

October 7, 1999

Mr. Harold B. Ray
Executive Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, CA 92674-0128

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION (SONGS), UNITS 2 AND 3 -
ISSUANCE OF AMENDMENTS RE: HYDROGEN CONTROL SYSTEM
(TAC NOS. MA3545 AND MA3546)

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No. 159 to Facility Operating License No. NPF-10 and Amendment No. 150 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Units 2 and 3, respectively. These amendments are in response to your application dated September 10, 1998 (PCN 496), as supplemented July 19, 1999, and delete the Technical Specification (TS) 3.6.7 relating to hydrogen recombiners.

As requested in your letter of July 19, 1999, your proposed changes to License Conditions 2.C(19)i for Unit 2, and 2. C(17)d for Unit 3 and TS 3.3.11 relating to hydrogen monitoring requirements are considered withdrawn and therefore, are not addressed in these amendments. Notice of Consideration of Issuance of these changes had not been published in the *Federal Register*.

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

Sincerely,

ORIG. SIGNED BY
L. Raghavan, Senior Project Manager, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosures: 1. Amendment No. 159 to NPF-10
2. Amendment No. 150 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

October 7, 1999

Mr. Harold B. Ray
Executive Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, CA 92674-0128

**SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION (SONGS), UNITS 2 AND 3 -
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(TAC NOS. MA3545 AND MA3546)**

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No. 159 to Facility Operating License No. NPF-10 and Amendment No. 150 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Units 2 and 3, respectively. These amendments are in response to your application dated September 10, 1998 (PCN 496), as supplemented July 19, 1999, and delete the Technical Specification (TS) 3.6.7 relating to hydrogen recombiners.

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Sincerely,

A handwritten signature in black ink, appearing to read "L. Raghavan", is written over a horizontal line.

L. Raghavan, Senior Project Manager, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosures: 1. Amendment No. 159 to NPF-10
2. Amendment No. 150 to NPF-15
3. Safety Evaluation

cc w/encls: See next page

San Onofre Nuclear Generating Station, Units 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 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 159
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 September 10, 1998, as supplemented July 19, 1999, 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. 159, 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 shall be implemented within 30 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Stephen Dembek, Chief, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: October 7, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 159

FACILITY OPERATING LICENSE NO. NPF-10

DOCKET NO. 50-361

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

3.6-23
3.6-24

INSERT

3.6-23
3.6-24

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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. 50-362

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 150
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 September 10, 1998, as supplemented July 19, 1999, 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. 150 , 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 shall be implemented within 30 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Stephen Dembek, Chief, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: October 7, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 150

FACILITY OPERATING LICENSE NO. NPF-15

DOCKET NO. 50-362

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

3.6-23
3.6-24

INSERT

3.6-23
3.6-24

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 159 TO FACILITY OPERATING LICENSE NO. NPF-10
AND AMENDMENT NO. 150 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 September 10, 1998 (PCN-496), as supplemented July 19, 1999, Southern California Edison (SCE or the licensee) proposed changes to the San Onofre Nuclear Generating Station (SONGS) Units 2 and 3 technical specifications (TSs) to delete the requirements for equipment used to control hydrogen in the containment structure. The licensee proposed to delete TS 3.6.7 in its entirety to remove requirements for the hydrogen control system.

2.0 BACKGROUND

Regulatory requirements for the hydrogen control system are specified in 10 CFR 50.44 and 10 CFR Part 50, Appendix A, (General Design Criteria 41, 42, and 43). Different requirements apply to facilities according to the date of publication of the Notice of Hearing for the Construction Permit. With regard to hydrogen recombiner and purge-repressurization system requirements, SONGS Units 2 and 3 are subject to the requirements of 10 CFR 50.44(e) for controlling combustible gases following a loss-of-coolant accident (LOCA) by a combustible gas control system, such as recombiners, that does not result in a significant release from containment. By letter dated September 10, 1998, as supplemented July 19, 1999, the licensee applied for an exemption from the 10 CFR 50.44(d) and (e) requirements relating to hydrogen control from the SONGS Units 2 and 3 design basis. The NRC granted this exemption on September 3, 1999. The licensee proposes to reflect the approved exemption by deleting TS 3.6.7.

3.0 EVALUATION

The underlying purpose of 10 CFR 50.44 is to ensure that following a LOCA, an uncontrolled hydrogen-oxygen recombination would not take place, or that the plant could withstand the consequences of uncontrolled hydrogen-oxygen recombination without loss of safety function.

The licensee demonstrated that the plant could withstand the consequences of uncontrolled hydrogen-oxygen recombination without loss of safety function without credit for the hydrogen recombiners or the hydrogen purge system for both the design-basis and the more limiting severe accident with up to 75 percent metal-water reaction that remains in-vessel scenario. Several risk studies, such as NUREG-1150, "Severe Accident Risk: An Assessment for Five U.S. Nuclear Plants," and those performed by the licensee, have shown that the relative importance of hydrogen combustion for large, dry containments with respect to containment failure to be quite low. The licensee also demonstrated that hydrogen recombiners are insignificant from a large, dry containment integrity perspective and the radiological consequences remain unchanged with or without recombiners. Therefore, the requirements for hydrogen recombiners and the backup hydrogen purge capability for large, dry containments, such as SONGS Units 2 and 3, are not necessary. On September 3, 1999, the NRC granted an exemption from the 10 CFR 50.44(d) and (e) requirements relating to hydrogen control from the SONGS Units 2 and 3 design basis. The proposed TS change is consistent with the approved exemption and is therefore, acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the California State official was notified of the proposed issuance of the amendments. 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 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 (64 FR 43778). 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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: L. Raghavan

Date: October 7, 1999