

September 27, 1994

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

Mr. Edwin A. Cuiles
Vice President
Engineering and Operations
San Diego Gas & Electric Co.
101 Ash Street
San Diego, California 92112

SUBJECT: ISSUANCE OF AMENDMENT FOR SAN ONOFRE NUCLEAR GENERATING STATION,
UNIT NO. 2 (TAC NO. M85097) AND UNIT NO. 3 (TAC NO. M85098)

Gentlemen:

The Commission has issued the enclosed Amendment No.112 to Facility Operating License No. NPF-10 and Amendment No. 101 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 response to your application dated October 29, 1992, designated by you as PCN-400.

These amendments revise Surveillance Requirement 4.5.1.c of TS 3/4.5.1, "Safety Injection Tanks," by including an alternate method of ensuring that power to the safety injection tank vent valves has been removed. The existing method verifies that the fuses are removed. The alternate method verifies that the disconnect switches are in the open position. The amendments include both methods in the TS but require only one.

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.112 to NPF-10
- 2. Amendment No.101 to NPF-15
- 3. Safety Evaluation

cc w/enclosures:
See next page

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DOCUMENT NAME: S085097.AMD

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NAME	DFoster-Curseen	MShuaibi:pk	MFields	TCBerlinger	TQuay	TQuay
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Messrs. Ray and Guiles
Southern California Edison Company

San Onofre Nuclear Generating Station
Unit Nos. 2 and 3

cc:

T. E. Oubre, Esq.
Southern California Edison Company
Irvine Operations Center
23 Parker Street
Irvine, California 92718

Mr. Thomas E. Bostrom, Project Manager
Bechtel Power Corporation
12440 E. Imperial Highway
Norwalk, California 90650

Chairman, Board of Supervisors
County of San Diego
1600 Pacific Highway, Room 335
San Diego, California 92101

Mr. Robert G. Lacy
Manager, Nuclear Department
San Diego Gas & Electric Company
P. O. Box 1831
San Diego, California 92111

Alan R. Watts, Esq.
Rourke & Woodruff
701 S. Parker St. No. 7000
Orange, California 92668-4702

Mr. Steve Hsu
Radiologic Health Branch
State Department of Health Services
Post Office Box 942732
Sacramento, California 94234

Mr. Sherwin Harris
Resource Project Manager
Public Utilities Department
City of Riverside
3900 Main Street
Riverside, California 92522

Resident Inspector/San Onofre NPS
c/o U.S. Nuclear Regulatory Commission
Post Office Box 4329
San Clemente, California 92674

Mr. Charles B. Brinkman, Manager
Washington Nuclear Operations
ABB Combustion Engineering Nuclear Power
12300 Twinbrook Parkway, Suite 330
Rockville, Maryland 20852

Mayor
City of San Clemente
100 Avenida Presidio
San Clemente, California 92672

Mr. R. W. Krieger, Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
P. O. Box 128
San Clemente, California 92674-0128

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
Harris Tower & Pavilion
611 Ryan Plaza Drive, Suite 400
Arlington, Texas 76011-8064

Mr. Don J. Womeldorf
Chief, Environmental Management Branch
California Department of Health Services
714 P Street, Room 616
Sacramento, California 95814



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. 112
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 October 29, 1992, 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. 112, 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

Theodore R. Quay

Theodore R. Quay, Director
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 27, 1994

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 112 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 5-2

INSERT

3/4 5-2

3/4.5 EMERGENCY CORE COOLING SYSTEMS

3/4.5.1 SAFETY INJECTION TANKS

LIMITING CONDITION FOR OPERATION

3.5.1 Each reactor coolant system safety injection tank shall be OPERABLE with:

- a. The isolation valve open and power to the valve removed,
- b. A contained borated water volume of between 1680 and 1807 cubic feet,
- c. Between 1850 and 2800 ppm of boron, and
- d. A nitrogen cover-pressure of between 615 and 655 psia.

