April 4, 1986

Docket Nos.: 50-361
and 50-362

Mr. Kenneth P. Baskin
Vice President
Southern California Edison Company
2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770

Mr. James C. Holcombe
Vice President - Power Supply
San Diego Gas & Electric Company
101 Ash Street
Post Office Box 1831
San Diego, California 92112

Gentlemen:

Subject: Issuance of Amendment No. 44 to Facility Operating License NPF-10 and Amendment No. 33 to Facility Operating License NPF-15 San Onofre Nuclear Generating Station, Units 2 and 3

The Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 44 to Facility Operating License No. NPF-10 and Amendment No. 33 to Facility Operating License No. NPF-15 for the San Onofre Nuclear Generating Station, Units 2 and 3, located in San Diego County, California. The amendments revise Surveillance Requirement 4.4.8.2.2 of Technical Specification 3/4.4.8.2, "Reactor Coolant System - Pressurizer - Heatup/Cooldown" and the associated table to incorporate additional thermal transient conditions for calculation of cumulative thermal cycle usage factors.

These amendments were requested by your letters of February 20, July 1, October 10, and October 22, 1985, and are covered by Proposed Change Number PCN-165.

A copy of the Safety Evaluation supporting the amendments is also enclosed.

Sincerely,

George W. Knighton, Director
PWR Project Directorate No. 7
Division of PWR Licensing-B

Enclosures:
1. Amendment No. 44 to NPF-10
2. Amendment No. 33 to NPF-15
3. Safety Evaluation

cc: See next page

DPWR-B:PBD7	DPWR-B:PBD7	OELD	DPWR-B:PBD7
JLee	HRood/yt		GWKnighton
2/27/86	3/3/86	3/18/86	3/26/86

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ISSUANCE OF AMENDMENT NO.44 TO FACILITY OPERATING LICENSE NPF-10
AND AMENDMENT NO. 33 TO FACILITY OPERATING LICENSE NPF-15
SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

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Mr. Kenneth P. Baskin
Southern California Edison Company

San Onofre Nuclear Generating Station
Units 2 and 3

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Government Publications Section
Library & Courts Building
Sacramento, CA 95841
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San Clemente, CA 92672

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San Diego County
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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. 44
License No. NPF-10

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment to the license for San Onofre Nuclear Generating Station, Unit 2 (the facility) filed by the Southern California Edison Company on behalf of itself and San Diego Gas and Electric Company, The City of Riverside and the City of Anaheim, California (licensees) dated February 20, 1985, as supplemented by letters dated July 1, October 10, and October 22, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the 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 set forth in 10 CFR Chapter I;

   D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public;

   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.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this 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. 44, are hereby incorporated in the license. SCE shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This amendment is effective immediately and is to be fully implemented within 30 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

George W. Knighton

George W. Knighton, Director
PWR Project Directorate No. 7
Division of PWR Licensing-B

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 4, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 44

FACILITY OPERATING LICENSE NO. NPF-10

DOCKET NO. 50-361

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contains vertical lines indicating the area of change. Also to be replaced are the following overleaf pages to the amended pages.

Amendment Page	Overleaf Page
3/4 4-31	3/4 4-32
5-9	-
5-10	-
5-11	-

PRESSURIZER - HEATUP/COOLDOWN

LIMITING CONDITION FOR OPERATION

3.4.8.2 The pressurizer shall be limited to:

a. A maximum heatup of 200°F in any one hour period,

b. A maximum cooldown of 200°F in any one hour period.

APPLICABILITY: At all times.

ACTION:

With the pressurizer temperature limits in excess of any of the above limits, restore the temperature to within the limits within 30 minutes; perform an engineering evaluation to determine the effects of the out-of-limit condition on the structural integrity of the pressurizer; determine that the pressurizer remains acceptable for continued operation or be in at least HOT STANDBY within the next 6 hours and reduce the pressurizer pressure to less than 500 psig within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.4.8.2.1 The pressurizer temperatures shall be determined to be within the limits at least once per 30 minutes during system heatup or cooldown.

4.4.8.2.2 The spray water temperature differential shall be determined for use in Table 5.7-1 for each cycle of main spray when less than 4 reactor coolant pumps are operating and for each cycle of auxiliary spray operation.

