

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

September 28, 1998
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10CFR50.90
STI: 30718525

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

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Proposed Amendment to South Texas Project Technical Specifications to Modify Requirements
Associated with Control Room and Fuel Handling Building Ventilation Systems

STP Nuclear Operating Company (STPNOC) proposes to change the Technical Specifications to modify requirements associated with the Control Room and Fuel Handling Building Ventilation Systems.

South Texas Project has reviewed the proposed amendment pursuant to 10CFR50.92 and determined that it does not involve a significant hazards consideration. In addition, South Texas Project has determined that the proposed amendment satisfies the criteria of 10CFR51.22(c)(9) for categorical exclusion from the requirement for an environmental assessment. The South Texas Plant Operations Review Committee and the Nuclear Safety Review Board have reviewed and approved the proposed amendment.

The required affidavit, a Safety Evaluation and Determination of No Significant Hazards Consideration, Environmental Assessment, and the marked-up affected pages of the Technical Specifications are included as attachments to this letter.

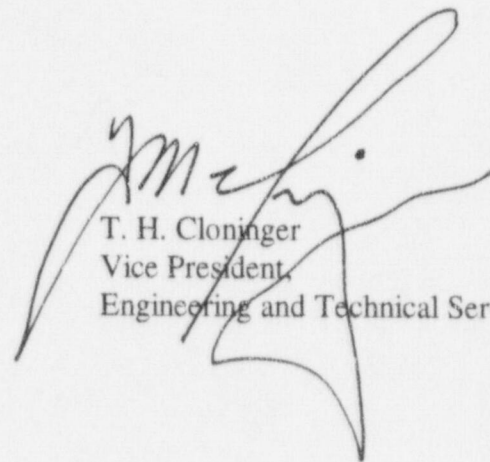
In accordance with 10CFR50.91(b), South Texas Project is notifying the State of Texas of this request for license amendment by providing a copy of this letter and its attachments.

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This proposed amendment is not a high priority change, however, STPNOC requests that it be reviewed and approved by July 31, 1999 to allow implementation prior to the fall Unit 2 outage. One of the changes for the Fuel Handling Building HVAC requested by this submittal will correct a condition that resulted in STPNOC requesting enforcement discretion to repair an exhaust fan without entering Technical Specification 3.0.3. STPNOC requests up to 60 days for implementation.

If there are any questions regarding the proposed amendment, please contact Mr. M. A. McBurnett at (512) 972-7206 or myself at (512) 972-8787.



T. H. Cloninger
Vice President,
Engineering and Technical Services

Attachments:

1. Affidavit
2. Description of Change and Safety Evaluation
3. Determination of No Significant Hazards
4. Description of Probabilistic Safety Analysis Impact
5. Environmental Assessment
6. Annotated Technical Specifications and Bases

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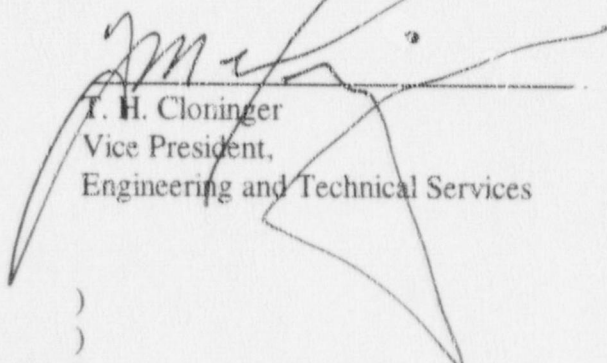
U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter)	
)	
South Texas Project, et al.,)	Docket Nos. STN 50-498
)	STN 50-499
South Texas Project Units 1 and 2)	

AFFIDAVIT

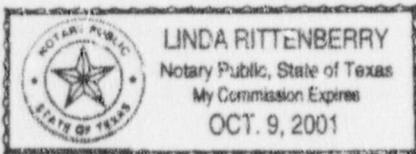
I, T. H. Cloninger, being duly sworn, hereby depose and say that I am Vice President, Engineering and Technical Services of STP Nuclear Operating Company; that I am duly authorized to sign and file with the Nuclear Regulatory Commission the attached proposed Technical Specification change to modify requirements associated with control room and fuel handling building ventilation systems; 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.

