



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

December 5, 2022

Mr. Bob Coffey  
Executive Vice President, Nuclear  
Division and Chief Nuclear Officer  
Florida Power & Light Company  
NextEra Energy Seabrook, LLC  
Mail Stop: EX/JB  
700 Universe Blvd.  
Juno Beach, FL 33408

SUBJECT: SEABROOK STATION, UNIT NO. 1 - ISSUANCE OF AMENDMENT NO. 171  
RE: REVISION TO TECHNICAL SPECIFICATIONS TO ADOPT TSTF-577,  
"REVISED FREQUENCIES FOR STEAM GENERATOR TUBE INSPECTIONS"  
(EPID L-2022-LLA-0087)

Dear Mr. Coffey:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 171 to Renewed Facility Operating License No. NPF-86 for the Seabrook Station, Unit No. 1. This amendment consists of changes to the technical specifications (TSs) in response to your application dated June 9, 2022.

The amendment revises the "Steam Generator (SG) Program" and the "Steam Generator Tube Inspection Report" TSs based on Technical Specifications Task Force (TSTF) Traveler TSTF-577, Revision 1, "Revised Frequencies for Steam Generator Tube Inspections," and the associated NRC staff safety evaluation of TSTF-577.

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/

Justin C. Poole, Project Manager  
Plant Licensing Branch I  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-443

Enclosures:

1. Amendment No. 171 to NPF-86
2. Safety Evaluation

cc: Listserv



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

NEXTERA ENERGY SEABROOK, LLC, ET AL.\*

DOCKET NO. 50-443

SEABROOK STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 171  
Renewed Facility Operating License No. NPF-86

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment filed by NextEra Energy Seabrook, LLC, et al. (the licensee), dated June 9, 2022, 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, 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.

\*NextEra Energy Seabrook, LLC, is authorized to act as agent for the: Hudson Light & Power Department, Massachusetts Municipal Wholesale Electric Company, and Taunton Municipal Lighting Plant (collectively, with NextEra Energy Seabrook, LLC, "licensees") 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-86 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 171, are incorporated into the Renewed Facility Operating License No. NPF-86. NextEra Energy Seabrook, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Hipólito J. González, Chief  
Plant Licensing Branch I  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Renewed Facility Operating  
License and Technical Specifications

Date of Issuance: December 5, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 171

SEABROOK STATION, UNIT NO. 1

RENEWED FACILITY OPERATING LICENSE NO. NPF-86

DOCKET NO. 50-443

Replace the following page of Renewed Facility Operating License No. NPF-86 with the attached revised page. The revised page is identified by amendment number and contains a marginal line indicating the area of change.

Remove  
3

Insert  
3

Replace the following pages of the Appendix A, Technical Specifications, with the attached revised pages as indicated. The revised pages are identified by amendment number and contain marginal lines indicating the area of change.

Remove  
6-11  
6-12  
6-13  
6-14  
6-21  
6-21a

Insert  
6-11  
6-12  
6-13  
6-14  
6-21  
6-21a

- (3) NextEra Energy Seabrook, LLC, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
  - (4) NextEra Energy Seabrook, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
  - (5) NextEra Energy Seabrook, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
  - (6) NextEra Energy Seabrook, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility authorized herein.
  - (7) DELETED
- C. This renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level

NextEra Energy Seabrook, LLC, is authorized to operate the facility at reactor core power levels not in excess of 3648 megawatts thermal (100% of rated power).
  - (2) Technical Specifications

The Technical Specifications contained in Appendix A, and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 171, are incorporated into the Renewed Facility Operating License No. NPF-86. NextEra Energy Seabrook, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

PROCEDURES AND PROGRAMS

6.7.6 (Continued)

j. Technical Specification (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 (UFSAR) 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 UFSAR.
- d. Proposed changes that meet the criteria of Specification 6.7.6j.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).

k. Steam Generator (SG) Program

An SG Program shall be established and implemented to ensure that SG tube integrity is maintained. In addition, the SG Program shall include the following:

- a. Provisions for condition monitoring assessments. Condition monitoring assessment means an evaluation of the “as found” condition of the tubing with respect to the performance criteria for structural integrity and accident induced leakage. The “as found” condition refers to the condition of the tubing during an SG inspection outage, as determined from the inservice inspection results or by other means, prior to the plugging of tubes. Condition monitoring assessments shall be conducted during each outage during which the SG tubes are inspected or plugged to confirm that the performance criteria are being met.

