



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

September 6, 2022

Ms. Paula Gerfen  
Senior Vice President, Generation  
and Chief Nuclear Officer  
Pacific Gas and Electric Company  
Diablo Canyon Power Plant  
P.O. Box 56, Mail Code 104/6  
Avila Beach, CA 93424

SUBJECT: DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2 - ISSUANCE  
OF AMENDMENT NOS. 241 AND 242 RE: REVISION TO TECHNICAL  
SPECIFICATIONS TO ADOPT TSTF-577, "REVISED FREQUENCIES FOR  
STEAM GENERATOR TUBE INSPECTIONS" (EPID L-2022-LLA-0038)

Dear Ms. Gerfen:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 241 to Facility Operating License No. DPR-80 and Amendment No. 242 to Facility Operating License No. DPR-82 for the Diablo Canyon Nuclear Power Plant, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated March 10, 2022.

The amendments revise TS 3.4.17, "Steam Generator (SG) Tube Integrity"; TS 5.5.9, "Steam Generator (SG) Tube Inspection Program"; and TS 5.6.10, "Steam Generator (SG) Tube Inspection Report," to adopt Technical Specifications Task Force (TSTF) Traveler TSTF-577, Revision 1, "Revised Frequencies for Steam Generator Tube Inspections."

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

Sincerely,

**/RA/**

Samson S. Lee, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosures:

1. Amendment No. 241 to DPR-80
2. Amendment No. 242 to DPR-82
3. Safety Evaluation

cc: Listserv



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

PACIFIC GAS AND ELECTRIC COMPANY

DOCKET NO. 50-275

DIABLO CANYON NUCLEAR POWER PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 241  
License No. DPR-80

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Pacific Gas and Electric Company (the licensee), dated March 10, 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.

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. DPR-80 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. 241 are hereby incorporated in the license. Pacific Gas & Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of 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 Facility Operating  
License No. DPR-80 and the  
Technical Specifications

Date of Issuance: September 6, 2022



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

PACIFIC GAS AND ELECTRIC COMPANY

DOCKET NO. 50-323

DIABLO CANYON NUCLEAR POWER PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 242  
License No. DPR-82

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Pacific Gas and Electric Company (the licensee), dated March 10, 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.

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. DPR-82 is hereby amended to read as follows:

- (2) Technical Specifications (SSER 32, Section 8)\* and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 242, are hereby incorporated in the license. Pacific Gas & Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of 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 Facility Operating  
License No. DPR-82 and the  
Technical Specifications

Date of Issuance: September 6, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 241

TO FACILITY OPERATING LICENSE NO. DPR-80

AND LICENSE AMENDMENT NO. 242 TO FACILITY OPERATING LICENSE NO. DPR-82

DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2

DOCKET NOS. 50-275 AND 50-323

Replace the following pages of Facility Operating License Nos. DPR-80 and DPR-82, and the 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 No. DPR-80

REMOVE

-3-

INSERT

-3-

Facility Operating License No. DPR-82

REMOVE

-3-

INSERT

-3-

Technical Specifications

REMOVE

3.4-37

3.4-38

5.0-10

5.0-11

5.0-23

INSERT

3.4-37

3.4-38

5.0-10

5.0-11

5.0-23

- (4) 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
- (5) 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.

C. This 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

The Pacific Gas and Electric Company is authorized to operate the facility at reactor core power levels not in excess of 3411 megawatts thermal (100% rated power) in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 241 are hereby incorporated in the license. Pacific Gas & Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

(3) Initial Test Program

The Pacific Gas and Electric Company shall conduct the post-fuel-loading initial test program (set forth in Section 14 of Pacific Gas and Electric Company's Final Safety Analysis Report, as amended), without making any major modifications of this program unless modifications have been identified and have received prior NRC approval. Major modifications are defined as:

- a. Elimination of any test identified in Section 14 of PG&E's Final Safety Analysis Report as amended as being essential;



- (4) 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
  - (5) 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.
- C. This 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  
The Pacific Gas and Electric Company is authorized to operate the facility at reactor core power levels not in excess of 3411 megawatts thermal (100% rated power) in accordance with the conditions specified herein.
  - (2) Technical Specifications (SSER 32, Section 8)\* and Environmental Protection Plan  
The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 242, are hereby incorporated in the license. Pacific Gas & Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.
  - (3) Initial Test Program (SSER 31, Section 4.4.1)  
Any changes to the Initial Test Program described in Section 14 of the FSAR 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.

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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.

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.17 Steam Generator (SG) Tube Integrity

LCO 3.4.17 SG tube integrity shall be maintained.

AND

All SG tubes satisfying the tube plugging criteria shall be plugged in accordance with the Steam Generator Program.

