

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

March 29, 2000

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

Serial No. 00-099  
SPS-LIC/CGL R0  
Docket Nos. 50-280, 281  
License Nos. DPR-32, 37

Gentlemen:

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**SURRY POWER STATION UNITS 1 AND 2**  
**PROPOSED TECHNICAL SPECIFICATIONS AND BASES CHANGE -**  
**MAIN CONTROL ROOM BOTTLED AIR SYSTEM REQUIREMENTS**  
**AND ADDITIONAL SURVEILLANCE TESTING**

Pursuant to 10CFR50.90, Virginia Electric and Power Company requests amendments, in the form of revisions to the Technical Specifications to Facility Operating License Numbers DPR-32 and DPR-37 for Surry Power Station Units 1 and 2. The proposed change revises Technical Specification (TS) 3.19 and TS 4.1. The change reflects two redundant trains of bottled air, includes remedial action statements for one train and two trains inoperable, eliminates the extension of 8 hours to 24 hours currently permitted by TS 3.19.B, adds requirements for an inoperable control room pressure boundary, and includes additional surveillance testing requirements. The TS 3.19 Basis and TS 4.1 Basis are revised for consistency with the respective TSs. A discussion of the proposed Technical Specifications and Bases change is provided in Attachment 1.

The proposed administrative Technical Specifications and Bases change has been reviewed and approved by the Station Nuclear Safety and Operating Committee and the Management Safety Review Committee. It has been determined that the proposed Technical Specifications and Bases change does not involve an unreviewed safety question, as defined in 10CFR50.59. The proposed Technical Specifications and Bases change mark-up and typed pages are provided in Attachments 2 and 3, respectively. The basis for our determination that the Technical Specifications change does not involve a significant hazards, as defined in 10CFR50.92, is provided in Attachment 4.

Should you have any questions or require additional information, please contact us.

Very truly yours,



David A. Christian  
Vice President – Nuclear Operations

A001

Attachments:

1. Discussion of Change
2. Mark-up of Technical Specifications and Bases
3. Proposed Technical Specifications and Bases Change
4. Significant Hazards Consideration Determination

Commitments made in this letter: None.

cc: U.S. Nuclear Regulatory Commission  
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Surry Power Station

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**Attachment 1**

**Discussion of Change**

## DISCUSSION OF CHANGES

### Introduction

Pursuant to 10 CFR 50.90, Virginia Electric and Power Company requests changes to Technical Specification (TS) 3.19, "Main Control Room Bottled Air System", and TS 4.1, "Operational Safety Review". The TS 3.19 Basis and TS 4.1 Basis are being revised for consistency with the respective TSs. This TS change is appropriate to reflect the actual Main Control Room (MCR) bottled air system configuration, as well as the method of operation of the bottled air system. Specifically, TS 3.19 currently reflects a single bottled air bank; this change revises the specification to reflect the MCR bottled air system configuration of two redundant trains with remedial action times for one train and both trains inoperable. An additional remedial action is imposed for an inoperable control room pressure boundary. TS 3.19.B currently permits extension of the 8-hour remedial action to 24 hours if tests demonstrate that the control room emergency ventilation system is functional; this TS change eliminates the currently allowed extension of the remedial action time. Additional surveillance testing requirements for the MCR bottled air system are included in TS 4.1; these tests are currently conducted, although not necessarily as TS-required surveillances. This TS change 1) does not involve any physical modification to the plant, 2) does not affect the design or operation of the MCR bottled air system or the plant, 3) is consistent with the existing accident analyses, and 4) imposes more restrictive TS requirements and additional surveillance testing. Therefore, the proposed TS change does not constitute an unreviewed safety question or significant hazards consideration.

