

February 13, 1995

Mr. Harold B. Ray  
Senior Vice President  
Southern California Edison Co.  
Irvine Operations Center  
23 Parker Street  
Irvine, California 92718

SUBJECT: ISSUANCE OF AMENDMENT FOR SAN ONOFRE NUCLEAR GENERATING STATION,  
UNIT NO. 2 (TAC NO. M86191) AND UNIT NO. 3 (TAC NO. M86192)

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No. 115 to Facility Operating License No. NPF-10 and Amendment No. 104 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Unit Nos. 2 and 3. The amendments consist of changes to the Technical Specifications (TS) in partial response to your application dated December 30, 1993, designated by you as PCN-299, as supplemented by letters dated June 3, 1994, August 25, 1994, January 3 and 19, 1995. By letter dated January 30, 1995, the licensee forwarded TS pages in the current format for the change approved by this amendment.

These amendments will revise TS Table 3.3-1, "Reactor Protective Instrumentation," to allow the use of the source range neutron flux monitors in place of safety related excore monitors in Modes 3, 4, and 5, with the reactor trip circuit breakers open or the CEA Drive System not capable of CEA withdrawal, for the purpose of monitoring core reactive changes.

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

Sincerely,  
Original signed by:  
Mel B. Fields, Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

- Enclosures: 1. Amendment No.115 to NPF-10  
2. Amendment No.104 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

February 13, 1995

Mr. Harold B. Ray  
Senior Vice President  
Southern California Edison Co.  
Irvine Operations Center  
23 Parker Street  
Irvine, California 92718

SUBJECT: ISSUANCE OF AMENDMENT FOR SAN ONOFRE NUCLEAR GENERATING STATION,  
UNIT NO. 2 (TAC NO. M86191) AND UNIT NO. 3 (TAC NO. M86192)

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No.115 to Facility Operating License No. NPF-10 and Amendment No. 104 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Unit Nos. 2 and 3. The amendments consist of changes to the Technical Specifications (TS) in partial response to your application dated December 30, 1993, designated by you as PCN-299, as supplemented by letters dated June 3, 1994, August 25, 1994, January 3 and 19, 1995. By letter dated January 30, 1995, the licensee forwarded TS pages in the current format for the change approved by this amendment.

These amendments will revise TS Table 3.3-1, "Reactor Protective Instrumentation," to allow the use of the source range neutron flux monitors in place of safety related excore monitors in Modes 3, 4, and 5, with the reactor trip circuit breakers open or the CEA Drive System not capable of CEA withdrawal, for the purpose of monitoring core reactive changes.

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

Sincerely,

A handwritten signature in cursive script that reads "Mel B. Fields".

Mel B. Fields, Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosures: 1. Amendment No.115 to NPF-10  
2. Amendment No.104 to NPF-15  
3. Safety Evaluation

cc w/encls: See next page

Mr. Harold B. Ray  
Southern California Edison Company

San Onofre Nuclear Generating Station  
Unit Nos. 2 and 3

cc:

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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 NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 115  
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 December 30, 1993, as supplemented by letters dated June 3, 1994, August 25, 1994, and January 3, 19, and 30, 1995, 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.

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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. 115, 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 must be fully implemented no later than 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Mel B. Fields, Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 13, 1995

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 115 TO FACILITY OPERATING LICENSE NO. NPF-10