OVERPRESSURE PROTECTION SYSTEMS

RCS TEMPERATURE $\leq$ 235°F

LIMITING CONDITION FOR OPERATION

3.4.8.3.1 At least one of the following overpressure protection systems shall be OPERABLE:

a. The Shutdown Cooling System Relief Valve (PSV9349) with:

   1) A lift setting of 406 ± 10 psig*, and

   2) Relief Valve isolation valves 2HV9337, 2HV9339, 2HV9377 and 2HV9378 open, or,

b. The Reactor Coolant System depressurized with an RCS vent of greater than or equal to 5.6 square inches.

APPLICABILITY: MODE 4 when the temperature of any one RCS cold leg is less than or equal to 235°F; MODE 5; MODE 6 with the reactor vessel head on.

ACTION:

a. With the SDCS Relief Valve inoperable, reduce T_{avg} to less than 200°F, depressurize and vent the RCS through a greater than or equal to 5.6 square inch vent within the next 8 hours.

b. With one or both SDCS Relief Valve isolation valves in a single SDCS Relief Valve isolation valve pair (valve pair 2HV9337 and 2HV9339 or valve pair 2HV9377 and 2HV9378) closed, open the closed valve(s) within 7 days or reduce T_{avg} to less than 200°F, depressurize and vent the RCS through a greater than or equal to 5.6 inch vent within the next 8 hours.

c. In the event either the SDCS Relief Valve or an RCS vent is used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the SDCS Relief Valve or RCS vent on the transient and any corrective action necessary to prevent recurrence.

d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.4.8.3.1.1 The SDCS Relief Valve shall be demonstrated OPERABLE by:

a. Verifying at least once per 72 hours when the SDCS Relief Valve is being used for overpressure protection that SDCS Relief Valve isolation valves 2HV9337, 2HV9339, 2HV9377 and 2HV9378 are open.

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*For valve temperatures less than or equal to 130°F.

TABLE 5.7-1 (Continued)

COMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT	CYCLIC OR TRANSIENT LIMIT	DESIGN CYCLE OR TRANSIENT
Reactor Coolant System	2 complete loss of secondary pressure cycles.	Loss of secondary pressure from either steam generator while in MODES 1, 2 or 3.
Pressurizer Spray System	Unlimited number of cycles.	Main spray (4 pumps operating) Main spray (less than 4 pumps operating) with $\Delta T \leq 200°F$. Auxiliary spray with $\Delta T \leq 200°F$.
	Calculate cumulative usage factor.	Main spray (less than 4 pumps operating) with $\Delta T > 200°F$ Auxiliary spray with $\Delta T > 200°F$

Where:

ΔT = Maximum temperature difference between pressurizer and pressurizer spray during the spray cycle.

TABLE 5.7-1 (Continued)

COMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT	CYCLIC OR TRANSIENT LIMIT	DESIGN CYCLE OR TRANSIENT
Pressurizer Spray System		

Pressurizer Spray System Usage Factor

ΔT	N_A	N	N/N_A
201 - 250	11,000		
251 - 300	4,000		
301 - 350	2,200		
351 - 400	1,300		
401 - 450	900		
451 - 500	500		
501 - 550	300		
551 - 600	200		

$\Sigma N/N_A =$ _____

where:

ΔT = Maximum temperature difference between pressurizer and pressurizer spray during the spray cycle.

N_A = Allowable number of spray cycles

N = Number of cycles in ΔT range indicated

TABLE 5.7-1 (Continued)

COMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT	CYCLIC OR TRANSIENT LIMIT	DESIGN CYCLE OR TRANSIENT
Pressurizer Spray System		

Calculational Method:

1. The spray cycle is defined as any initiation and termination of main or auxiliary spray flow through the pressurizer spray nozzle.

2. If the maximum temperature difference between the pressurizer and the pressurizer spray during the spray cycle exeeds 200°F, each spray cycle and the corresponding temperature difference is logged.

3. The spray system usage factor is calculated as follows:

   A. Fill in Column "N" above.

   B. Calculate "N/N_A" (Divide N and N_A).

   C. Add Column "N/N_A" to find $\Sigma N/N_A$. This total is the cumulative usage factor.

4. A. If the cumulative usage factor is equal to or less than 0.65 no further action is required.

   B. If the cumulative usage factor exceeds 0.65, subsequent pressurizer spray operation shall continue to be monitored and an engineering evaluation of spray system fatigue shall be performed within 90 days. The evaluation shall determine that the spray system remains acceptable for additional service beyond the 90 day period or subsequent spray operation shall be restricted so that the maximum temperature difference between pressurizer and pressurizer spray during the spray cycle shall be limited to less than or equal to 200°F.

