



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

August 14, 2012

Mr. Kevin D. Richards  
President and Chief Executive Officer/  
STP Nuclear Operating Company  
South Texas Project  
P.O. Box 289  
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS  
RE: REVISE THE APPLICABILITY OF RISK-MANAGED TECHNICAL  
SPECIFICATIONS TO TECHNICAL SPECIFICATION 3.7.7 (TAC NOS. ME6978  
AND ME6979)

Dear Mr. Richards:

The Commission has issued the enclosed Amendment No. 199 to Facility Operating License No. NPF-76 and Amendment No. 187 to Facility Operating License No. NPF-80 for the South Texas Project, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated August 23, 2011.

The amendments revise the applicability of risk-managed technical specifications to TS 3.7.7, "Control Room Makeup and Cleanup Filtration System." The change corrects a potential misapplication of the Configuration Risk Management Program that is currently allowed by the TSs.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read "Balwant K. Singal".

Balwant K. Singal, Senior Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosures:

1. Amendment No. 199 to NPF-76
2. Amendment No. 187 to NPF-80
3. Safety Evaluation

cc w/encls: Distribution via Listserv



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

STP NUCLEAR OPERATING COMPANY

DOCKET NO. 50-498

SOUTH TEXAS PROJECT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 199  
License No. NPF-76

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by STP Nuclear Operating Company (STPNOC)\* acting on behalf of itself and for NRG South Texas LP, the City Public Service Board of San Antonio (CPS), and the City of Austin, Texas (COA) (the licensees), dated August 23, 2011, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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\*STPNOC is authorized to act for NRG South Texas LP, the City Public Service Board of San Antonio, and the City of Austin, Texas, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-76 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 199, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. STPNOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Facility Operating  
License No. NPF-76 and the  
Technical Specifications

Date of Issuance: August 14, 2012



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

STP NUCLEAR OPERATING COMPANY

DOCKET NO. 50-499

SOUTH TEXAS PROJECT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 187  
License No. NPF-80

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by STP Nuclear Operating Company (STPNOC)\* acting on behalf of itself and for NRG South Texas LP, the City Public Service Board of San Antonio (CPS), and the City of Austin, Texas (COA) (the licensees), dated August 23, 2011, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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\*STPNOC is authorized to act for NRG South Texas LP, the City Public Service Board of San Antonio, and the City of Austin, Texas, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-80 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No.187, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. STPNOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Facility Operating  
License No. NPF-80 and the  
Technical Specifications

Date of Issuance: August 14, 2012

ATTACHMENT TO LICENSE AMENDMENT NOS. 199 AND 187 AND

FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80

DOCKET NOS. 50-498 AND 50-499

Replace the following pages of the Facility Operating Licenses, Nos. NPF-76 and NPF-80, and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License NPF-76

<u>REMOVE</u>	<u>INSERT</u>
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4	4
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Facility Operating License No. NPF-80

<u>REMOVE</u>	<u>INSERT</u>
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4	4
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Technical Specifications

<u>REMOVE</u>	<u>INSERT</u>
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3/4 7-16	3/4 7-16
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(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 199, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. STPNOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

## (3) Not Used

(4) Initial Startup Test Program (Section 14, SER)\*

Any changes to the Initial Test Program described in Section 14 of the Final Safety Analysis Report made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

(5) Safety Parameter Display System (Section 18, SSER No. 4)\*

Before startup after the first refueling outage, HL&P<sup>[\*\*]</sup> shall perform the necessary activities, provide acceptable responses, and implement all proposed corrective actions related to issues as described in Section 18.2 of SER Supplement 4.

(6) Supplementary Containment Purge Isolation (Section 11.5, SSER No. 4)

HL&P shall provide, prior to startup from the first refueling outage, control room indication of the normal and supplemental containment purge sample line isolation valve position.