DOCKET NO. 50-361

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

REMOVE

3/4 3-3  
3/4 3-4  
3/4 3-6

INSERT

3/4 3-3  
3/4 3-4  
3/4 3-6

TABLE 3.3-1

## REACTOR PROTECTIVE INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
1. Manual Reactor Trip	2 sets of 2 2 sets of 2	1 set of 2 1 set of 2	2 sets of 2 2 sets of 2	1, 2 3*, 4*, 5*	1 7A
2. Linear Power Level - High	4	2	3	1, 2	2#,3#
3. Logarithmic Power Level - High					
a. Startup and Operating	4	2(a)(d)	3	1, 2	2#,3#
	4	2	3	3*, 4*, 5*	7A
b. Shutdown	4	0	2**	3, 4, 5	4
4. Pressurizer Pressure - High	4	2	3	1, 2	2#,3#
5. Pressurizer Pressure - Low	4	2(b)	3	1, 2	2#,3#
6. Containment Pressure - High	4	2	3	1, 2	2#,3#
7. Steam Generator Pressure - Low	4/SG	2/SG	3/SG	1, 2	2#,3#
8. Steam Generator Level Low	4/SG	2/SG	3/SG	1, 2	2#,3#
9. Local Power Density - High	4	2(c)(d)(e)	3	1, 2	2#,3#
10. DNBR - Low	4	2(c)(d)(e)	3	1, 2	2#,3#
11. Steam Generator Level - High	4/SG	2/SG	3/SG	1, 2	2#,3#
12. Reactor Protection System Logic	4	2	3	1, 2 3*, 4*, 5*	2#,3# 7A
13. Reactor Trip Breakers	4	2(f)	4	1, 2 3*, 4*, 5*	5 7A
14. Core Protection Calculators	4	2(c)(d)(e)	3	1, 2	2#,3#,7
15. CEA Calculators	2	1	2(e)	1, 2	6#,7
16. Reactor Coolant Flow - Low	4/SG	2/SG	3/SG	1, 2	2#,3#
17. Seismic - High	4	2	3	1, 2	2#,3#
18. Loss of Load	4	2	3	1(g)	2#,3#

TABLE 3.31 (Continued)

TABLE NOTATION

\*With the protective system trip breakers in the closed position, the CEA drive system capable of CEA withdrawal, and fuel in the reactor vessel.

\*\*The source range neutron flux monitors may be used in Modes 3, 4, and 5 with the reactor trip circuit breakers open or the Control Element Assembly (CEA) Drive System not capable of CEA withdrawal.

#The provisions of Specification 3.0.4 are not applicable.

- (a) Trip may be manually bypassed above  $10^{-4}\%$  of RATED THERMAL POWER; bypass shall be automatically removed when THERMAL POWER is less than or equal to  $10^{-4}\%$  of RATED THERMAL POWER.
- (b) Trip may be manually bypassed below 400 psia; bypass shall be automatically removed whenever pressurizer pressure is greater than or equal to 400 psia.
- (c) Trip may be manually bypassed below  $10^{-4}\%$  of RATED THERMAL POWER; bypass shall be automatically removed when THERMAL POWER is greater than or equal to  $10^{-4}\%$  of RATED THERMAL POWER. During testing pursuant to Special Test Exception 3.10.2 or 3.10.3, trip may be manually bypassed below 5% of RATED THERMAL POWER; bypass shall be automatically removed when THERMAL POWER is greater than or equal to 5% of RATED THERMAL POWER.
- (d) Trip may be bypassed during testing pursuant to Special Test Exception 3.10.3.
- (e) See Special Test Exception 3.10.2.
- (f) Each channel shall be comprised of two trip breakers; actual trip logic shall be one-out-of-two taken twice.
- (g) Trip may be bypassed below 55% RATED THERMAL POWER.

ACTION STATEMENTS

- ACTION 1 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within the next 6 hours and/or open the protective system trip breakers.
- ACTION 2 - With the number of channels OPERABLE one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may continue provided the inoperable channel is placed in the bypassed or tripped condition within 1 hour. If the inoperable channel is bypassed, the desirability of maintaining this channel in the bypassed condition shall be reviewed in accordance with Specification 6.5.1.6e. The channel shall be returned to OPERABLE status no later than during the next COLD SHUTDOWN.