### Background

#### Current Licensing Basis

The original Surry TSs, issued March 17, 1972, included TS 3.19, then titled Main Control Room Ventilation System, which required a bottled air bank to pressurize the main control room to a positive pressure with no action statement. The original Surry TSs also included TS Table 4.1-2A Item 15 to test the ability to maintain positive pressure for 1 hour using a volume of air equivalent to or less than that stored in the bottled air supply each refueling interval (approximately every 12 – 18 months). TS Amendments 1/1, dated September 23, 1974, incorporated the remedial action to be taken in the event of a loss of bottled air in the main control room ventilation system (i.e., 8 hours to hot shutdown and after 48 hours to cold shutdown). The original requirements for a bottled air bank and the Table 4.1-2A surveillance, as well as the TS Amendments 1/1 remedial action, still exist in the current TSs. In response to NUREG-0737, Item III.D.3.4 by a December 9, 1981 letter (Serial No. 655), a commitment was made to provide redundancy in the control room bottled air system. In 1983, a redundant source of bottled air was installed with no associated TS revisions. TS Amendments 92/91, issued on January 17, 1984, revised the terminology in the specification from main control room ventilation system to main control room bottled air system. The frequency of the TS Table 4.1-2A surveillance was

changed from each refueling interval (approximately every 12 – 18 months) to once every 18 months in TS Amendments 213/213, dated June 11, 1998.

### Current Design Basis

The Surry reactor containments are maintained at subatmospheric pressure during normal operation and are returned to subatmospheric pressure within 60 minutes following a design basis accident. A subatmospheric containment provides for termination of outleakage of fission products from the containment following a design basis accident. In keeping with this reactor containment design philosophy, the MCR is equipped with a bottled air system, now comprised of redundant trains, to pressurize the MCR to a positive differential pressure with respect to adjoining areas. Each train of bottled air is sufficient for one hour of control room pressurization.

It should be noted that the original Surry design was a single train system that had a single bank of bottled air. As reflected above in the Current Licensing Basis discussion, in response to NUREG-0737, Item III.D.3.4, a commitment was made to provide redundancy in the control room bottled air portion of the system to meet single failure criteria. Subsequently, a redundant train of bottled air was installed.

A summary of the current control room dose calculations was provided to the NRC as part of the Surry Core Uprate package transmitted by an August 30, 1994 letter (Serial No. 94-509). These dose calculations assumed main control room pressurization using the bottled air system. The results of the calculations demonstrate that the predicted control room doses remain within the limits of 10CFR50, Appendix A, General Design Criteria (GDC) 19.

### Discussion

The evolution of the MCR bottled air system configuration and associated TS 3.19 and TS 4.1 requirements is summarized above in the Current Licensing and Current Design Bases discussions. Subsequent to the installation of the redundant train of bottled air, a station deviation report identified that the extension of the 8-hour remedial action to 24 hours permitted by TS 3.19.B (if tests demonstrate that the control room emergency ventilation system is functional) was inappropriate because it was inconsistent with control room dose calculations. Operation of the control room emergency ventilation system fans is intended to extend pressurization of the control room areas and the supply of breathing air upon depletion of bottled air. However, as currently written, TS 3.19.B implies that alternate use of the control room ventilation fans during the first hour following an accident is acceptable. In the event that the fans were operated during the first hour following a design basis accident, the resultant control room doses could exceed the GDC 19 limits. Therefore, to address the station deviation concern, operator guidance was instituted prohibiting the operation of the fans during the first hour following an accident condition. The prohibition of control room ventilation fan operation has continued to be imposed by TS-related administrative controls. This TS change eliminates the currently allowed extension of the remedial action time from 8 hours to 24 hours.

In conjunction with the review conducted to address the extension of the remedial action time, it was recognized that TS 3.19 did not reflect the redundant trains of bottled air. The TS-related administrative controls put in place to address the prohibited extension of the remedial action time also invoked remedial action times supplementing TS 3.19 for bottled air system inoperability. The existing TS 3.19 includes an 8-hour remedial action time to place the unit(s) in hot shutdown for system inoperability. With the redundant train configuration, system inoperability has been taken to mean both trains of bottled air in an inoperable condition. The existing TS-related administrative controls state “. . . an administrative time limit of 7 days shall be imposed whenever one bank is out of service. A condition involving two banks out of service falls under the requirement to place the unit(s) in hot shutdown within 8 hours.” The existing TS 3.19 includes a 48-hour remedial action time (after achieving hot shutdown) to place the unit(s) in cold shutdown with no time specified to achieve cold shutdown. This TS change:

- 1) revises the specification to reflect the MCR bottled air system configuration of two redundant trains,
- 2) adds a remedial action time a) of 7 days for one train inoperable consistent with the TS-related administrative controls and b) for both trains inoperable, retains the 8-hour remedial action to place both units in hot shutdown,
- 3) retains the remedial action that if these requirements are not met within 48 hours after achieving hot shutdown to place both units in cold shutdown, and
- 4) adds a time frame of the next 30 hours to achieve cold shutdown.