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\* The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

\*\* The original licensee authorized to possess, use and operate the facility was HL&P. Consequently, historical references to certain obligations of HL&P remain in the license conditions.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 187 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. STPNOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Not Used

(4) Initial Startup Test Program (Section 14, SR)\*

Any changes to the Initial Test Program described in Section 14 of the Final Safety Analysis Report made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

(5) License Transfer

Texas Genco, LP shall provide decommissioning funding assurance, to be held in decommissioning trusts for South Texas Project, Unit 2 (Unit 2) upon the direct transfer of the Unit 2 license to Texas Genco, LP, in an amount equal to or greater than the balance in the Unit 2 decommissioning trust immediately prior to the transfer. In addition, Texas Genco, LP shall ensure that all contractual arrangements referred to in the application for approval of the transfer of the Unit 2 license to Texas Genco, LP to obtain necessary decommissioning funds for Unit 2 through a non-bypassable charge are executed and will be maintained until the decommissioning trusts are fully funded, or shall ensure that other mechanisms that provide equivalent assurance of decommissioning funding in accordance with the Commission's regulations are maintained.

(6) License Transfer

The master decommissioning trust agreement for Unit 2, at the time the direct transfer of Unit 2 to Texas Genco, LP is effected and thereafter, is subject to the following:

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\* The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.



## 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: MODES 1, 2, 3, and 4:

ACTION:

- a. With one Control Room Makeup and Cleanup Filtration System inoperable for reasons other than condition b or condition e, within 7 days restore the inoperable system to OPERABLE status, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one Control Room Makeup and Cleanup Filtration System inoperable only due to unavailability of cooling, within 7 days restore the inoperable system to OPERABLE status or apply the requirements of the CRMP, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With two Control Room Makeup and Cleanup Filtration Systems inoperable for reasons other than condition e, within 72 hours restore at least two systems to OPERABLE status, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. With three Control Room Makeup and Cleanup Filtration Systems inoperable for reasons other than condition e, within 12 hours restore at least one system to OPERABLE status, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Note

The Control Room Envelope (CRE) boundary is not a required system, subsystem, train, component, or device that depends on a diesel generator as a source of emergency power. Specification 3.8.1.1.d need not be applied for an inoperable Control Room Makeup and Cleanup Filtration System that is inoperable solely due to an inoperable Control Room Envelope boundary.

- e. One or more Control Room Makeup and Cleanup Filtration Systems inoperable due to inoperable Control Room Envelope (CRE) boundary perform the following:
  - 1) immediately initiate action to implement mitigating actions, and
  - 2) within 24 hours verify mitigating actions ensure CRE occupant exposures to radiological, chemical and smoke hazards will not exceed limits, and
  - 3) within 90 days restore CRE boundary to OPERABLE status.

OR

be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 199 AND 187 TO

FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80

STP NUCLEAR OPERATING COMPANY, ET AL.

SOUTH TEXAS PROJECT, UNITS 1 AND 2

DOCKET NOS. 50-498 AND 50-499

1.0 INTRODUCTION

By application dated August 23, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11244A044), STP Nuclear Operating Company (STPNOC, the licensee), requested changes to the Technical Specifications (TSs) for South Texas Project (STP), Units 1 and 2.

The proposed changes would revise the applicability of risk-managed technical specifications (RMTS) to TS 3.7.7, "Control Room Makeup and Cleanup Filtration System." The change corrects a potential misapplication of the Configuration Risk Management Program (CRMP) that is currently allowed by the TSs.