APPLICABILITY: MODES 1, 2 and 3.*

ACTION:

- a. With one safety injection tank inoperable, except as a result of a closed isolation valve, restore the inoperable tank to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With one safety injection tank inoperable due to the isolation valve being closed, either immediately open the isolation valve or be in at least HOT STANDBY within one hour and be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.5.1 Each safety injection tank shall be demonstrated OPERABLE:

- a. At least once per 12 hours by:
 1. Verifying that the contained borated water volume and nitrogen cover-pressure in the tanks is within the above limits, and
 2. Verifying that each safety injection tank isolation valve is open.

*With pressurizer pressure greater than or equal to 715 psia.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

- b. At least once per 31 days and within 6 hours after each solution volume increase of greater than or equal to 1% of tank volume by verifying the boron concentration of the safety injection tank solution.
- c. At least once per 31 days by verifying either the disconnect switch is in the open position or the fuses are removed for each safety injection tank vent valve.
- d. At least once per 31 days when the RCS pressure is above 715 psia, by verifying that the isolation valve operator breakers are padlocked in the open position.
- e. At least once per refueling interval by verifying that each safety injection tank isolation valve opens automatically under each of the following conditions:
 - 1. Before an actual or simulated RCS pressure signal exceeds 715 psia, and
 - 2. Upon receipt of an SIAS test signal.



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. 101
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 October 29, 1992, 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. 101, 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

Theodore R. Quay

Theodore R. Quay, Director
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 27, 1994

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 101 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

3/4 5-2

INSERT

3/4 5-2

3/4.5 EMERGENCY CORE COOLING SYSTEMS

3/4.5.1 SAFETY INJECTION TANKS

LIMITING CONDITION FOR OPERATION

3.5.1 Each reactor coolant system safety injection tank shall be OPERABLE with:

- a. The isolation valve open and power to the valve removed.
- b. A contained borated water volume of between 1680 and 1807 cubic feet.
- c. Between 1850 and 2800 ppm of boron, and
- d. A nitrogen cover-pressure of between 615 and 655 psia.

APPLICABILITY: MODES 1, 2 and 3.*

ACTION:

- a. With one safety injection tank inoperable, except as a result of a closed isolation valve, restore the inoperable tank to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With one safety injection tank inoperable due to the isolation valve being closed, either immediately open the isolation valve or be in at least HOT STANDBY within one hour and be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.5.1 Each safety injection tank shall be demonstrated OPERABLE:

- a. At least once per 12 hours by:
 1. Verifying that the contained borated water volume and nitrogen cover-pressure in the tanks is within the above limits, and
 2. Verifying that each safety injection tank isolation valve is open.

*With pressurizer pressure greater than or equal to 715 psia.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

- b. At least once per 31 days and within 6 hours after each solution volume increase of greater than or equal to 1% of tank volume by verifying the boron concentration of the safety injection tank solution.
- c. At least once per 31 days by verifying either the disconnect switch is in the open position or the fuses are removed for each safety injection tank vent valve.
- d. At least once per 31 days when the RCS pressure is above 715 psia, by verifying that the isolation valve operator breakers are padlocked in the open position.
- e. At least once per refueling interval by verifying that each safety injection tank isolation valve opens automatically under each of the following conditions:
 - 1. Before an actual or simulated RCS pressure signal exceeds 715 psia, and
 - 2. Upon receipt of an SIAS test signal.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO.112 TO FACILITY OPERATING LICENSE NO. NPF-10
AND AMENDMENT NO. 101 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 October 29, 1992, 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, Unit Nos. 2 and 3. The proposed changes would revise Surveillance Requirement (SR) 4.5.1.c of TS 3/4.5.1, "Safety Injection Tanks," by including an alternate method of ensuring that power to the safety injection tank (SIT) vent valves has been removed. The existing method verifies that the fuses are removed. The alternate method verifies that the disconnect switches are in the open position. The amendments include both methods in the TS but require only one.

2.0 BACKGROUND

The SIT vent valves provide a means to vent the SITs when nitrogen cover pressure is higher than the TS limit of 655 psia. To keep the required cover pressure, these valves must be maintained closed. To provide additional assurance that these valves remain closed unless required to be opened, the TS contain a requirement to verify that power is removed from the valves. SR 4.5.1.c provides this assurance by requiring verification, every 31 days, that the fuses in the power supply to the SIT vent valves are removed.

