

September 28, 2000

Mr. Harold B. Ray
Executive Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, CA 92674-0128

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3 -
ISSUANCE OF AMENDMENTS RE: PRESSURE TEMPERATURE LIMITS
(TAC NOS. MA8882 and MA8883)

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No. 172 to Facility Operating License No. NPF-10 and Amendment No. 163 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Units 2 and 3, respectively. The amendments consist of changes to the Technical Specifications in response to your application dated May 3, 2000, and supplemented by letter dated August 25, 2000, and revises the pressure temperature (P-T) limits for 20 effective full power years and reduces the minimum boltup temperature from 86°F to 65°F. The P-T limits calculations are based on the 1989 American Society of Mechanical Engineers Appendix G methodology.

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

Sincerely,
/RA/

L. Raghavan, Senior Project Manager, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosures: 1. Amendment No. 172 to NPF-10
2. Amendment No. 163 to NPF-15
3. Safety Evaluation

cc w/encls: See next page

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*No major changes made to SE

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subject to
change noted.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 28, 2000

Mr. Harold B. Ray
Executive Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
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L. Raghavan, Senior Project Manager, Section 2
Project Directorate IV & Decommissioning
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Docket Nos. 50-361 and 50-362

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2. Amendment No. 163 to NPF-15
3. Safety Evaluation

cc w/encls: See next page

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

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

THE CITY OF RIVERSIDE, CALIFORNIA

THE CITY OF ANAHEIM, CALIFORNIA

DOCKET NO. 50-361

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 172

License No. NPF-10

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern California Edison Company, et al. (SCE or the licensee), dated May 3, 2000, and supplemented by letter dated August 25, 2000, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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. NPF-10 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. 172 , are hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Stephen Dembek, Chief, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: September 28, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 172

FACILITY OPERATING LICENSE NO. NPF-10

DOCKET NO. 50-361

Replace the following pages of 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.

REMOVE

3.4-5
3.4-7
3.4-8
3.4-9
3.4-10
3.4-11

INSERT

3.4-5
3.4-7
3.4-8
3.4-9
3.4-10
3.4-11

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.3 RCS Pressure and Temperature (P/T) Limits

LCO 3.4.3 With the reactor vessel head bolts tensioned*, the Reactor Coolant System (except the pressurizer) temperature and pressure shall be limited in accordance with the limit lines shown on Figures 3.4.3-1, 3.4.3-2, 3.4.3-3, 3.4.3-4, 3.4.3-5, and Table 3.4.3-1 during heatup, cooldown, and inservice leak and hydrostatic testing with:

- a. A maximum heatup of 60°F in any 1-hour period with RCS cold leg temperature greater than or equal to 65°F.
- b. A maximum cooldown as specified by Figure 3.4.3-3 in any 1-hour period with RCS cold leg temperature less than or equal to 160°F. A maximum cooldown of 100°F in any 1-hour period with RCS cold leg temperature greater than 160°F.
- c. A maximum temperature change of 10°F in any 1-hour period during inservice hydrostatic and leak testing operations above the heatup and cooldown limit curves.
- d. A minimum temperature of 65°F to tension reactor vessel head bolts.

With the reactor vessel head bolts detensioned, the Reactor Coolant System (except the pressurizer) temperature shall be limited to a maximum heatup or cooldown of 60°F in any 1-hour period.

*With the reactor vessel head bolts detensioned, RCS cold leg temperature may be less than 65°F.