PROCEDURES AND PROGRAMS

6.7.6 (Continued)

- b. Performance criteria for SG tube integrity. SG tube integrity shall be maintained by meeting the performance criteria for tube structural integrity, accident induced leakage, and operational LEAKAGE.
  - 1. Structural integrity performance criterion: All in-service SG tubes shall retain structural integrity over the full range of normal operating conditions (including startup, operation in the power range, hot standby, and cool down), all anticipated transients included in the design specification, and design basis accidents. This includes retaining a safety factor of 3.0 against burst under normal steady state full power operation primary-to-secondary pressure differential and a safety factor of 1.4 against burst applied to the design basis accident primary-to-secondary pressure differentials. Apart from the above requirements, additional loading conditions associated with the design basis accidents, or combination of accidents in accordance with the design and licensing basis, shall also be evaluated to determine if the associated loads contribute significantly to burst or collapse. In the assessment of tube integrity, those loads that do significantly affect burst or collapse shall be determined and assessed in combination with the loads due to pressure with a safety factor of 1.2 on the combined primary loads and 1.0 on axial secondary loads.
  - 2. Accident induced leakage performance criterion: The primary to secondary accident induced leakage rate for any design basis accident, other than a SG tube rupture, shall not exceed the leakage rate assumed in the accident analysis in terms of total leakage rate for all SGs and leakage rate for an individual SG. Leakage is not to exceed 1 gpm total or 500 gpd through any one SG.
  - 3. The operational LEAKAGE performance criterion is specified in LCO 3.4.6.2, "Reactor Coolant System Operational Leakage."
- c. Provisions for SG tube plugging criteria. Tubes found by inservice inspection to contain flaws with a depth equal to or exceeding 40% of the nominal tube wall thickness shall be plugged.

### PROCEDURES AND PROGRAMS

#### 6.7.6 (Continued)

The following alternate tube plugging criteria shall be applied as an alternative to the 40% depth based criteria:

Tubes with service-induced flaws located greater than 15.21 inches below the top of the tubesheet do not require plugging. Tubes with service-induced flaws located in the portion of the tube from the top of the tubesheet to 15.21 inches below the top of the tubesheet shall be plugged upon detection.

- d. Provisions for SG tube inspections. Periodic SG tube inspections shall be performed. The number and portions of the tubes inspected and methods of inspection shall be performed with the objective of detecting flaws of any type (e.g., volumetric flaws, axial and circumferential cracks) that may be present along the length of the tube, from the tube-to-tubesheet weld at the tube inlet to the tube-to-tubesheet weld at the tube outlet except for any portions of the tube that are exempt from inspection by alternate repair criteria, and that may satisfy the applicable tube plugging criteria. The tube-to-tubesheet weld is not part of the tube. In addition to meeting the requirements of d.1, d.2, and d.3 below, the inspection scope, inspection methods, and inspection intervals shall be such as to ensure that SG tube integrity is maintained until the next SG inspection. A degradation assessment shall be performed to determine the type and location of flaws to which the tubes may be susceptible and, based on this assessment, to determine which inspection methods need to be employed and at what locations.
  1. Inspect 100% of the tubes in each SG during the first refueling outage following SG installation.
  2. After the first refueling outage following SG installation, inspect 100% of the tubes in each SG at least every 54 effective full power months, which defines the inspection period. If none of the SG tubes have ever experienced cracking other than in regions that are exempt from inspection by alternate repair criteria and the SG inspection was performed with enhanced probes, the inspection period may be extended to 72 effective full power months. Enhanced probes have a capability to detect flaws of any type equivalent to or better than array probe technology. The enhanced probes shall be used from the tube-to-tubesheet weld at the tube inlet to the tube-to-tubesheet



### PROCEDURES AND PROGRAMS

#### 6.7.6 (Continued)

weld at the tube outlet except any portions of the tube that are exempt from inspection by alternate repair criteria. If there are regions where enhanced probes cannot be used, the tube inspection techniques shall be capable of detecting all forms of existing and potential degradation in that region.