TABLE 3.3-1 (Continued)

ACTION STATEMENTS

With a channel process measurement circuit that affects multiple functional units inoperable or in test, bypass or trip all associated functional units as listed below:

Process Measurement Circuit	Functional Unit Bypassed
1. Linear Power (Subchannel or Linear)	Linear Power Level - High Local Power Density - High DNBR - Low
2. Pressurizer Pressure - High	Pressurizer Pressure - High Local Power Density - High DNBR - Low
3. Containment Pressure - High	Containment Pressure - High (RPS) Containment Pressure - High (ESF)
4. Steam Generator Pressure - Low	Steam Generator Pressure - Low Steam Generator $\Delta P$ 1 and 2 (EFAS 1 and 2)
5. Steam Generator Level	Steam Generator Level - Low Steam Generator Level - High Steam Generator $\Delta P$ (EFAS)
6. Core Protection Calculator	Local Power Density - High DNBR - Low

**ACTION 3** - With the number of channels OPERABLE one less than the Minimum Channels OPERABLE requirement, STARTUP and/or POWER OPERATION may continue provided the following conditions are satisfied:

- a. Verify that one of the inoperable channels has been bypassed and place the other channel in the tripped condition within 1 hour, and
- b. All functional units affected by the bypassed/tripped channel shall also be placed in the bypassed/tripped condition as listed below:

Process Measurement Circuit	Functional Unit Bypassed/Tripped
1. Linear Power (Subchannel or Linear)	Linear Power Level - High Local Power Density - High DNBR - Low

TABLE 3.3-1 (Continued)

TABLE NOTATION

2.	Pressurizer Pressure - High	Pressurizer Pressure - High Local Power Density - High DNBR - Low
3.	Containment Pressure - High	Containment Pressure - High (RPS) Containment Pressure - High (ESF)
4.	Steam Generator Pressure - Low	Steam Generator Pressure - Low Steam Generator $\Delta P$ 1 and 2 (EFAS 1 and 2)
5.	Steam Generator Level	Steam Generator Level - Low Steam Generator Level - High Steam Generator $\Delta P$ (EFAS)
6.	Core Protection Calculator	Local Power Density - High DNBR - Low

STARTUP and/or POWER OPERATION may continue until the performance of the next required CHANNEL FUNCTIONAL TEST. Subsequent STARTUP and/or POWER OPERATION may continue if one channel is restored to OPERABLE status and the provisions of ACTION 2 are satisfied.

ACTION 4 - With the number of channels OPERABLE one or more less than required by the Minimum Channels OPERABLE requirement, immediately suspend all operations involving positive reactivity changes and within 4 hours and once per 12 hours thereafter perform shutdown margin verification in accordance with Specification 4.1.1.1.1 if  $T_{avg}$  is greater than 200°F or Specification 4.1.1.2 if  $T_{avg}$  is less than or equal to 200°F.

ACTION 5 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours.

ACTION 6 - a. With one CEAC inoperable, operation may continue for up to 7 days provided that at least once per 4 hours, each CEA is verified to be within 7 inches (indicated position) of all other CEA's in its group. After 7 days, operation may continue provided that Action 6.b is met.\* If the exemption to Specification 3.0.4 is used, Action 6.b must be met.

b. With both CEACs inoperable, operation may continue provided that:\*

1. Within 1 hour the DNBR margin required by Specification 3.2.4.b (COLSS in service) or Specification 3.2.4.d (COLSS out of service) is satisfied.

\*Note: Requirements for CEA position indication given in Technical Specification 3.1.3.2.



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 NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 104  
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 December 30, 1993, as supplemented by letters dated June 3, 1994, August 25, 1994, and January 3, 19, and 30, 1995, 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.

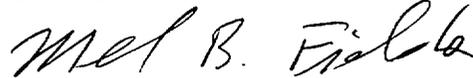
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Facility Operating License No. NPF-15 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 104, 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 must be fully implemented no later than 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Mel B. Fields, Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 13, 1995

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 104 TO FACILITY OPERATING LICENSE NO. NPF-15