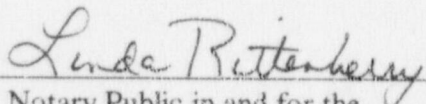


 T. H. Cloninger
 Vice President,
 Engineering and Technical Services

STATE OF TEXAS)
)
 COUNTY OF *Matagorda*)

28th Subscribed and sworn to before me, a Notary Public in and for the State of Texas, this day of September, 1998.





 Notary Public in and for the
 State of Texas

Description of Change and Safety Evaluation

Description of Change:

The proposed changes will modify the requirements applicable when one or more trains of Fuel Handling Building (FHB) Exhaust Air or Control Room (CR) Makeup and Cleanup Filtration are inoperable. The South Texas Project system design for these systems is unique and the proposed changes will account for these design features. In addition, the proposed changes will align the actuating instrumentation and logic system required actions with those that are applicable to the systems. The proposed changes will eliminate the need to enter Technical Specification 3.0.3 when multiple trains of these systems are inoperable, rather specific Actions are proposed to address these conditions. Finally, an administrative change is proposed to remove a footnote on page 3/4 7-20 that is no longer applicable to the facility.

Technical Specifications effected by the proposed change are as follows:

3/4.3.2, Table 3.3-3, "Engineered Safety Features Actuation System Instrumentation, Control Room Ventilation," and "FHB HVAC," Actions 27, 28, and 29

3/4.7.7, "Control Room Makeup and Cleanup Filtration System"

3/4.7.8, "Fuel Handling Building (FHB) Exhaust Air System"

3/4.9.12, "Fuel Handling Building Exhaust Air System"

The Actions associated with inoperable actuation instrumentation are being modified to align the allowed outage times for less than the minimum channels OPERABLE with those that apply when a similar condition exists on the actuated system. Specifically;

- Action 27 is modified to correct the ventilation train associated with the inoperable channel inoperable and requires the action for an inoperable ventilation train be carried out per Specification 3.7.7. These changes are consistent with measures described in South Texas Project Unit 2 License Event Report 95-007 dated November 15, 1995.
- Action 28 is modified to remove the mode dependent action requirements. This change establishes a standard system alignment, consistent with the actuated position, in response to the inoperability of a radiation monitoring channel and will result in maintaining the control room envelope pressurized while supplying a dilution flow of fresh filtered air regardless of plant mode. The requirement for a filtered recirculation without makeup flow was a holdover from the previously removed toxic gas requirements.
- Action 29 is also being modified to align the allowed outage times for less than the minimum channels OPERABLE with those that apply when a similar condition exists on the actuated system. This change will be worded similarly to Action 27 above. Specifically, Action 29 is

modified to declare the ventilation train associated with the inoperable channel inoperable and requires the actions for an inoperable ventilation train be carried out per Specification 3.7.8.

Specification 3/4.7.7 is modified by addition of an Action applicable when operating in MODES 1, 2, 3, and 4. The proposed new Action is structured similarly to existing Action b, which addresses the condition of two Control Room Makeup and Cleanup Filtration Systems being inoperable. However proposed Action c, provides for up to 12 hours to restore at least one system to OPERABLE status when all three systems are inoperable, or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. The actions applicable in MODES 5 and 6 are proposed to be modified to permit a suspension of all operations involving CORE ALTERATIONS, movement of spent fuel, and crane operations with loads over the spent fuel pool, rather than placing the control room ventilation system in operation while one Control Room Makeup and Cleanup Filtration System is inoperable.

Actions associated with Specification 3/4.7.8 are proposed to be modified from a single Action applicable to degraded system operability, to a series of Actions that more appropriately reflect the design, condition of the system, and the specific function of the inoperable component. A modification to the terminology used in the Specification is proposed, to clarify the required system configuration. The existing Specification lists the requirements for exhaust booster fans, main exhaust fans, and associated dampers separately, while the proposed Specification refers to these components in pairs, as exhaust ventilation trains. The proposed new actions provide for up to 12 hours to restore at least one ventilation system and one filter train to OPERABLE status when all three systems are inoperable, or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. This change will resolve the conditions that required granting of enforcement discretion to allow repair of an exhaust booster fan in May 1998 without entering Technical Specification 3.0.3 when all Fuel Handling Building exhaust air systems components were made inoperable. The proposed Action Statements use a similar terminology.