3. If crack indications are found in portions of the SG tube excluding any region that is exempt from inspection by alternate repair criteria, then the next inspection for each affected and potentially affected SG for the degradation mechanism that caused the crack indication shall be at the next refueling outage, but may be deferred to the following refueling outage if the 100% inspection of all SGs was performed with enhanced probes as described in paragraph d.2. If definitive information, such as from examination of a pulled tube, diagnostic non-destructive testing, or engineering evaluation indicates that a crack-like indication is not associated with a crack(s), then the indication need not be treated as a crack.

- e. Provisions for monitoring operational primary to secondary leakage.

- 6.8.1.6.c The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as SHUTDOWN MARGIN, and transient and accident analysis limits) of the safety analysis are met. The CORE OPERATING LIMITS REPORT for each reload cycle, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, to the NRC Document Control Desk with copies to the Regional Administrator and the Resident Inspector.

### STEAM GENERATOR TUBE INSPECTION REPORT

- 6.8.1.7 A report shall be submitted within 180 days after the initial entry into MODE 4 following completion of an inspection performed in accordance with Specification 6.7.6.k, "Steam Generator (SG) Program." The report shall include:
- a. The scope of inspections performed on each SG;
  - b. The nondestructive examination techniques utilized for tubes with increased degradation susceptibility;
  - c. For each degradation mechanism found:
    - 1. The nondestructive examination techniques utilized;
    - 2. The location, orientation (if linear), measured size (if available), and voltage response for each indication. For tube wear at support structures less than 20 percent through-wall, only the total number of indications needs to be reported;
    - 3. A description of the condition monitoring assessment and results, including the margin to the tube integrity performance criteria and comparison with the margin predicted to exist at the inspection by the previous forward-looking tube integrity assessment; and
    - 4. The number of tubes plugged during the inspection outage.
  - d. An analysis summary of the tube integrity conditions predicted to exist at the next scheduled inspection (the forward-looking tube integrity assessment) relative to the applicable performance criteria, including the analysis methodology, inputs, and results;
  - e. The number and percentage of tubes plugged to date, and the effective plugging percentage in each SG;

## ADMINISTRATIVE CONTROLS

---

### 6.8.1.7 (Continued)

- f. The results of any SG secondary side inspections;
- g. The primary to secondary leakage rate observed in each SG (if it is not practical to assign the leakage to an individual SG, the entire primary to secondary leakage should be conservatively assumed to be from one SG) during the cycle preceding the inspection which is the subject of the report;
- h. The calculated accident induced leakage rate from the portion of the tubes below 15.21 inches from the top of the tubesheet for the most limiting accident in the most limiting SG. In addition, if the calculated accident induced leakage rate from the most limiting accident is less than 2.49 times the maximum operational primary to secondary leakage rate, the report should describe how it was determined; and
- i. The results of monitoring for tube axial displacement (slippage). If slippage is discovered, the implications of the discovery and corrective action shall be provided.

## SPECIAL REPORTS

6.8.2 Special reports shall be submitted to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attn: Document Control Desk, with a copy to the NRC Regional Administrator within the time period specified for each report.

### 6.9 (THIS SPECIFICATION NUMBER IS NOT USED)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 171 TO FACILITY OPERATING LICENSE NO. NPF-86  
NEXTERA ENERGY SEABROOK, LLC  
SEABROOK STATION, UNIT NO. 1  
DOCKET NO. 50-443

1.0 INTRODUCTION

By letter dated June 9, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22160A581), NextEra Energy Seabrook, LLC (NextEra or the licensee) submitted License Amendment Request (LAR) No. 22-01, requesting changes to the technical specifications (TSs) for Seabrook Station, Unit No. 1. In its application, the licensee requested that the U.S. Nuclear Regulatory Commission (NRC, the Commission) process the proposed amendment under the Consolidated Line Item Improvement Process (CLIIP). The proposed changes would revise the "Steam Generator (SG) Program" and the "Steam Generator Tube Inspection Report" TSs based on Technical Specifications Task Force (TSTF) Traveler TSTF-577, Revision 1, "Revised Frequencies for Steam Generator Tube Inspections" (TSTF-577) (ML21060B434), and the associated NRC staff safety evaluation (SE) of TSTF-577 (ML21098A188).