The imposition of the 7-day allowed outage time for one train of MCR bottled air is consistent with inoperability of one train in NUREG-1431, Revision 1, LCO 3.7.10, Control Room Emergency Filtration System.

Remedial action requirements are added in TS 3.19.B for an inoperable control room pressure boundary. An 8-hour allowed outage time is imposed consistent with an existing TS-related administrative control. The control room pressure boundary is permitted to be opened intermittently under administrative control without declaring the boundary inoperable. The administrative control must provide the capability to re-establish the control room pressure boundary. For normal ingress into and egress from the pressure boundary, the individual entering or exiting the area has control of the door.

In addition, the Basis of TS 3.19 is being expanded to include: 1) a statement that the main control room is part of the control room pressure boundary or envelope, which is defined in the TS 3.23 Basis and 2) a discussion of an inoperable control room pressure boundary and permitted opening of the boundary under administrative controls.

TS Table 4.1-2A Item 15 currently requires testing of the ability to maintain positive pressure for 1 hour using a volume of air equivalent to or less than that stored in the bottled air supply once every 18 months. The surveillance requirements in this table for the Control Room Bottled Air System are revised to reflect testing required to verify air bottle pressurization, pressure boundary integrity, pressure control valve(s) functionality, and manual and automatic actuation capability. Each of these tests is currently conducted, although not necessarily as TS-required surveillances. The TS 4.1 Basis is being revised to reflect the additional surveillance requirements.

### Specific Changes

#### **REVISE TS 3.19.A FROM:**

##### **"A. Requirements**

A bottled dry air bank shall be available to pressurize the main control room. . . . This capability shall be demonstrated by the testing requirement delineated in Technical Specification 4.1."

#### **TO:**

##### **A. Requirements**

**Two trains of bottled air shall be OPERABLE and each shall be capable of pressurizing** the main control room . . . . This capability shall be demonstrated by the testing requirements delineated in Technical Specification 4.1.

#### **REVISE TS 3.19.B FROM:**

##### **"B. Remedial Action**

If the requirements of Specification 3.19.A are not met, the unit shall be placed in the hot shutdown condition within 8 hours; except that if tests during the 8-hour period demonstrate that the emergency control room ventilation system is functional, the unit shall be brought within the requirements of Specification 3.19.A or placed in the hot shutdown condition within 24 hours.

If the requirements of Specification 3.19.A are not met within 48 hours after achieving hot shutdown condition, the unit shall be placed in the cold shutdown condition."

TO:

B. Remedial Action

1. **With one train of the bottled air system inoperable, restore the inoperable train to OPERABLE status within 7 days or both units shall be placed in HOT SHUTDOWN within the next 8 hours.**
2. **With both trains of the bottled air system inoperable, restore one train to OPERABLE status or both units shall be placed in HOT SHUTDOWN within 8 hours.**
3. **With an inoperable control room pressure boundary, restore the boundary to OPERABLE status or both units shall be placed in HOT SHUTDOWN within 8 hours. The control room pressure boundary may be intermittently opened under administrative control.**

If the requirements of Specification **3.19.B.1, 3.19.B.2, or 3.19.B.3** are not met within 48 hours after achieving **HOT SHUTDOWN**, both units shall be placed in **COLD SHUTDOWN** within the next 30 hours.

**ADD TO TS 3.19 BASIS:**

**The main control room is contained in the control room pressure boundary or envelope, which is defined in the Technical Specification 3.23 Basis.**

The control room pressure boundary is permitted to be opened intermittently under administrative control without declaring the boundary inoperable. The administrative control must provide the capability to re-establish the control room pressure boundary. For normal ingress into and egress from the pressure boundary, the individual entering or exiting the area has control of the door.