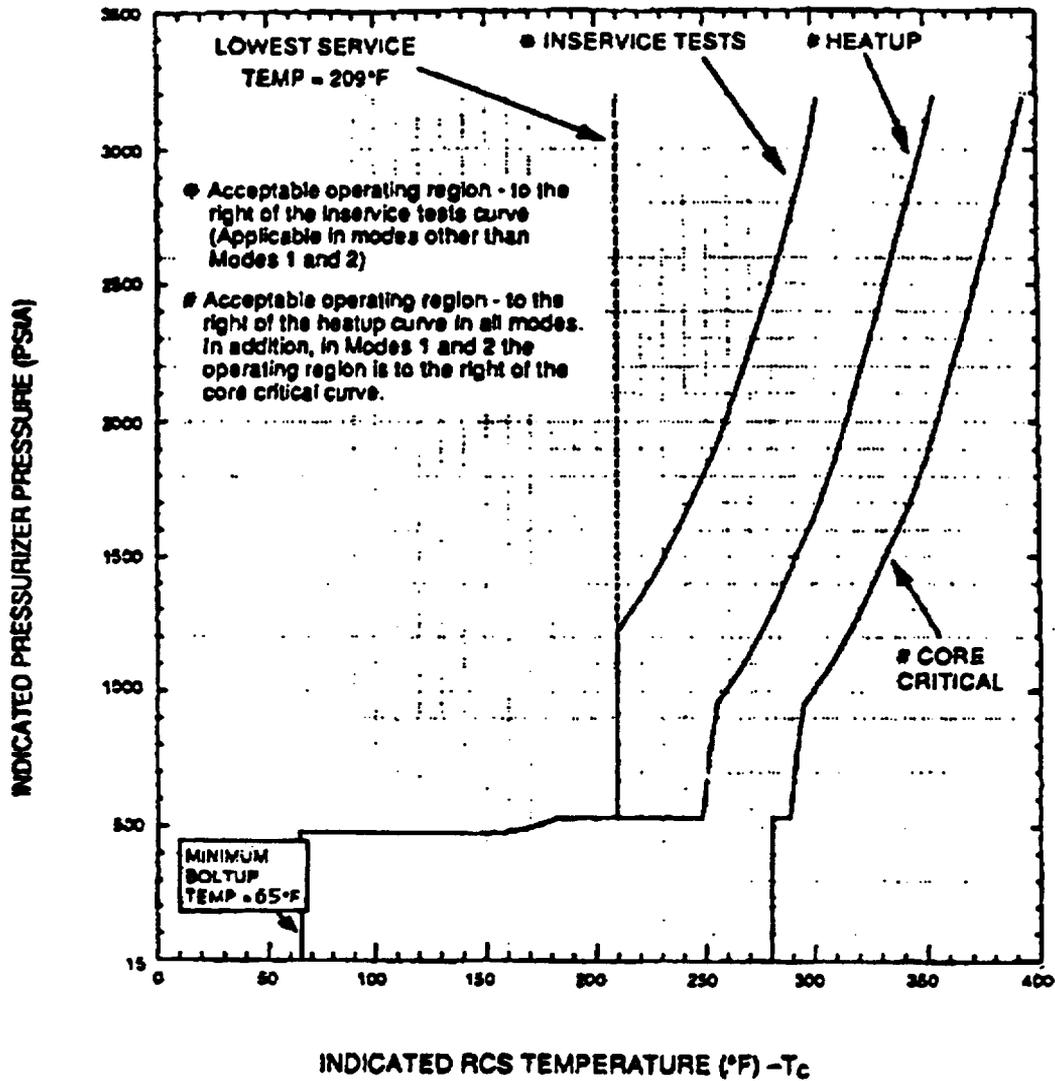


Figure 3.4.3-1

SONGS 2 HEATUP RCS PRESSURE/TEMPERATURE
LIMITATIONS UNTIL 20 EFY
Normal Operation

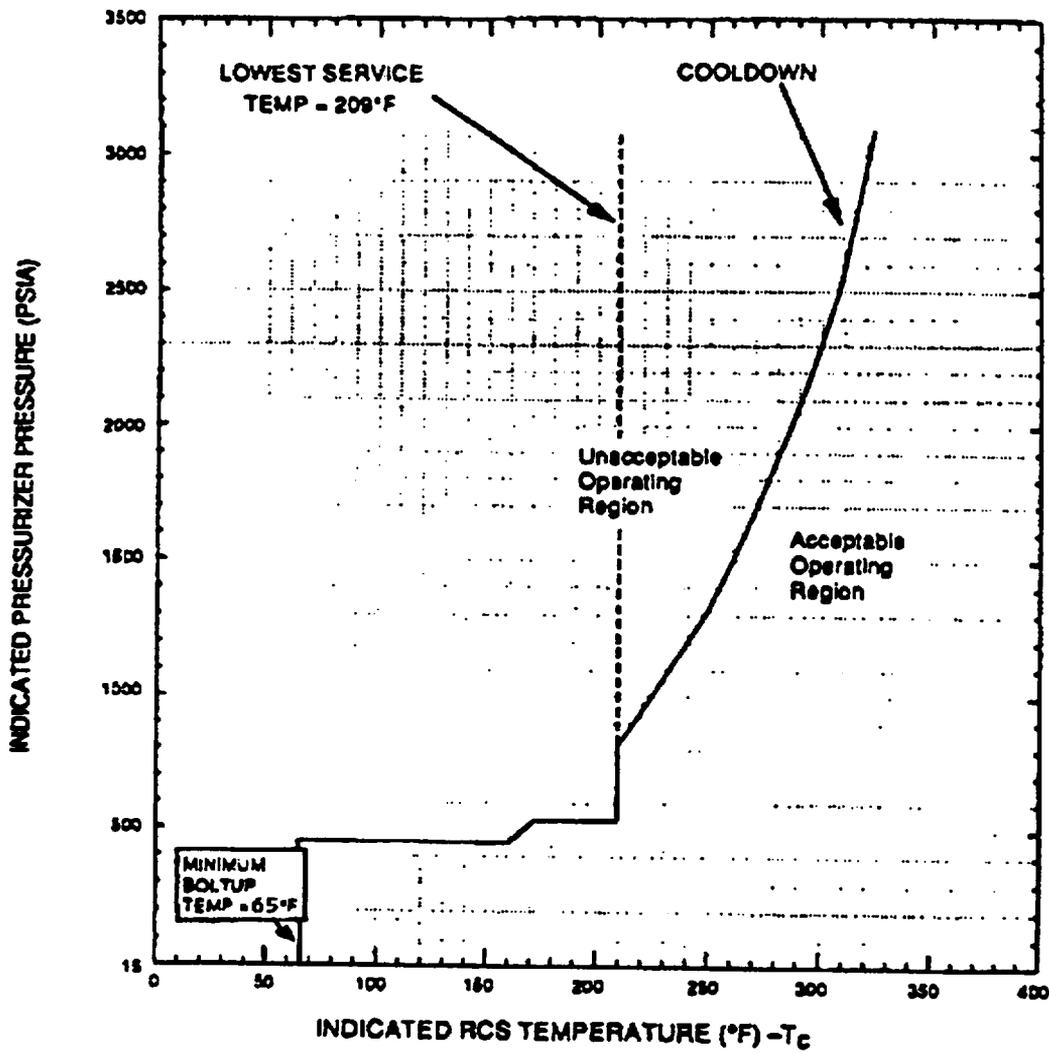
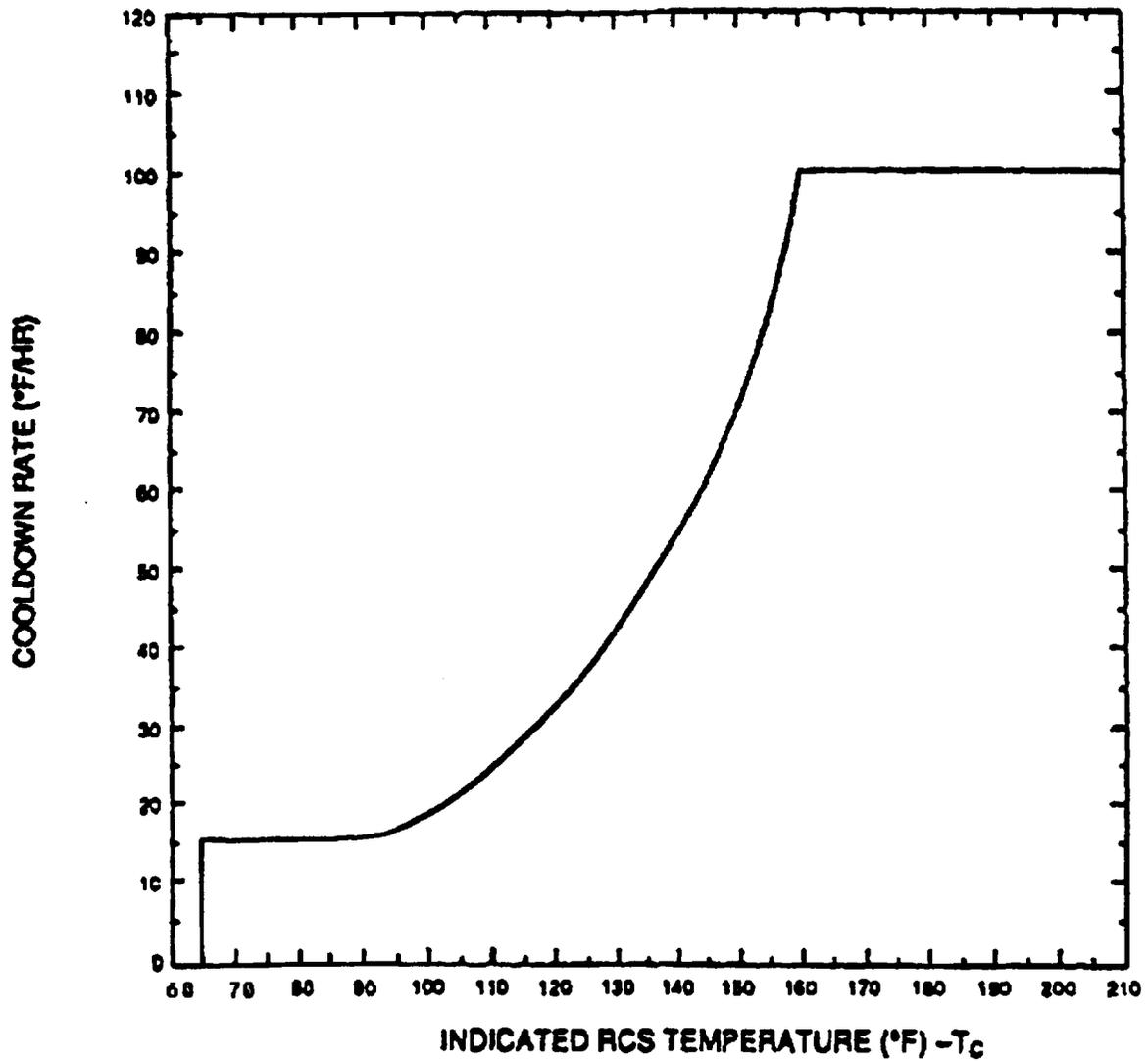


