



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

April 8, 2021

Mr. G. T. Powell
President and Chief Executive Officer
STP Nuclear Operating Company
P.O. Box 289
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENT NOS. 222 AND 207 TO REVISE TECHNICAL SPECIFICATIONS TO ADOPT TSTF-374, "REVISION TO TS 5.5.13 AND ASSOCIATED TS BASES FOR DIESEL FUEL OIL" (EPID L-2020-LLA-0172)

Dear Mr. Powell:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 222 to Renewed Facility Operating License No. NPF-76 and Amendment No. 207 to Renewed 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 July 30, 2020, as supplemented by letter dated September 22, 2020.

The amendments revise TS 6.8.3.i, "Diesel Fuel Oil Testing Program," by relocating references to specific American Society for Testing and Materials standards for fuel oil testing to the TS Bases and adding alternate criteria to the "clear and bright" acceptance test for new fuel oil. The changes are based upon Technical Specifications Task Force (TSTF) Traveler TSTF-374, "Revision to TS 5.5.13 and Associated TS Bases for Diesel Fuel Oil."

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

Sincerely,

/RA/

Dennis J. Galvin, 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. 222 to NPF-76
2. Amendment No. 207 to NPF-80
3. Safety Evaluation

cc: 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 RENEWED FACILITY OPERATING LICENSE

Amendment No. 222
Renewed 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 July 30, 2020, as supplemented by letter dated September 22, 2020, 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 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.

*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 Renewed 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. 222, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed 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 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jennifer L. Dixon-Herrity, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 8, 2021



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 RENEWED FACILITY OPERATING LICENSE

Amendment No. 207
Renewed 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 July 30, 2020, as supplemented by letter dated September 22, 2020, 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 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.

*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 Renewed 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. 207 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed 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 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jennifer L. Dixon-Herrity, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 8, 2021

ATTACHMENT TO LICENSE AMENDMENT NOS. 222 AND 207 TO
RENEWED FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80
SOUTH TEXAS PROJECT, UNITS 1 AND 2
DOCKET NOS. 50-498 AND 50-499

Replace the following pages of the Renewed Facility Operating License 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.

Renewed Facility Operating License No. NPF-76

REMOVE
- 4 -

INSERT
- 4 -

Renewed Facility Operating License No. NPF-80

REMOVE
- 4 -

INSERT
- 4 -

Technical Specifications

REMOVE
6-9

INSERT
6-9

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 222, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed 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^[**] 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.

* 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. 207 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed 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:

* 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.

6.8.3.g (continued)

- 10) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR 190.

h. Not Used

i. Diesel Fuel Oil Testing Program

A diesel fuel oil testing program to implement required testing of both new fuel oil and stored fuel oil shall be established. The program shall include sampling and testing requirements, and acceptance criteria, all based on applicable ASTM Standards. The purpose of the program is to establish the following:

- 1) Acceptability of new fuel oil prior to addition to the diesel generator fuel oil storage tanks by determining that the fuel oil has:
 - a. an API gravity or absolute specific gravity within limits,
 - b. a flash point and kinematic viscosity within limits for ASTM 2D fuel oil, and
 - c. a clear and bright appearance with proper color or a water and sediment content within limits;
- 2) Within 31 days following addition of new fuel oil to the diesel generator fuel oil storage tanks, verify that the properties of the new fuel oil, other than those addressed in 6.8.3.i.1 above, are within limits for ASTM 2D fuel oil; and
- 3) Total particulate concentration of fuel oil is ≤ 10 mg/l when tested every 31 days.

The provisions of Surveillance Requirements 4.0.2 and 4.0.3 are applicable to the Diesel Fuel Oil Testing Program test frequencies.

j. Containment Leakage Rate Testing Program

A program shall be established to implement leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Nuclear Energy Institute (NEI) topical report NEI 94-01 Revision 2-A, dated October 2008.

(continued)



UNITED STATES
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 222 AND 207 TO

RENEWED 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 letter dated July 30, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20212L521), as supplemented by letter dated September 22, 2020 (ADAMS Accession No. ML20266H819), STP Nuclear Operating Company (the licensee) submitted a license amendment request to the U.S. Nuclear Regulatory Commission (NRC, the Commission) for the South Texas Project, Units 1 and 2 (STP).

The proposed changes would revise TS 6.8.3.i, "Diesel Fuel Oil Testing Program," by relocating references to specific American Society for Testing and Materials (ASTM) standards for fuel oil testing to the Technical Specifications (TS) Bases and adding alternate criteria to the "clear and bright" acceptance test for new fuel oil. The changes are based upon Technical Specifications Task Force (TSTF) Traveler TSTF-374, "Revision to TS 5.5.13 and Associated TS Bases for Diesel Fuel Oil." These changes were described in a Notice of Availability published in the Federal Register on April 21, 2006 (71 FR 20735) (ADAMS Accession No. ML061040356).

2.0 REGULATORY EVALUATION

The onsite electrical power system includes standby power sources, distribution systems, and vital auxiliary supporting systems to supply power to safety-related equipment. Most commercial nuclear power plants use diesel generators as the emergency power source for the safety-related electrical buses. The importance of the diesel generators (or other standby power sources), is reflected in their incorporation into NRC regulations, TS, and other regulatory programs, including Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR Part 50). NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition," addresses diesel fuel oil and other supporting systems in Section 9.5.4, "Emergency Diesel Engine Fuel Oil Storage and Transfer System Review Responsibilities."