**REVISE TS TABLE 4.1-2A ITEM 15 FROM:**

"15. Control Room Ventilation System	* Ability to maintain positive pressure for 1 hour using a volume of air equivalent to or less than that stored in the bottled air supply	Once per 18 months	9.13"
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TO:

15. Control Room **Bottled Air System**

a. Air Bottle Pressure	* Verify each bank pressurized to a minimum of 2350 psig	Monthly	9.13
b. Pressure Boundary Integrity	* Demonstrate ability to maintain positive pressure by pressurizing the boundary using either one of the ventilation system fans with orificed flow or by discharging one train of the bottled air system	Once per 18 months	9.13
c. Pressure Control Valve(s) Functionality	* Demonstrate ability to pressurize the boundary to 0.05 inches of water for 1 hour by discharging each train of the bottled air system	Once per 18 months	9.13
d. Manual Actuation Capability	* Functional	Once per 18 months	9.13
e. Automatic Actuation Capability	* Functional	Once per 18 months	9.13

**REVISE TS 4.1 BASIS FROM:**

"The control room ventilation system is required to establish a positive differential pressure in the control room for one hour following a design basis loss-of-coolant accident using a bottled air supply as the source of air. The ability of the system to meet this requirement is tested by pressurizing the control room using the ventilation system fans and comparing the volume of air required to that stored. The test is conducted once per 18 months normally coinciding with the refueling outage of either Unit 1 or Unit 2."

TO:

The control room **bottled air** system is required to establish a positive differential pressure in the control room for one hour following a design basis accident. The ability of the system to meet this requirement is **verified by: 1) checking air bottle pressurization, 2) demonstrating the boundary integrity by pressurizing the control room pressure boundary, 3) functionally testing the pressure control valve(s), and 4) functionally testing the manual and automatic actuation capability.** The test requirements and frequency are specified in Table 4.1-2A.

## **Safety Significance**

The proposed TS change is appropriate to reflect the actual MCR bottled air system configuration of two redundant trains, as well as the method of operation of the bottled air system in accordance with existing TS requirements and TS-related administrative controls. This TS change 1) does not involve any physical modification to the plant, 2) does not affect the design or operation of the MCR bottled air system or the plant, 3) is consistent with the existing accident analyses, and 4) imposes more restrictive TS requirements (i.e., adds allowed outage times for one train inoperable and inoperable pressure boundary, as well as defines time to achieve cold shutdown) and additional surveillance testing. Therefore, the proposed TS change does not constitute an unreviewed safety question.

- a) The proposed change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.**

The proposed change does not involve a physical modification and does not modify the design or operation of MCR bottled air system or plant. Since the MCR bottled air system functions to respond to - not prevent - an accident, the probability of occurrence of an accident or malfunction is not affected. The elimination of the currently allowed extension of the remedial action time, as well as the imposition of more restrictive TS requirements and additional surveillance testing, serves to ensure no increase in the consequences of an accident or malfunction. Therefore, the proposed change does not increase the probability of occurrence or the consequences of any previously analyzed accident or malfunction.

- b) The proposed change does not create the possibility of an accident or malfunction of a different type than any evaluated previously in the safety analysis report.**

The proposed change does not involve a physical modification and does not affect the design or operation of the MCR bottled air system or the plant. Consequently, no new or unique operational modes or accident precursors are introduced. Therefore, the proposed change does not create the possibility of different kind of accident or malfunction from any those previously evaluated.

- c) The proposed change does not reduce the margin of safety as defined in the basis of any Technical Specifications.**

The proposed change does not involve a physical modification and does not modify the design or operation of the MCR bottled air system or the plant. The elimination of the extension of the current remedial action time, as well as the imposition of more restrictive TS requirements and additional surveillance testing, serves to ensure the bottled air system's ability to pressurize the main control room for one hour following a design basis accident, which is consistent with the existing accident analyses. Therefore, the proposed change does not result in a reduction in the margin of safety.

## **Environmental Assessment**

The proposed TS change is appropriate to reflect the actual MCR bottled air system configuration of two redundant trains, as well as the method of operation of the bottled air system in accordance with existing TS requirements and TS-related administrative controls. The proposed change eliminates the currently allowed extension of the remedial action time, imposes more restrictive TS requirements and additional surveillance testing. These revisions serve to ensure the bottled air system's ability to pressurize the main control room for one hour following a design basis accident, which is consistent with the existing accident analyses. The proposed change has no environmental impact and does not result in any increase in the individual or cumulative occupational radiation exposure. No new effluents or effluent release paths are created as a result of the proposed Technical Specification change. Therefore, there is no environmental impact as a result of the proposed Technical Specification change.