1.1 Background

By letter dated July 13, 2007 (ADAMS Accession No. ML071780168), the U.S. Nuclear Regulatory Commission (NRC) staff approved Amendment Nos. 179 and 166, for STP, Units 1 and 2, respectively, for application of RMTS to allow the CRMP to be applied to various STP TSs when determining allowed outage times (AOTs). The amendments included application of the CRMP to TS 3.7.7, "Control Room Makeup and Cleanup Filtration System." In Amendment Nos. 179 and 166 for STP, Units 1 and 2, respectively, the ACTIONS required in MODES 1, 2, 3, and 4 for the amended TS 3.7.7 read as follows:

- a. With one Control Room Makeup and Cleanup Filtration System inoperable, within 7 days restore the inoperable system to OPERABLE status or apply the requirements of the CRMP, 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, within 72 hours restore at least two systems to OPERABLE status or apply the requirements of the CRMP, 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 within 12 hours restore at least one system to OPERABLE status or apply the requirements of the CRMP, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Later, the licensee identified a potential misapplication of the CRMP to TS 3.7.7. In its letter dated May 28, 2008 (ADAMS Accession No. ML081720133), the licensee stated, in part, that:

On July 13, 2007, Amendments 179 and 166 to the TS approved the RMTS to allow the Configuration Risk Management Program (CRMP) to be applied to various STP TS for extending ACTION times for inoperable trains. The amendment permitted the CRMP to be applied to TS 3.7.7 on a limited basis.

The Control Room Makeup and Cleanup Filtration System (CRMCFCS), commonly referred to as Control Room HVAC (CRHVAC), includes a recirculation and filtration function that maintains the design basis accident radiation dose to the operators within the limits of General Design Criteria 19. The system also provides required cooling for the operators and equipment. The dose mitigation function is not modeled in the STP Probabilistic Risk Assessment (PRA) because it is evaluated as having no impact on core damage frequency (CDF) or large early release frequency (LERF), which are the metrics for application of RMTS. The cooling function is modeled. Based on discussion with the NRC reviewers, it was determined during the license amendment application review that the dose mitigation function could not be included in the scope of RMTS because it is not modeled in the PRA.

At the time the amendment was approved, STPNOC believed the dose mitigation function was independent of the cooling function and the CRMP could be applied to TS 3.7.7 for conditions where only the cooling function is affected. The "limited" basis approved in the license amendment allows the CRMP to apply to conditions where only the cooling function of the CRHVAC is affected. [Letter dated December 28, 2006 (ADAMS Accession No. ML070040247) addressed this by stating that the wording below would be included in the TS Bases for TS 3.7.7, and the TS Bases were changed accordingly.

"The dose mitigation function governed by TS 3.7.7 does not depend on the cooling function governed by TS 3.7.7 that is supported by TS 3.7.14 for EchW. Therefore, if a TS 3.7.7 action applies because EchW is not available or the cooling coil for

CRHVAC is not operable, the provision to apply the CRMP may be used.”

During a review of the basis for application of RMTS in February 2008, STPNOC determined that at least one train of Essential Chilled Water (EchW) supported by Essential Cooling Water (EW) is required to maintain humidity to support achieving the filter efficiency assumed in the accident dose analysis. Based on this information, the dose mitigation function governed by TS 3.7.7 has some dependence on the cooling function and the statement above is not correct.

The discrepancy in the information was entered in the STPNOC Corrective Action Program and administrative restrictions were put in place to prevent the use of RMTS for CRHVAC. STPNOC has not applied RMTS to TS 3.7.7, except for TS 3.7.7, ACTION a. for loss of cooling function only for one CRHVAC train.

Subsequently, the NRC approved the following amendments affecting the required ACTIONS for TS 3.7.7:

- Amendment Nos. 182 and 169 for STP, Units 1 and 2, respectively, dated March 6, 2008 (ADAMS Accession No. ML080300062);
- Amendment Nos. 185 and 172 for STP, Units 1 and 2, respectively, dated July 29, 2008 (ADAMS Accession No. ML082040560); and
- Amendment Nos. 195 and 183 for STP, Units 1 and 2, respectively, dated April 25, 2011 (ADAMS Accession No. ML110950146).