FIGURE 3.4.3-2

SONGS 2 COOLDOWN RCS PRESSURE/TEMPERATURE
LIMITATIONS UNTIL 20 EPY
Normal Operation



NOTE: A MAXIMUM COOLDOWN RATE OF 100°F/HR IS ALLOWED
AT ANY TEMPERATURE ABOVE 160°F

FIGURE 3.4.3-3

SONGS 2 RCS PRESSURE/TEMPERATURE LIMITS
MAXIMUM ALLOWABLE COOLDOWN RATES (UNTIL 20 EFY)
Normal Operation

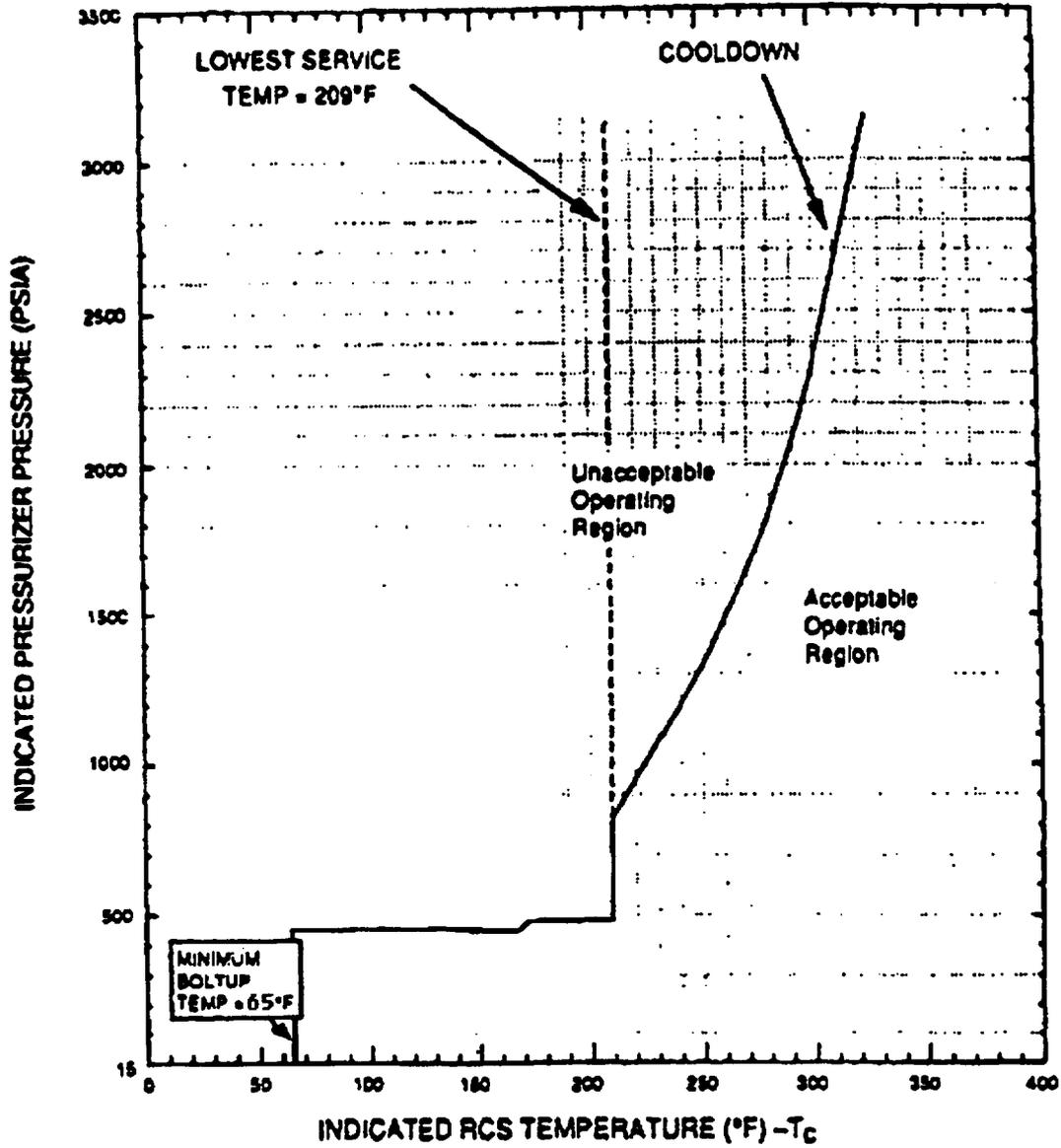
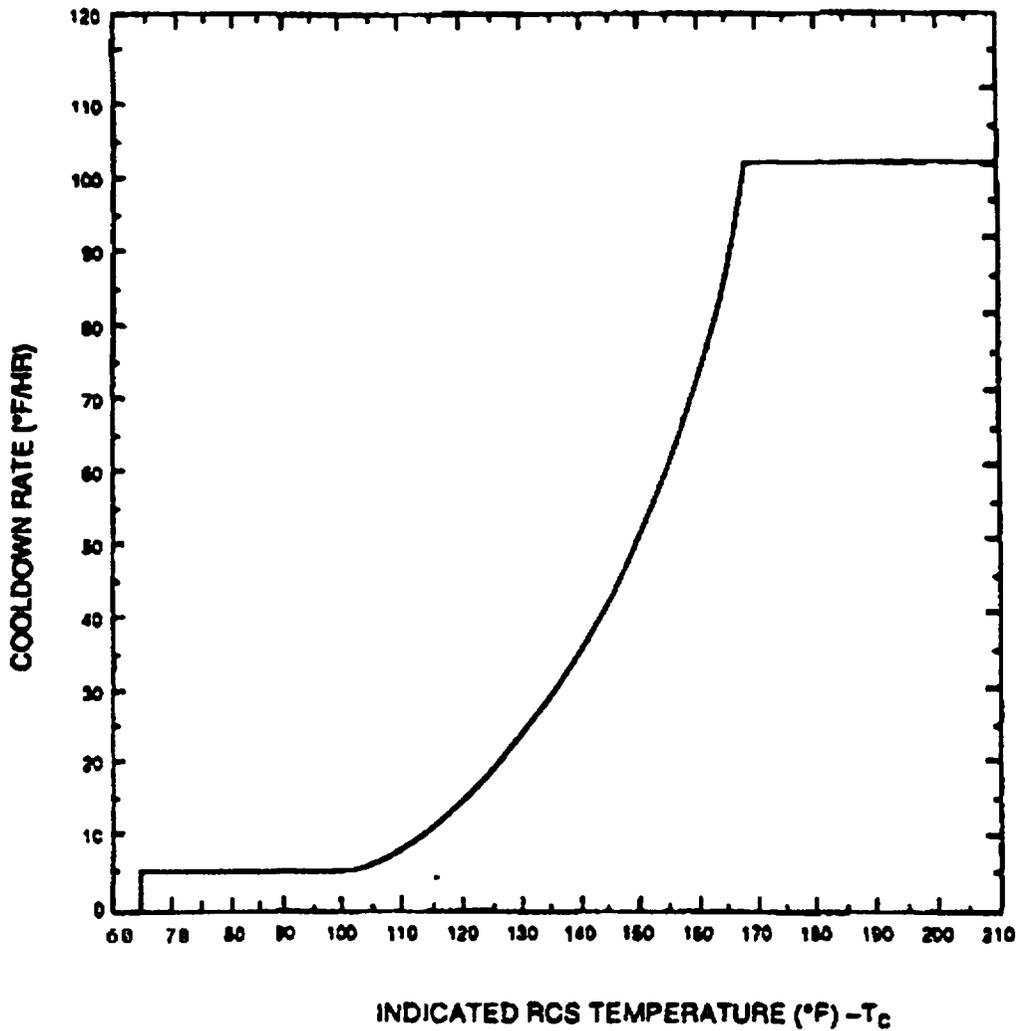


