STP
Nuclear Operating Company
South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

December 17, 1997
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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
Proposed Amendment to Technical Specification 4.6.2.1 to Extend
Surveillance Interval of Containment Spray System Nozzle Air Flow Test

The South Texas Project proposes to amend Facility Operating Licenses NPF-76 and NPF-80 by revising Technical Specification 4.6.2.1, "Containment Spray System", to extend the surveillance interval of the Containment Spray system nozzle air flow test from five years to ten years.

The South Texas Project proposed to extend the surveillance interval of the Containment Spray system nozzle air flow test from five years to ten years as part of the conversion to Improved Technical Specifications, which was submitted to the NRC on June 4, 1996, and supplemented on July 22, 1997. In anticipation of approval of the Improved Technical Specifications, South Texas Project did not schedule the Containment Spray System nozzle air flow test for completion during the most recent Unit 1 refueling outage.

The Unit 1 Containment Spray System nozzle air flow test must be performed prior to January 14, 1999. There are no Unit 1 outages currently scheduled prior to this date and the potential exists that approval and implementation of the Improved Technical Specifications will be delayed beyond this date. Therefore, approval of an extension of the surveillance interval from five years to ten years is being requested in addition to the Improved Technical Specifications submittal.

Extension of the Containment Spray System nozzle air flow test interval from five years to ten years is listed as an acceptable change by NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements." The NRC Staff has already recognized that this change is acceptable with adequate justification.

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The South Texas Project has reviewed the attached proposed amendment pursuant to 10CFR50.92 and determined that it does not involve a significant hazards consideration. In addition, the 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 Project Nuclear Safety Review Board has reviewed and approved the proposed changes.

The South Texas Project requests this amendment be approved by July 1, 1998. This will allow appropriate time to take compensatory actions for the surveillance requirement prior to the due date if necessary. The South Texas Project requests 30 days for implementation after approval to allow time for required procedural changes.

The required affidavit, Safety Evaluation and No Significant Hazards Consideration Determination associated with the proposed change, and the marked up Technical Specifications page are included as attachments to this letter.

In accordance with 10CFR50.91(b), South Texas Project is providing the State of Texas with a copy of this proposed amendment.

If you should have any questions concerning this matter, please call Mr. A. W. Harrison at (512) 972-7298 or myself at (512) 972-8787.

T. H. Cloninger
Vice President,
Nuclear Engineering

DNB/

Attachments: 1. Affidavit
2. Safety Evaluation and No Significant Hazards Consideration Determination
3. Proposed Change to Technical Specification 4.6.2.1

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
STP Nuclear Operating Company,	)	Docket Nos. 50-498
et al.,	)	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, Nuclear Engineering, of STP Nuclear Operating Company; that I am duly authorized to sign and file with the Nuclear Regulatory Commission the attached revised pages to Technical Specification 4.6.2.1; 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,
Nuclear Engineering

STATE OF TEXAS	)
	)
COUNTY OF MATAGORDA	)

Subscribed and sworn to before me, a Notary Public in and for the State of Texas, this 17th day of December, 1997.

LINDA RITTENBERRY
Notary Public, State of Texas
My Commission Expires
OCT. 9, 2001

Linda Rittenberry
Notary Public in and for the
State of Texas

SAFETY EVALUATION

Description of the Proposed Changes

The South Texas Project proposes to change Technical Specification 4.6.2.1, Containment Spray System, to extend the surveillance interval of the nozzle air flow test from five years to ten years consistent with NUREG-1431, "Standard Technical Specifications, Westinghouse Plants." This change will incorporate the surveillance interval of the proposed Improved Technical Specifications for the South Texas Project that were submitted to the NRC on June 4, 1996, and supplemented on July 22, 1997. The marked up Technical Specifications page for the proposed change is provided in Attachment 3.

Description and Bases of the Current Requirement

Technical Specification 4.6.2.1 requires performance of an air or smoke flow test through the spray nozzles to verify that the nozzles are unobstructed. This surveillance requirement is a qualitative check to ensure that each spray nozzle is unobstructed and provides assurance that spray coverage of the containment during an accident is not degraded. OPERABILITY of the Containment Spray System ensures that containment depressurization and cooling capability will be available in the event of a loss of coolant accident (LOCA) or steam line break.