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

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. 33
License No. NPF-15

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment to the license for San Onofre Nuclear Generating Station, Unit 2 (the facility) filed by the Southern California Edison Company on behalf of itself and San Diego Gas and Electric Company, The City of Riverside and the City of Anaheim, California (licensees) dated February 20, 1985, as supplemented by letters dated July 1, October 10, and October 22, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the 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 set forth in 10 CFR Chapter I;

   D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public;

   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 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. 33, are hereby incorporated in the license. SCE shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This amendment is effective immediately and is to be fully implemented within 30 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

George W. Knighton

George W. Knighton, Director
PWR Project Directorate No. 7
Division of PWR Licensing-B

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 4, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 33

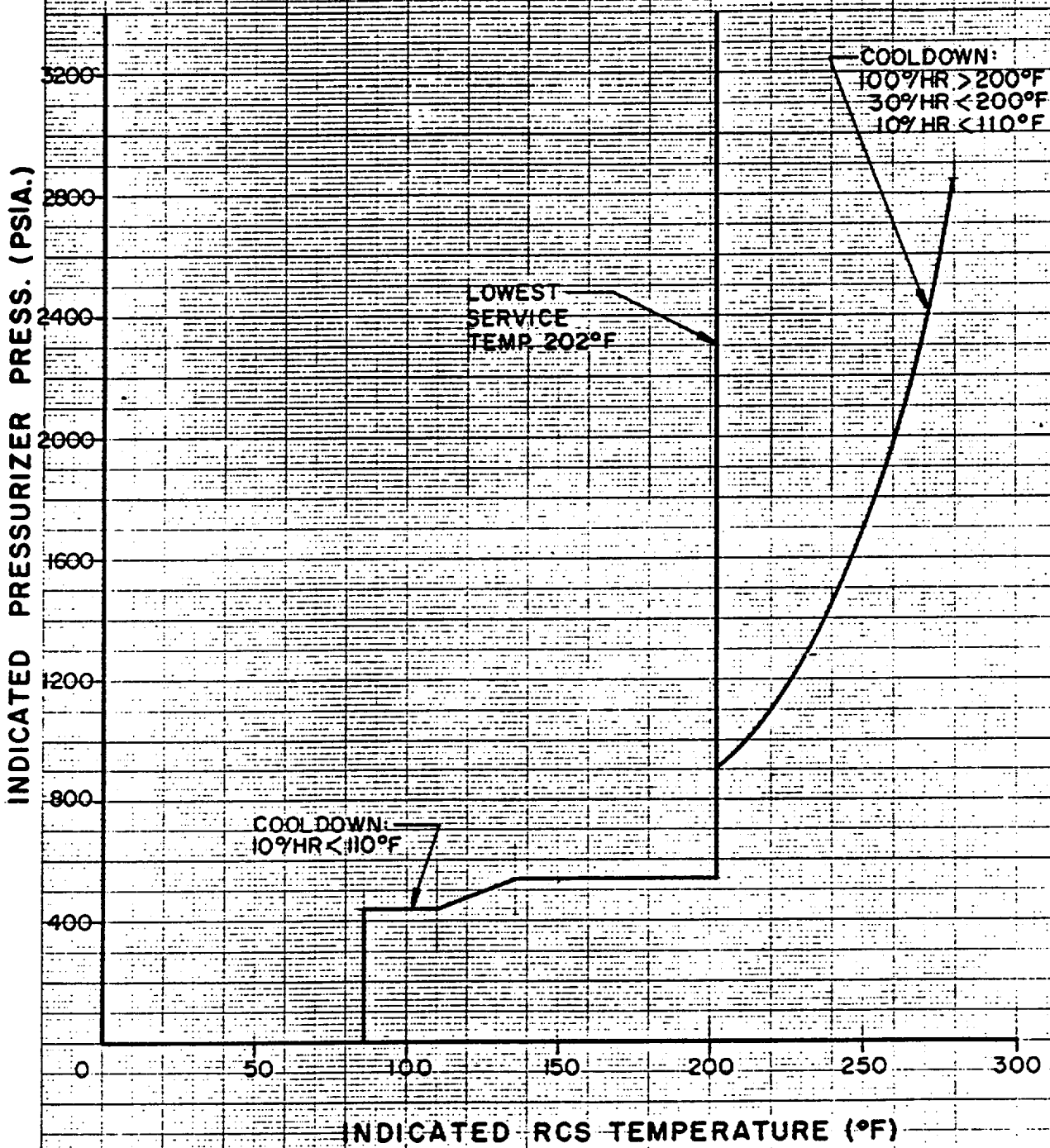
FACILITY OPERATING LICENSE NO. NPF-15

DOCKET NO. 50-362

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Also to be replaced is the following overleaf page to the amended page.