FIGURE 3.4.3-4

SONGS 2 COOLDOWN RCS PRESSURE/TEMPERATURE
LIMITATIONS UNTIL 20 EFY
Remote Shutdown Operation



NOTE: A MAXIMUM COOLDOWN RATE OF 100°F/HR IS ALLOWED
AT ANY TEMPERATURE ABOVE 168°F

FIGURE 3.4.3-5

SONGS 2 RCS PRESSURE/TEMPERATURE LIMITS
MAXIMUM ALLOWABLE COOLDOWN RATES (UNTIL 20 EFY)
Remote Shutdown Operation



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

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

THE CITY OF RIVERSIDE, CALIFORNIA

THE CITY OF ANAHEIM, CALIFORNIA

DOCKET NO. 50-362

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 163
License No. NPF-15

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern California Edison Company, et al. (SCE or the licensee), dated May 3, 2000, and supplemented by letter dated August 25, 2000, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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. NPF-15 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. 163 , are hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Stephen Dembek, Chief, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: September 28, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 163

FACILITY OPERATING LICENSE NO. NPF-15

DOCKET NO. 50-362

Replace the following pages of 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.

REMOVE

3.4-5
3.4-7
3.4-8
3.4-9
3.4-10
3.4-11

INSERT

3.4-5
3.4-7
3.4-8
3.4-9
3.4-10
3.4-11

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.3 RCS Pressure and Temperature (P/T) Limits

- LCO 3.4.3 With the reactor vessel head bolts tensioned*, the Reactor Coolant System (except the pressurizer) temperature and pressure shall be limited in accordance with the limit lines shown on Figures 3.4.3-1, 3.4.3-2, 3.4.3-3, 3.4.3-4, 3.4.3-5, and Table 3.4.3-1 during heatup, cooldown, and inservice leak and hydrostatic testing with:
- a. A maximum heatup of 60°F in any 1-hour period with RCS cold leg temperature greater than or equal to 65°F.
 - b. A maximum cooldown as specified by Figure 3.4.3-3 in any 1-hour period with RCS cold leg temperature less than or equal to 147°F. A maximum cooldown of 100°F in any 1-hour period with RCS cold leg temperature greater than 147°F.
 - c. A maximum temperature change of 10°F in any 1-hour period during inservice hydrostatic and leak testing operations above the heatup and cooldown limit curves.
 - d. A minimum temperature of 65°F to tension reactor vessel head bolts.

With the reactor vessel head bolts detensioned, the Reactor Coolant System (except the pressurizer) temperature shall be limited to a maximum heatup or cooldown of 60°F in any 1-hour period.

*With the reactor vessel head bolts detensioned, RCS cold leg temperature may be less than 65°F.

