

March 5, 2002

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, UNITS 2 AND 3 -
ISSUANCE OF AMENDMENTS RE: TECHNICAL SPECIFICATION FOR
DIESEL FUEL OIL (TAC NOS. MB3601 AND MB3602)

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No. 183 to Facility Operating License No. NPF-10 and Amendment No. 174 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Units 2 and 3, respectively. The amendments are in response to your application dated December 11, 2001, and revise Technical Specification 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," to support the use of California Diesel fuel rather than the existing Environmental Protection Agency Clear diesel fuel, and reflect a change in the diesel generator load profile in Modes 1 through 4.

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

Sincerely,

/RA/

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

Docket Nos. 50-361 and 50-362

Enclosures: 1. Amendment No. 183 to NPF-10
2. Amendment No. 174 to NPF-15
3. Safety Evaluation

cc w/encls: See next page

March 5, 2002

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, UNITS 2 AND 3 -
ISSUANCE OF AMENDMENTS RE: TECHNICAL SPECIFICATION FOR
DIESEL FUEL OIL (TAC NOS. MB3601 AND MB3602)

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No. 183 to Facility Operating License No. NPF-10 and Amendment No. 174 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Units 2 and 3, respectively. The amendments are in response to your application dated December 11, 2001, and revise Technical Specification 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," to support the use of California Diesel fuel rather than the existing Environmental Protection Agency Clear diesel fuel, and reflect a change in the diesel generator load profile in Modes 1 through 4.

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

Sincerely,

/RA/

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

Docket Nos. 50-361 and 50-362

Enclosures: 1. Amendment No. 183 to NPF-10
2. Amendment No. 174 to NPF-15
3. Safety Evaluation

DISTRIBUTION

PUBLIC RidsNrrDripRtsb (R. Dennig) MRubin
PDIV-2 r/f RidsAcrcsAcnwMailCenter
G. Hill (4) RidsOgcRp
RidsNrrDlpmLpdiv (S. Richards) RidsRgn4MailCenter (K. Kennedy, L. Hurley, D. Bujol)
RidsNrrPMLRaghavan
RidsNrrLAMMcAllister

PACKAGE: ML020780070 TS PAGES: ML020640446

ACCESSION NO: ML020780080 ML020770391

OFFICE	PDIV-2/PM	PDIV-I/LA	EMCB	OGC	PDIV-2/SC
NAME	LRaghavan	McAllister	WBateman	SUttal	SDembek
DATE	2/7/02	2/5/02	2/7/02	2/11/02	2/20/02

OFFICIAL RECORD COPY

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. 183

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 11, 2001, 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. 183, 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 issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

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

Attachment: Changes to the Technical
Specifications

Date of Issuance: March 5, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 183

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

3.8-20
3.8-21

INSERT

3.8-20
3.8-21

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.174
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 11, 2001, 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. 174, 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 issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

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

Attachment: Changes to the Technical
Specifications

Date of Issuance: March 5, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 174

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

3.8-20
3.8-21

INSERT

3.8-20
3.8-21

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 183 TO FACILITY OPERATING LICENSE NO. NPF-10
AND AMENDMENT NO. 174 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 application dated December 11, 2001, Southern California Edison Company, et al., (SCE or the licensee), requested changes to the Technical Specifications (TS) for San Onofre Nuclear Generating Station (SONGS), Units 2 and 3. The proposed changes would revise TS 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," to change the minimum required amount of stored diesel fuel. The licensee indicated that the proposed changes are required to support the use of California Diesel fuel rather than the existing Environmental Protection Agency (EPA) Clear diesel fuel, and reflect a change in the diesel generator load profile in Modes 1 through 4.

The licensee proposed to revise TS 3.8.3, Conditions A and C, and surveillance requirement (SR) 3.8.3.1, to express the 7-day and 6-day fuel volume requirements in gallons rather than percent tank level.

Specifically, the licensee proposed to revise:

- (1) TS 3.8.3, Condition A, to specify that during Modes 1 through 4, if one or more diesel generators (DGs) has a fuel volume in the storage tank less than 45,662 gallons (instead of 89 percent level) and greater than 39,468 gallons (instead of "greater than or equal to 76 percent level), then fuel oil level must be restored to within limits within 48 hours.
- (2) TS 3.8.3, Condition C, to specify that during Modes 5 and 6, if one DG has a fuel volume in the storage tank less than 41,691 gallons (instead of 72 percent level) and greater than 35,735 gallons (instead of "greater than or equal to 63 percent level), then fuel oil level must be restored to within limits within 48 hours.

The volumes specified above do not include allowances for instrument uncertainty.

