B.1

[Reviewer's Note: Adoption of Condition B is dependent on a commitment from the licensee to have written procedures available describing compensatory measures to be taken in the event of an intentional or unintentional entry into Condition B.]

If the control room boundary is inoperable in MODES 1, 2, 3, and 4, the CREVS trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the control room boundary.

Final Resolution: Superceded by Revision Final Resolution Date: 06-Oct-99

TSTF Revision 3 Revision Status: Closed

Revision Proposed by: NRC

Revision Description:
Revised the Bases for Action B.1 to incorporate NRC comments.

TSTF Review Information

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TSTF Revision 3 Revision Status: Closed

TSTF Received Date: 01-Nov-99 Date Distributed for Review 18-Nov-99

OG Review Completed: ✓ BWOG ✓ WOG ✓ CEOG ✓ BWROG

TSTF Comments:
(No Comments)

TSTF Resolution: Approved Date: 18-Nov-99

NRC Review Information

NRC Received Date: 23-Nov-99

NRC Comments:
(No Comments)

Final Resolution: Superceded by Revision Final Resolution Date:

TSTF Revision 4 Revision Status: Closed

Revision Proposed by: NRC

Revision Description:
Revised inserts for areas other than the control room to refer to protecting "plant personnel" instead of "control room operators."

TSTF Review Information

TSTF Received Date: 14-Dec-99 Date Distributed for Review 14-Dec-99

OG Review Completed: ✓ BWOG ✓ WOG ✓ CEOG ✓ BWROG

TSTF Comments:
(No Comments)

TSTF Resolution: Approved Date: 14-Dec-99

NRC Review Information

NRC Received Date: 27-Dec-99

NRC Comments:
1/10/00 - NRC requested modifications.

Final Resolution: Superceded by Revision Final Resolution Date:

TSTF Revision 5 Revision Status: Active Next Action: NRC

Revision Proposed by: NRC

Revision Description:
Revised to incorporate NRC comments. The Bases inserts for the non-Control Room specifications were revised to include reference to the applicable General Design Criteria and 10 CFR Part 100.

TSTF Review Information

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TSTF Revision 5 **Revision Status: Active** **Next Action: NRC**

TSTF Received Date: 10-Jan-00 Date Distributed for Review 10-Jan-00

OG Review Completed: ✓ BWOG ✓ WOG ✓ CEOG ✓ BWROG

TSTF Comments:
(No Comments)

TSTF Resolution: Approved Date: 10-Jan-00

NRC Review Information

NRC Received Date: 11-Jan-00

NRC Comments:
(No Comments)

Final Resolution: NRC Action Pending Final Resolution Date:

Incorporation Into the NUREGs

File to BBS/LAN Date: TSTF Informed Date: TSTF Approved Date:

NUREG Rev Incorporated:

Affected Technical Specifications

LCO 3.7.10	CREVS	NUREG(s)- 1430 Only
LCO 3.7.10 Bases	CREVS	NUREG(s)- 1430 Only
Action 3.7.10.B	CREVS Change Description: New Condition	NUREG(s)- 1430 Only
Action 3.7.10.B	CREVS Change Description: Renamed 3.7.10.C and Revised	NUREG(s)- 1430 Only
Action 3.7.10.B Bases	CREVS Change Description: Renamed 3.7.10.C and Revised	NUREG(s)- 1430 Only
Action 3.7.10.B Bases	CREVS Change Description: New Condition	NUREG(s)- 1430 Only
Action 3.7.10.C	CREVS Change Description: Renamed 3.7.10.D	NUREG(s)- 1430 Only
Action 3.7.10.C Bases	CREVS Change Description: Renamed 3.7.10.D	NUREG(s)- 1430 Only
Action 3.7.10.D	CREVS Change Description: Renamed 3.7.10.E and Revised	NUREG(s)- 1430 Only
Action 3.7.10.D Bases	CREVS Change Description: Renamed 3.7.10.E	NUREG(s)- 1430 Only