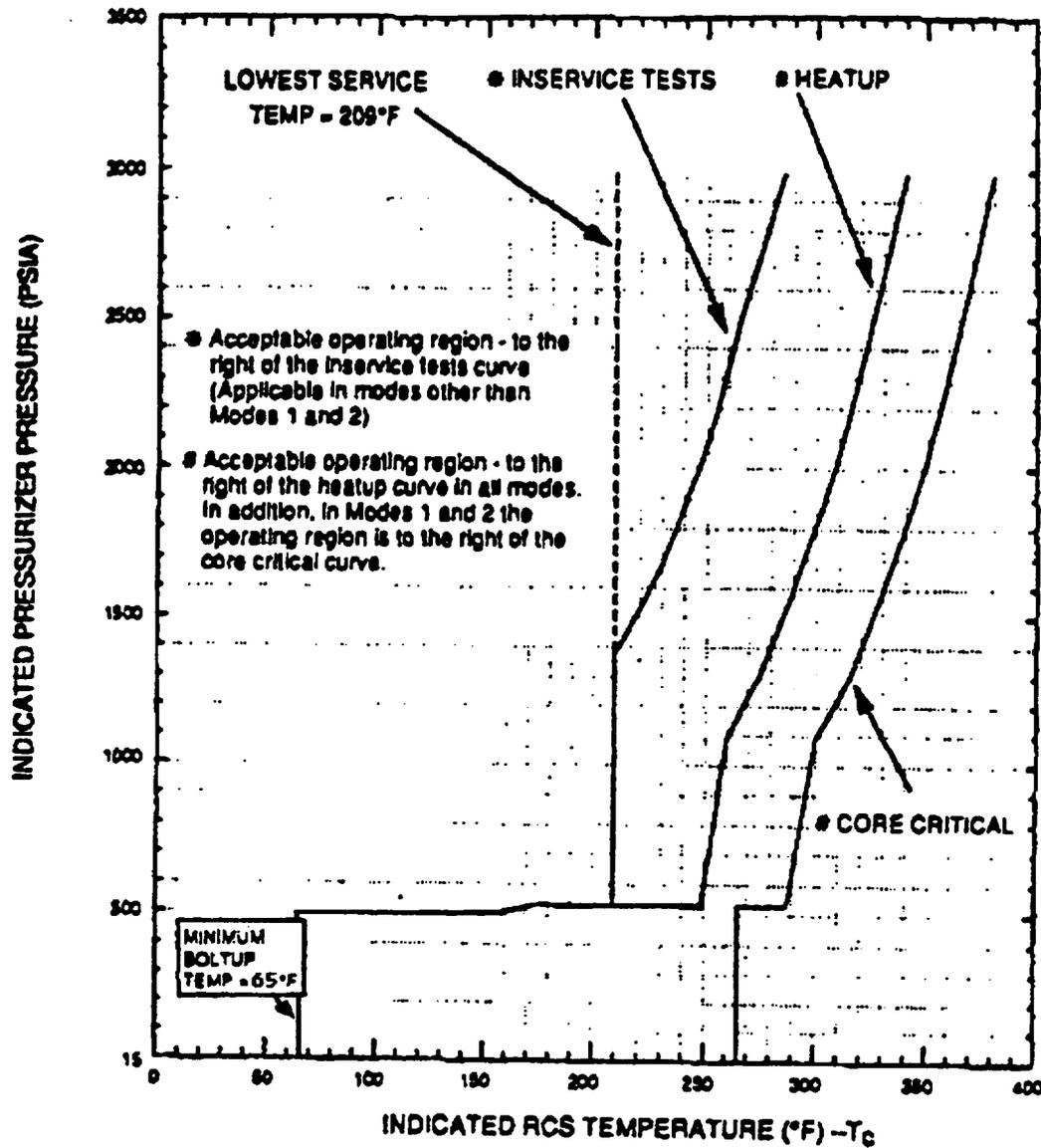


FIGURE 3.4.3-1

SONGS 3 HEATUP RCS PRESSURE/TEMPERATURE
LIMITATIONS UNTIL 20 EFY
Normal Operation

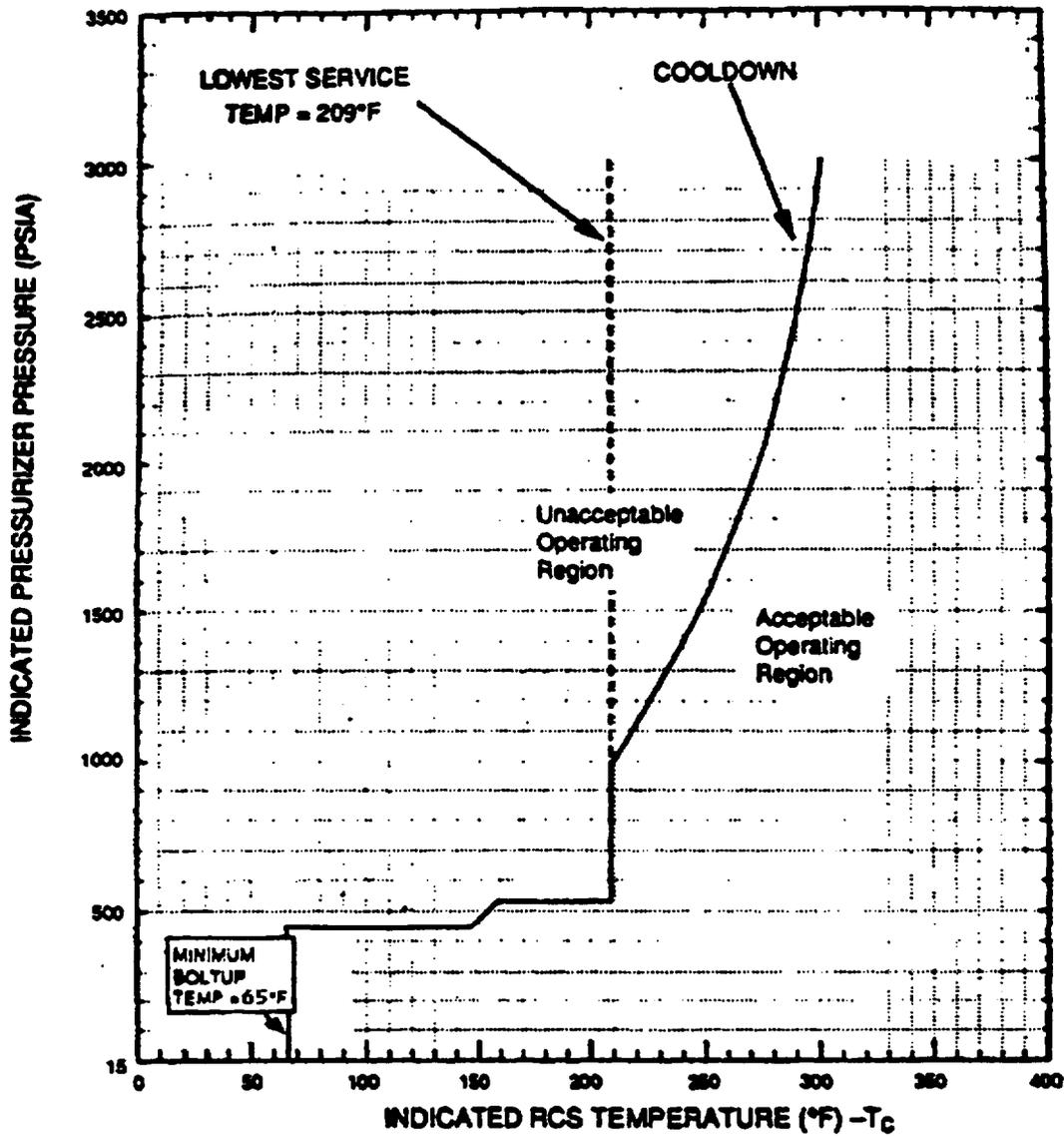
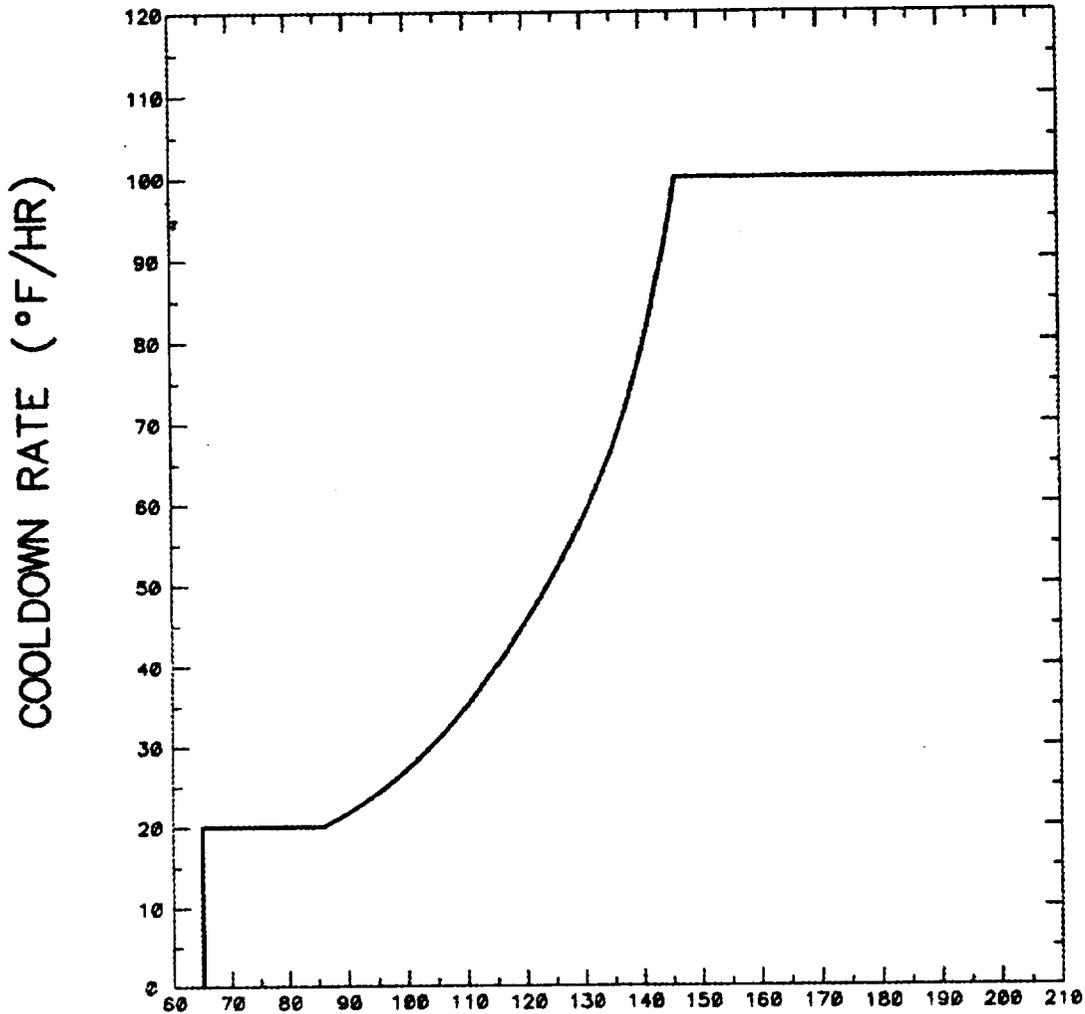


