

Docket Nos. 50-361
and 50-362

June 3, 1991

Mr. Harold B. Ray
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Irvine Operations Center
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Mr. Gary D. Cotton
Senior Vice President
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Gentlemen:

SUBJECT: ISSUANCE OF AMENDMENT NOS. 94 AND 84 TO FACILITY OPERATING
LICENSE NOS. NPF-10 AND NPF-15 FOR THE SAN ONOFRE NUCLEAR
GENERATING STATION, UNIT NOS. 2 AND 3 (TAC NOS. 80101 AND 80102)

The Commission has issued the enclosed Amendment Nos. 94 and 84 to Facility
Operating License Nos. NPF-10 and NPF-15 for San Onofre Nuclear Generating
Station, Unit Nos. 2 and 3, in response to your application dated April 8,
1991, designated by you as PCN-343.

These amendments provide NRC staff approval to revise the Updated Final Safety
Analysis Report to allow the shutdown cooling (SDC) system to be used as a
primary means of cooling the spent fuel pool. This changes the use of the SDC
system as a credited backup system when available, to an alternate means of
spent fuel pool cooling. This change allows systems that normally provide
cooling for the spent fuel pool to be removed from service for maintenance
activities. The shutdown cooling system will not be used as the primary means
of spent fuel pool cooling when Technical Specifications require the shutdown
cooling system to be operable for cooling the reactor core. No changes to the
Technical Specifications or License Conditions are required as a result of this
amendment.

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:

Lawrence E. Kokajko, Project Manager
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 94 to NPF-10
- 2. Amendment No. 84 to NPF-15
- 3. Safety Evaluation

cc w/enclosures:
See next page

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Messrs. Ray and Cotton
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San Onofre Nuclear Generating
Station, Unit Nos. 2 and 3

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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 NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 94
License No. NPF-10

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern California Edison Company, San Diego Gas and Electric Company, the City of Riverside, California, and the City of Anaheim, California (licensees) (the licensee) dated April 8, 1991, 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, by Amendment No. 94 the license is amended to authorize revision of the Updated Final Safety Analysis Report description to allow the shutdown cooling system to be used as an alternate means of cooling the spent fuel pool, and to allow systems that normally provide cooling for the spent fuel pool to be removed from service for maintenance activities. The shutdown cooling system will not be used as the primary means of spent fuel pool cooling when Technical Specifications require the shutdown cooling system to be operable for cooling the reactor core. This was set forth in the application for amendments by Southern California Edison Company, et al., dated April 8, 1991. Southern California Edison Company, et al., shall update the Updated Final Safety Analysis Report to reflect the revised description authorized by this amendment in accordance with 10 CFR 50.71(e).
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

James E. Dyer

James E. Dyer, Director
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Date of Issuance: June 3, 1991



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 NO. 3

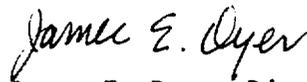
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 84
License No. NPF-15

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern California Edison Company, San Diego Gas and Electric Company, the City of Riverside, California, and the City of Anaheim, California (licensees) (the licensee) dated April 8, 1991, 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, by Amendment No. 84 the license is amended to authorize revision of the Updated Final Safety Analysis Report description to allow the shutdown cooling system to be used as an alternate means of cooling the spent fuel pool, and to allow systems that normally provide cooling for the spent fuel pool to be removed from service for maintenance activities. The shutdown cooling system will not be used as the primary means of spent fuel pool cooling when Technical Specifications require the shutdown cooling system to be operable for cooling the reactor core. This was set forth in the application for amendments by Southern California Edison Company, et al., dated April 8, 1991. Southern California Edison Company, et al., shall update the Updated Final Safety Analysis Report to reflect the revised description authorized by this amendment in accordance with 10 CFR 50.71(e).
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



James E. Dyer, Director
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Date of Issuance: June 3, 1991



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 94 AND 84 TO

FACILITY OPERATING LICENSE NOS. NPF-10 AND 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, UNIT NOS. 2 AND 3

DOCKET NOS. 50-361 AND 50-362

1.0 INTRODUCTION

By letter dated April 8, 1991, Southern California Edison Company, et al., (SCE or the licensee) requested an amendment to Facility Operating License Nos. NPF-10 and NPF-15 that authorize operation of San Onofre Nuclear Generating Station, Unit Nos. 2 and 3 in San Diego County, California. Specifically, the proposed amendment revised the Updated Final Safety Analysis Report (UFSAR) Section 9.1.3, "Spent Fuel Pool Cooling and Cleanup System," to allow the use of the shutdown cooling system as an alternate means of cooling the spent fuel pool.