The tubes within an SG function as an integral part of the reactor coolant pressure boundary and, in addition, isolate fission products in the primary coolant from the secondary coolant and the environment. SG tube integrity means that the tubes are capable of performing this safety function in accordance with the plant design and licensing basis. Seabrook has one unit. The SGs have Alloy 600 thermally treated (Alloy 600TT) tubes.

1.1 Proposed TS Changes to Adopt TSTF-577

In accordance with NRC staff-approved TSTF-577, the licensee proposed changes that would revise Seabrook TS 6.7.6.k, "Steam Generator (SG) Program," and TS 6.8.1.7, "Steam Generator Tube Inspection Report." Specifically, the licensee proposed the following changes to adopt TSTF-577:

TS 6.7.6.k, "Steam Generator (SG) Program":

- TS 6.7.6.k introductory paragraph and paragraph b.1 would be revised by replacing "steam generator" with "SG" in a few instances.

- TS 6.7.6.k.d would be revised by adding a phrase regarding portions of the tube that are exempt from inspection by alternate repair criteria that replaces information that specifies distance from top of the tubesheet.
- TS 6.7.6.k.d.2 would be revised by deleting the requirement to base inspection frequency on the more restrictive metric between either the effective full power months (EFPM) or refueling outage and to use just the EFPM metric.
- TS 6.7.6.k.d.2 would be revised by changing the requirement to inspect 100 percent of the tubes at periods of 120, 96, and 72 EFPM to 54 EFPM. A 72 EFPM inspection period would be permitted if SG tubing has never experienced cracking (not including regions exempt from inspection by alternate repair criteria) and the SG inspection was performed with enhanced probes. A description of the enhanced probe inspection would be added.
- TS 6.7.6.k.d.2 would be revised by deleting the allowance to extend the inspection period by 3 months and by deleting the discussion of prorating inspections.
- TS 6.7.6.k.d.3 would be revised by replacing “shall not exceed 24 effective full power months or one refueling outage (whichever results in more frequent inspections)” with “shall be at the next refueling outage.”
- TS 6.7.6.k.d.3 would be revised by adding a phrase regarding portions of the tube that are exempt from inspection by alternate repair criteria that replaces the phrase “not excluded above.” An additional phrase would be added that permits deferring SG inspections after cracking indications are found if the 100 percent inspection was performed with enhanced probes.

TS 6.8.1.7, “Steam Generator Tube Inspection Report”:

- Existing reporting requirement b. would be renumbered as c. and be revised by editorial and punctuation changes.
- New reporting requirement b. would be added to require the nondestructive examination (NDE) techniques utilized for tubes with increased degradation susceptibility be reported.
- Existing reporting requirement c. would be renumbered as c.1. and be revised by editorial and punctuation changes.
- Existing reporting requirement d. would be renumbered as c.2. and be revised to note that the location, orientation (if linear), measured size (if available), and voltage response do not need to be reported for tube wear indications at support structures that are less than 20 percent through-wall. However, the total number of tube wear indications at support structures that are less than 20 percent through-wall would be reported.
- New reporting requirement d. would be added to require an analysis summary of the tube integrity conditions predicted to exist at the next scheduled inspection relative to the applicable performance criteria, including the analysis methodology, inputs, and results.

- Existing reporting requirement e. would be renumbered as c.4. and be revised by editorial and punctuation changes.
- Existing reporting requirement f. would be renumbered as e. and be revised by editorial and punctuation changes.
- New reporting requirement f. would be added to require the results of any SG secondary side inspections be reported.
- Existing reporting requirement g. would be renumbered as c.3. and be revised to add the requirements to report a description of the condition monitoring assessment, the margin to the tube integrity performance criteria, and a comparison with the margin predicted to exist at the inspection by the previous forward-looking tube integrity assessment. In addition, the requirement to report the results of tube pulls and in-situ testing would be deleted.
- Existing reporting requirements h., i., and j. would be renumbered to g., h., and i., and be revised by editorial and punctuation changes.

## 1.2 Additional Proposed TS Changes

In addition to the changes proposed consistent with the traveler discussed in Section 1.1, the licensee proposed the following variations.

### 1.2.1 Editorial Variations

The licensee identified three editorial variations.

