



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

May 2, 2011  
NOC-AE-11002665  
File No.: G25  
10 CFR 50.90

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

South Texas Project  
Units 1 and 2  
Docket Nos. STN 50-498, STN 50-499  
Proposed Amendment to Technical Specifications for Containment  
Post-Tensioning System Surveillance Program (Revision 2) (TAC ME3969/ME3970)

- References: 1) G. T. Powell to NRC Document Control Desk, "Proposed Amendment to Technical Specification 6.8.3.I for Containment Post-Tensioning System Surveillance Program," dated May 18, 2010 (NOC-AE-10002541) (ML101450414)
- 2) G. T. Powell to NRC Document Control Desk, "Revised Proposed Amendment to Technical Specification 6.8.3.I for Containment Post-Tensioning System Surveillance Program," dated March 1, 2011 (NOC-AE-11002632) (ML110690223)

Pursuant to 10 CFR 50.90, STP Nuclear Operating Company (STPNOC) requests Nuclear Regulatory Commission (NRC) approval of an amendment to Unit 1 Operating License NPF-76 and Unit 2 Operating License NPF-80. The proposed change revises Technical Specification 6.8.3.I, "Containment Post-Tensioning System Surveillance Program." This amendment request was previously submitted in the referenced correspondence. This revised request addresses NRC reviewer comments. Text changes are indicated by change bars in the margin. A supporting change to Surveillance Requirement 4.6.1.6 (page 3/4 6-9) is included.

This proposed amendment provides changes that are consistent with the Revision 3.1 of NUREG-1431, "Standard Technical Specifications for Westinghouse Plants." A safety evaluation of the proposed change and the proposed revised pages of the Technical Specifications are attached.

STPNOC has reviewed the attached proposed amendment pursuant to 10CFR50.92 and determined that it does not involve a significant hazards consideration. In addition, STPNOC has determined that the proposed amendment satisfies the criteria of 10CFR51.22(c)(9) for categorical exclusion from the requirement for an environmental assessment.

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The NRC is requested to approve the proposed amendment by June 30, 2011. This date is flexible. STPNOC will implement the amendment within 30 days after NRC approval. 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 attachment.

There are no commitments in this letter.

If there are any questions, please contact either Philip L. Walker at 361-972-8392 or me at 361-972-7566.

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

Executed on May 2, 2011  
Date



G. T. Powell  
Vice President,  
Technical Support & Oversight

PLW

Attachment: Proposed Amendment to Technical Specification 6.8.3.I for Containment Post-Tensioning System Surveillance Program (Revision 2) - Evaluation of the Proposed Change

cc: (paper copy)

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## **ATTACHMENT**

### **SOUTH TEXAS PROJECT UNITS 1 AND 2**

#### **Evaluation of the Proposed Change**

**Subject:** Proposed Amendment to Technical Specification 6.8.3.I for Containment Post-Tensioning System Surveillance Program (Revision 2)

1.0 SUMMARY DESCRIPTION

2.0 PROPOSED CHANGE

3.0 BACKGROUND

4.0 TECHNICAL EVALUATION

5.0 REGULATORY EVALUATION

5.1 No Significant Hazards Consideration

5.2 Applicable Regulatory Requirements

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6.0 ENVIRONMENTAL CONSIDERATION

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Enclosure 2 – Proposed Technical Specification Pages

**SOUTH TEXAS PROJECT  
UNITS 1 AND 2**

**PROPOSED AMENDMENT TO TECHNICAL SPECIFICATION 6.8.3.I FOR CONTAINMENT  
POST-TENSIONING SYSTEM SURVEILLANCE PROGRAM (REVISION 2)**

**1.0 SUMMARY DESCRIPTION**

South Texas Project (STP) Technical Specification Section 6.8.3.I states that the Containment Post-Tensioning System Surveillance Program shall be in accordance with ASME Code Section XI, Subsection IWL, 1992 Edition with 1992 Addenda, as supplemented by 10 CFR 50.55a(b)(2)(viii). This change removes the specific year of the applicable Code edition consistent with Revision 3.1 of NUREG-1431, "Standard Technical Specifications for Westinghouse Plants." This will allow for future updates to the surveillance program when the applicable code edition changes without requiring additional Technical Specification changes. Additional changes have been made for consistency with the current version of NUREG-1431, and to assure that the surveillance intervals are consistent with Code requirements. These changes have no impact on implementation of the Containment Post-Tensioning System Surveillance Program.

**2.0 PROPOSED CHANGE**

STP Technical Specification 6.8.3.I currently states the following:

Containment Post-Tensioning System Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measures prior to initial operations. The Containment Post-Tensioning System Surveillance Program shall be in accordance with ASME Code Section XI, Subsection IWL, 1992 Edition with 1992 Addenda, as supplemented by 10CFR50.55a(b)(2)(viii).

Changes proposed by this amendment will result in the following (change bar shows additional change to be made under this revision):

Containment Post-Tensioning System Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Containment Post-Tensioning System Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with ASME Code Section XI, Subsection IWL, of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 1992 Edition with 1992 Addenda, as supplemented by 40CFR50.55a(b)(2)(viii), 10 CFR 50.55a, except where an alternative, exemption, or relief has been authorized by the NRC.

The provisions of SR 4.0.3 are applicable to the Containment Post-Tensioning System Surveillance Program inspection frequencies with the exception of the surveillance interval extension allowed per Surveillance Requirement 4.0.2.

In addition, the following addition is proposed for surveillance requirement 4.6.1.6:

The provisions of SR 4.0.2 do not apply to extending the interval for this surveillance.