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

ACTIONS

-----NOTE-----

Separate Condition entry is allowed for each SG tube.  
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CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more SG tubes satisfying the tube plugging criteria and not plugged in accordance with the Steam Generator Program.	A.1 Verify tube integrity of the affected tube(s) is maintained until the next refueling outage or SG tube inspection.	7 days
	<u>AND</u> A.2 Plug the affected tube(s) in accordance with the Steam Generator Program.	Prior to entering MODE 4 following the next refueling outage or SG tube inspection
B. Required Action and associated Completion Time of Condition A not met.  <u>OR</u> SG tube integrity not maintained.	B.1 Be in MODE 3.	6 hours
	<u>AND</u> B.2 Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.4.17.1	Verify SG tube integrity in accordance with the Steam Generator Program.	In accordance with the Steam Generator Program
SR 3.4.17.2	Verify that each inspected SG tube that satisfies the tube plugging criteria is plugged in accordance with the Steam Generator Program.	Prior to entering MODE 4 following a SG tube inspection

## 5.5 Programs and Manuals (continued)

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### 5.5.9 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.
- 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. Except during a SG tube rupture, leakage is also not to exceed 1 gallon per minute per SG.

(continued)

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## 5.5 Programs and Manuals

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### 5.5.9 Steam Generator (SG) Program (continued)

3. The operational LEAKAGE performance criterion is specified in LCO 3.4.13, "RCS 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.
- 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, 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 96 effective full power months, which defines the inspection period.
  3. If crack indications are found in any SG tube, 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. 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.

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(continued)

## 5.6 Reporting Requirements (continued)

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### 5.6.10 Steam Generator Tube Inspection Report

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 5.5.9, "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; and
  - f. The results of any SG secondary side inspections.
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 241 TO FACILITY OPERATING LICENSE NO. DPR-80  
AND AMENDMENT NO. 242 TO FACILITY OPERATING LICENSE NO. DPR-82  
PACIFIC GAS AND ELECTRIC COMPANY  
DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2  
DOCKET NOS. 50-275 AND 50-323

## 1.0 INTRODUCTION

By application dated March 10, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22069B122), Pacific Gas and Electric Company (the licensee) requested changes to the Technical Specifications (TSs) for the Diablo Canyon Nuclear Power Plant, Units 1 and 2 (Diablo Canyon).

The proposed amendments would revise TS 3.4.17, "Steam Generator (SG) Tube Integrity"; TS 5.5.9, "Steam Generator (SG) Tube Inspection Program"; and TS 5.6.10, "Steam Generator (SG) Tube Inspection Report," based on Technical Specifications Task Force (TSTF) Traveler TSTF-577, Revision 1, "Revised Frequencies for Steam Generator Tube Inspections" (ML21060B434), and the associated U.S. Nuclear Regulatory Commission (NRC, the Commission) staff safety evaluation (SE) of TSTF-577 (ML21098A188). In its application, the licensee requested that the NRC process the proposed amendment under the Consolidated Line Item Improvement Process (CLIIP).

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.

Diablo Canyon has two units. The Unit 1 and Unit 2 SGs have Alloy 690 thermally treated tubes.

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

The licensee proposed changes that would revise Diablo Canyon TS 3.4.17, TS 5.5.9, and TS 5.6.10. Specifically, the licensee proposed the following changes to adopt TSTF-577:

TS 3.4.17, "Steam Generator (SG) Tube Integrity":

- TS 3.4.17 would be revised by replacing tube "repair" criteria with tube "plugging" criteria in several locations.

TS 5.5.9, "Steam Generator (SG) Program":

- The introductory paragraph to TS 5.5.9 would be revised by replacing "steam generator" with "SG" in a couple instances.
- The last sentence in the introductory paragraph to TS 5.5.9 ended "... shall include the following provisions." It was changed to delete the word "provisions".
- TS 5.5.9.b.1 would be revised by replacing "steam generator" with "SG" in one instance.
- TS 5.5.9.b.1 would be revised to correct a misplaced closing parenthesis. It now reads, in part, "All in-service ... 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."
- TS 5.5.9.c would be revised to rename the title from "Provisions for SG tube repair criteria" to "Provisions for SG tube plugging criteria."
- TS 5.5.9.d would be revised to replace the words "tube repair criteria" with the words "tube plugging criteria" and to replace the words "assessment of degradation" with the words "degradation assessment."
- TS 5.5.9.d.1 would be revised by replacing the words "SG replacement" with the words "SG installation."
- TS 5.5.9.d.2 would be revised by deleting the requirement to inspect 100 percent of the tubes at sequential periods (144, 108, 72, and thereafter 60 effective full power months (EFPM)) and by adding the requirement to inspect 100 percent of the tubes every 96 EFPM. The 72 EFPM limit or three refueling outages (whichever is less) between inspections would be replaced with the 96 EFPM inspection period.
- TS 5.5.9.d.2 would be revised by deleting the requirement to inspect 50 percent of the tubes at the inspection nearest the midpoint of the period and the remaining 50 percent of the tubes nearest the end of the period.
- TS 5.5.9.d.3 would be revised by replacing the words "for each SG" with the words "for each affected and potentially affected SG."
- TS 5.5.9.d.3 would be revised by replacing the words "shall not exceed 24 effective full power months or one refueling outage (whichever is less)" with the words "shall be at the next refueling outage."