Amendment Page	Overleaf Page
3/4 4-32	3/4 4-31
5-9	-
5-10	-
5-11	-

FIGURE 3.4-3



COOLDOWN RCS PRESSURE/TEMPERATURE LIMITATIONS FOR 0 - 5 YRS

PRESSURIZER - HEATUP/COOLDOWN

LIMITING CONDITION FOR OPERATION

3.4.8.2 The pressurizer shall be limited to:

a. A maximum heatup of 200°F in any 1 hour period,

b. A maximum cooldown of 200°F in any 1 hour period.

APPLICABILITY: At all times.

ACTION:

With the pressurizer temperature limits in excess of any of the above limits, restore the temperature to within the limits within 30 minutes; perform an engineering evaluation to determine the effects of the out-of-limit condition on the structural integrity of the pressurizer; determine that the pressurizer remains acceptable for continued operation or be in at least HOT STANDBY within the next 6 hours and reduce the pressurizer pressure to less than 500 psig within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.4.8.2.1 The pressurizer temperatures shall be determined to be within the limits at least once per 30 minutes during system heatup or cooldown.

4.4.8.2.2 The spray water temperature differential shall be determined for use in Table 5.7-1 for each cycle of main spray when less than 4 reactor coolant pumps are operating and for each cycle of auxiliary spray operation.

TABLE 5.7-1

COMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT	CYCLIC OR TRANSIENT LIMIT	DESIGN CYCLE OR TRANSIENT
Reactor Coolant System	2 complete loss of secondary pressure cycles.	Loss of secondary pressure from either steam generator while in MODES 1, 2 or 3.
Pressurizer Spray System	Unlimited number of cycles.	Main spray (4 pumps operating) Main spray (less than 4 pumps operating) with $\Delta T \leq 200^{\circ}F$. Auxiliary spray with $\Delta T \leq 200^{\circ}F$.
	Calculate cumulative usage factor.	Main spray (less than 4 pumps operating) with $\Delta T > 200^{\circ}F$ Auxiliary spray with $\Delta T > 200^{\circ}F$

Where:

ΔT = Maximum temperature difference between pressurizer and pressurizer spray during the spray cycle.

TABLE 5.7-1 (Continued)

COMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT	CYCLIC OR TRANSIENT LIMIT	DESIGN CYCLE OR TRANSIENT
Pressurizer Spray System		

Pressurizer Spray System Usage Factor

ΔT	N_A	N	N/N_A
201 - 250	11,000		
251 - 300	4,000		
301 - 350	2,200		
351 - 400	1,300		
401 - 450	900		
451 - 500	500		
501 - 550	300		
551 - 600	200		

$\Sigma N/N_A =$ _____

where:

ΔT = Maximum temperature difference between pressurizer and pressurizer spray during the spray cycle.

NA = Allowable number of spray cycles.

N = Number of cycles in ΔT range indicated.

TABLE 5.7-1 (Continued)

COMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT	CYCLIC OR TRANSIENT LIMIT	DESIGN CYCLE OR TRANSIENT
Pressurizer Spray System		

Calculational Method:

1. The spray cycle is defined as any initiation and termination of main or auxiliary spray flow through the pressurizer spray nozzle.

2. If the maximum temperature difference between the pressurizer and the pressurizer spray during the spray cycle exeeds 200°F, each spray cycle and the corresponding temperature difference is logged.

3. The spray system usage factor is calculated as follows:

   A. Fill in Column "N" above.

   B. Calculate "N/N_A" (Divide N and N_A).

   C. Add Column "N/N_A" to find $\Sigma N/N_A$. This total is the cumulative usage factor.

4. A. If the cumulative usage factor is equal to or less than 0.65 no further action is required.

   B. If the cumulative usage factor exceeds 0.65, subsequent pressurizer spray operation shall continue to be monitored and an engineering evaluation of spray system fatigue shall be performed within 90 days. The evaluation shall determine that the spray system remains acceptable for additional service beyond the 90 day period or subsequent spray operation shall be restricted so that the maximum temperature difference between pressurizer and pressurizer spray during the spray cycle shall be limited to less than or equal to 200°F.