DOCKET NO. 50-362

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

REMOVE

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3/4 3-6

INSERT

3/4 3-3  
3/4 3-4  
3/4 3-6

TABLE 3.3-1

REACTOR PROTECTIVE INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
1. Manual Reactor Trip	2 sets of 2 2 sets of 2	1 set of 2 1 set of 2	2 sets of 2 2 sets of 2	1, 2 3*, 4*, 5*	1 7A
2. Linear Power Level - High	4	2	3	1, 2	2#,3#
3. Logarithmic Power Level - High					
a. Startup and Operating	4	2(a)(d)	3	1, 2	2#,3#
	4	2	3	3*, 4*, 5*	7A
b. Shutdown	4	0	2**	3, 4, 5	4
4. Pressurizer Pressure - High	4	2	3	1, 2	2#,3#
5. Pressurizer Pressure - Low	4	2(b)	3	1, 2	2#,3#
6. Containment Pressure - High	4	2	3	1, 2	2#,3#
7. Steam Generator Pressure - Low	4/SG	2/SG	3/SG	1, 2	2#,3#
8. Steam Generator Level Low	4/SG	2/SG	3/SG	1, 2	2#,3#
9. Local Power Density - High	4	2(c)(d)(e)	3	1, 2	2#,3#
10. DNBR - Low	4	2(c)(d)(e)	3	1, 2	2#,3#
11. Steam Generator Level - High	4/SG	2/SG	3/SG	1, 2	2#,3#
12. Reactor Protection System Logic	4	2	3	1, 2 3*, 4*, 5*	2#,3# 7A
13. Reactor Trip Breakers	4	2(f)	4	1, 2 3*, 4*, 5*	5 7A
14. Core Protection Calculators	4	2(c)(d)(e)	3	1, 2	2#,3#,7
15. CEA Calculators	2	1	2(e)	1, 2	6#,7
16. Reactor Coolant Flow - Low	4/SG	2/SG	3/SG	1, 2	2#,3#
17. Seismic - High	4	2	3	1, 2	2#,3#
18. Loss of Load	4	2	3	1(g)	2#,3#

SAN ONOFRE - UNIT 3

3/4 3-3

AMENDMENT NO. 53, 104

TABLE 3.3-1 (Continued)

TABLE NOTATION

\*With the protective system trip breakers in the closed position, the CEA drive system capable of CEA withdrawal, and fuel in the reactor vessel.

\*\*The source range neutron flux monitors may be used in Modes 3, 4, and 5 with the reactor trip circuit breakers open or the Control Element Assembly (CEA) Drive System not capable of CEA withdrawal.

#The provisions of Specification 3.0.4 are not applicable.

- (a) Trip may be manually bypassed above  $10^{-4}\%$  of RATED THERMAL POWER; bypass shall be automatically removed when THERMAL POWER is less than or equal to  $10^{-4}\%$  of RATED THERMAL POWER.
- (b) Trip may be manually bypassed below 400 psia; bypass shall be automatically removed whenever pressurizer pressure is greater than or equal to 400 psia.
- (c) Trip may be manually bypassed below  $10^{-4}\%$  of RATED THERMAL POWER; bypass shall be automatically removed when THERMAL POWER is greater than or equal to  $10^{-4}\%$  of RATED THERMAL POWER. During testing pursuant to Special Test Exception 3.10.2 or 3.10.3, trip may be manually bypassed below 5% of RATED THERMAL POWER; bypass shall be automatically removed when THERMAL POWER is greater than or equal to 5% of RATED THERMAL POWER.
- (d) Trip may be bypassed during testing pursuant to Special Test Exception 3.10.3.
- (e) See Special Test Exception 3.10.2.
- (f) Each channel shall be comprised of two trip breakers; actual trip logic shall be one-out-of-two taken twice.
- (g) Trip may be bypassed below 55% RATED THERMAL POWER.

ACTION STATEMENTS

- ACTION 1 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within the next 6 hours and/or open the protective system trip breakers.
- ACTION 2 - With the number of channels OPERABLE one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may continue provided the inoperable channel is placed in the bypassed or tripped condition within 1 hour. If the inoperable channel is bypassed, the desirability of maintaining this channel in the bypassed condition shall be reviewed in accordance with Specification 6.5.1.6e. The channel shall be returned to OPERABLE status no later than during the next COLD SHUTDOWN.