FIGURE 3.4.3-2

SONGS 3 COOLDOWN RCS PRESSURE/TEMPERATURE
LIMITATIONS UNTIL 20 EFY
Normal Operation



INDICATED RCS TEMPERATURE (°F)- T_c

NOTE: A MAXIMUM COOLDOWN RATE OF 100°F/HR IS ALLOWED
AT ANY TEMPERATURE ABOVE 147°F

FIGURE 3.4.3-3

SONGS 3 RCS PRESSURE/TEMPERATURE LIMITS
MAXIMUM ALLOWABLE COOLDOWN RATES (UNTIL 20 EFPY)
Normal Operation

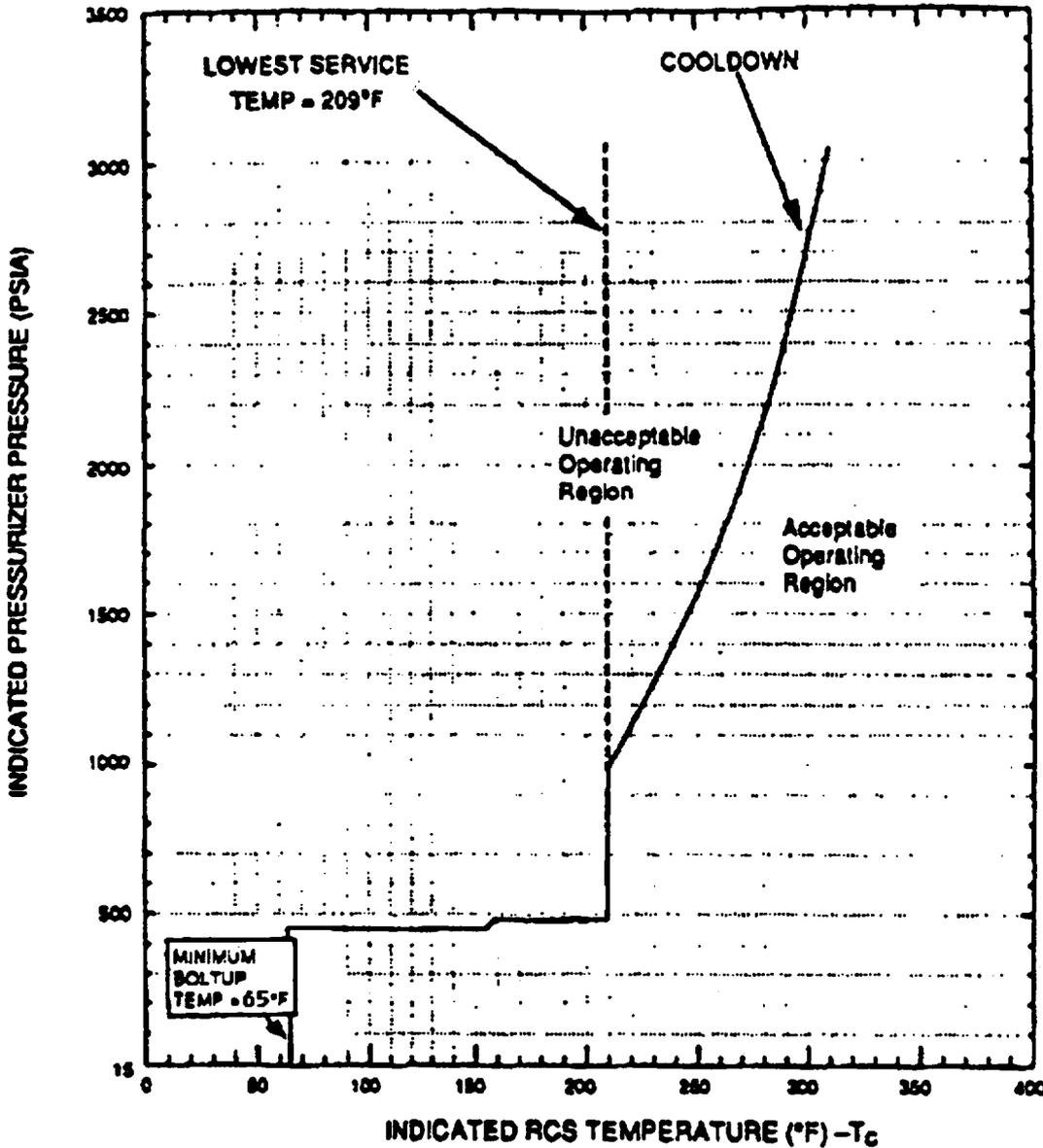
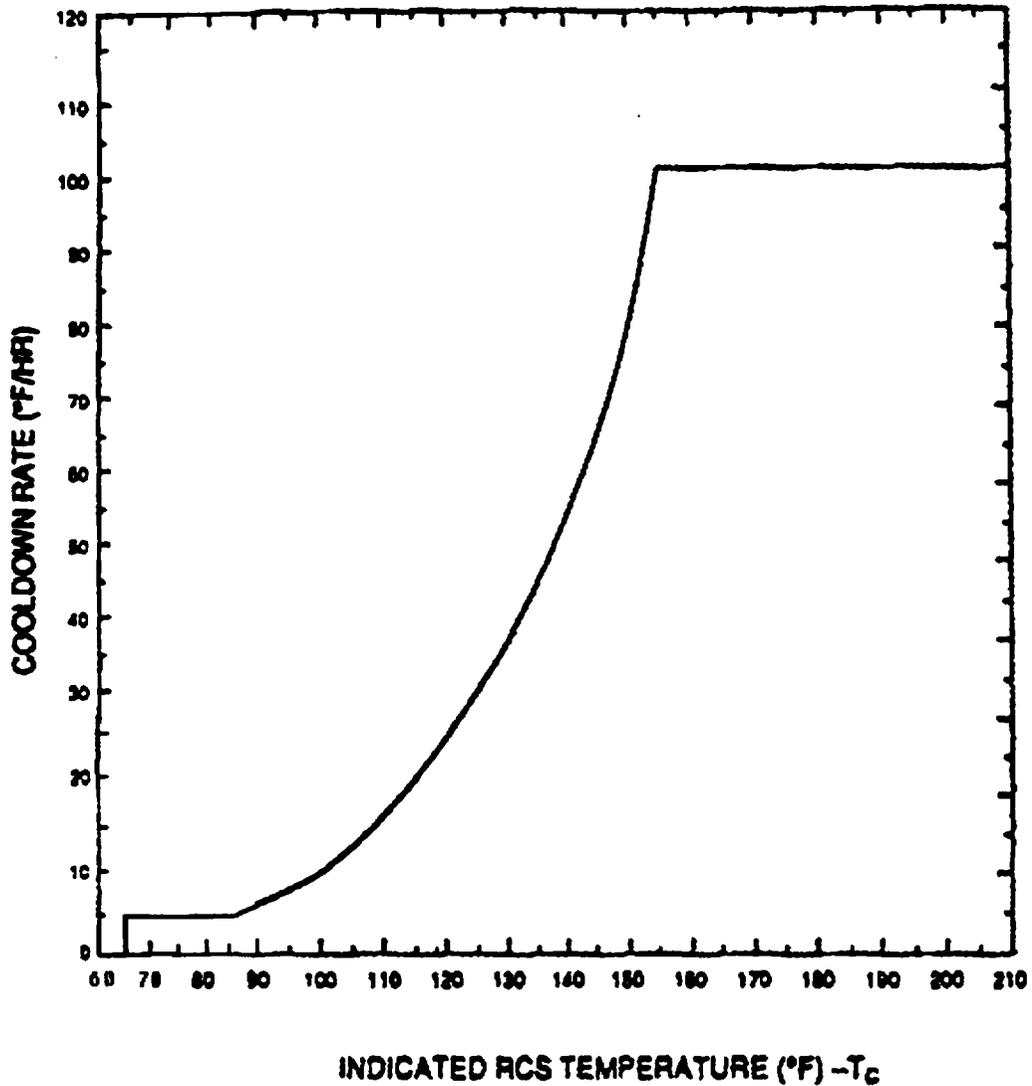