This amendment would revise SR 4.5.1.c to allow flexibility in the method of power removal. The requested change will require verification every 31 days that either the disconnect switch for each SIT vent valve is in the open position or that the fuses are removed. The disconnect switches will be the method for removing power to the SIT vent valves whenever these switches are

operable. Opening disconnect switches to remove power to the SIT vent valves will avoid wear on the fuses and the fuse holder from repeatedly pulling and replacing the fuses whenever the SITs are vented. The disconnect switch is also more accessible than the fuses. This feature is valuable because TS 3.5.1 provides only a 1-hour ACTION statement when a SIT is declared inoperable.

With this change, the option to remove power to the SIT vent valves by removing fuses is maintained and will be used if unforeseen difficulties cause the switches to become inoperable at any time.

3.0 EVALUATION

Venting of SITs currently requires (1) replacing the vent valve fuse in its fuse holder, (2) closing the disconnect switch, and (3) operator action to open the vent valve. Though no requirements exist for the disconnect switches, these switches are maintained in the open position at all times when the SIT valves are required closed. Existing TS ensure that power is removed from the associated vent valves and require that the fuses be removed at all times when the SIT vent valves are to be closed. The intent of this requirement is to render the SIT vent valves inoperable. These amendments do not change the requirement to remove power from the valves. They only change the method by which the licensee ensures that power is removed.

In accordance with procedures, the fuses are currently kept in an unlocked drawer and are placed in their holders only when the associated valves are to be opened. Similarly, the disconnect switches are in an unlocked cabinet and, with approval of these amendments, would be closed only when the associated valves are to be opened. These switches are clearly labeled, as are the other switches in the same cabinets, to prevent inadvertent closure. Other components in the cabinets also require the use of procedures for operation, thereby decreasing the possibility of inadvertent closure. Therefore, this amendment does not change the level of administrative control on these valves.

The disconnect switches for the SITs are of the double-pole, single-throw design. In the fully open position, the switches are 180 degrees downward from the closed position. These switches require positive operator action to be closed. To support its proposed amendment, the licensee performed calculations to ensure that these switches will not fail closed from an open position during a design-basis earthquake. The calculations were performed with the conservative assumption that the switches are initially at least 90 degrees in the open position.

This amendment request changes only the method by which the licensee verifies that power is removed from the valves. Though associated fuses will remain in the fuse holder at all times (unless the associated disconnect switch is inoperable), the SIT vent valves will have power removed when the valves are closed by use of the disconnect switches. Therefore, the staff finds these changes to SR 4.5.1.c of TS 3/4.5.1 acceptable.

4.0 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.

5.0 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 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 effluent 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 (58 FR 8783). 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: M. Shuaibi

Date: September 27, 1994



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

September 27, 1994

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

Mr. Edwin A. Guiles
Vice President
Engineering and Operations
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SUBJECT: ISSUANCE OF AMENDMENT FOR SAN ONOFRE NUCLEAR GENERATING STATION,
UNIT NO. 2 (TAC NO. M85097) AND UNIT NO. 3 (TAC NO. M85098)

Gentlemen:

The Commission has issued the enclosed Amendment No. 112 to Facility Operating License No. NPF-10 and Amendment No. 101 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 response to your application dated October 29, 1992, designated by you as PCN-400.

These amendments revise Surveillance Requirement 4.5.1.c of TS 3/4.5.1, "Safety Injection Tanks," by including an alternate method of ensuring that power to the safety injection tank vent valves has been removed. The existing method verifies that the fuses are removed. The alternate method verifies that the disconnect switches are in the open position. The amendments include both methods in the TS but require only one.