TS 5.6.10, "Steam Generator (SG) 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 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.

## 1.2 Additional TS Changes - Variations

The licensee identified several editorial variations:

- TS 5.5.9, paragraphs a, b, c, and d, are reformatted to remove a paragraph break between the first sentence and the remainder of the paragraph in order to be consistent with TSTF-577.
- The title of TS 5.5.9 is changed from “Steam Generator (SG) Tube Inspection Program,” to the “Steam Generator (SG) Program,” in order to be consistent with TSTF-577.
- The title of TS 5.6.10 is changed to remove the acronym definition “(SG)” in order to be consistent with TSTF-577.
- The introductory paragraph of TS 5.6.10 is revised to place the title of TS 5.5.9, “Steam Generator (SG) Program,” in quotation marks in order to be consistent with TSTF-577.

The NRC staff identified one additional editorial variation:

- The NRC staff notes that the Diablo Canyon TSs have different numbering than standard technical specifications (STS) on which TSTF-577 was based. Specifically, “Steam Generator (SG) Tube Integrity” is numbered as TS 3.4.17 in Diablo Canyon TSs rather than TS 3.4.20 as identified in TSTF-577. Similarly, the “Steam Generator (SG) Tube Inspection Report,” is numbered as TS 5.6.10 in Diablo Canyon TSs rather than TS 5.6.7 as identified in TSTF-577.

## 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 CLIP on April 14, 2021 (ML21099A086).

## 3.0 TECHNICAL EVALUATION

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

Section 2.2 of the TSTF-577 Traveler SE identified in part, that at the time TSTF-577 was approved, the STS SG related requirements were established by TSTF-449, Revision 4, “Steam Generator Tube Integrity” (ML051090200). TSTF-449, Revision 4, was approved on May 2, 2005 (ML051160106), was adopted by all operating pressurized water reactor (PWR) plants, and was incorporated into the STS, Revision 4. Subsequent to the publication of the Revision 4 STS, the NRC staff approved STS changes to the SG program, reporting, and tube integrity specifications in TSTF-510, Revision 2, “Revision to Steam Generator Program Inspection Frequencies and Tube Sample Selection” (ML110610350), on October 19, 2011 (ML112101604). TSTF-510, Revision 2, has been adopted by most of the applicable plants.

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<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).

Section 2.2 of the TSTF-577 Traveler SE identified in part, that although multiple versions of marked-up STS were provided in the traveler (TSTF-577), the NRC staff focused on reviewing the version in the enclosure titled, "Changes to the Technical Specifications Based on TSTF-510" (also referred to as the "Markup Based on TSTF-510"). TSTF-577 included mark-ups based on the TSTF-510 changes but the TSTF-510 changes were not reevaluated in the SE of TSTF-577 since the NRC staff had already approved TSTF-510, Revision 2.

Diablo Canyon TSs are based on TSTF-449. Therefore, as part of this SE, the NRC staff also considered the version of marked-up STS provided in the traveler (TSTF-577) enclosure titled, "Changes to the Technical Specifications Based on TSTF-449" (also referred to as the Markup Based on TSTF-449). The TSTF-577 "Markup Based on TSTF-449" includes markups that incorporate applicable changes attributable to NRC-approved TSTF-510. Therefore, the TSTF-510 related changes associated with TSTF-577 markups based on TSTF-449, were not reevaluated in this SE since the NRC staff had already approved TSTF-510, Revision 2.

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 Diablo Canyon 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 Diablo Canyon TSs in section 1.1 of this SE are consistent with NRC-approved 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 finds that the proposed changes to the SG program and inspection reporting requirements are acceptable because they continue 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 Diablo Canyon TS described 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

The editorial variations are described in section 1.2 of this SE. The NRC staff finds that each variation is acceptable because the variations do not substantively alter TS requirements.

#### 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 California State official was notified of the proposed issuance of the amendments on May 9, 2022. The State official had no comments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendments relate, in part, to changes in recordkeeping, reporting, or administrative procedures or requirements. The amendments also relate, 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 and changes 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, published in the *Federal Register* on May 17, 2022 (87 FR 29887), 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) 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 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 Contributors: C. Ashley  
P. Klein

Date: September 6, 2022

SUBJECT: DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENT NOS. 241 AND 242 RE: REVISION TO TECHNICAL SPECIFICATIONS TO ADOPT TSTF-577, "REVISED FREQUENCIES FOR STEAM GENERATOR TUBE INSPECTIONS" (EPID L-2022-LLA-0038) DATED SEPTEMBER 6, 2022

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