FIGURE 3.4.3-4

SONGS 3 COOLDOWN RCS PRESSURE/TEMPERATURE
LIMITATIONS UNTIL 20 EFY
Remote Shutdown Operation



NOTE: A MAXIMUM COOLDOWN RATE OF 100°F/HR IS ALLOWED
AT ANY TEMPERATURE ABOVE 155°F

FIGURE 3.4.3-5

SONGS 3 RCS PRESSURE/TEMPERATURE LIMITS
MAXIMUM ALLOWABLE COOLDOWN RATES (UNTIL 20 EFPY)
Remote Shutdown Operation



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 172 TO FACILITY OPERATING LICENSE NO. NPF-10
AND AMENDMENT NO. 163 TO FACILITY OPERATING LICENSE NO. NPF-15

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

THE CITY OF RIVERSIDE, CALIFORNIA

THE CITY OF ANAHEIM, CALIFORNIA

SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

DOCKET NOS. 50-361 AND 50-362

1.0 INTRODUCTION

By letter dated May 3, 2000 (PCN-516), and supplemented by letter dated August 25, 2000, Southern California Edison Company (the licensee), submitted a Technical Specifications (TSs) change request to revise the pressure temperature (P-T) limits for 20 effective full power years (EFPYs) for San Onofre Nuclear Generating Station (SONGS), Units 2 and 3. The proposed change is minor and involves only the revision of the P-T limits at temperatures less than 86 °F as a result of reducing the minimum boltup temperature from 86 °F to 65 °F. The P-T limits calculations are based on the 1989 American Society of Mechanical Engineers (ASME) Appendix G methodology.

The supplemental letter dated August 25, 2000, provided clarifying information that was within the scope of the May 3, 2000, application and the original *Federal Register* notice and did not change the staff's initial proposed no significant hazards consideration determination.

The U.S. Nuclear Regulatory Commission (NRC) has established requirements in Title 10 of the *Code of Federal Regulations*, Part 50 (10 CFR Part 50), to protect the integrity of the reactor coolant pressure boundary in nuclear power plants. The NRC staff evaluates the P-T limit curves based on the following NRC regulations and guidance: 10 CFR Part 50, Appendix G; Generic Letter (GL) 88-11, "NRC Position on Radiation Embrittlement of Reactor Vessel Materials and Its Impact on Plant Operations"; GL 92-01, "Reactor Vessel Structural Integrity," Revision 1 and Supplement 1; Regulatory Guide (RG) 1.99, "Radiation Embrittlement of Reactor Vessel Materials", Revision 2; and Standard Review Plan (SRP) Section 5.3.2, "Pressure-Temperature Limits." GL 88-11 advised licensees that the staff would use RG 1.99, to review P-T limit curves. RG 1.99, Revision 2, contains methodologies for determining the increase in transition temperature and the decrease in upper-shelf energy (USE) resulting from neutron radiation. GL 92-01, Revision 1, requested that licensees submit their reactor pressure

vessel (RPV) data for their plants to the staff for review. GL 92-01, Revision 1, Supplement 1, requested that licensees provide and assess data from other licensees that could affect their RPV integrity evaluations. These data are used by the staff as the basis for the staff's review of P-T limit curves and as the basis for the staff's review of pressurized thermal shock (PTS) assessments (10 CFR 50.61 assessments). Appendix G to 10 CFR Part 50 requires that P-T limit curves for the RPV be at least as conservative as those obtained by applying the methodology of Appendix G to Section XI of the ASME Code.

SRP Section 5.3.2 provides an acceptable method of determining the P-T limit curves for ferritic materials in the beltline of the RPV based on the linear elastic fracture mechanics (LEFM) methodology of Appendix G to Section XI of the ASME Code. The basic parameter of this methodology is the stress intensity factor K_I , which is a function of the stress state and flaw configuration. Appendix G requires a safety factor of 2.0 on stress intensities resulting from reactor pressure during normal and transient operating conditions, and a safety factor of 1.5 for hydrostatic testing curves. The methods of Appendix G postulate the existence of a sharp surface flaw in the RPV that is normal to the direction of the maximum stress. This flaw is postulated to have a depth that is equal to 1/4 thickness (1/4T) of the RPV beltline thickness and a length equal to 1.5 times the RPV beltline thickness. The critical locations in the RPV beltline region for calculating heatup and cooldown P-T curves are the 1/4T and 3/4 thickness (3/4T) locations, which correspond to the maximum depth of the postulated inside surface and outside surface defects, respectively.

