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

General Directions: This model SE provides the format for an SE of LARs to adopt traveler TSTF-577. TSTF-577 was approved as part of the CLIIP. This model SE can also be used as a template for LARs adopting TSTF-577 that have significant variations and are not using the CLIIP. The **[bolded bracketed]** information shows text that should be filled in for the specific amendment. The *italicized* wording provides guidance on what should be included in each section.

FINAL MODEL SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO TSTF-577, REVISION 1

AMENDMENT NO. **[XXX]** TO FACILITY OPERATING LICENSE NO. **[XXX-XX]**

AND AMENDMENT NO. **[XXX]** TO FACILITY OPERATING LICENSE NO. **[XXX-XX]**

[NAME OF LICENSEE]

[NAME OF FACILITY]

DOCKET NOS. 50-**[XXX]** AND 50-**[XXX]**

Application (i.e., initial and supplements)	Safety Evaluation Date
• **[Date]**, **[ADAMS Accession No.]**	**[April 14, 2021]**
	Principal Contributors to Safety Evaluation
	• **[Caroline Tilton]**

1.0 PROPOSED CHANGES

[Name of licensee] (the licensee) requested changes to the technical specifications (TSs) for **[name of facility]** by license amendment request (application). 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) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21060B434), and the associated NRC staff safety evaluation (SE) of TSTF-577 (ADAMS Accession No. 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.

{NOTE. Choose the type of alloy tubing in the plant's SGs from the bracketed information. Units may have SGs with different alloy tubing materials (for example, one unit with SGs with Alloy 600MA and another with SGs with Alloy 600TT). Repeat the second sentence below for each unit.}

[Name of facility] has **[X]** unit**[s]**. The Unit **[1]** SGs have **[Alloy 600 mil-annealed (Alloy 600MA), Alloy 600 thermally treated (Alloy 600TT), or Alloy 690 thermally treated (Alloy 690TT)]** 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 **[name of facility]** TS **[5.5.9]**, "Steam Generator (SG) Program," and TS **[5.6.7]**, "Steam Generator Tube Inspection Report." Specifically, the licensee proposed the following changes to adopt TSTF-577:

TS **[5.5.9]**, "Steam Generator (SG) Program":

- TS 5.5.9.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 5.5.9.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 5.5.9.d.3 would be revised by adding that each SG inspected at the next inspection after crack indications are found, includes each "affected and potentially affected" SG. The next inspection after crack indications are found would be changed from "shall not exceed 24 effective full power months or one refueling outage (whichever results in more frequent inspections)" to "shall be at the next refueling outage."

{NOTE: The following bullet is only applicable for plants that have Alloy 600MA tubing.}

- TS 5.5.9.d.2 would be revised by changing the requirement to inspect 100 percent of the tubes from every 60 EFPM to every 24 EFPM.

{NOTE: The following bullets are only applicable for plants that have Alloy 600TT tubing.}

- TS 5.5.9.d would be revised by adding a phrase regarding portions of the tube that are exempt from inspection by alternate repair criteria.

- TS 5.5.9.d.2 would be revised by changing the requirement to inspect 100 percent of the tubes at periods of 120, 90, and 60 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 5.5.9.d.3 would be revised by adding a phrase regarding portions of the tube that are exempt from inspection by alternate repair criteria. 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.

{NOTE: The following bullet is only applicable for plants that have Alloy 690TT tubing.}

- TS 5.5.9.d.2 would be revised by deleting the requirement to inspect 100 percent of the tubes during each period in paragraphs d.2.a, d.2.b, d.2.c, and d.2.d (144, 120, 96, and 72 EFPM, respectively) and by adding the requirement to inspect 100 percent of the tubes every 96 EFPM.

TS **[5.6.7]**, "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 requirements f. and h. would be combined, 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 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.

- **[New reporting requirement g. would include existing plant-specific reporting requirements, if applicable.]**

- Existing reporting requirement h. would be renumbered as c.5. and be revised by editorial changes.