**Attachment 2**

**Mark-up of Technical Specifications and Bases**

3.19 MAIN CONTROL ROOM BOTTLED AIR SYSTEM

Applicability

Applies to the ability to maintain a positive differential pressure in the main control room.

Objective

To specify functional requirements for the main control room bottled air system.

Specification

A. Requirements

Two trains of

**OPERABLE and each shall be capable of pressurizing**

~~Two~~ bottled ~~air~~ ~~train~~ shall be ~~available~~ to pressurize the main control room to a positive differential pressure with respect to adjoining areas of the auxiliary, turbine, and service buildings for one hour. A minimum positive differential pressure of 0.05 inches of water must be maintained when the control room is isolated under accident conditions. This capability shall be demonstrated by the testing requirements delineated in Technical Specification 4.1.

B. Remedial Action

~~If the requirements of Specification 3.19.A are not met, the unit shall be placed in the hot shutdown condition within 8 hours; except that if tests during the 8-hour period demonstrate that the emergency control room ventilation system is functional, the unit shall be brought within the requirements of Specification 3.19.A or placed in the hot shutdown condition within 24 hours.~~

~~Amendment No. 92 and Amendment No. 91~~

1. }  
2. } INSERT A  
3. }

3.19.B.1, 3.19.B.2, or 3.19.B.3

If the requirements of Specification ~~3.19.A~~ are not met within 48 hours after achieving hot shutdown condition, <sup>both</sup> ~~the~~ units shall be placed in ~~the~~ cold shutdown condition within the next 30 hours.

Basis

PUT IN UPPER CASE

Following a design basis ~~loss of coolant~~ accident, the containment will be depressurized to subatmospheric condition in less than 1 hour; thus, terminating leakage from the containment. The main control room is maintained at a positive differential pressure using bottled air during the period when containment leakage may exist to prevent contamination.

INSERT B

The refueling water storage tank is sampled weekly for Cl<sup>-</sup> and/or F<sup>-</sup> contaminations. Weekly sampling is adequate to detect any inleakage of contaminated water.

### Control Room Bottled Air System

The control room ~~ventilation~~ <sup>bottled air</sup> system is required to establish a positive differential pressure in the control room for one hour following a design basis ~~loss of coolant~~ accident, ~~using a bottled air supply as the source of air~~. The ability of the system to meet this requirement is ~~tested by pressurizing the control room using the ventilation system fans and comparing the volume of air required to that stored.~~ ~~The test is conducted once per 18 months normally coinciding with the refueling outage of either Unit 1 or Unit 2.~~



verified by: 1) checking air bottle pressurization, 2) demonstrating the boundary integrity by pressurizing the control room pressure boundary, 3) functionally testing the pressure control valve(s), and 4) functionally testing the manual and automatic actuation capability. The test requirements and frequency are specified in Table 4.1-2A.

EXCERPT FROM  
TS4.1 BASIS

TABLE 4.1-2A(CONTINUED)  
MINIMUM FREQUENCY FOR EQUIPMENT TESTS

<u>DESCRIPTION</u>	<u>TEST</u>	<u>FREQUENCY</u>	<u>FSAR SECTION REFERENCE</u>
14a. Service Water System Valves in Line Supplying Recirculation Spray Heat Exchangers	Functional	Once per 18 months	9.9
b. Service Water System Valves Isolating Flow to Non-essential loads on Intake Canal Low Level Isolation	Functional	Once per 18 months	9.9
15. Control Room <del>Ventilation</del> <sup>Bottled Air</sup> System	* Ability to maintain positive pressure for 1 hour using a volume of air equivalent to or less than stored in the bottled air supply	Once per 18 months	9.13
a. } b. } <b>INSERT C</b> c. } d. } e. }			
16. Reactor Vessel Overpressure Mitigating System (except backup air supply)	Functional & Setpoint	Prior to decreasing RCS temperature below 350°F and monthly while the RCS is < 350°F and the Reactor Vessel Head is bolted	4.3
	CHANNEL CALIBRATION	Once per 18 months	
17. Reactor Vessel Overpressure Mitigating System Backup Air Supply	Setpoint	Once per 18 months	4.3
18. Power-Operated Relief Valve Control System	Functional, excluding valve actuation	Monthly	4.3
	CHANNEL CALIBRATION	Once per 18 months	