## 2.0 REGULATORY EVALUATION

The amendments proposed by the licensee in its letter dated June 6, 2006 (ADAMS Accession No. ML061630315), as supplemented by letters dated December 28, 2006, and February 28, May 9, and May 17, 2007 (ADAMS Accession Nos. ML070040247, ML070670369, ML071350248, and ML071450379, respectively), were authorized by the NRC staff by letter dated July 13, 2007 (ADAMS Accession No. ML071780168). The proposed changes were evaluated by the NRC staff based on the following applicable regulations and regulatory criteria/guidance:

- Title 10 of the *Code of Federal Regulations*, Section 50.36, “Technical specifications.”
- 10 CFR 50.65, “Requirements for monitoring the effectiveness of maintenance at nuclear power plants.”
- Regulatory Guide (RG) 1.174, “An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis,” July 1998 (ADAMS Accession No. ML003740133).

- RG 1.177, Revision 0, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications," August 1998 (ADAMS Accession No. ML081690576).
- NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants" (SRP), Chapter 19, "Use of Probabilistic Risk Assessment in Plant-Specific, Risk-Informed Decisionmaking: General Guidance," Revision 1, November 2002 (ADAMS Accession No. ML023250195).
- SRP Section 19.1, "Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities," Revision 1, September 2006 (ADAMS Accession No. ML062510220).
- SRP Section 16.1, "Risk-Informed Decisionmaking: Technical Specifications," Revision 0, August 1998 (ADAMS Accession No. ML042520260).
- RG Guide 1.200, Revision 1, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities," Revision 1, January 2007 (ADAMS Accession No. ML063170035).
- Nuclear Energy Institute (NEI) 06-09, Revision 0, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines, Industry Guidance Document," November 2006 (ADAMS Accession No. ML063390639).

In addition, the proposed changes were reviewed against the requirements of 10 CFR 50, Appendix A, Criterion 19, "Control room," to ensure compliance with the general design criteria.

The purpose of the proposed changes is to make sure that CRMP is applied only when one Control Room Makeup and Cleanup Filtration System is inoperable only due to unavailability of cooling. All other options to apply the requirements of CRMP to TS 3.7.7 are being removed.

### 3.0 TECHNICAL EVALUATION

#### 3.1 Proposed TS Changes

Current TS 3.7.7 ACTIONS a through d state:

- a. With one Control Room Makeup and Cleanup Filtration System inoperable for reasons other than condition d, within 7 days restore the inoperable system to OPERABLE status or apply the requirements of the CRMP, 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 for reasons other than condition d, within 72 hours restore at least two systems to OPERABLE status or apply the requirements of the

CRMP, 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 for reasons other than condition d, within 12 hours restore at least one system to OPERABLE status or apply the requirements of the CRMP, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Note

The Control Room Envelope (CRE) boundary is not a required system, subsystem, train, component, or device that depends on a diesel generator as a source of emergency power. Specification 3.8.1.1.d need not be applied for an inoperable Control Room Makeup and Cleanup Filtration System that is inoperable solely due to an inoperable Control Room Envelope boundary.

- d. One or more Control Room Makeup and Cleanup Filtration Systems inoperable due to inoperable Control Room Envelope (CRE) boundary perform the following:

- 1) immediately initiate action to implement mitigating actions, and
- 2) within 24 hours verify mitigating actions ensure CRE occupant exposures to radiological, chemical and smoke hazards will not exceed limits, and
- 3) within 90 days restore CRE boundary to OPERABLE status.

