



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

February 28, 2001  
NOC-AE-01001038  
File No.: G20.02.01  
G21.02.01  
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U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555-0001

South Texas Project  
Units 1 and 2  
Docket Nos. STN 50-498, STN 50-499  
Second Supplement To:  
Proposed Amendment to South Texas Project Technical Specifications to  
Modify Requirements Applicable When Actions Require  
No Positive Reactivity Additions

- References: 1) Letter from J. J. Sheppard to NRC Document Control Desk dated December 20, 2000 ( NOC-AE-000394 )  
2) Letter from J. J. Sheppard to NRC Document Control Desk dated February 1, 2001 ( NOC-AE-01001022 )

STP Nuclear Operating Company (STPNOC) submits this second supplement to NOC-AE-000394, dated December 20, 2000, which proposed to amend South Texas Project Operating Licenses NPF-76 and NPF-80 by incorporating the changes attached to that correspondence. The proposed changes revise the Technical Specification and Technical Requirements Manual requirements applicable when actions direct suspension of operations involving positive reactivity additions.

This supplement is submitted to correct administrative and typographical errors identified in discussions with the Nuclear Regulatory Commission's Project Manager responsible for processing the amendment. Attachment 2 provides updated/corrected pages to replace the corresponding pages in the original proposed amendment. During our review an additional occurrence of "positive reactivity changes" was identified on page 3/4 7-16. This should be replaced with revised wording contained in insert 10. The revised page 3/4 7-16 markup and reconciled page attached include this correction.

In accordance with 10 CFR 50.91(b), STPNOC is notifying the State of Texas of this request for license amendment by providing a copy of this letter and its attachments.

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The changes are administrative and do not affect the evaluations previously submitted. This submittal letter contains no new licensing commitments.

If there are any questions regarding the proposed amendment or this supplement, please contact Mr. S. M. Head at (361) 972-7136 or me at (361) 972-8757.



J. J. Sheppard  
Vice President, Engineering  
& Technical Services

WRB/

Attachments:

1. Affidavit
2. Updated/ corrected pages for NOC-AE-000394

cc:

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U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
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# **ATTACHMENT 1**

## **AFFIDAVIT**

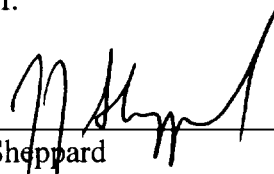
UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
)  
STP Nuclear Operating Company )  
)  
)  
)  
South Texas Project Units 1 and 2 )

Docket Nos. STN 50-498  
STN 50-499

AFFIDAVIT

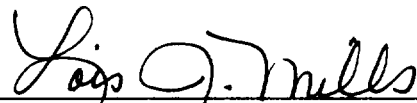
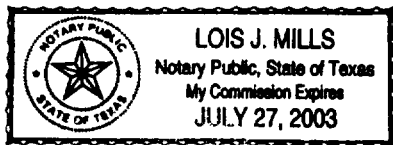
I, J. J. Sheppard, being duly sworn, hereby depose and say that I am Vice President, Engineering & Technical Services of STP Nuclear Operating Company; that I am duly authorized to sign and file with the Nuclear Regulatory Commission the attached supplemental information; that I am familiar with the content thereof; and that the matters set forth therein are true and correct to the best of my knowledge and belief.



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J. J. Sheppard  
Vice President,  
Engineering & Technical Services

STATE OF TEXAS )  
)  
COUNTY OF MATAGORDA )

Subscribed and sworn to before me, a Notary Public in and for the State of Texas, this 28<sup>th</sup> day of February, 2001.



\_\_\_\_\_  
Notary Public in and for the  
State of Texas

# **ATTACHMENT 2**

**UPDATED/CORRECTED PAGES  
FOR  
NOC-AE-000394**

The attached Updated/Corrected pages, listed below, are provided as a supplement to NOC-AE-000394. These pages are provided as replacement pages for attachments contained in NOC-AE-000394.

Marked up page (Attachment 5)

3/4 7-16

Reconciled pages (Attachment 7)

3/4 7-16

B 3/4 4-1a

B 3/4 7-5

## PLANT SYSTEMS

### 3/4.7.7 CONTROL ROOM MAKEUP AND CLEANUP FILTRATION SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.7 Three independent Control Room Makeup and Cleanup Filtration Systems shall be OPERABLE.

APPLICABILITY: All MODES.

#### ACTION:

MODES 1, 2, 3, and 4:

- a. With one Control Room Makeup and Cleanup Filtration System inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With two Control Room Makeup and Cleanup Filtration Systems inoperable, restore at least two systems to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With three Control Room Makeup and Cleanup Filtration Systems inoperable, suspend all operations involving movement of spent fuel, and crane operation with loads over the spent fuel pool, and restore at least one system to OPERABLE status within 12 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6:

- a. With one Control Room Makeup and Cleanup Filtration System inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE Control Room Makeup and Cleanup Filtration Systems in the recirculation and makeup air filtration mode, or suspend all operations involving CORE ALTERATIONS, ~~positive reactivity changes~~, movement of spent fuel, and crane operation with loads over the spent fuel pool. *insert 10*
- b. With more than one Control Room Makeup and Cleanup Filtration System inoperable, or with the OPERABLE Control Room Makeup and Cleanup Filtration Systems required to be in the recirculation and makeup air filtration mode by ACTION a. not capable of being powered by an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS, ~~positive reactivity changes~~, movement of spent fuel, and crane operations with loads over the spent fuel pool. *insert 10*

#### SURVEILLANCE REQUIREMENTS

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4.7.7 Each Control Room Makeup and Cleanup Filtration System shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 78°F;
- b. At least once per 92 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers of the makeup and cleanup air filter units and verifying that the system operates for at least 10 continuous hours with the makeup filter unit heaters operating;



## PLANT SYSTEMS

### 3/4.7.7 CONTROL ROOM MAKEUP AND CLEANUP FILTRATION SYSTEM

#### LIMITING CONDITION FOR OPERATION

---

3.7.7 Three independent Control Room Makeup and Cleanup Filtration Systems shall be OPERABLE.

APPLICABILITY: All MODES.