TABLE 3.3-1 (Continued)

ACTION STATEMENTS

With a channel process measurement circuit that affects multiple functional units inoperable or in test, bypass or trip all associated functional units as listed below:

Process Measurement Circuit	Functional Unit Bypassed
1. Linear Power (Subchannel or Linear)	Linear Power Level - High Local Power Density - High DNBR - Low
2. Pressurizer Pressure - High	Pressurizer Pressure - High Local Power Density - High DNBR - Low
3. Containment Pressure - High	Containment Pressure - High (RPS) Containment Pressure - High (ESF)
4. Steam Generator Pressure - Low	Steam Generator Pressure - Low Steam Generator $\Delta P$ 1 and 2 (EFAS 1 and 2)
5. Steam Generator Level	Steam Generator Level - Low Steam Generator Level - High Steam Generator $\Delta P$ (EFAS)
6. Core Protection Calculator	Local Power Density - High DNBR - Low

**ACTION 3 -** With the number of channels OPERABLE one less than the Minimum Channels OPERABLE requirement, STARTUP and/or POWER OPERATION may continue provided the following conditions are satisfied:

- a. Verify that one of the inoperable channels has been bypassed and place the other channel in the tripped condition within 1 hour, and
- b. All functional units affected by the bypassed/tripped channel shall also be placed in the bypassed/tripped condition as listed below:

Process Measurement Circuit	Functional Unit Bypassed/Tripped
1. Linear Power (Subchannel or Linear)	Linear Power Level - High Local Power Density - High DNBR - Low

TABLE 3.3-1 (Continued)

TABLE NOTATION

2.	Pressurizer Pressure - High	Pressurizer Pressure - High Local Power Density - High DNBR - Low
3.	Containment Pressure - High	Containment Pressure - High (RPS) Containment Pressure - High (ESF)
4.	Steam Generator Pressure - Low	Steam Generator Pressure - Low Steam Generator ΔP 1 and 2 (EFAS 1 and 2)
5.	Steam Generator Level	Steam Generator Level - Low Steam Generator Level - High Steam Generator ΔP (EFAS)
6.	Core Protection Calculator	Local Power Density - High DNBR - Low

STARTUP and/or POWER OPERATION may continue until the performance of the next required CHANNEL FUNCTIONAL TEST. Subsequent STARTUP and/or POWER OPERATION may continue if one channel is restored to OPERABLE status and the provisions of ACTION 2 are satisfied.

ACTION 4 - With the number of channels OPERABLE one or more less than required by the Minimum Channels OPERABLE requirement, immediately suspend all operations involving positive reactivity changes and within 4 hours and once per 12 hours thereafter perform shutdown margin verification in accordance with Specification 4.1.1.1.1 if  $T_{avg}$  is greater than 200°F or Specification 4.1.1.2 if  $T_{avg}$  is less than or equal to 200°F.

ACTION 5 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours.

ACTION 6 -

- a. With one CEAC inoperable, operation may continue for up to 7 days provided that at least once per 4 hours, each CEA is verified to be within 7 inches (indicated position) of all other CEA's in its group. After 7 days, operation may continue provided that Action 6.b is met.\* If the exemption to Specification 3.0.4 is used, Action 6.b must be met.
- b. With both CEACs inoperable, operation may continue provided that:\*
  1. Within 1 hour the DNBR margin required by Specification 3.2.4.b (COLSS in service) or Specification 3.2.4.d (COLSS out of service) is satisfied.