The TS includes requirements for testing diesel fuel oil to ensure it is of the appropriate grade and that it has not been contaminated (i.e., proper fuel oil quality). The Diesel Fuel Oil Testing Program defined in the TS includes tests for (1) the acceptability of new fuel oil for use prior to addition to storage tanks; (2) other properties of new fuel oil within limits within 31 days following sampling and addition to storage tanks; and (3) total particulate concentration of the fuel oil every 31 days. The current TS identify particular ASTM standards and methods of performing these tests. The industry submitted TSTF-374 proposing changes to the Standard TS (STS) (NUREGs 1430-1434) to provide the flexibility to address future changes in Environmental Protection Agency (EPA) regulations for fuel oil or revisions to the ASTM standards. TSTF-374 was reviewed and accepted by the NRC staff and has been incorporated into each of the STS NUREGs. Requirements for testing the diesel fuel oil are maintained, but references to specific ASTM standards are relocated to licensee-controlled documents and an alternative to the “clear and bright” acceptance test for new fuel is added to address changes in EPA requirements.

3.0 TECHNICAL EVALUATION

In adopting TSTF-374, the licensee proposes to relocate the reference to specific ASTM standards from the TS Administrative Controls Section 6.8.3.i to a licensee-controlled document. Although the reference to specific testing standards or methods is relocated, TS 6.8.3.i retains acceptance criteria for new and stored diesel fuel oil and refers to “applicable ASTM standards” for sampling and testing requirements. The specific testing standards or methods are relocated to the TS Bases Section, which are controlled in accordance with 10 CFR 50.59, “Changes, tests, and experiments,” as described in TS 6.8.3.m, “Technical Specification (TS) Bases Control Program.” The licensee’s testing programs for diesel fuel oil are also governed by other regulatory requirements, including Appendix B (Quality Assurance Criteria) to 10 CFR Part 50. While the relocation of selected program details provides the licensee with some flexibility to adopt practices defined in future ASTM standards, the NRC staff finds that the remaining TS, TS Bases Control Program, and other NRC regulations provide appropriate regulatory controls to ensure diesel fuel oil quality will be maintained.

The plant-specific adoption of TSTF-374 also includes an alternative to the “clear and bright” test currently required for new fuel oil acceptability. The revised TS would allow either the “clear and bright” test or a test confirming that the fuel oil has “water and sediment content within limits.” This alternative test is better suited for darker colored fuels and is recognized in ASTM standards that have been referenced in NRC approved amendment requests. The NRC staff finds that the alternative for testing the water and sediment content will maintain or improve the inspection of new fuel oil and therefore finds the change acceptable.

The licensee included in its application the proposed revisions to the TS Bases to reflect the changes to TS 6.8.3.i and to incorporate the references to the applicable ASTM standards. In the above Notice of Availability, the NRC requested TS Bases changes be included with the proposed license amendments consistent with the Bases in TSTF-374. The STP TS and Bases are custom specifications. As a result, the current STP Bases were not consistent with the STS Bases and the markup to the STS Bases provided in TSTF-374. Therefore, the licensee proposed conforming changes to the STP Bases to ensure consistency with the STS Bases used to develop TSTF-374 and changes to STS Bases as provided in TSTF-374. The proposed STP Bases change also include updated references to applicable ASTM standards, as the applicable ASTM standards associated with testing diesel fuel have changed since the NRC approved TSTF-374 in 2005.

In addition, the STS Bases used to develop TSTF-374 changes described American Petroleum Institute (API) gravity fuel limits. However, the current STP Bases, due to their custom nature, did not describe API gravity fuel limits. Rather, STP's Diesel Fuel Oil Testing Program, a licensee-controlled program, defined STP's API gravity fuel limits. The proposed STP Bases include API gravity limits to ensure consistency with the STS Bases used to develop TSTF-374 and STP's Diesel Fuel Oil Testing Program. However, STP's API gravity range described in STP's current Diesel Fuel Oil Testing Program and STP's proposed revision to STP Bases differ slightly from the STS Bases used to develop TSTF-374. The API gravity range in STP's Diesel Fuel Oil Testing Program was previously adjusted (i.e., not as part of this license amendment request) in order to accommodate higher API gravity fuels that STP expected to receive from fuel vendors. As described in the license amendment request as supplemented, STP performed an evaluation that approved use of a higher API gravity limit (i.e., 42°) in comparison to the STS Bases used to develop TSTF-374. STP applied the 10 CFR 50.59 process to this API gravity change and determined that NRC approval was not required prior to making the change to STP's licensee-controlled Diesel Fuel Oil Testing Program. The STP Bases changes are consistent with TSTF-374 (considering updates to applicable ASTM standards and the use of the 10 CFR 50.59 process) and will be incorporated into the TS Bases in accordance with TS 6.8.3.m.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Texas State official was notified of the proposed issuance of the amendments on March 15, 2021. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. 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, as published in the *Federal Register* on November 3, 2020 (85 FR 69656), and there has been no public comment on such finding. 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: C. Ashley

Date: April 8, 2021

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENT NOS. 222 AND 207 TO REVISE TECHNICAL SPECIFICATIONS TO ADOPT TSTF-374, "REVISION TO TS 5.5.13 AND ASSOCIATED TS BASES FOR DIESEL FUEL OIL" (EPID L-2020-LLA-0172) DATED APRIL 8, 2021

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NAME	DGalvin	PBlechman	VCusumano
DATE	3/16/2021	3/15/2021	10/30/2020
OFFICE	NRR/DNRL/NCSEG/BC	NRR/DORL/LPL4/BC	NRR/DORL/LPL4/PM
NAME	SBloom	JDixon-Herrity	DGalvin
DATE	2/1/2021	4/8/2021	4/8/2021

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