### **3.0 TECHNICAL EVALUATION**

There will be no change in the design basis of the South Texas Project as a result of this amendment. There will be no change in the level of compliance with the General Design Criteria. There will be no change in compliance with the requirements of the applicable ASME code edition because that is established by the requirements of 10 CFR 50.55a. Consequently, revising the description of the Containment Post-Tensioning System Surveillance Program for consistency with the Standard Technical Specifications does not affect safe operation of the South Texas Project.

### **4.0 REGULATORY EVALUATION**

#### **4.1 Applicable Regulatory Requirements/Criteria**

10 CFR 50.55a requires that STP containment structural integrity be determined in accordance with the requirements of ASME Code Section XI, Subsection IWL, "Requirements for Class CC Concrete Components of Light Water Cooled Power Plants," 2004 Edition as modified and supplemented by specified requirements and limitations. There is no change in applicable code requirements as a consequence of this amendment.

Inspection requirements for containment structural integrity applied by 10 CFR 50.55a do not have provisions for extending the inspection interval consistent with the provisions of Surveillance Requirement 4.0.2. Specifically removing Surveillance Requirement 4.0.2 as a provision for extending the inspection interval is for consistency between the Technical Specifications and code requirements.

#### **4.1.1 General Design Criteria**

##### General Design Criterion 16, "Containment Design"

Reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require.

This change does not affect the function of reactor containment and associated functions.

#### **4.1.2 Regulatory Compliance**

Future changes to the Containment Post-Tensioning System Surveillance Program that depart from code requirements will continue to require prior NRC approval, pursuant to the provisions of 10CFR50.55a. Therefore, adequate regulatory oversight will be maintained following implementation of this change.

#### 4.2 Significant Hazards Consideration

Excluding the extension allowed for a specified surveillance interval per Surveillance Requirement 4.0.2 from implementation of the Containment Post-Tensioning System Surveillance Program has no impact on the Significant Hazards Consideration.

STPNOC has evaluated whether 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. Inspection practices and acceptance standards will continue to be consistent with the approved ASME code edition as specified by 10 CFR 50.55a. Therefore, the proposed changes will not increase the probability or consequences of an 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 changes will not alter the plant configuration (no new or different type of equipment will be installed) or require any unusual operator actions. The proposed changes will not alter the way any structure, system, or component functions, and will not significantly alter the manner in which the plant is operated. The response of the plant and the operators following an accident will not be different. In addition, the proposed change does not introduce any new failure modes. Therefore, the proposed changes will not create the possibility of a new or different kind of accident from any accident previously analyzed.

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

Response:

No. Containment tendon inspection practices and acceptance standards will continue to be consistent with the applicable ASME code edition. There is no change in surveillance acceptance criteria. Therefore, the proposed changes will not result in a reduction in a margin of safety.

Based on the above, STPNOC concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly, a finding of "no significant hazards consideration" is justified.

#### 4.3 Conclusion

Based on the considerations discussed above: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; (2) such activities will be conducted in compliance with the Commission's regulations; and (3) implementation of the amendment will not be detrimental to the common defense and security or to the health and safety of the public.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The proposed amendment will not change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, nor would change an inspection or surveillance requirement. The proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement, or environmental assessment need be prepared in connection with the proposed amendment.

#### 6.0 IMPLEMENTATION

The NRC is requested to approve the proposed amendment by June 30, 2011. This date is flexible. STPNOC will implement the amendment within 30 days after NRC approval.



**ENCLOSURE 1**

**UPDATED TECHNICAL SPECIFICATION PAGES**

## CONTAINMENT SYSTEMS

### CONTAINMENT STRUCTURAL INTEGRITY

#### LIMITING CONDITION FOR OPERATION

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3.6.1.6 The structural integrity of the containment(s) shall be maintained as required by the Containment Post-Tensioning System Surveillance Program.

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTION:

If the containment is not OPERABLE, restore containment to OPERABLE status in 1 hour, or be in at least HOT STANDBY in the next 6 hours and be in COLD SHUTDOWN in the following 30 hours.

### SURVEILLANCE REQUIREMENTS

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#### 4.6.1.6 CONTAINMENT PRESTRESSING SYSTEM

Verify containment structural integrity in accordance with the Containment Post-Tensioning System Surveillance Program. The provisions of SR 4.0.2 do not apply to extending the interval for this surveillance.

6.8.3 (continued)

l. Containment Post-Tensioning System Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measures prior to initial operations. The Containment Post-Tensioning System Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with ASME Code Section XI, Subsection IWL, of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 1992 Edition with 1992 Addenda, as supplemented by 10CFR50.55a(b)(2)(viii), 10 CFR 50.55a, except where an alternative, exemption, or relief has been authorized by the NRC.

The provisions of SR 4.0.3 are applicable to the Containment Post-Tensioning System Surveillance Program inspection frequencies with the exception of the surveillance interval extension allowed per Surveillance Requirement 4.0.2.

m. Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:
  1. A change in the TS incorporated in the license or
  2. A change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.
- c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the FSAR.
- d. Proposed changes that meet the criteria of Specification 6.8.3.m.b above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

n. Offsite Dose Calculation Manual (ODCM)

- 1) The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and

(continued)

**ENCLOSURE 2**

**PROPOSED TECHNICAL SPECIFICATION PAGES**

## CONTAINMENT SYSTEMS

### CONTAINMENT STRUCTURAL INTEGRITY

#### LIMITING CONDITION FOR OPERATION

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APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

If the containment is not OPERABLE, restore containment to OPERABLE status in 1 hour, or be in at least HOT STANDBY in the next 6 hours and be in COLD SHUTDOWN in the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

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The provisions of SR 4.0.3 are applicable to the Containment Post-Tensioning System Surveillance Program inspection frequencies with the exception of the surveillance interval extension allowed per Surveillance Requirement 4.0.2.

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(continued)