ACTION:

MODES 1, 2, 3, and 4:

- a. With one Control Room Makeup and Cleanup Filtration System inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With two Control Room Makeup and Cleanup Filtration Systems inoperable, restore at least two systems to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With three Control Room Makeup and Cleanup Filtration Systems inoperable, suspend all operations involving movement of spent fuel, and crane operation with loads over the spent fuel pool, and restore at least one system to OPERABLE status within 12 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6:

- a. With one Control Room Makeup and Cleanup Filtration System inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE Control Room Makeup and Cleanup Filtration Systems in the recirculation and makeup air filtration mode, or suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or required boron concentration, movement of spent fuel, and crane operation with loads over the spent fuel pool.
- b. With more than one Control Room Makeup and Cleanup Filtration Systems inoperable, or with the OPERABLE Control Room Makeup and Cleanup Filtration Systems required to be in the recirculation and makeup air filtration mode by ACTION a. not capable of being powered by an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or required boron concentration, movement of spent fuel, and crane operations with loads over the spent fuel pool.

#### SURVEILLANCE REQUIREMENTS

---

4.7.7 Each Control Room Makeup and Cleanup Filtration System shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 78°F;
- b. At least once per 92 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers of the makeup and cleanup air filter units and verifying that the system operates for at least 10 continuous hours with the makeup filter unit heaters operating;

## REACTOR COOLANT SYSTEM

### BASES

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#### REACTOR COOLANT LOOPS and COOLANT CIRCULATION ( continued )

ACTIONS are provided with a similar requirement that, with no reactor coolant loop in operation, operations that would cause introduction into the RCS of coolant with boron concentration less than required to meet the required SHUTDOWN MARGIN are prohibited. Suspending the introduction into the RCS of coolant with boron concentration less than that required to meet the SHUTDOWN MARGIN limit is necessary to assure continued safe operation. Introduction of coolant inventory must be from sources that have a boron concentration greater than what would be required in the RCS for minimum SHUTDOWN MARGIN. This may result in an overall reduction in RCS boron concentration, but provides acceptable margin to maintaining subcritical operation. Introduction of temperature changes, including temperature increases when operating with a positive moderator temperature coefficient, must also be evaluated to not result in reducing core reactivity below the required SHUTDOWN MARGIN limit.

The restrictions on starting an RCP with one or more RCS cold legs less than or equal to 350°F are provided to prevent RCS pressure transients, caused by energy additions from the Secondary Coolant System, which could exceed the limits of Appendix G to 10 CFR Part 50. The RCS will be protected against overpressure transients and will not exceed the limits of Appendix G by restricting starting of the RCPs to when the secondary water temperature of each steam generator is less than 50°F above each of the RCS cold leg temperatures.

#### 3/4.4.2 SAFETY VALVES

The pressurizer Code safety valves operate to prevent the RCS from being pressurized above its Safety Limit of 2735 psig. Each safety valve is designed to relieve 504,950 lbs. per hour of saturated steam at the valve setpoint of 2500 psia.

## PLANT SYSTEMS

### BASES

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#### 3/4.7.7 CONTROL ROOM MAKEUP AND CLEANUP FILTRATION SYSTEM (cont.)

unlock the control rods, they must be withdrawn at least one step. However, since the control rods are above the active fuel when the unlocking process occurs, there is no reactivity addition.

The time limits associated with the ACTIONS to restore an inoperable train to OPERABLE status are consistent with the redundancy and capability of the system and the low probability of a design basis accident while the affected train(s) is out of service. A limited allowed outage time of 12 hours is allowed for all three trains to be out of service simultaneously in recognition of the fact that there are common plenums and some maintenance or testing activities required opening or entry into these common plenums. This time is reasonable to diagnose, plan, and possibly repair problems with the boundary or the ventilation system. This is acceptable based on the low probability of a design basis event in that brief allowed outage time and because administrative controls impose compensatory actions that reduce the already small risk associated with being in the ACTION. The compensatory actions are consistent with the intent of GDC 19 to protect plant personnel from potential hazards such as radioactive contamination, smoke, and temperature, etc. Pre-planned measures should be available to address these concerns for intentional and unintentional entry into the condition. The compensatory actions include:

- Procedures will preclude intentionally removing multiple trains of Control Room Envelope HVAC from service if Containment Spray is not functional or intentionally making a train of Containment Spray unavailable when multiple trains of Control Room Envelope HVAC are out of service. For purposes of this compensatory action, Containment Spray is considered functional if at least one train can be manually or automatically initiated.
- The plant will not make planned simultaneous entries into TS 3.7.7 ACTION c. for MODES 1, 2, 3 and 4 and TS 3.7.8 ACTION b or d.

The compensatory action may include placing fans in pull-to-lock as necessary to preclude there being a motive force to transport contaminated air to a clean environment in the event of an accident. These compensatory actions also include administrative controls on opening plenums or other openings such that appropriate communication is established with the control room to assure timely closing of the system if necessary. Since the Control Room Envelope boundary integrity also affects operability of the overall system, entry and exit is administratively controlled.

Administrative control of entry and exit through doors is performed by the person(s) entering or exiting the area. Extended opening of the boundary is coordinated with the control room with appropriate plans for closure and communication.