Amendment Nos. 213 and 213

A

A

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TS 4.1-9c  
06/11/88

### INSERT A IN TS 3.19

1. With one train of the bottled air system inoperable, restore the inoperable train to OPERABLE status within 7 days or both units shall be placed in HOT SHUTDOWN within the next 8 hours.
2. With both trains of the bottled air system inoperable, restore one train to OPERABLE status or both units shall be placed in HOT SHUTDOWN within 8 hours.
3. With an inoperable control room pressure boundary, restore the boundary to OPERABLE status or both units shall be placed in HOT SHUTDOWN within 8 hours. The control room pressure boundary may be intermittently opened under administrative control.

### INSERT B IN TS 3.19 BASIS

The main control room is contained in the control room pressure boundary or envelope, which is defined in the Technical Specification 3.23 Basis.

The control room pressure boundary is permitted to be opened intermittently under administrative control without declaring the boundary inoperable. The administrative control must provide the capability to re-establish the control room pressure boundary. For normal ingress into and egress from the pressure boundary, the individual entering or exiting the area has control of the door.

### INSERT C IN TS TABLE 4.1-2A ITEM 15

a. Air Bottle Pressure	* Verify each bank pressurized to a minimum of 2350 psig	Monthly	9.13
b. Pressure Boundary Integrity	* Demonstrate ability to maintain positive pressure by pressurizing the boundary using either one of the ventilation system fans with orificed flow or by discharging one train of the bottled air system	Once per 18 months	9.13
c. Pressure Control Valve(s) Functionality	* Demonstrate ability to pressurize the boundary to 0.05 inches of water for 1 hour by discharging each train of the bottled air system	Once per 18 months	9.13
d. Manual Actuation Capability	* Functional	Once per 18 months	9.13
e. Automatic Actuation Capability	* Functional	Once per 18 months	9.13

**Attachment 3**

**Proposed Technical Specifications and Bases Change**

### 3.19 MAIN CONTROL ROOM BOTTLED AIR SYSTEM

#### Applicability

Applies to the ability to maintain a positive differential pressure in the main control room.

#### Objective

To specify functional requirements for the main control room bottled air system.

#### Specification

##### A. Requirements

Two trains of bottled air shall be OPERABLE and each shall be capable of pressurizing the main control room to a positive differential pressure with respect to adjoining areas of the auxiliary, turbine, and service buildings for one hour. A minimum positive differential pressure of 0.05 inches of water must be maintained when the control room is isolated under accident conditions. This capability shall be demonstrated by the testing requirements delineated in Technical Specification 4.1.

##### B. Remedial Action

1. With one train of the bottled air system inoperable, restore the inoperable train to OPERABLE status with 7 days or both units shall be placed in HOT SHUTDOWN within the next 8 hours.
2. With both trains of the bottled air system inoperable, restore one train to OPERABLE status or both units shall be placed in HOT SHUTDOWN within 8 hours.
3. With an inoperable control room pressure boundary, restore the boundary to OPERABLE status or both units shall be placed in HOT SHUTDOWN within 8 hours. The control room pressure boundary may be intermittently opened under administrative control.

If the requirements of Specification 3.19.B.1, 3.19.B.2, or 3.19.B.3 are not met within 48 hours after achieving HOT SHUTDOWN, both units shall be placed in the COLD SHUTDOWN within the next 30 hours.

#### Basis

Following a design basis accident, the containment will be depressurized to subatmospheric condition in less than 1 hour; thus, terminating leakage from the containment. The main control room is maintained at a positive differential pressure using bottled air during the period when containment leakage may exist to prevent contamination.

The main control room is contained in the control room pressure boundary or envelope, which is defined in the Technical Specification 3.23 Basis.

The control room pressure boundary is permitted to be opened intermittently under administrative control without declaring the boundary inoperable. The administrative control must provide the capability to re-establish the control room pressure boundary. For normal ingress into and egress from the pressure boundary, the individual entering or exiting the area has control of the door.