An administrative change is proposed to remove the asterisk footnote at the bottom of 3/4 7-20. This footnote was only applicable during the first six weeks after March 28, 1989 and no longer serves any purpose in the Technical Specifications. The proposed change also removes the asterisk from the body of the Specification at surveillance requirement 4.7.8.d.(4).

Finally, Specification 3.9.12 is modified to use the same terminology as used in Specification 3.7.8 for consistency.

The proposed changes are required to address the South Texas Project plant design, which incorporates unique, three-train design features. The changes to the Action Statements associated with Table 3.3-3 are required as a result of the need to align the action requirements of the actuation system with those of the system being actuated. The three train design was previously recognized in the system-specific Technical Specifications, however the design is not fully reflected in the actuation instrumentation table. This was a contributing factor to an event in 1995 that resulted in issuance of STP Unit 2 License Event Report 95-007 dated November 15, 1995.

Additionally, a change is proposed to permit operation in MODES 5 and 6 with the actuation instrumentation inoperable for an extended period without placing the Control Room Ventilation System in operation. As an alternative, the proposed change administratively restricts operations to prevent conduct of operations that are the assumed precursor activities for the design basis events of the Control Room Ventilation System while in MODES 5 and 6.

The Fuel Handling Building HVAC and Control Room Ventilation Systems each use the three train design to satisfy their design basis requirements. The existing Specifications recognize and partially address the design, however they do not fully address operational considerations related to certain design features. The separate trains of ventilation in the Fuel Handling Building HVAC and Control Room Ventilation Systems typically use common plenums or ductwork that must be opened to permit maintenance and required testing. The proposed changes to the actions for each system Specification will permit this maintenance to be conducted without entering Technical Specification 3.0.3 requiring a shutdown of the unit.

The administrative change to remove the footnote on page 3/4 7-20 removes extraneous material that no longer serves any purpose. It is proposed for removal at this time for convenience because the Specification is being changed for other reasons.

Most of the proposed change would have been addressed in the application for Improved Technical Specifications (ITS), however implementation of the STP ITS has been deferred.

To clarify the proposed changes to the Specifications, changes to the Bases are proposed. These changes are included and will affect the Bases for Specifications 3/4.7.7, 3/4.7.8, and 3/4.9.12.

Safety Evaluation:

These proposed changes will permit South Texas to utilize the facility design in a manner more appropriate for its design. The changes to the required action times associated with Table 3.3-3 align the allowed outage times with those that apply to the associated system. The alignment of allowed outage times does not represent change in the safety of the facility because the inoperability of an actuated system is no more significant than inoperability of the actuating instrumentation system. The proposed change to Control Room Ventilation configuration with an inoperable radiation monitoring channel will result in maintaining control room pressurization in all modes of operation and align the system to the actuated condition. This alignment with a filtered makeup supply will result in an increase in protection to the operators.

The change proposed to the actions of Specification 3/4.7.7 does not represent a significant challenge to plant safety because of the low probability of a design basis event during the brief allowed outage time. The allowed outage time will permit the conduct of required maintenance and testing without unnecessarily violating the limits of the Specification by requiring actions be taken in accordance with Technical Specification 3.0.3. The ability to conduct maintenance and testing while in operation will improve overall system reliability and availability. Similarly, the allowance to continue operations in MODES 5 and 6 with an inoperable train while administrative

controls prevent conduct of operations that could challenge the system does not represent a degradation in overall facility safety.

The proposed changes to Specification 3/4.7.8 are primarily directed at improving the definition of the system operability requirements that are applicable to the Fuel Handling Building HVAC system, while more accurately reflecting the system design, and allowing for maintenance on system components. The existing Specification differentiates between the exhaust booster fans, main exhaust fans, and associated dampers, while the proposed Specification will more appropriately refer to exhaust ventilation trains. The Fuel Handling Building HVAC design includes three exhaust booster fans and three main booster fans that can be utilized in multiple combinations to achieve successful design basis accident mitigation by the system. The system design includes a common plenum located at the suction of the sets of fans. This plenum permits fans from different trains of equipment to be utilized to compose a flow path that is adequate to perform the required safety functions. The proposed allowed outage time will permit the conduct of required maintenance and testing without unnecessarily violating the limits of the Specification or requiring actions be taken in accordance with Technical Specification 3.0.3. The ability to conduct maintenance and testing while in operation will improve overall system reliability and availability. This change will resolve the condition that required enforcement discretion to correct.