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Action 3.7.10.E	CREVS	NUREG(s)- 1430 Only
	Change Description: Renamed 3.7.10.F	
Action 3.7.10.E Bases	CREVS	NUREG(s)- 1430 Only
	Change Description: Renamed 3.7.10.F and Revised	
LCO 3.7.12	EVS	NUREG(s)- 1430 Only
LCO 3.7.12 Bases	EVS	NUREG(s)- 1430 Only
Action 3.7.12.B	EVS	NUREG(s)- 1430 Only
	Change Description: Renamed 3.7.12.C	
Action 3.7.12.B	EVS	NUREG(s)- 1430 Only
	Change Description: New Condition	
Action 3.7.12.B Bases	EVS	NUREG(s)- 1430 Only
	Change Description: Renamed 3.7.12.C and Revised	
Action 3.7.12.B Bases	EVS	NUREG(s)- 1430 Only
	Change Description: New Condition	
LCO 3.7.13	FSPVS	NUREG(s)- 1430 Only
LCO 3.7.13 Bases	FSPVS	NUREG(s)- 1430 Only
Action 3.7.13.B	FSPVS	NUREG(s)- 1430 Only
	Change Description: New Condition	
Action 3.7.13.B	FSPVS	NUREG(s)- 1430 Only
	Change Description: Renamed 3.7.13.C and Revised	
Action 3.7.13.B Bases	FSPVS	NUREG(s)- 1430 Only
	Change Description: Renamed 3.7.13.C and Revised	
Action 3.7.13.B Bases	FSPVS	NUREG(s)- 1430 Only
	Change Description: New Condition	
Action 3.7.13.C	FSPVS	NUREG(s)- 1430 Only
	Change Description: Renamed 3.7.13.D	
Action 3.7.13.C Bases	FSPVS	NUREG(s)- 1430 Only
	Change Description: Renamed 3.7.13.D	
Action 3.7.13.D	FSPVS	NUREG(s)- 1430 Only
	Change Description: Renamed 3.7.13.E	
Action 3.7.13.D Bases	FSPVS	NUREG(s)- 1430 Only
	Change Description: Renamed 3.7.13.E	
LCO 3.7.10	CREFS	NUREG(s)- 1431 Only
LCO 3.7.10 Bases	CREFS	NUREG(s)- 1431 Only

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Action 3.7.10.B	CREFS	NUREG(s)- 1431 Only
	Change Description: New Condition	
Action 3.7.10.B	CREFS	NUREG(s)- 1431 Only
	Change Description: Renamed 3.7.10.C and Revised	
Action 3.7.10.B Bases	CREFS	NUREG(s)- 1431 Only
	Change Description: Renamed 3.7.10.C and Revised	
Action 3.7.10.B Bases	CREFS	NUREG(s)- 1431 Only
	Change Description: New Condition	
Action 3.7.10.C	CREFS	NUREG(s)- 1431 Only
	Change Description: Renamed 3.7.10.D	
Action 3.7.10.C Bases	CREFS	NUREG(s)- 1431 Only
	Change Description: Renamed 3.7.10.D	
Action 3.7.10.D	CREFS	NUREG(s)- 1431 Only
	Change Description: Renamed 3.7.10.E	
Action 3.7.10.D Bases	CREFS	NUREG(s)- 1431 Only
	Change Description: Renamed 3.7.10.E	
Action 3.7.10.E	CREFS	NUREG(s)- 1431 Only
	Change Description: Renamed 3.7.10.F and Revised	
Action 3.7.10.E Bases	CREFS	NUREG(s)- 1431 Only
	Change Description: Renamed 3.7.10.F and Revised	
LCO 3.7.12	ECCS PREACS	NUREG(s)- 1431 Only
LCO 3.7.12 Bases	ECCS PREACS	NUREG(s)- 1431 Only
Action 3.7.12.B	ECCS PREACS	NUREG(s)- 1431 Only
	Change Description: New Condition	
Action 3.7.12.B	ECCS PREACS	NUREG(s)- 1431 Only
	Change Description: Renamed 3.7.12.C	
Action 3.7.12.B Bases	ECCS PREACS	NUREG(s)- 1431 Only
	Change Description: Renamed 3.7.12.C and Revised	
Action 3.7.12.B Bases	ECCS PREACS	NUREG(s)- 1431 Only
	Change Description: New Condition	
LCO 3.7.13	FBACS	NUREG(s)- 1431 Only
LCO 3.7.13 Bases	FBACS	NUREG(s)- 1431 Only
Action 3.7.13.B	FBACS	NUREG(s)- 1431 Only
	Change Description: New Condition	

