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. 27 License No. NPF-10

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications 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 September 3, 1982 and January 25, 1983 comply 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 applications, 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 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. 27, 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 as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

George W. Knighton, Chief Licensing Branch No. 3 Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: November 9, 1984

DL:LB#3 HRood/yt 10/17/84

Dt 30 B#3 JLEE 10/19/84 OELD // LChandler 10/2/84 GWKnighton 40/5/84

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 contain vertical lines indicating the area of change. Also to be replaced is the following reissued page.

Amendment Pages

3/4 4-5
3/4 4-5a

Reissued Page

3/4 4-6

COLD SHUTDOWN - LOOPS FILLED

LIMITING CONDITION FOR OPERATION

- 3.4.1.4.1 a. At least one of the following loop(s)/trains listed below shall be OPERABLE and in operation*:
 - Reactor Coolant Loop 1 and its associated steam generator and at least one associated Reactor Coolant Pump**
 - Reactor Coolant Loop 2 and its associated steam generator and at least one associated Reactor Coolant Pump**
 - 3. Shutdown Cooling Train A
 - 4. Shutdown Cooling Train B
 - One additional Reactor Coolant Loop/shutdown cooling train shall be OPERABLE, or
 - c. The secondary side water level of each steam generator shall be greater than 10% (wide range).

APPLICABILITY: MODE 5, with Reactor Coolant loops filled.

ACTION:

- a. With less than the above required shutdown trains/loops OPERABLE or with less than the required steam generator level, immediately initiate corrective action to return the required trains/loops to OPERABLE status or restore the required level as soon as possible.
- b. With no loop/train in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required loop/ train to operation.

^{*}All reactor coolant pumps and shutdown cooling pumps may be de-energized for up to 1 hour provided (1) no operations are permitted that would cause dilution of the Reactor Coolant System boron concentration, and (2) core outlet temperature is maintained at least 10°F below saturation temperature.

^{**}A Reactor Coolant pump shall not be started with one or more of the Reactor Coolant System cold leg temperatures less than or equal to 235°F unless (1) the pressurizer water volume is less than 900 cubic feet, or (2) the secondary water temperature of each steam generator is less than 100°F above each of the Reactor Coolant system cold leg temperatures.

COLD SHUTDOWN - LOOPS FILLED

SURVEILLANCE REQUIREMENTS

- 4.4.1.4.1.1 The required Reactor Cooling pump(s), if not in operation, shall be determined to be OPERABLE once per 7 days by verifying correct breaker alignments and indicated power availability.
- 4.4.1.4.1.2 The required steam generator(s) shall be determined OPERABLE by verifying the secondary side water level to be $\geq 10\%$ (wide range) at least once per 12 hours.
- 4.4.1.4.1.3 At least one Reactor Coolant loop or shutdown cooling train shall be verified to be in operation and circulating Reactor Coolant at least once per 12 hours.

COLD SHUTDOWN - LOOPS NOT FILLED

LIMITING CONDITION FOR OPERATION

3.4.1.4.2 Two shutdown cooling trains shall be OPERABLE and at least one shutdown cooling train shall be in operation.*

APPLICABILITY: MCDE 5 with Reactor Coolant loops not filled.

ACTION:

- a. With less than the above required trains OPERABLE, immediately initiate corrective action to return the required trains to OPERABLE status as soon as possible.
- b. With no shutdown cooling trains in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required shutdown cooling train to operation.

SURVEILLANCE REQUIREMENTS

4.4.1.4.2 At least one shutdown cooling train shall be determined to be in operation and circulating reactor coolant at least once per 12 hours.

[&]quot;One shutdown cooling train may be inoperable for up to 2 hours for surveillance testing provided the other shutdown cooling train is OPERABLE and in operation.

^{*}The shutdown cooling pump may be de-energized for up to 1 hour provided 1) no operations are permitted that would cause dilution of the Reactor Coolant System boron concentration, and 2) core outlet temperature is maintained at least 10°F below saturation temperature.