Based on the evaluation above, it is appropriate to make the proposed changes to the Specifications. The proposed change will provide a continued assurance that the Fuel Handling Building HVAC and Control Room Ventilation Systems are OPERABLE and appropriately tested and maintained. Overall plant safety will not be significantly affected by the proposed changes and the proposed changes will not affect any safety limit applicable to the facility.

An administrative change is proposed to the asterisk footnote at the bottom of page 3/4 7-20, as well as to remove the associated asterisk from the body of the surveillance requirements located on the page. This change will have no effect on plant operations, and removes extraneous material from the Specifications. Based on this evaluation, it is appropriate to delete this footnote that is no longer applicable.

The proposed change to Specification 3.9.12 changes the terminology used in the Specification to maintain consistency throughout the Specifications and does not change any requirements. Therefore, the proposed change will have no safety impact.

No Significant Hazards Determination:

In accordance with the criteria set forth in 10CFR50.92, the South Texas Project has evaluated these proposed Technical Specification changes and determined they do not represent a significant hazards consideration. The following is provided in support of this conclusion.

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

The proposed changes do not involve an increase in the probability or consequences of an accident previously evaluated. The proposed changes consist of:

- a) Assuring that the Specifications define consistent allowed outage times when the same safety function is addressed in multiple Specifications,
- b) Allowing a system to remain inoperable when appropriately restrictive administrative controls are placed on operations that could result in a challenge to the safety function of the system,
- c) Providing an appropriately short Allowed Outage Time for inoperability needed to permit required maintenance and testing that affects all trains of a system,
- d) Redefining system operability and associated actions in a manner consistent with the system design and function,
- e) Aligning a system to the actuated condition on the loss of an actuation channel,
- f) Using consistent terminology throughout the Specifications

The proposed changes do not represent significant increases in the probability or consequences of an accident because:

- a) The alignment of the action times between actuating system and actuated system operability requirements do not effect probability or consequences since inoperability of the actuated system has the same effect as inoperability of the actuating system. Since the changes proposed to the actuating system action times will reflect those of the actuated system action times, no change to the allowed outage time applicable to the safety function addressed and fulfilled by both, will occur.
- b) Administrative controls to prevent the conduct of operations that could lead to a challenge to the safety function of the system when the actuation system is inoperable, assures that the design bases functions of the system will not be challenged. Therefore,

the probability or consequences of an event previously identified have not been significantly changed.

c) Allowing up to 12 hours to recover from the inoperability of all three trains of Control Room Ventilation or two or more trains of Fuel Handling Building HVAC does not represent a significant change to the probability of an accident because the inoperability of these ventilation systems are not identified as precursors to a design basis event. The low likelihood of a design basis accident during the limited period of allowed inoperability of these systems does not represent a significant increase in the consequences of an accident.

d) The redefinition of plant operability requirements into functional trains rather than individual components does not effect the required system functional operability. Therefore, this change does not represent an increase in the probability or consequences of an accident previously identified.

e) The alignment of the Control Room Ventilation System to the same configuration it would be placed in from an actuation of the inoperable radiation monitoring channel places the system in the design condition. This alignment would result in maintaining the control room envelope pressurized and increases the protection afforded to the operators.

f) The change in terminology does not change any requirements or actions in the Specification. Therefore this change does not represent an increase in the probability or consequences of any accident previously evaluated.

Based on the above discussion, the individual changes do not represent an increase in the probability or consequences of any accident previously evaluated.

In addition to the changes proposed to controls over Control Room Ventilation, Fuel Handling Building HVAC, and associated actuation logic, an administrative change is proposed to remove the footnote at the bottom of page 3/4 7-20. Since the footnote no longer has meaning or relevance to the operation of the facility, its removal does not increase the probability or consequences of any accident previously evaluated.

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

The proposed changes make the existing Specifications internally consistent, manually align a system to the actuated position, provide an alternative measure that assures a safety function which is unavailable is not required to perform, provide an extended period of allowance for all trains of a system to be inoperable, and redefines system operability to reflect its functional design. The proposed changes do not introduce any new equipment into the plant or significantly alter the manner in which existing equipment will be operated. The systems affected by the proposed changes are not identified as contributing

causal factors in design basis accidents, their function is to assist in mitigation of accidents postulated to occur. Since the proposed changes do not allow activities that are significantly different from those presently allowed, no possibility exists for a new or different kind of accident from those previously evaluated.