OR

be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Revised TS 3.3.7 ACTION a would state:

- a. With one Control Room Makeup and Cleanup Filtration System inoperable for reasons other than condition b or condition e, within 7 days restore the inoperable system to OPERABLE status, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

New TS 3.7.7 ACTION b would state:

- b. With one Control Room Makeup and Cleanup Filtration System inoperable only due to unavailability of cooling, within 7 days restore the inoperable system to OPERABLE status or apply the requirements of the CRMP, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Current TS 3.7.7 ACTIONS b, c, and d would be renumbered as ACTIONS c, d, and e, respectively, and revised to state:

- c. With two Control Room Makeup and Cleanup Filtration Systems inoperable for reasons other than condition e, within 72 hours restore at least two systems to OPERABLE status, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. With three Control Room Makeup and Cleanup Filtration Systems inoperable for reasons other than condition e, within 12 hours restore at least one system to OPERABLE status, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Note

The Control Room Envelope (CRE) boundary is not a required system, subsystem, train, component, or device that depends on a diesel generator as a source of emergency power. Specification 3.8.1.1.d need not be applied for an inoperable Control Room Makeup and Cleanup Filtration System that is inoperable solely due to an inoperable Control Room Envelope boundary.

- e. One or more Control Room Makeup and Cleanup Filtration Systems inoperable due to inoperable Control Room Envelope (CRE) boundary perform the following:
  - 1) immediately initiate action to implement mitigating actions, and
  - 2) within 24 hours verify mitigating actions ensure CRE occupant exposures to radiological, chemical and smoke hazards will not exceed limits, and
  - 3) within 90 days restore CRE boundary to OPERABLE status.

OR

be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Hence, after implementation of the proposed changes, the use of RMTS for CRHVAC will apply to the new proposed ACTION b only. The CRHVAC system design features are described in Section 3.2 of this safety evaluation.

### 3.2 System Description

In its letter dated August 23, 2011, the licensee provided the following basic description of the CRHVAC system:

The CRHVAC is comprised of three 50-percent redundant trains that share a common intake plenum and exhaust plenum. Each train is comprised of a makeup fan, a makeup filtration unit, a cleanup filtration unit, a cleanup fan, a control room air handling unit, a supply fan, a return fan, and associated ductwork and dampers.

Two of the three 50% design capacity trains are required to be operable to ensure that: (1) the ambient air temperature does not exceed the allowable temperature for continuous-duty rating for the equipment and instrumentation cooled by this system; and (2) the control room remains habitable for operations personnel during and following design-basis accident conditions. The CRHVAC maintains the design-basis accident radiation dose to the operators within the limits of General Design Criterion 19.

An engineering calculation demonstrates that two trains of CRHVAC pressurization (fans) with one train of cooling are adequate for the dose mitigation function based on maintaining the required control room envelope positive pressure and maintaining the relative humidity of the control room air below the 70% acceptance criterion required to support design-basis assumptions for carbon filter efficiency. With one train of CRHVAC inoperable from a loss of cooling, either of the two operable trains of CRHVAC provides adequate cooling to maintain the filter efficiency for the CRHVAC system to perform its design function of mitigating dose.

A single failure while in the action statement is postulated to demonstrate that the CRMP is being applied for the cooling function and is not being applied to extend the allowed outage time to restore necessary redundancy for the required dose mitigation function. Therefore, application of the CRMP to the proposed Action b for one train of CRHVAC that is inoperable only due to unavailability of cooling is permissible.

For those TS where application of the CRMP is allowed, the operator has the option of using the existing TS AOT for routine plant activities and emergent conditions that would not be expected to require an extension of the AOT. This existing AOT is referred to as the "frontstop" time. The frontstop time provides the operator sufficient time to determine and apply an appropriate extended time from the application of the CRMP for those situations where an extended AOT, as allowed by the RMTS, is necessary. Once the CRMP is applied and a component has exceeded its frontstop time, the CRMP is applied to all subsequent inoperable TS components within the scope of the CRMP to determine the time of the extended AOT for the new configuration until no components are in ACTIONS beyond the frontstop time.



The CRHVAC room cooling function is modeled in the PRA [probabilistic risk assessment]. An extended AOT can be calculated for one inoperable train of CRHVAC cooling. Therefore, the CRMP can be applied for the condition of a single train of CRHVAC inoperable only due to the unavailability of cooling.