SOUTHERN CALIFORNIA EDISON COMPANY

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THE CITY OF RIVERSIDE, CALIFORNIA

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DOCKET NO. 50-362

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 16 License No. NPF-15

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment to the license for San Onofre Nuclear Generating Station, Unit 3 (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 September 3, 1982 and January 25, 1983 comply 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 applications, 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 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. 16, 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 as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

George W. Knighton, Chief Licensing Branch No. 3 Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: November 9, 1984

DL:L8#3 HRood/yt 10/\7/84

01:48#3 10/19/84 OELD // LChandler 10/2/84

10/5/84

FACILITY OPERATING LICENSE NO. NPF-15 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 contain vertical lines indicating the area of change. Also to be replaced is the following reissued page.

Amendment Pages

3/4 4-5 3/4 4-5a Reissued Page

3/4 4-6

COLD SHUTDOWN - LOOPS FILLED

LIMITING CONDITION FOR OPERATION

- 3.4.1.4.1 a. At least one of the following loop(s)/trains listed below shall be OPERABLE and in operation*:
 - Reactor Coolant Loop 1 and its associated steam generator and at least one associated Reactor Coolant Pump**
 - Reactor Coolant Loop 2 and its associated steam generator and at least one associated Reactor Coolant Pump**
 - 3. Shutdown Cooling Train A
 - 4. Shutdown Cooling Train B
 - One additional Reactor Coolant Loop/shutdown cooling train shall be OPERABLE, or
 - c. The secondary side water level of each steam generator shall be greater than 10% (wide range).

APPLICABILITY: MODE 5, with Reactor Coolant loops filled.

ACTION:

- a. With less than the above required shutdown trains/loops OPERABLE or with less than the required steam generator level, immediately initiate corrective action to return the required trains/loops to OPERABLE status or restore the required level as soon as possible.
- b. With no loop/train in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required loop/ train to operation.

^{*}All reactor coolant pumps and shutdown cooling pumps may be de-energized for up to 1 hour provided (1) no operations are permitted that would cause dilution of the Reactor Coolant System boron concentration, and (2) core outlet temperature is maintained at least 10°F below saturation temperature.

^{**}A Reactor Coclant pump shall not be started with one or more of the Reactor Coolant System cold leg temperatures less than or equal to 285°F unless (1) the pressurizer water volume is less than 900 cubic feet, or (2) the secondary water temperature of each steam generator is less than 100°F above each of the Reactor Coolant system cold leg temperatures.

COLD SHUTDOWN - LOOPS FILLED

SURVEILLANCE REQUIREMENTS

- 4.4.1.4.1.1 The required Reactor Cooling pump(s), if not in operation, shall be determined to be OPERABLE once per 7 days by verifying correct breaker alignments and indicated power availability.
- 4.4.1.4.1.2 The required steam generator(s) shall be determined OPERABLE by verifying the secondary side water level to be $\geq 10\%$ (wide range) at least once per 12 hours.
- 4.4.1.4.1.3 At least one Reactor Coolant loop or shutdown cooling train shall be verified to be in operation and circulating Reactor Coolant at least once per 12 hours.

COLD SHUTDOWN - LOOPS NOT FILLED

LIMITING CONDITION FOR OPERATION

3.4.1.4.2 Two shutdown cooling trains shall be OPERABLE $^{\#}$ and at least one shutdown cooling train shall be in operation.*

APPLICABILITY: MODE 5 with Reactor Coolant loops not filled.

ACTION:

- a. With less than the above required trains OPERABLE, immediately initiate corrective action to return the required trains to OPERABLE status as soon as possible.
- b. With no shutdown cooling trains in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required shutdown cooling train to operation.

SURVEILLANCE REQUIREMENTS

4.4.1.4.2 At least one shutdown cooling train shall be determined to be in operation and circulating reactor coolant at least once per 12 hours.

One shutdown cooling train may be inoperable for up to 2 hours for surveillance testing provided the other shutdown cooling train is OPERABLE and in operation.

The shutdown cooling pump may be de-energized for up to 1 hour provided 1) no operations are permitted that would cause dilution of the Reactor Coolant System boron concentration, and 2) core outlet temperature is maintained at least 10°F below saturation temperature.