1.2 Additional Proposed TS Changes

{NOTE: Use this section if variations are proposed. Add additional subsections if needed. Editorial variations discussed below in Section 1.2.1 do not warrant removal from the CLIIP and do not require any additional technical branches to be on the review. Variations discussed in Section 1.2.2, may remove the LAR from the CLIIP and may require additional technical review depending on the significance of the variations.}

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

{NOTE: Use this section if the plant has different numbering/nomenclature or modify accordingly for other editorial changes made.}

The licensee noted that **[name of facility]** TSs have different numbering **[and nomenclature]** than standard technical specifications (STSs).

1.2.2 Other Variations

{NOTE: Use this section if the plant has variations other editorial changes discussed in 1.2.1.}

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 (ADAMS Accession No. 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 **[insert applicable NUREG from list in footnote],**[1] as modified by NRC-approved travelers.

[1] U.S. Nuclear Regulatory Commission, "Standard Technical Specifications, Babcock and Wilcox Plants," NUREG-1430, Volume 1, "Specifications," and Volume 2, "Bases," Revision 4, April 2012 (ADAMS Accession Nos. ML12100A177 and ML12100A178, respectively).

U.S. Nuclear Regulatory Commission, "Standard Technical Specifications, Westinghouse Plants," NUREG-1431, Volume 1, "Specifications," and Volume 2, "Bases," Revision 4, April 2012 (ADAMS Accession Nos. ML12100A222 and ML12100A228, respectively).

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 (ADAMS Package Accession No. 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 **[name of facility]** is a 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 **[name of facility]** 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 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 **[name of facility]** 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

{NOTE: Use this section if variations are proposed. Add additional subsections if needed. Variations evaluated in Section 3.2.2, may remove the LAR from the CLIIP and may require additional technical review depending on the significance of the variations. Additionally, the variations may require additional regulations/guidance being included in the Regulatory Evaluation Section.}

U.S. Nuclear Regulatory Commission, "Standard Technical Specifications, Combustion Engineering Plants," NUREG-1432, Volume 1, "Specifications," and Volume 2, "Bases," Revision 4, April 2012 (ADAMS Accession Nos. ML12102A165 and ML12102A169, respectively).

3.2.1 Editorial

{NOTE: Use this section if the plant has different numbering/nomenclature or modify accordingly for other editorial changes made.}

The licensee noted that **[name of facility]** TSs have different numbering **[and nomenclature]** than STS. The NRC staff finds that the different TS numbering **[and nomenclature]** changes are acceptable because they do not substantively alter TS requirements.

3.2.2 Other Variations

{NOTE: Use this section if the plant has variations other editorial changes discussed in 3.2.1.}

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 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.

NOTICES AND ENVIRONMENTAL FINDINGS

RELATED TO

AMENDMENT NO. **[XXX]** TO FACILITY OPERATING LICENSE NO. **[XXX-XX]**

AND AMENDMENT NO. **[XXX]** TO FACILITY OPERATING LICENSE NO. **[XXX-XX]**

[NAME OF LICENSEE]

[NAME OF FACILITY]

DOCKET NOS. 50-**[XXX]** AND 50-**[XXX]**

Application (i.e., initial and supplements)	Safety Evaluation Date
• **[Date]**, **[ADAMS Accession No.]**	**[Date]**

1.0 INTRODUCTION

The PM should prepare this required section.

[Name of licensee] (the licensee) requested changes to the technical specifications (TSs) for **[name of facility]** by license amendment request (application). 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) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21060B434), and the associated NRC staff safety evaluation (SE) of TSTF-577 (ADAMS Accession No. ML21098A188).

2.0 STATE CONSULTATION

The PM should prepare this required section.

In accordance with the Commission's regulations, the **[Name of State]** State official was notified of the proposed issuance of the amendment on **[insert date]**. The State official had **[no]** comments. **[If comments were provided, they should be addressed here]**.

3.0 ENVIRONMENTAL CONSIDERATION

The PM should prepare this required section.

The amendment relates, in part, to changes in recordkeeping, reporting, or administrative procedures or requirements. The amendment also relates, in part, to changing requirements with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined 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 published in the *Federal Register* on **[Month Day, Year (XX FR XXX)]**. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and 51.22(c)(10). 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.