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Action 3.7.13.B	FBACS		NUREG(s)- 1431 Only
	Change Description:	Renamed 3.7.13.C and Revised	
Action 3.7.13.B Bases	FBACS		NUREG(s)- 1431 Only
	Change Description:	New Condition	
Action 3.7.13.B Bases	FBACS		NUREG(s)- 1431 Only
	Change Description:	Renamed 3.7.13.C and Revised	
Action 3.7.13.C	FBACS		NUREG(s)- 1431 Only
	Change Description:	Renamed 3.7.13.D	
Action 3.7.13.C Bases	FBACS		NUREG(s)- 1431 Only
	Change Description:	Renamed 3.7.13.D	
Action 3.7.13.D	FBACS		NUREG(s)- 1431 Only
	Change Description:	Renamed 3.7.13.E	
Action 3.7.13.D Bases	FBACS		NUREG(s)- 1431 Only
	Change Description:	Renamed 3.7.13.E	
LCO 3.7.14	PREACS		NUREG(s)- 1431 Only
LCO 3.7.14 Bases	PREACS		NUREG(s)- 1431 Only
Action 3.7.14.B	PREACS		NUREG(s)- 1431 Only
	Change Description:	Renamed 3.7.14.C	
Action 3.7.14.B	PREACS		NUREG(s)- 1431 Only
	Change Description:	New Condition	
Action 3.7.14.B Bases	PREACS		NUREG(s)- 1431 Only
	Change Description:	New Condition	
Action 3.7.14.B Bases	PREACS		NUREG(s)- 1431 Only
	Change Description:	Renamed 3.7.14.C and Revised	
LCO 3.7.11	CREACS		NUREG(s)- 1432 Only
LCO 3.7.11 Bases	CREACS		NUREG(s)- 1432 Only
Action 3.7.11.B	CREACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.11.C and Revised	
Action 3.7.11.B	CREACS		NUREG(s)- 1432 Only
	Change Description:	New Condition	
Action 3.7.11.B Bases	CREACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.11.C and Revised	
Action 3.7.11.B Bases	CREACS		NUREG(s)- 1432 Only
	Change Description:	New Condition	

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Action 3.7.11.C	CREACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.11.D	
Action 3.7.11.C Bases	CREACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.10.D	
Action 3.7.11.D	CREACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.11.E and Revised	
Action 3.7.11.D Bases	CREACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.11.E and Revised	
Action 3.7.11.E	CREACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.11.F	
Action 3.7.11.E Bases	CREACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.11.F	
LCO 3.7.13	ECCS PREACS		NUREG(s)- 1432 Only
LCO 3.7.13 Bases	ECCS PREACS		NUREG(s)- 1432 Only
Action 3.7.13.B	ECCS PREACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.13.C	
Action 3.7.13.B	ECCS PREACS		NUREG(s)- 1432 Only
	Change Description:	New Condition	
Action 3.7.13.B Bases	ECCS PREACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.13.C and Revised	
Action 3.7.13.B Bases	ECCS PREACS		NUREG(s)- 1432 Only
	Change Description:	New Condition	
LCO 3.7.14	FBACS		NUREG(s)- 1432 Only
LCO 3.7.14 Bases	FBACS		NUREG(s)- 1432 Only
Action 3.7.14.B	FBACS		NUREG(s)- 1432 Only
	Change Description:	New Condition	
Action 3.7.14.B	FBACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.14.C and Revised	
Action 3.7.14.B Bases	FBACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.14.C and Revised	
Action 3.7.14.B Bases	FBACS		NUREG(s)- 1432 Only
	Change Description:	New Condition	
Action 3.7.14.C	FBACS		NUREG(s)- 1432 Only
	Change Description:	Renamed 3.7.14.D	

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Action 3.7.14.C Bases	FBACS	NUREG(s)- 1432 Only
	Change Description: Renamed 3.7.14.D	
Action 3.7.14.D	FBACS	NUREG(s)- 1432 Only
	Change Description: Renamed 3.7.14.E	
Action 3.7.14.D Bases	FBACS	NUREG(s)- 1432 Only
	Change Description: Renamed 3.7.14.E	
LCO 3.7.15	PREACS	NUREG(s)- 1432 Only
LCO 3.7.15 Bases	PREACS	NUREG(s)- 1432 Only
Action 3.7.15.B	PREACS	NUREG(s)- 1432 Only
	Change Description: Renamed 3.7.15.C	
Action 3.7.15.B	PREACS	NUREG(s)- 1432 Only
	Change Description: New Condition	
Action 3.7.15.B Bases	PREACS	NUREG(s)- 1432 Only
	Change Description: Renamed 3.7.15.C and Revised	
Action 3.7.15.B Bases	PREACS	NUREG(s)- 1432 Only
	Change Description: New Condition	
LCO 3.7.4	[MCREC] System	NUREG(s)- 1433 Only
LCO 3.7.4 Bases	[MCREC] System	NUREG(s)- 1433 Only
Action 3.7.4.B	[MCREC] System	NUREG(s)- 1433 Only
	Change Description: Renumbered 3.7.4.C and Revised	
Action 3.7.4.B	[MCREC] System	NUREG(s)- 1433 Only
	Change Description: New Condition	
Action 3.7.4.B Bases	[MCREC] System	NUREG(s)- 1433 Only
	Change Description: Renumbered 3.7.4.C and Revised	
Action 3.7.4.B Bases	[MCREC] System	NUREG(s)- 1433 Only
	Change Description: New Condition	
Action 3.7.4.C	[MCREC] System	NUREG(s)- 1433 Only
	Change Description: Renumbered 3.7.4.D	
Action 3.7.4.C Bases	[MCREC] System	NUREG(s)- 1433 Only
	Change Description: Renumbered 3.7.4.D	
Action 3.7.4.D	[MCREC] System	NUREG(s)- 1433 Only
	Change Description: Renumbered 3.7.4.E and Revised	
Action 3.7.4.D Bases	[MCREC] System	NUREG(s)- 1433 Only
	Change Description: Renumbered 3.7.4.E and Revised	