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. 112 to NPF-10
2. Amendment No. 101 to NPF-15
3. Safety Evaluation

cc w/enclosures:
See next page

Messrs. Ray and Guiles
Southern California Edison Company

cc:

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Southern California Edison Company
Irvine Operations Center
23 Parker Street
Irvine, California 92718

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12300 Twinbrook Parkway, Suite 330
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San Onofre Nuclear Generating Station
Unit Nos. 2 and 3

Mr. Thomas E. Bostrom, Project Manager
Bechtel Power Corporation
12440 E. Imperial Highway
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611 Ryan Plaza Drive, Suite 400
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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. 112
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 October 29, 1992, 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. 112, 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

Theodore R. Quay

Theodore R. Quay, Director
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 27, 1994

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 112 TO FACILITY OPERATING LICENSE NO. NPF-10

DOCKET NO. 50-361

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REMOVE

3/4 5-2

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3/4 5-2

3/4.5 EMERGENCY CORE COOLING SYSTEMS

3/4.5.1 SAFETY INJECTION TANKS

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- a. The isolation valve open and power to the valve removed,
- b. A contained borated water volume of between 1680 and 1807 cubic feet,
- c. Between 1850 and 2800 ppm of boron, and
- d. A nitrogen cover-pressure of between 615 and 655 psia.

APPLICABILITY: MODES 1, 2 and 3.*

ACTION:

- a. With one safety injection tank inoperable, except as a result of a closed isolation valve, restore the inoperable tank to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With one safety injection tank inoperable due to the isolation valve being closed, either immediately open the isolation valve or be in at least HOT STANDBY within one hour and be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.5.1 Each safety injection tank shall be demonstrated OPERABLE:

- a. At least once per 12 hours by:
 1. Verifying that the contained borated water volume and nitrogen cover-pressure in the tanks is within the above limits, and
 2. Verifying that each safety injection tank isolation valve is open.

*With pressurizer pressure greater than or equal to 715 psia.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

- b. At least once per 31 days and within 6 hours after each solution volume increase of greater than or equal to 1% of tank volume by verifying the boron concentration of the safety injection tank solution.
- c. At least once per 31 days by verifying either the disconnect switch is in the open position or the fuses are removed for each safety injection tank vent valve.
- d. At least once per 31 days when the RCS pressure is above 715 psia, by verifying that the isolation valve operator breakers are padlocked in the open position.
- e. At least once per refueling interval by verifying that each safety injection tank isolation valve opens automatically under each of the following conditions:
 - 1. Before an actual or simulated RCS pressure signal exceeds 715 psia, and
 - 2. Upon receipt of an SIAS test signal.



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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. 101
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 October 29, 1992, 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. 101 , 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

Theodore R. Quay

Theodore R. Quay, Director
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 27, 1994

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 101 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

3/4 5-2

INSERT

3/4 5-2

3/4.5 EMERGENCY CORE COOLING SYSTEMS

3/4.5.1 SAFETY INJECTION TANKS

LIMITING CONDITION FOR OPERATION

3.5.1 Each reactor coolant system safety injection tank shall be OPERABLE with:

- a. The isolation valve open and power to the valve removed.
- b. A contained borated water volume of between 1680 and 1807 cubic feet.
- c. Between 1850 and 2800 ppm of boron, and
- d. A nitrogen cover-pressure of between 615 and 655 psia.

APPLICABILITY: MODES 1, 2 and 3.*

ACTION:

- a. With one safety injection tank inoperable, except as a result of a closed isolation valve, restore the inoperable tank to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With one safety injection tank inoperable due to the isolation valve being closed, either immediately open the isolation valve or be in at least HOT STANDBY within one hour and be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.5.1 Each safety injection tank shall be demonstrated OPERABLE:

- a. At least once per 12 hours by:
 1. Verifying that the contained borated water volume and nitrogen cover-pressure in the tanks is within the above limits, and
 2. Verifying that each safety injection tank isolation valve is open.