The Appendix G ASME Code methodology requires that licensees determine the adjusted reference temperature (ART or adjusted RT_{NDT}). The ART is defined as the sum of the initial (unirradiated) reference temperature (initial RT_{NDT}), the mean value of the adjustment in reference temperature caused by irradiation (ΔRT_{NDT}), and a margin (M) term.

The ΔRT_{NDT} is a product of a chemistry factor and a fluence factor. The chemistry factor is dependent upon the amount of copper and nickel in the material and may be determined from tables in RG 1.99, Revision 2, or from surveillance data. The fluence factor is dependent upon the neutron fluence at the maximum postulated flaw depth. The margin term is dependent upon whether the initial RT_{NDT} is a plant-specific or a generic value and whether the chemistry factor (CF) was determined using the tables in RG 1.99, Revision 2, or surveillance data. The margin term is used to account for uncertainties in the values of the initial RT_{NDT} , the copper and nickel contents, the fluence and the calculational procedures. RG 1.99, Revision 2, describes the methodology to be used in calculating the margin term.

2.0 EVALUATION

2.1 Licensee Evaluation

The licensee used the methodology of Appendix G in 10 CFR Part 50 to calculate the minimum temperature for the P-T limits for both units. The licensee determined that the highest reference temperature for the material in the closure flange region that is highly stressed by the bolt preload is 40 °F for both units. A temperature uncertainty of 19 °F and a margin of 6 °F were then added to this reference temperature to arrive at the minimum temperature of 65 °F for the P-T limits.

In addition, the licensee performed fracture mechanics analyses for the vessel closure head and flange region and documented the effort in Attachment I of the May 3, 2000, submittal, entitled, "Reactor Pressure Vessel Minimum Boltup Temperature." Attachment I is meant to demonstrate that adequate margin exists for the vessel closure head and flange region while the vessel is operated with a pressure of 622 psig (20 percent of the preservice system hydrostatic test pressure) and at the proposed minimum temperature of 65 °F.

2.2 Staff Evaluation

Since the proposed change involves only the revision of the P-T limits at temperatures less than 86 °F caused by reducing the minimum boltup temperature from 86 °F to 65 °F, the licensee did not submit detailed information regarding the ART calculation for the limiting beltline material for both SONGS units. However, adequate information was provided to demonstrate that the revised minimum temperature segment of the P-T limits satisfy the Appendix G requirements.

Appendix G of 10 CFR Part 50 imposes a minimum temperature at the closure head flange based on the reference temperature for the flange material. Section IV.A.2 of Appendix G states that when the pressure is less than or equal to 20 percent of the preservice system hydrostatic test pressure, the temperature of the closure flange regions highly stressed by the bolt preload must exceed the highest reference temperature of the material in the closure flange region that is highly stressed by the bolt for normal operation and for hydrostatic pressure tests and leak tests. Based on the flange RT_{NDT} of 40 °F for both units, the staff has determined that the 65 °F limit has satisfied the requirement for the closure flange region during normal operation and inservice leak and hydrostatic testing.

The SONGS P-T limits have a unique shape in the low temperature region (65 °F to 126 °F) for both heatup and cooldown. For cooldown P-T limits (cooldown curves), when the pressure drops to 450 psig, the cooldown curves continue to cool at a constant pressure and extend horizontally to the minimum temperature line (the vertical line determined by the boltup temperature). This unique shape would be nonconservative for the cooldown curves based on a constant cooldown rate. However, in validating the proposed cooldown curves, the staff found that these curves were developed for varying cooldown rates. Consequently, the cooldown curve of each SONGS unit is accompanied by a separate cooldown rate curve, which shows the variation of the cooldown rate with the temperature of the coolant. To further validate the revised part of the cooldown curves, the staff used the ART of 129 °F at 1/4T for the lower shell plate C-6404-5 (the limiting beltline material) for Unit 2 and the ART of 116 °F at 1/4T for the intermediate shell plate C-6802-1 for Unit 3 from the licensee's submittal for the current P-T limits and applied the 1989 ASME Appendix G methodology to generate the cooldown curves for temperatures less than 126 °F for both units. The staff's results indicated that the licensee's cooldown curves in the low temperature region are in compliance with the 1989 ASME Appendix G requirements. Since the 1989 ASME Appendix G methodology is more conservative than the 1995 (the 1996 Addenda) ASME Appendix G methodology, currently endorsed by the NRC for P-T limits application, using the 1989 ASME Appendix G methodology is acceptable.

Unlike the cooldown curves, the licensee developed the heatup P-T limits (heatup curves) based on a constant heatup rate of 60 °F/Hour. In the beginning of heatup, the pressure is maintained constant at 497 psig for Unit 2 and 515 psig for Unit 3 until the coolant temperature

has reached 126 °F. This unique shape would be nonconservative for the heatup curves based on a constant through-wall temperature difference. However, in validating the proposed heatup curves, the staff found that they were developed for the actual through-wall temperature difference using an axisymmetric finite element model (including cladding). This approach took advantage of the transient state of the early heatup, which has a much smaller through-wall temperature difference, and hence a much smaller thermal stress intensity factor for the assumed flaw at 3/4T. Consequently, the pressure at 65 °F could be as high as the pressure at 126 °F where the through-wall temperature difference has reached about 80 percent of the steady-state value. Although the 1989 ASME Appendix G methodology does not specify how the through-wall temperature difference should be obtained, the 1995 ASME Appendix G methodology specifies an option for the thermal stress intensity factor to be calculated from "the thermal stress distribution at any specified time during the heatup or cooldown." Hence, the licensee's methodology for generating heatup curves based on the through-wall temperature difference at any specified time during the heatup is equivalent to the 1995 ASME Appendix G methodology. Considering the above, the staff confirmed that the licensee's heatup curves in the low temperature region are in compliance with both the 1989 and the 1995 ASME Appendix G requirements.

Also, the staff has reviewed Attachment I of the submittal, entitled, "Reactor Pressure Vessel Minimum Boltup Temperature," and determined that the information there on fracture mechanics analyses for the vessel closure head and flange region is not needed to demonstrate that the proposed P-T limits satisfy the minimum temperature requirements of Appendix G. The staff is currently reviewing reactor vessel closure head/vessel flange requirements for operating pressurized-water and boiling-water reactor plants and will make public any new staff position regarding the low temperature region of the P-T limits.

2.3 Reactor Vessel Integrity Database (RVID) Updating

Since the submittal contains no new material information for the SONGS units, there is no need to update information for these plants in the RVID program.

Based on the above discussion, the staff concludes that the proposed P-T limits for the reactor coolant system for heatup, cooldown, hydrotest, and criticality satisfy the requirements in Appendix G to Section XI of the ASME Code and Appendix G of 10 CFR Part 50 for 20 EFPYs for both SONGS units. The proposed P-T limits also satisfy GL 88-11, because the method in RG 1.99, Revision 2, was used to calculate the ART. Hence, the proposed P-T limit curves may be incorporated into the SONGS Units 2 and 3 technical specifications

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite, and that there is no

significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (65 FR 34749). 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) 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.

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