The Containment Spray system is designed to provide post-accident cooling of the containment atmosphere and a mechanism for removal of iodine from the containment atmosphere. In conjunction with the Recirculation Fluid pH Control system, the Containment Spray system ensures a containment sump pH of 7.0 during the recirculation phase of a postulated LOCA. The current Containment Spray system design thereby meets the related requirements of 10CFR50, Appendix A, General Design Criteria 38, 39, 40, 41, 42 and 43; 10CFR50, Appendix K; and 10CFR100.

Description and Justification for the Requested Change

The South Texas Project Containment Spray system header and nozzles are passive devices that are not normally exposed to fluids or debris. The system piping and nozzles are fabricated of stainless steel which is highly resistant to corrosion, especially in a low-stress, non-wetted application such as this. It is unlikely that nozzles with satisfactory air flow at a five year interval will become obstructed if the interval is extended to ten years because the environment is not particularly conducive to corrosion and the system will not normally be open or exposed to debris which could foul the nozzles.

In NUREG-1366, "Improvements to Technical Specification Requirements," industry operating history was evaluated to determine the cause of problems discovered when performing this surveillance. In all cases, the problems discovered were related to construction, and not the

result of normal operation. A draft NRC Generic Letter dated March 8, 1993, described a problem that was caused during operation because sodium silicate, a coating material applied to the Containment Spray system carbon steel piping, clogged seven nozzles. As stated above, the South Texas Project Containment Spray system piping and nozzles are stainless steel and are not coated.

The Containment Spray system nozzles for both South Texas Project units have been tested satisfactorily twice since construction which shows that the construction problems identified in NUREG-1366 do not exist at the South Texas Project. Also, the tests show that over a period of normal operation, the spray nozzles did not become obstructed.

Therefore, extending this surveillance interval fro five to ten years is reasonable based on the spray header/nozzles being fabricated from stainless steel, the spray header/nozzles being located in an environment that is not particularly conducive to corrosion, South Texas Project operating experience, and industry operating experience.

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The South Texas Project proposes to change Technical Specification 4.6.2.1 to extend the surveillance interval of the Containment Spray system nozzle air flow test from five years to ten years consistent with NUREG-1431 and the recommendations of NUREG-1366. The South Texas Project has evaluated this proposed amendment in accordance with the criteria set forth in 10CFR50.92 and determined that it involves no significant hazards considerations as follows:

A. Operation of the facility in accordance with the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change does not result in any hardware changes. The Containment Spray system trains or nozzles are not assumed to be the initiators of any analyzed events. Extending the surveillance interval for performing the Containment Spray system nozzle air flow test from five to ten years does not represent a significant increase in the probability of an accident. The Containment Spray system nozzles are not precursors to any accident analyses.

The Containment Spray system trains and nozzles function to mitigate the consequences of an analyzed event by providing spray flow to containment during an accident. The proposed change still provides assurance that the Containment Spray system nozzles will be maintained operable due to the passive nature of the design, the materials of construction, and the low-stress non-wetted environment. The extension of the surveillance interval does not significantly increase the probability or consequences of an accident since the nozzle will still be OPERABLE between surveillance tests.

B. Operation of the facility in accordance with the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change does not necessitate a physical alteration of the plant or changes in parameters governing normal plant operation. No new or different types of equipment will be installed. The proposed change will still ensure Containment Spray system nozzle OPERABILITY is adequately maintained.

C. Operation of the facility in accordance with the proposed amendment does not involve a significant reduction in a margin of safety.

The increased interval between the Containment Spray system nozzle air flow test is acceptable due to the passive design of the nozzles and industry operating experience as detailed in NUREG-1366. The increased interval is considered acceptable for maintaining nozzle OPERABILITY. The Containment Spray system, including the nozzles, will continue to provide their required safety function with the increase from five to ten years between inspections.

Conclusion

Based on the above evaluation, South Texas Project has concluded that the proposed change does not involve a significant hazards consideration. Also, there is reasonable assurance that operation of the South Texas Project in the proposed manner will not endanger the public health and safety.

Implementation Schedule

The South Texas Project requests this amendment be approved by July 1, 1998. This will allow appropriate time to take compensatory actions for the surveillance requirement prior to the due date if necessary. The South Texas Project requests 30 days for implementation after approval to allow time for required procedural changes.