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

SAFETY EVALUATION SUPPORTING ISSUANCE OF

AMENDMENT NO. 44 TO NPF-10 AND AMENDMENT NO. 33 TO NPF-15

SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 & 3

DOCKET NOS. 50-361 AND 50-382

1.0 INTRODUCTION

Southern California Edison Company (SCE), on behalf of itself and the other licensees, San Diego Gas and Electric Company, The City of Riverside, California, and The City of Anaheim, California, has submitted several applications for license amendments for San Onofre Nuclear Generating Station (SONGS), Units 2 and 3. One such request, Proposed Change PCN-165, is evaluated herein. This change would revise Surveillance Requirement 4.4.8.2.2 of Technical Specification 3/4.4.8.2, "Reactor Coolant System - Pressurizer - Heatup/Cooldown", and Table 5.7-1 of Technical Specification 5.7, "Component Cycle or Transient Limits". Specifically, the change would revise Surveillance Requirement 4.4.8.2.2 to incorporate additional thermal transient conditions for calculation of cumulative thermal cycle usage factors.

The proposed change also would revise Table 5.7-1, which identifies components subject to thermal fatigue when subjected to thermal cycling. The pressurizer spray system (used for control of pressurizer level and RCS pressure) is one such system identified in Table 5.7-1 which is routinely subjected to thermal cycling. Table 5.7-1 identifies the number of thermal cycles to which a component can be subjected and actions to be taken when the limit is approached. The severity of a thermal cycle on the pressurizer spray system is a function of the temperature differential between the pressurizer and the pressurizer spray. The greater this temperature differential, the fewer the number of spray cycles allowed before action must be taken. The threshold for determining when action must be taken is identified as the cumulative usage factor which is the sum of the usage factors for each differential temperature range. The usage factor for each temperature range is defined as the number of cycles accumulated in that temperature range divided by the number allowed.

Table 5.7-1 defines a spray cycle, the threshold temperature, the threshold differential temperature above which a spray cycle must be counted, differential temperature ranges and the number of spray cycles allowed for each range, the method for calculating the usage factor, the cumulative usage factor limit, and the action to be taken when the cumulative usage factor is exceeded. The proposed change revises Table 5.7-1 as follows: It (1) makes the table apply to the entire pressurizer spray system rather than just the pressurizer spray nozzle; (2) redefines a spray cycle; (3) increases the differential threshold pressurizer

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temperature from 150°F to 200°F; (4) redefines the temperature differential ranges and the number of allowed spray cycles for each range; and (5) reduces the cumulative usage factor limit from 0.75 to 0.65.

2.0 EVALUATION OF CHANGE

The NRC staff has evaluated each part of the proposed change and has concluded that each is acceptable. The staff's evaluation of each is given below.

The proposed change to Surveillance Requirement 4.4.8.2.2 would state that the spray water temperature differential shall be determined for use in Table 5.7-1 for each cycle of main spray when less than four reactor coolant pumps are operating and for each cycle of auxiliary spray operation. This would change the existing requirement specifying that the temperature differential be determined at least once per twelve hours during auxiliary spray operation.

This change constitutes an additional restriction or control not presently included in the technical specifications. The proposed change would provide a more accurate and stringent evaluation of the modified pressurizer spray system by incorporating the temperature transient effect for each cycle of main spray when less than four reactor coolant pumps are operating and for each cycle of auxiliary spray operation. This new surveillance requirement will therefore cover thermal transients which are not considered in the existing one. Because the change imposes a monitoring requirement to include thermal transients which are more severe and more numerous than those previously accounted for, it is more restrictive and, therefore, is acceptable.

Currently, Table 5.7-1 applies only to the pressurizer spray nozzle. The proposed change will make this table apply to the entire pressurizer spray system and will require accounting for both main spray cycles when less than four reactor coolant pumps are operating and for all auxiliary spray cycles if the temperature differential is greater than 200°F. This change is an additional restriction which is currently not included in the current technical specification since the existing specification only applies to the pressurizer spray nozzle; therefore, this change is acceptable.

The existing specification defines a spray cycle as the opening and closing of spray valve by main or auxiliary spray. The proposed change redefines the spray cycle as any initiation and termination of main or auxiliary spray flow through the pressurizer spray nozzle. This proposed change redefines the spray cycle to more closely correspond to the actual monitoring of spray cycles within the plant. Spray cycles are monitored by counting demands made by the spray valves in conjunction with monitoring spray line temperature rather than by monitoring actual opening and closing of the spray valves. This is more accurate since the spray valves often are not completely closed and a small bypass flow is allowed to minimize thermal transients on the system. This change is essentially a change in nomenclature and, therefore, is acceptable.