The spent fuel pool (SFP) cooling system for San Onofre Nuclear Generating Station, Units 2 and 3, consists of two pumps, each powered from the class 1E electrical system, and two heat exchangers. The SFP cooling heat exchangers are cooled by the non-critical loop of the component cooling water (CCW) system. The non-critical loop is supplied by either of two trains of the CCW system. Each CCW heat exchanger is cooled by an independent train of the salt water cooling (SWC) system which transfers heat to the ultimate heat sink, the Pacific Ocean.

The CCW system has two 100 percent capacity train aligned pumps and one 100 percent capacity swing pump, each powered from the class 1E electrical system, and two 100 percent capacity heat exchangers. The two independent critical loops are interconnected with a cross tie downstream of the heat exchangers and a cross tie upstream of the component cooling water pumps. Isolation valves for the two independent critical loops are provided in these two cross ties. The non-critical loop piping is connected between these cross ties such that it can be supplied from either critical loop. Each CCW critical loop operates independently of the other, including when the opposite loop cross

train isolation valves are isolated for maintenance. However, maintenance to be performed on the cross-train isolation valve will require the removal of the SFP cooling system from service. Therefore, an approved alternate cooling system for the SFP is needed. Consequently, by letter dated April 8, 1991, the licensee requested an amendment to Facility Operating License Nos. NPF-10 and NPF-15. The licensee's application proposed to revise the Updated Final Safety Analysis Report (UFSAR) Section 9.1.3, "Spent Fuel Pool Cooling and Cleanup System," to allow the use of the shutdown cooling system (SDC) system as an alternate means of cooling the SFP when the Technical Specification (TS) do not require the SDC system to be operable to cool the reactor core. Currently, the SDC system has been approved only as a backup system and may only be used to cool the SFP if the SDC is available and the normal SFP cooling system fails.

The SDC system has two 100 percent capacity heat exchangers, each cooled by a CCW critical loop. Flow through the SDC heat exchangers is provided by two low pressure safety injection pumps; each pump can be aligned to either SDC heat exchanger. The system can be aligned to either the reactor coolant system or the SFP. The process generally consists of the reversal of blind spectacle flanges, a fill and vent of the suction and discharge lines from the refueling water storage tank, and a valve alignment.

2.0 EVALUATION

2.1 Proposed changes to San Onofre Unit Nos. 2 and 3 UFSAR Section 9.1.3.2, "System Description"

The licensee proposed to add the following paragraph to Section 9.1.3.2:

"The shutdown cooling system is a safety related, and seismically qualified system which is powered by a class 1E electrical system. The cooling capacity of 1 train of the shutdown cooling system is sufficient to maintain the spent fuel pool temperature lower than the spent fuel pool cooling system. During a full core offload from the reactor vessel, the shutdown cooling system is not required to be operable for reactor core cooling. The shutdown cooling system (consisting of 1 LPSI [low pressure safety injection] pump, 1 heat exchanger, flow path to and from the SFP, and the associated diesel generator) may be aligned to cool the spent fuel pool."

The licensee stated that the SDC system will only be used during a complete core off-load when current TS do not require SDC system operability for reactor core cooling. We concur with licensee's rationale and find the above proposed changes to the UFSAR acceptable.

2.2 Proposed changes to San Onofre Unit Nos. 2 and 3 UFSAR Section 9.1.3.3, "Safety Evaluation"

The licensee proposed to reword the second to the last paragraph of Section 9.1.3.3 as follows to reflect the above proposed use of SDC system as an alternate means of cooling the spent fuel pool:

Current Wording:

"The shutdown cooling system, if available, may be used as backup cooling for the spent fuel pool when the full core is removed from the reactor vessel and this covers the possibility referred to under the remarks column of table 9.1-3."

Proposed Wording:

"The shutdown cooling system, if available, may be used as an alternative means of cooling the spent fuel pool when the full core is removed from the reactor vessel. This covers the possibility referred to under the remarks column of table 9.1-3."

Based on our review of licensee's rationale, we find the above proposed rewording of UFSAR acceptable.

2.3 Conclusion

Based upon the licensee's letter dated April 8, 1991, and the information presented above, the staff finds the proposed amendment to the San Onofre Nuclear Generating Station, Unit Nos. 2 and 3, (Facility Operating License Nos. NPF-10 and NPF-15) acceptable. Therefore, staff approval to authorize Southern California Edison Company, et al., to revise the Updated Final Safety Analysis Report to reflect the use of the shutdown cooling system as an alternate means to cool the spent fuel pool is granted.

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, or changes a surveillance requirement. 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. 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.

Principal Contributors: David H. Shum
Lawrence E. Kokajko

Date: June 3, 1991