- 1) Seabrook TSs have different numbering than standard technical specifications (STSs) on which TSTF-577 was based. Specifically, the "Steam Generator (SG) Program" is numbered 6.7.6.k in the Seabrook TSs rather than 5.5.9 as stated in the TSTF. In addition, in Specification 6.7.6.k.b.3, the operational LEAKAGE performance criterion is specified in limiting conditions for operation (LCO) 3.4.6.2 rather than LCO 3.4.13.
- 2) Seabrook TS 6.7.6.k.b.3 uses the phrase "Reactor Coolant System" in place of the acronym "RCS."
- 3) Seabrook TS 6.8.1.7 refers to the "Steam Generator (SG) Program," without placing the title in quotes. For consistency with TSTF-577 and the STS, a change is proposed to place the title in quotes.

### 1.2.2 Other Variations

The licensee identified two additional variations.

- 1) Seabrook TSs currently contain a provision for alternate tube plugging criteria. The licensee noted that the description of the alternate tube plugging criteria in the proposed change is equivalent to the description in the current TSs.

- 2) Seabrook TSs contain a requirement that differs from the STSs on which TSTF-577 was based. Specifically, Seabrook TS 6.7.6.k, "Steam Generator (SG) Program," item b.2, states, "Leakage is not to exceed 1 gpm total or 500 gpd through any one SG" rather than, "Leakage is not to exceed [1 gpm] per SG."

## 2.0 REGULATORY EVALUATION

The regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) paragraph 50.36(c)(5), "Administrative controls," state that "[a]dministrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner. Each licensee shall submit any reports to the Commission pursuant to approved technical specifications as specified in [10 CFR] 50.4." Technical Specification Section 5.0, "Administrative Controls," requires that an SG Program be established and implemented to ensure that SG tube integrity is maintained. Programs established by the licensee, including the SG Program, are listed in the administrative controls section of the TS to operate the facility in a safe manner.

The NRC staff's guidance for the review of TSs is in NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition" (SRP), Chapter 16.0, "Technical Specifications," Revision 3, dated March 2010 (ML100351425). As described therein, as part of the regulatory standardization effort, the NRC staff has prepared STSs for each of the LWR nuclear designs. Accordingly, the NRC staff's review includes consideration of whether the proposed changes are consistent with NUREG-1431,<sup>1</sup> as modified by NRC-approved travelers.

TSTF-577 revised the STSs related to SG tube inspections and SG tube inspection reporting requirements. The NRC approved TSTF-577, under the CLIIP on April 14, 2021 (ML21099A086).

## 3.0 TECHNICAL EVALUATION

### 3.1 Proposed TS Changes to Adopt TSTF-577

The NRC staff compared the licensee's proposed TS changes in Section 1.1 of this SE against the changes approved in TSTF-577. In accordance with SRP Chapter 16.0, the NRC staff determined that the STS changes approved in TSTF-577 are applicable because Seabrook is a pressurized water reactor (PWR) design plant and the NRC staff approved the TSTF-577 changes for PWR designs. The NRC staff finds that the licensee's proposed changes to the Seabrook TSs in Section 1.1 of this SE are consistent with those found acceptable in TSTF-577.

In the SE of TSTF-577, the NRC staff concluded that the TSTF-577 changes to STS 5.5.9, "Steam Generator (SG) Program," and STS 5.6.7, "Steam Generator Tube Inspection Report," were acceptable because, as discussed in Section 3.0 of that SE, they continued to ensure SG tube integrity and, therefore, protected the public health and safety. In particular, the structural integrity performance criterion and accident-induced leakage performance criterion (explained in STS 5.5.9.b, items 1 and 2, respectively) will continue to be met with the proposed revised SG

---

<sup>1</sup> U.S. Nuclear Regulatory Commission, "Standard Technical Specifications, Westinghouse Plants," NUREG-1431, Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21259A155 and ML21259A159, respectively).

inspection intervals (maximum allowable time between SG inspections) and inspection periods (maximum allowable time between 100 percent of SG tubes inspections). Additionally, the proposed changes to the reporting requirements will provide more detailed and consistent information to the NRC. Therefore, the NRC staff found that the proposed changes to the SG program and inspection reporting requirements were acceptable because they continued to meet the requirements of 10 CFR 50.36(c)(5) by providing administrative controls necessary to assure operation of the facility in a safe manner. For these same reasons, the NRC staff concludes that the corresponding proposed changes to the Seabrook TSs in Section 1.1 of this SE continue to meet the requirements of 10 CFR 50.36(c)(5).