The existing Table 5.7-1 requires logging of all pressurizer spray cycles where the differential temperature is greater than 150°F. The proposed change would require logging of pressurizer spray cycles only if the differential temperature is greater than 200°F. The increase in the threshold temperature may be perceived to reduce, in some way, a margin of safety. However, the new threshold limit has been incorporated into the analysis of the pressurizer spray system and is compensated for by a decrease in the cummulative usage factor. Although the proposed change may result in fewer spray cycles being logged, with the lower cumulative usage factor limit, fewer cycles will have to be logged before action must be taken. The reanalysis of the pressurizer spray system and the revised criteria for logging of thermal cycles is consistent with the requirements of SRP Section 3.9.1 "Specific Topics and Mechanical Components." On this basis, the staff finds this change to be acceptable.

The existing specification defines the differential temperature ranges and the number of allowed spray cycles for each range. Currently, 50,000 spray cycles are allowed in the temperature range of 150°F to 200°F, 7,000 cycles are allowed in the range 201°F to 300°F, 2,000 cycles in the range 301°F to 400°F, 1,000 cycles in the range of 401°F to 500°F and 800 cycles in the range of 501°F to 600°F. The proposed change allows unlimited cycles below 200°F since, as discussed above, 200°F is the new threshold limit. The new ranges are defined in 50°F increments from 201°F to 600°F with 11,000 cycles allowed to 250°F, 4,000 cycles between 251°F and 300°F, 2,200 cycles allowed between 301°F and 350°F, 1,300 cycles between 351°F and 400°F, 900 cycles between 401°F and 450°F, 500 cycles between 351°F and 500°F, 300 cycles between 501°F and 550°F and 200 cycles between 551°F and 600°F. Comparing the number of spray cycles allowed by the existing specification between 201°F and 300°F and by the proposed specification, the existing specification allows 7,000 cycles whereas the proposed change would allow a total of 15,000 cycles (11,000 cycles between 201°F and 250°F, and 4,000 cycles between 251°F and 300°F).

Because the severity of the transient increases with the differential temperature, splitting the ranges into smaller increments allows considerably more cycles at the lower temperature without significantly increasing the overall severity of the allowed transient. For example, in the existing technical specification, in the range of 201°F to 300°F, 7,000 cycles are allowed, but from an analysis standpoint, all 7,000 cycles could occur at 300°F, whereas in the proposed change, 11,000 cycles are allowed to 250°F which are less severe than cycles at 300°F and 4,000 cycles are allowed at 300°F. Although the increased number of spray cycles allowed by the proposed change represents a relaxation of requirements, the number of allowed spray cycles are accounted for in the analysis of the spray system in accordance with SRP Section 3.9.1; therefore, this change is acceptable.

Currently, the cumulative usage factor limit is 0.75. When the cumulative factor limit is exceeded, spray cycles must be limited to less than the threshold differential temperature and an engineering evaluation must be performed to show

that the spray system remains acceptable prior to removing this restriction. The proposed change reduces the cumulative usage factor limit to 0.65. This reduction in the cumulative usage factor limit is an additional restriction and, in some ways, compensates for the relaxations in the threshold differential temperature and the increased number of allowed spray cycles in the redefined temperature ranges. Because this change is an additional restriction, it is acceptable.

In summary, the NRC staff has reviewed each part of the proposed change and has found each to be acceptable, either on the basis of it being an additional restriction, or, if it is a relaxation of requirements, it nevertheless meets the applicable requirements given in the SRP.

3.0 CONTACT WITH STATE OFFICIAL

The NRC staff has advised the Chief of the Radiological Health Branch, State Department of Health Services, State of California, of the proposed determination of no significant hazards consideration. No comments were received.

4.0 ENVIRONMENTAL CONSIDERATION

These amendments involve changes in the installation or use of facility components located within the restricted area. The staff has determined that the amendments involve no significant increase in the amounts of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupation radiation exposure. The Commission has previously issued proposed findings that the amendments involve no significant hazards consideration, and there has been no public comment on such findings. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR Sec. 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need to be prepared in connection with the issuance of these amendments.

5.0 CONCLUSION

Based upon our evaluation of the proposed changes to the San Onofre Units 2 and 3 Technical Specifications, we have concluded that: there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public. We, therefore, conclude that the proposed changes are acceptable, and are hereby incorporated into the San Onofre 2 and 3 Technical Specifications.

Dated: April 4, 1986