In addition to the changes proposed to controls over reactivity changes, an administrative change is proposed to remove the footnote at the bottom of page 3/4 7-20. Since the footnote does not perform any function and will never again apply to plant operations, its removal cannot create the possibility of a new or different kind of accident from those previously evaluated.

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

The proposed changes do not involve a significant reduction in a margin of safety because the ability of the Fuel Handling Building HVAC and Control Room Ventilation Systems will be maintained. The margin of safety is defined by the ability of the systems to limit the release of radioactive materials and limit exposures to operators respectively following a postulated design basis accident. The only aspect of the proposed change that can be postulated to have any effect on a margin of safety is the proposed allowance for all trains of Control Room Ventilation or Fuel Handling Building HVAC to be inoperable for a limited period. The low probability of a design basis event that would require the system to perform its safety function during the limited period allowed by the proposed action assures that the change does not involve a significant change in a margin of safety. Therefore, the proposed changes do not significantly affect these operating restrictions and the margin of safety which support the ability to make and maintain the reactor in a safe shutdown and limit the release of radioactive material is not affected.

In addition to the changes described above, an administrative change is proposed to remove the footnote at the bottom of page 3/4 7-20. Since the footnote is no longer applicable to the facility, its removal cannot result in a reduction in a margin of safety.

Description of Probabilistic Safety Analysis Impact

The STPNOC Probabilistic Risk Analysis (PRA) models loss of Control Room Envelope HVAC (CRE HVAC) as an initiating event and does not credit the CRE HVAC for post accident/transient analysis. The PRA does not credit the Fuel Handling Building Ventilation System for mitigating core damage accidents.

Failure of the CRE HVAC system is assumed to lead to failure of the electronic components modeled in the reactor protection system, including the actuation relays and instrumentation. This, in turn, leads to a plant trip signal with failure of automatic actuation for the systems necessary to respond to the trip. Loss of CRE HVAC and failure to recover within 24 hours is assumed to result in a plant trip with failure of all actuation signals.

This request provides up to 12 hours to restore at least one train of CRE HVAC to OPERABLE when all three trains are inoperable, or be in HOT STANDBY within the next 6 hours. Since the plant will be required to be in HOT STANDBY before the 24 hours with no HVAC cooling assumed to lead to a plant trip, this submittal will have no impact on the at-power core damage or large, early release frequency.

ENVIRONMENTAL ASSESSMENT

This proposed Technical Specification Change has been evaluated against the criteria for and identification of licensing and regulatory actions requiring environmental assessment in accordance with 10CFR51.21. It has been determined that the proposed changes meet the criteria for categorical exclusion as provided for under 10CFR51.22 (c) (9). The following is a discussion of how the proposed Technical Specification Change meets the criteria for categorical exclusion.

10CFR51.22 (c) (9): Although the proposed change involves changes to requirements with respect to inspection or surveillance requirements;

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

Accordingly, the proposed change meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22 (c)(9). Based on the aforementioned and pursuant to 10CFR51.22 (b), no environmental assessment or environmental impact statement need be prepared in connection with issuance of an amendment to the Technical Specifications incorporating the proposed changes of this request.

Annotated Technical Specification and Bases Pages

Author: Ronald L Baker at FS7-2-STP-HLP
Date: 9/28/98 7:03 AM
Priority: Normal
CC: Albon W Harrison at FS2-1-STP-HLP
TO: Marilyn K Johnson at FS2-1-STP-HLP
CC: Ulhas S Patil at FS6-2-STP-HLP, Albert C McIntyre at FS6-2-STP-HLP
Subject: Re: CN 2194

I gave a replacement original to Ulhas Patil to resign as the
DCP reviewer Thursday.

Reply Separator

Subject: CN 2194
Author: Marilyn K Johnson at FS2-1-STP-HLP
Date: 9/24/98 9:19 AM

Ron,,

CR 97-12915 action 1 has been extended to 12/24/1998. Ron, this change
needs to be incorporated into revision 6 of the UFSAR which is to be
submitted in December 1998. I will need the approved 10CFR50.59 and
marked up pages of the UFSAR as soon as possible.

Thanks,
Marilyn