*With pressurizer pressure greater than or equal to 715 psia.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

- b. At least once per 31 days and within 6 hours after each solution volume increase of greater than or equal to 1% of tank volume by verifying the boron concentration of the safety injection tank solution.
- c. At least once per 31 days by verifying either the disconnect switch is in the open position or the fuses are removed for each safety injection tank vent valve.
- d. At least once per 31 days when the RCS pressure is above 715 psia, by verifying that the isolation valve operator breakers are padlocked in the open position.
- e. At least once per refueling interval by verifying that each safety injection tank isolation valve opens automatically under each of the following conditions:
 - 1. Before an actual or simulated RCS pressure signal exceeds 715 psia, and
 - 2. Upon receipt of an SIAS test signal.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO.112 TO FACILITY OPERATING LICENSE NO. NPF-10
AND AMENDMENT NO.101 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 October 29, 1992, 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, Unit Nos. 2 and 3. The proposed changes would revise Surveillance Requirement (SR) 4.5.1.c of TS 3/4.5.1, "Safety Injection Tanks," by including an alternate method of ensuring that power to the safety injection tank (SIT) vent valves has been removed. The existing method verifies that the fuses are removed. The alternate method verifies that the disconnect switches are in the open position. The amendments include both methods in the TS but require only one.

2.0 BACKGROUND

The SIT vent valves provide a means to vent the SITs when nitrogen cover pressure is higher than the TS limit of 655 psia. To keep the required cover pressure, these valves must be maintained closed. To provide additional assurance that these valves remain closed unless required to be opened, the TS contain a requirement to verify that power is removed from the valves. SR 4.5.1.c provides this assurance by requiring verification, every 31 days, that the fuses in the power supply to the SIT vent valves are removed.

This amendment would revise SR 4.5.1.c to allow flexibility in the method of power removal. The requested change will require verification every 31 days that either the disconnect switch for each SIT vent valve is in the open position or that the fuses are removed. The disconnect switches will be the method for removing power to the SIT vent valves whenever these switches are

operable. Opening disconnect switches to remove power to the SIT vent valves will avoid wear on the fuses and the fuse holder from repeatedly pulling and replacing the fuses whenever the SITs are vented. The disconnect switch is also more accessible than the fuses. This feature is valuable because TS 3.5.1 provides only a 1-hour ACTION statement when a SIT is declared inoperable.

With this change, the option to remove power to the SIT vent valves by removing fuses is maintained and will be used if unforeseen difficulties cause the switches to become inoperable at any time.

3.0 EVALUATION

Venting of SITs currently requires (1) replacing the vent valve fuse in its fuse holder, (2) closing the disconnect switch, and (3) operator action to open the vent valve. Though no requirements exist for the disconnect switches, these switches are maintained in the open position at all times when the SIT valves are required closed. Existing TS ensure that power is removed from the associated vent valves and require that the fuses be removed at all times when the SIT vent valves are to be closed. The intent of this requirement is to render the SIT vent valves inoperable. These amendments do not change the requirement to remove power from the valves. They only change the method by which the licensee ensures that power is removed.

In accordance with procedures, the fuses are currently kept in an unlocked drawer and are placed in their holders only when the associated valves are to be opened. Similarly, the disconnect switches are in an unlocked cabinet and, with approval of these amendments, would be closed only when the associated valves are to be opened. These switches are clearly labeled, as are the other switches in the same cabinets, to prevent inadvertent closure. Other components in the cabinets also require the use of procedures for operation, thereby decreasing the possibility of inadvertent closure. Therefore, this amendment does not change the level of administrative control on these valves.

The disconnect switches for the SITs are of the double-pole, single-throw design. In the fully open position, the switches are 180 degrees downward from the closed position. These switches require positive operator action to be closed. To support its proposed amendment, the licensee performed calculations to ensure that these switches will not fail closed from an open position during a design-basis earthquake. The calculations were performed with the conservative assumption that the switches are initially at least 90 degrees in the open position.

This amendment request changes only the method by which the licensee verifies that power is removed from the valves. Though associated fuses will remain in the fuse holder at all times (unless the associated disconnect switch is inoperable), the SIT vent valves will have power removed when the valves are closed by use of the disconnect switches. Therefore, the staff finds these changes to SR 4.5.1.c of TS 3/4.5.1 acceptable.

4.0 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.

5.0 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 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 effluent 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 (58 FR 8783). 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: M. Shuaibi

Date: September 27, 1994