



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

May 22, 2007
NOC-AE-07002153
10CFR50.90

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

South Texas Project

Units 1 and 2

Docket Nos. STN 50-498, STN 50-499

Proposed Change to Technical Specification 3.7.1.2, "Auxiliary Feedwater System"

Reference: Letter, C. T. Bowman to NRC Document Control Desk, "Proposed change to Technical Specification 3.7.1.2, Auxiliary Feedwater System" dated February 28, 2007 (ML070650314, NOC-AE-07002113) (TAC MD 4655, MD 4656)

STP Nuclear Operating Company (STPNOC) submits a revision to the referenced letter as a result of a conference call with the NRC Staff on April 12, 2007. Attachment 1 contains the description and safety evaluation. Attachment 2 contains the marked-up Technical Specification pages. This submittal supersedes the referenced letter in its entirety.

There are no commitments in this letter.

STPNOC requests approval by July 15, 2008.

STPNOC requests 60 days for implementation of the amendment after it is approved.

The STPNOC Plant Operations Review Committee has reviewed and concurred with the proposed change to the Technical Specifications.

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.

STI: 32152286

A member of the STARS (Strategic Teaming and Resource Sharing) Alliance

Callaway – Comanche Peak – Diablo Canyon – Palo Verde – South Texas Project – Wolf Creek

AOD1

If there are any questions regarding the proposed amendment, please contact Mr. Scott Head at (361) 972-7136 or me at (361) 972-7454.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on May 22, 2007
Date



Charles T. Bowman
General Manager, Oversight

tck/

Attachments:

1. Description of Changes and Safety Evaluation
2. Annotated Technical Specification Page

cc:

(paper copy)

Regional Administrator, Region IV
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, Texas 76011-8064

Senior Resident Inspector
U. S. Nuclear Regulatory Commission
P. O. Box 289, Mail Code: MN116
Wadsworth, TX 77483

C. M. Canady
City of Austin
Electric Utility Department
721 Barton Springs Road
Austin, TX 78704

Richard A. Ratliff
Bureau of Radiation Control
Texas Department of State Health Services
1100 West 49th Street
Austin, TX 78756-3189

(electronic copy)

A. H. Guterman, Esquire
Morgan, Lewis & Bockius LLP

Mohan C. Thadani
U. S. Nuclear Regulatory Commission

Thad Hill
Steve Winn
Eddy Daniels
Harry Holloway
Marty Ryan
NRG South Texas LP

J. J. Nesrsta
R. K. Temple
Kevin Pollo
E. Alarcon
City Public Service

Jon C. Wood
Cox Smith Matthews

C. Kirksey
City of Austin

ATTACHMENT 1

DESCRIPTION OF CHANGES

AND

SAFETY EVALUATION

1.0 Introduction

The proposed amendment will revise the language of Action b for Technical Specification (TS) 3.7.1.2, “Auxiliary Feedwater System” (AFW) to reflect the Licensing Basis established by Amendments 87 and 74, dated May 27, 1997. This Amendment established the acceptability of entry into MODE 3 with the turbine-driven AFW pump inoperable for the purposes of performing post-maintenance and surveillance testing. The original language which read “The provisions of Specification 3.0.4 are not applicable for entry into Mode 3 for the turbine driven pump” was reworded in the subsequent Amendments 170 and 158, dated January 10, 2005, that modified Specifications 3.0.4 and 4.0.4 and introduced the current wording that requires clarification.

2.0 Description

The proposed change will revise the wording of TS 3.7.1.2 Action b from “MODE 3 may be entered with an inoperable turbine-driven auxiliary feedwater pump for the purposes of performing Surveillance Requirement 4.7.1.2.1a.2” to “MODE 3 may be entered with an inoperable turbine-driven auxiliary feedwater pump for the purposes of performing post-maintenance testing and Surveillance Requirement 4.7.1.2.1a.2”. The post-maintenance testing typically involves an uncoupled run and adjustment on an essentially intact pump, and is the correct representation of the STP Licensing Basis for TS 3.7.1.2.

3.0 Background

The AFW system at each of the STP units consists of three motor-driven AFW pumps and one steam-turbine-driven AFW pump configured into four independent trains. Each motor-driven pump and the turbine-driven pump provide 100% of the required capacity to the steam generators, as assumed in the accident analysis. Each motor-driven pump is powered from an independent Class 1E power supply and feeds one steam generator, although each pump has the capability to be realigned from the control room to feed other steam generators. The turbine-driven pump receives steam from, and feeds, the remaining steam generator (Train D). Like the motor-driven pumps, it can also be realigned to feed (but cannot be supplied steam from) any of the other steam generators. Post-maintenance testing, (turbine overspeed, governor and linkage adjustments, etc.) requires steam pressure of at least 300 psi; consequently, the turbine-driven AFW pump is inoperable when the plant enters MODE 3. When the required plant conditions are achieved and the necessary testing is complete, the turbine-driven AFW pump is declared OPERABLE. Once in MODE 3, the turbine-driven AFW pump must be declared OPERABLE within 72 hours. The fact that the STP AFW system design includes four AFW pumps (in lieu of three like most other Westinghouse-designed plants) and the fact that the STP design does not rely on the turbine-driven AFW pump for its station blackout (SBO) analysis provides the plant-specific bases for this proposed change.

Based on this information, the NRC stated in its Safety Evaluation for Amendment Nos. 87 and 74 that entry into MODE 3 with an inoperable turbine-driven auxiliary feedwater

pump for the purposes of post-maintenance and surveillance testing had minimal safety impact and was acceptable.