\*Note: Requirements for CEA position indication given in Technical Specification 3.1.3.2.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 115 TO FACILITY OPERATING LICENSE NO. NPF-10  
AND AMENDMENT NO. 104 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 December 30, 1993, as supplemented by letters dated June 3, 1994, August 25, 1994, January 3 and 19, 1995, Southern California Edison Company, et al. (SCE or the licensee) submitted a request for changes to the Technical Specifications (TS) for San Onofre Nuclear Generating Station (SONGS), Unit Nos. 2 and 3. These submittals contain the licensee's justification to replace the current TS with a set of TS based on the CE Owners Group Improved Standard Technical Specifications (STS) issued by the NRC Staff as NUREG-1432 in September 1992. The adoption of Owners Group approved TS is part of an industry-wide initiative to standardize and improve TS. SONGS Units 2 and 3 are the lead plants for adoption of the CE Owners Group standardized TS.

This Safety Evaluation (SE) addresses the licensee's request to implement one provision of the improved STS program in advance of the implementation of the entire program. This provision is a revision to TS Table 3.3-1, "Reactor Protective Instrumentation," to allow the use of the source range neutron flux monitors in place of safety related excore monitors in Modes 3, 4, and 5, with the reactor trip circuit breakers open or the Control Element Assembly (CEA) Drive System not capable of CEA withdrawal, for the purpose of monitoring core reactivity changes. By letter dated January 30, 1995, the licensee forwarded TS pages in the current format for the change evaluated by this SE.

The initial notice in the Federal Register included the letters dated December 30, 1993, June 3, 1994, and August 25, 1994. The additional information contained in the January 3, 19, and 30, 1995, letters were clarifying in nature, within the scope of the initial notice and did not affect the NRC staff's proposed no significant hazards consideration determination.

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## 2.0 EVALUATION

The excore safety channels are necessary to monitor core reactivity changes and are the primary means of detecting and triggering operator actions to respond to reactivity transients. The safety function of the excore detectors during shutdown with the Reactor Trip Breakers (RTBs) open or the CEA Drive System not capable of CEA withdrawal is to provide indication of core reactivity changes and to alert operators of any unexpected increase in reactivity (neutron flux).

The existing Table 3.3-1, Functional Unit 3.b, requires two out of 4 safety related excore monitoring channels to be operable in Modes 3, 4, and 5. To ensure the operability requirement is met, only two out of the 4 channels can be removed out of service at any given time for maintenance/surveillance testing during these modes of operation.

The licensee proposes to use the source range neutron flux monitors in place of safety related excore monitors in Modes 3, 4, and 5, with the RTBs open or the CEA Drive System not capable of CEA withdrawal, for the purpose of monitoring core reactivity changes. The source range channels are more sensitive than the safety related excore channels during these modes of operation and therefore provide a more accurate indication of reactivity changes. The source range channels include an audible alarm function with a procedurally adjustable setpoint designed to alert operators in the event of an unexpected reactivity change such that an inadvertent criticality is avoided.

In these modes of operation, the safety channels or the source range channels would be used for monitoring purposes only. Neither the safety channels nor the source range channels provide automatic equipment control function which directly affect plant equipment to initiate an accident. The use of source range neutron flux detectors had already been evaluated and incorporated into the normal operating procedures during these modes and explicitly credited in the Updated Final Safety Analysis Report (UFSAR) boron dilution event. The use of the source range channels with the RTBs open or the CEA Drive System incapable of CEA withdrawal does not compromise any safety function or create any new possibilities for equipment malfunction. Therefore, operation of the facility in accordance with this proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The use of the source range neutron monitors in place of the excore monitors in Modes 3, 4, and 5, with the RTBs open or the CEA Drive System not capable of CEA withdrawal, is permitted by NUREG-1432, and has been incorporated by the licensee in their improved STS submittal. The proposed modifications to TS Table 3.3-1 to include this provision are consistent with the TS on this subject in both NUREG-1432 and the licensee's improved STS submittal. Since the implementation of this provision in advance of approving the entire improved STS submittal has no adverse impact on other portions of the current TS, and since the source range monitors are fully capable of performing the

required monitoring requirements, the staff concludes that the proposed changes to TS Table 3.3-1 are acceptable.

### 3.0 STATE CONSULTATION

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

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change 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, and there has been no public comment on such finding (59 FR 49434). 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.

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

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Date: February 13, 1995