The refueling water storage tank is sampled weekly for  $\text{Cl}^-$  and/or  $\text{F}^-$  contaminations. Weekly sampling is adequate to detect any inleakage of contaminated water.

#### Control Room Bottled Air System

The control room bottled air system is required to establish a positive differential pressure in the control room for one hour following a design basis accident. The ability of the system to meet this requirement is verified by: 1) checking air bottle pressurization, 2) demonstrating the boundary integrity by pressurizing the control room pressure boundary, 3) functionally testing the pressure control valve(s), and 4) functionally testing the manual and automatic actuation capability. The test requirements and frequency are specified in Table 4.1-2A.

TABLE 4.1-2A (CONTINUED)  
MINIMUM FREQUENCY FOR EQUIPMENT TESTS

<u>DESCRIPTION</u>	<u>TEST</u>	<u>FREQUENCY</u>	<u>FSAR SECTION REFERENCE</u>
14a. Service Water System Valves in Line Supplying Recirculation Spray Heat Exchangers	Functional	Once per 18 months	9.9
b. Service Water System Valves Isolating Flow to Non-essential loads on Intake Canal Low Level Isolation	Functional	Once per 18 months	9.9
15. Control Room Bottled Air System			
a. Air Bottle Pressure	* Verify each bank pressurized to a minimum of 2350 psig	Monthly	9.13
b. Pressure Boundary Integrity	* Demonstrate ability to maintain positive pressure by pressurizing the boundary using either one of the ventilation system fans with orificed flow or by discharging one train of the bottled air system	Once per 18 months	9.13
c. Pressure Control Valve(s) Functionality	* Demonstrate ability to pressurize the boundary to 0.05 inches of water for 1 hour by discharging each train of the bottled air system	Once per 18 months	9.13
d. Manual Actuation Capability	* Functional	Once per 18 months	9.13
e. Automatic Actuation Capability	* Functional	Once per 18 months	9.13
16. Reactor Vessel Overpressure Mitigating System (except backup air supply)	Functional & Setpoint	Prior to decreasing RCS temperature below 350°F and monthly while the RCS is < 350°F and the Reactor Vessel Head is bolted	4.3
	CHANNEL CALIBRATION	Once per 18 months	
17. Reactor Vessel Overpressure Mitigating System Backup Air Supply	Setpoint	Once per 18 months	4.3
18. Power-Operated Relief Valve Control System	Functional, excluding valve actuation	Monthly	4.3
	CHANNEL CALIBRATION	Once per 18 months	

Amendment Nos.

**Attachment 4**

**Significant Hazards Consideration Determination**

## Significant Hazards Consideration

The proposed TS change includes train specific requirements, adds requirements for an inoperable control room pressure boundary, imposes additional surveillance testing requirements for the MCR bottled air system, and is consistent with the existing accident analyses. We have reviewed the proposed TS change relative to the requirements of 10 CFR 50.92 and determined that a significant hazards consideration is not involved. Specifically, operation of Surry Power Station with the proposed change will not:

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

The proposed change does not involve a physical modification and does not modify the design or operation of the MCR bottled air system or the plant. Since the MCR bottled air system functions to respond to - not prevent - an accident, the probability of occurrence of an accident is not affected. The elimination of the currently allowed extension of the remedial action time, the addition of train specific requirements and inoperable boundary requirements, and the imposition of additional surveillance testing requirements serve to ensure no increase in the consequences of an accident. Therefore, the proposed change does not significantly increase the probability of occurrence or the consequences of any previously analyzed accident.

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

The proposed change does not involve a physical modification and does not affect the design or operation of the MCR bottled air system or the plant. Consequently, no new or unique operational modes or accident precursors are introduced. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

**3. Involve a significant reduction in the margin of safety.**

The proposed change does not involve a physical modification and does not modify the design or operation of the MCR bottled air system or the plant. The elimination of the currently allowed extension of the remedial action time, the addition of train specific requirements and inoperable boundary requirements, and the imposition of additional surveillance testing requirements serve to ensure the bottled air system's ability to pressurize the main control room for one hour following a design basis accident, which is consistent with the existing accident analyses. Therefore, the proposed change does not result in a reduction in the margin of safety.