On February 3, 2004, STP requested adoption of TSTF-359, "Increased Flexibility in Mode Restraints", via the Consolidated Line Item Improvement Process (CLIP) which involved modification of TS 3.0.4. The incorporation of this TSTF required the modification of several Technical Specifications, including TS 3.7.1.2. The current wording found in TS 3.7.1.2 Action b reflects wording consistent with the Improved Standard Technical Specifications found in the CLIP. The wording could be construed to allow the MODE change only for the performance of the surveillance requirement. This interpretation is not consistent with STP's Licensing Basis and would be an unnecessarily restrictive and incorrect application of STP's Technical Specifications.

Because there was no intent to change or modify the Licensing Basis for the AFW system, this proposed amendment is considered an administrative clarification.

4.0 Technical Analysis

The addition of the words "post-maintenance testing" to Action b is administrative in nature and will clarify the intent and Licensing Basis for this Specification. The Licensing Basis for entry into MODE 3 with an inoperable turbine-driven auxiliary feedwater pump under TS 3.7.1.2 Action b has remained unchanged since the approval of Amendments 87 and 74 and the addition of these words will make TS 3.7.1.2 more clearly reflect STP's Licensing Basis.

5.0 Regulatory Safety Analysis

5.1 No Significant Hazards Determination

STPNOC has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10CFR50.92, "Issuance of amendment," as discussed below.

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

Response: No.

The proposed addition of the words in TS 3.7.1.2 Action b is an administrative change that will clarify the Licensing Basis for the turbine-driven auxiliary feedwater pump. Since this change does not change the Licensing Basis for TS 3.7.1.2, this change cannot affect the probability or consequence of any accident previously evaluated.

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

Response: No.

The proposed addition of the words in TS 3.7.1.2 Action b is an administrative change that will clarify the Licensing Basis for the turbine-driven auxiliary feedwater pump. Since this change does not change the Licensing Basis for TS 3.7.1.2, this change cannot affect the possibility of a new or different kind of accident from any accident previously evaluated.

- 3) Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed addition of the words in TS 3.7.1.2 Action b is an administrative change that will clarify the Licensing Basis for the turbine-driven auxiliary feedwater pump. Since this change does not change the Licensing Basis for TS 3.7.1.2, this change cannot involve a significant reduction in a margin of safety.

Conclusion

Based upon the analysis provided herein, the proposed amendment does not involve a significant hazards consideration.

5.2 Applicable Regulatory Requirements/Criteria

This change to TS 3.7.1.2 does not involve any physical changes to the plant or to the AFW system design that would affect the intent of the General Design Criteria, national standards, or engineering principles. The change clarifies the Technical Specification requirements with respect to the Licensing Basis for TS 3.7.1.2. Consistency with the defense-in-depth philosophy is maintained. Reasonable balance among prevention of core damage, prevention of containment failure, and consequence mitigation is preserved. The independence of physical barriers will not be degraded by the TS change. Sufficient safety margins are maintained in that the proposed change is not in conflict with approved Codes and standards relevant to the AFW system.

Therefore STPNOC has determined that there is no impact on compliance with the regulatory requirements.

6.0 Environmental Considerations

10 CFR 51.22(b) specifies the criteria for categorical exclusion from the requirements for a specific environmental assessment per 10 CFR 51.21. This amendment request meets the criteria specified in 10 CFR 51.22(c)(9). The specific criteria contained in this section are discussed below.

(i) the amendment involves no significant hazards consideration

As demonstrated in the No Significant Hazards Consideration Determination, the requested license amendment does not involve any significant hazards consideration.

(ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite

The requested license amendment involves no change to the facility and does not involve any change in the manner of operation of any plant systems involving the generation, collection or processing of radioactive materials or other types of effluents. Therefore, no increase in the amounts of effluents or new types of effluents would be created.

(iii) there is no significant increase in individual or cumulative occupational radiation exposure

The requested license amendment involves no change to the facility and will not increase the radiation dose resulting from the operation of any plant system. Furthermore, implementation of this proposed change will not involve work activities that could contribute to occupational radiation exposure. Therefore, there will be no increase in individual or cumulative occupational radiation exposure associated with this proposed change.

Based on the above, it is concluded that there will be no impact on the environment resulting from this change. The change meets the criteria specified in 10 CFR 51.22 for a categorical exclusion from the requirements of 10 CFR 51.21 relative to specific environmental assessment by the Commission.

7.0 References

7.1 None

ATTACHMENT 2

ANNOTATED
TECHNICAL SPECIFICATION PAGE

PLANT SYSTEMS

AUXILIARY FEEDWATER SYSTEM

LIMITING CONDITION FOR OPERATION

- 3.7.1.2 Four independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:
- a. Three motor-driven auxiliary feedwater pumps, each capable of being powered from separate emergency busses, and
 - b. One steam turbine-driven auxiliary feedwater pump capable of being powered from an OPERABLE steam supply system.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

- a. With one motor-driven auxiliary feedwater pump inoperable, restore the pump to OPERABLE status within 28 days.
- b. With the turbine-driven auxiliary feedwater pump inoperable, or with any two auxiliary feedwater pumps inoperable, restore the affected auxiliary feedwater pump(s) to OPERABLE status within 72 hours. MODE 3 may be entered with an inoperable turbine-driven auxiliary feedwater pump for the purposes of performing post-maintenance testing and Surveillance Requirement 4.7.1.2.1a.2.
- c. With three auxiliary feedwater pumps inoperable, or if the required action and associated allowed outage time for a) or b) is not met, be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- d. With four auxiliary feedwater pumps inoperable, immediately initiate corrective action to restore at least one auxiliary feedwater pump to OPERABLE status as soon as possible. LCO 3.0.3 and all other LCO actions requiring Mode changes are suspended until one of the four inoperable auxiliary feedwater pumps is restored to OPERABLE status.
- e. Specification 3.0.4.b is not applicable.