### 3.2 Additional Proposed TS Changes

#### 3.2.1 Editorial Variations

Editorial variations are described in Section 1.2.1 of this SE. The NRC staff finds these variations (i.e., different TS numbering, use of "Reactor Coolant System" in place of the acronym "RCS," and placing a title in quotes) are acceptable because the variations do not substantively alter TS requirements or are consistent with TSTF-577.

#### 3.2.2 Other Variations

Other variations are described in Section 1.2.2 of this SE.

For the first variation, the licensee noted that the Seabrook SG Program TSs currently contain a provision for an alternate tube plugging criteria. The current Seabrook TS that addresses alternate tube plugging criteria (i.e., TS 6.7.6.k.c.) reflects NRC-approved changes contained in Amendment No. 131 to the Seabrook operating license (ML12178A537). As part of the request to adopt TSTF-577, the licensee did not propose any changes to these criteria. Therefore, the NRC staff considers the variation acceptable.

For the second variation, the licensee noted that Seabrook SG Program TSs currently contain requirements that differ from the STS on which TSTF-577 was based but are encompassed in the TSTF-577 justification. In particular, TS 6.7.6.k.b.2 contains limits on leakage rate for any one SG as well as the total for all SGs, rather than a leakage rate per SG as used in the STS. Specifically, the last sentence of TS 6.7.6.k.b.2 states, "Leakage is not to exceed 1 gpm [gallons per minute] total or 500 gpd [gallons per day] through any one SG" rather than "Leakage is not to exceed 1 gpm per SG." The NRC staff notes that the Seabrook TS 6.7.6.k.b.2 leakage rate requirements are more restrictive than the STS and reflect NRC-approved changes contained in Amendment No. 115 to the Seabrook operating license (ML070510629). As part of the request to adopt TSTF-577, the licensee did not propose any changes to these leakage rate requirements. Therefore, the NRC staff considers the variation acceptable.

### 3.3 TS Change Consistency

The NRC staff reviewed the proposed TS changes for technical clarity and consistency with the existing requirements for customary terminology and formatting. The NRC staff finds that the proposed changes are consistent with Chapter 16.0 of the SRP and are therefore acceptable.



#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Hampshire and Massachusetts State officials were notified of the proposed issuance of the amendment on September 29, 2022. The State officials had no comments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes 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 finds that the amendment involves 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 amendment involves no significant hazards consideration, and there has been no public comment on such finding (August 9, 2022; 87 FR 48517). Accordingly, the amendment meets 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 amendment.

#### 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: C. Ashley

Date of Issuance: December 5, 2022

SUBJECT: SEABROOK STATION, UNIT NO. 1 - ISSUANCE OF AMENDMENT NO. 171  
RE: REVISION TO TECHNICAL SPECIFICATIONS TO ADOPT TSTF-577,  
"REVISED FREQUENCIES FOR STEAM GENERATOR TUBE INSPECTIONS"  
(EPID L-2022-LLA-0087) DATED DECEMBER 5, 2022

**DISTRIBUTION:**

Public	RidsNrrLAKZeletznock Resource
PM File Copy	RidsACRS_MailCTR Resource
RidsNrrDssStsb Resource	RidsNrrDorlLpl1 Resource
RidsRgn1MailCenter Resource	Cashley, NRR
RidsNrrPMSeabrook Resource	

**ADAMS Accession No.: ML22287A157**

**\*via memorandum**

OFFICE	NRR/DORL/LPL1/PM	NRR/DORL/LPL1/LA	NRR/DSS/STSB/BC
NAME	JPoole	KZeletznock	VCusumano*
DATE	10/13/2022	10/17/2022	08/19/2022
OFFICE	NRR/DORL/LPL1/BC	NRR/DORL/LPL1/PM	
NAME	HGonzalez	JPoole	
DATE	12/2/2022	12/5/2022	

**OFFICIAL RECORD COPY**