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Action 3.7.4.E	[MCREC] System Change Description: Renumbered 3.7.4.F	NUREG(s)- 1433 Only
Action 3.7.4.E Bases	[MCREC] System Change Description: Renumbered 3.7.4.F	NUREG(s)- 1433 Only
LCO 3.7.3	[CRFA] System	NUREG(s)- 1434 Only
LCO 3.7.3 Bases	[CRFA] System	NUREG(s)- 1434 Only
Action 3.7.3.B	[CRFA] System Change Description: New Condition	NUREG(s)- 1434 Only
Action 3.7.3.B	[CRFA] System Change Description: Renumbered 3.7.3.C and Revised	NUREG(s)- 1434 Only
Action 3.7.3.B Bases	[CRFA] System Change Description: New Condition	NUREG(s)- 1434 Only
Action 3.7.3.B Bases	[CRFA] System Change Description: Renumbered 3.7.3.C and Revised	NUREG(s)- 1434 Only
Action 3.7.3.C	[CRFA] System Change Description: Renumbered 3.7.3.D	NUREG(s)- 1434 Only
Action 3.7.3.C Bases	[CRFA] System Change Description: Renumbered 3.7.3.D	NUREG(s)- 1434 Only
Action 3.7.3.D	[CRFA] System Change Description: Renumbered 3.7.3.E	NUREG(s)- 1434 Only
Action 3.7.3.D Bases	[CRFA] System Change Description: Renumbered 3.7.3.E	NUREG(s)- 1434 Only
Action 3.7.3.E	[CRFA] System Change Description: Renumbered 3.7.3.F	NUREG(s)- 1434 Only
Action 3.7.3.E Bases	[CRFA] System Change Description: Renumbered 3.7.3.F	NUREG(s)- 1434 Only

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INSERT

LCO NOTE (CEOG 3.7.11, CREACS)

---------- NOTE ----------

The control room boundary may be opened intermittently under administrative control.

TSTF-287 Rev 5

3.7 PLANT SYSTEMS

3.7.11 Control Room Emergency Air Cleanup System (CREACS)

LCO 3.7.11 Two CREACS trains shall be OPERABLE.

INSERT LCO NOTE

APPLICABILITY: MODES 1, 2, 3, 4, [5, and 6,]
During movement of irradiated fuel assemblies,
[During CORE ALTERATIONS].

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CREACS train inoperable.	A.1 Restore CREACS train to OPERABLE status.	7 days
~~B.~~ C. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, 3, or 4. or B	~~B~~ C.1 Be in MODE 3. AND ~~B~~ C.2 Be in MODE 5.	6 hours 36 hours
~~C.~~ D. Required Action and associated Completion Time of Condition A not met [in MODES 5 and 6, or] during movement of irradiated fuel assemblies[, or during CORE ALTERATIONS].	~~C~~ D.1 --------NOTE--------- Place in toxic gas protection mode if automatic transfer to toxic gas mode inoperable. ---------- Place OPERABLE CREACS train in emergency radiation protection mode. OR	Immediately (continued)
B. Two CREACS trains inoperable due to inoperable control room boundary in MODES 1, 2, 3, and 4	B.1 Restore control room boundary to OPERABLE status.	24 hours