The dose mitigation function is not modeled in the PRA because it has no effect on core damage frequency or LERF [large early release frequency]. Consequently, there is no direct quantifiable technical basis for calculating an extended AOT for an inoperable condition involving the dose mitigation function. Therefore, the CRMP cannot be applied to the condition of inoperable CRHVAC train(s) where the dose mitigation function is adversely impacted.

### 3.3 NRC Staff Evaluation

The existing TS 3.7.7 ACTIONS a, b, and c, permit 7 days of operation with one of three Control Room Makeup and Cleanup Filtration Systems inoperable, 72 hours with two of three systems inoperable, and 12 hours with all three systems inoperable or apply the requirements of CRMP or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. This is based on the assumption that the chilled water support system was not required for the system to perform the dose mitigation function, but only to perform control room cooling.

The cooling function is adequately modeled in the PRA, but since the filtration function is not related to mitigation of severe accidents, this function is not modeled in the PRA. Loss of one Control Room Makeup and Cleanup Filtration System due to loss of cooling only will not affect the operability of the dose mitigation function. However, loss of more than one Control Room Makeup and Cleanup Filtration System, even if it is due to loss of cooling only, will affect the operability of the dose mitigation function. Hence, the requirements of CRMP can be applied only when one Control Room Makeup and Cleanup Filtration System is inoperable due to loss of cooling only.

TS 3.7.7 Actions for MODES 1, 2, 3, and 4 have been revised to correct the misapplication of the CRMP permitted by the existing TSs. ACTION a has been split to ACTION a and ACTION b to separate the action required for loss of dose mitigation function from the action required for a loss of cooling function only and from the action for loss of only Control Room Envelope boundary. The application of CRMP to the existing ACTION b and ACTION c has been removed. Also, re-lettering of the existing ACTIONS b, c, and d to ACTIONS c, d, and e has been made to accommodate new ACTION b.

The TS 3.7.7 has been revised to rectify the existing error for application of the CRMP requirements and the revised TSs is consistent with the original licensing basis of the CRMP applicability to TS 3.7.7.

Additionally, the NRC staff review concluded that the proposed changes are still consistent with the applicable regulations and regulatory criteria/guidance against which the original request was evaluated, meets the requirements of 10 CFR 50, Appendix A, Criterion 19, and is, therefore, acceptable to the NRC staff.

#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Texas State official was notified of the proposed issuance of the amendment. The State official had no comments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on November 1, 2011 (76 FR 67490). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

#### 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Andrew Howe, NRR/DRA/APLA

Date: August 14, 2012

August 14, 2012

Mr. Kevin D. Richards  
President and Chief Executive Officer/  
STP Nuclear Operating Company  
South Texas Project  
P.O. Box 289  
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS  
RE: REVISE THE APPLICABILITY OF RISK-MANAGED TECHNICAL  
SPECIFICATIONS TO TECHNICAL SPECIFICATION 3.7.7 (TAC NOS. ME6978  
AND ME6979)

Dear Mr. Richards:

The Commission has issued the enclosed Amendment No. 199 to Facility Operating License No. NPF-76 and Amendment No. 187 to Facility Operating License No. NPF-80 for the South Texas Project, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated August 23, 2011.

The amendments revise the applicability of risk-managed technical specifications to TS 3.7.7, "Control Room Makeup and Cleanup Filtration System." The change corrects a potential misapplication of the Configuration Risk Management Program that is currently allowed by the TSs.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,  
*/RA/*

Balwant K. Singal, Senior Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosures:

1. Amendment No. 199 to NPF-76
2. Amendment No. 187 to NPF-80
3. Safety Evaluation

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DATE	7/30/12	7/25/12	8/1/12	7/30/12
OFFICE	NRR/DRA/APLA/BC	OGC - NLO	NRR/LPL4/BC	NRR/LPL4/PM
NAME	DHarrison*	LSubin	MMarkley (FLyon for)	BSingal
DATE	1/12/12	8/7/12	8/14/12	8/14/12

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