TSTF-287 Rev 5

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. (continued)	D.2.1 Suspend CORE ALTERATIONS.	Immediately
	AND	
	D.2.2 Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREACS trains inoperable [in MODES 5 and 6, or] during movement of irradiated fuel assemblies [, or during CORE ALTERATIONS]. for reasons other than Condition B	E.1 Suspend CORE ALTERATIONS.	Immediately
	AND	
	E.2 Suspend movement of irradiated fuel assemblies.	Immediately
F. Two CREACS trains inoperable in MODE 1, 2, 3, or 4.	F.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.11.1	Operate each CREACS train for [≥ 10 continuous hours with heaters operating or (for systems without heaters) ≥ 15 minutes].	31 days

(continued)

INSERT
LCO NOTE BASES (CEOG 3.7.11, CREACS)

The LCO is modified by a Note allowing the control room boundary to be opened intermittently under administrative controls. 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 consist of stationing a dedicated individual at the opening who is in continuous communication with the control room. This individual will have a method to rapidly close the opening when a need for control room isolation is indicated.

BASES

TSTF-287 Rev. 5

APPLICABLE SAFETY ANALYSES (continued)

accident dose analyses for the most limiting design basis loss of coolant accident fission product release presented in the FSAR, Chapter [15] (Ref. 2).

The analysis of toxic gas releases demonstrates that the toxicity limits are not exceeded in the control room following a toxic chemical release, as presented in Reference 1.

The worst case single active failure of a component of the CREACS, assuming a loss of offsite power, does not impair the ability of the system to perform its design function.

The CREACS satisfies Criterion 3 of the NRC Policy Statement.

LCO

Two independent and redundant trains of the CREACS are required to be OPERABLE to ensure that at least one is available, assuming that a single failure disables the other train. Total system failure could result in a control room operator receiving a dose in excess of 5 rem in the event of a large radioactive release.

The CREACS is considered OPERABLE when the individual components necessary to control operator exposure are OPERABLE in both trains. A CREACS train is considered OPERABLE when the associated:

a. Fan is OPERABLE;

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

c. Heater, demister, ductwork, valves, and dampers are OPERABLE, and air circulation can be maintained.

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors.

INSERT LCO NOTE BASES

(continued)

INSERT 1 (CEOG 3.7.11)

B.1

[Reviewer's Note: Adoption of Condition B is dependent on a commitment from the licensee to have written procedures available describing compensatory measures to be taken in the event of an intentional or unintentional entry into Condition B.]

If the control room boundary is inoperable in MODES 1, 2, 3, and 4, the CREACS trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the control room boundary.

BASES (continued) TSTF-287 Rev 5

APPLICABILITY

In MODES 1, 2, 3, and 4, the CREACS must be OPERABLE to limit operator exposure during and following a DBA.

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

During movement of irradiated fuel assemblies [and CORE ALTERATIONS], the CREACS must be OPERABLE to cope with the release from a fuel handling accident.

ACTIONS

A.1

With one CREACS train inoperable, action must be taken to restore OPERABLE status within 7 days. In this Condition, the remaining OPERABLE CREACS subsystem is adequate to perform control room radiation protection function. However, the overall reliability is reduced because a single failure in the OPERABLE CREACS train could result in loss of CREACS function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and the ability of the remaining train to provide the required capability.

INSERT 1 (CEOG)

C B.1 and B.2 C

or control room boundary

associated

If the inoperable CREACS cannot be restored to OPERABLE status within the required Completion Time in MODE 1, 2, 3, or 4, the unit must be placed in a MODE that minimizes the accident risk. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D D D

C.1, C.2.1, and C.2.2

D

Required Action C.1 is modified by a Note indicating to place the system in the emergency radiation protection mode if the automatic transfer to emergency mode is inoperable.

(continued)

TSTF-287 Rev 5

BASES

ACTIONS

D D D

[C].1, [C].2.1, and [C].2.2 (continued)

In MODE 5 or 6, or during movement of irradiated fuel assemblies [, or during CORE ALTERATIONS], if Required Action A.1 cannot be completed within the required Completion Time, the OPERABLE CREACS train must be immediately placed in the emergency mode of operation. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure will be readily detected.

D

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

E E

[D].1 and [D].2

When [in MODES 5 and 6, or] during movement of irradiated fuel assemblies [, or during CORE ALTERATIONS], with two CREACS trains inoperable, action must be taken immediately to suspend activities that could result in a release of radioactivity that might enter the control room. This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

F

[E].1

for reasons other than an inoperable control room boundary (i.e., Condition B)

If both CREACS trains are inoperable in MODE 1, 2, 3, or 4, the CREACS 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.

SURVEILLANCE REQUIREMENTS

SR 3.7.11.1

Standby systems should be checked periodically to ensure that they function properly. Since the environment and normal operating conditions on this system are not severe,

(continued)