Enclosure

- (3) SR 3.8.3.1 to verify the above specified fuel volume every 31 days instead of levels.
- (4) TS 3.8.3 Conditions A and C to change the "greater than or equal to" sign to a "greater than" sign for consistency with the rest of the specification.
- (5) TS Bases 3.8.3 to reflect the above proposed TS changes.

The new requirements will continue to ensure that sufficient fuel is available to supply loads for the necessary time periods (7-day, and 6-day supply).

2.0 REGULATORY ANALYSIS

Appendix A to 10 CFR Part 50, General Design Criterion, Criterion 17, Electric power systems, requires :

An onsite electric power system and an offsite electric power system shall be provided to permit functioning of structures, systems, and components important to safety. The safety function for each system (assuming the other system is not functioning) shall be to provide sufficient capacity and capability to assure that (1) specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

American National Standards Institute (ANSI) standard ANSI 195/ANS 59.51, "Fuel Oil Systems for Standby Diesel Generators," requires that the onsite fuel oil storage shall be sufficient to operate the minimum number of DGs following the limiting design-basis accident for either seven (7) days, or the time required to replenish the oil from the sources outside the plant site following any limiting design-basis event without interrupting the operation of the diesel, whichever is longer.

3.0 EVALUATION

SONGS, Units 2 and 3 design includes an onsite power system consisting of one DG for each safety-related load group (two per unit) complete with accessories, fuel storage, and transfer systems. Each DG is provided with sufficient stored diesel fuel oil to operate the DG for a period of 7 days, while the DG is supplying maximum post-loss-of-coolant accident (LOCA) load demand.

Presently, SONGS uses EPA Clear diesel fuel. SONGS is required by California State regulation as implemented by the San Diego Air Pollution Control District to discontinue use of the current EPA Clear diesel fuel and replace it with California Diesel fuel for emissions purposes. The California Diesel fuel has slightly lower heating value (LHV) per gallon basis compared to the existing EPA Clear diesel fuel. As a result, a larger quantity of diesel fuel will be required to ensure a 7-day or 6-day supply of fuel is available for each DG. In addition, the licensee has revised fuel volume calculations to reflect a change to the diesel generator load profile in Modes 1 through 4 in accordance with the provisions of 10 CFR 50.59. The existing fuel volume calculations assumed operation of the third-of-a-kind High Pressure Safety Injection (HPSI) pump under post-accident conditions. Operation of the third-of-a-kind HPSI is no longer required under these conditions. Removal of this load from the post-accident load profile has decreased the overall required volumes of fuel in the tank for Modes 1 through 4, even when use of the new fuel is taken into account. The NRC staff did not review the DG load profile changes which were made in accordance with 10 CFR 50.59.

Using the methods described in ANSI 195/ANS 59.51, and based on the LHV of California Diesel fuel, and the revised post-accident load profile, the licensee has re-calculated the minimum required volume of fuel necessary to ensure a 7-day or 6-day supply of fuel is available for each DG. Based on the revised calculations, the licensee has determined that the amount of stored fuel required to ensure a sufficient supply of fuel in Modes 1 through 4 will be decreased from 49,724 gallons to 45,662 gallons (7-day supply of fuel), and from 42,960 gallons to 39,468 gallons (6-day supply of fuel). The minimum amount of fuel in Modes 5 and 6 will be increased from 40,472 gallons to 41,691 gallons (7-day supply of fuel) and from 34,690 gallons to 35,735 gallons (6-day supply of fuel).

Because the revised volume of stored diesel fuel oil is sufficient to operate the DG for a required period of 7 or 6 days, as applicable, while the DG is supplying maximum post-LOCA load demand, the proposed changes are acceptable. The change of units for the minimum required diesel fuel from tank level (percent) to volume (gallons), and the "greater than or equal to" sign to "greater than" in TS 3.8.3, are administrative in nature and have no impact on the safe operation of the DGs. Therefore, these changes are acceptable.

Because the new values are expressed in gallons, these values need not include allowances for instrument uncertainty. However, the licensee indicated that instrument uncertainty will continue be included in calculations to determine corresponding tank levels for use in control room alarm setpoints and surveillance procedures.

Following implementation of these proposed changes, there will be no change in the ability of the diesel fuel oil storage and transfer system to supply the diesel generators over the required 7-day and 6-day periods and, therefore, the NRC staff finds the proposed changes to be 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 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 (67 FR 932 dated January 8, 2002). 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: March 5, 2002

San Onofre Nuclear Generating Station, Units 2 and 3

cc:

San Diego Gas & Electric Company
P.O. Box 1831
San Diego, CA 92112-4150

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

Mr. Steve Hsu
Radiologic Health Branch
State Department of Health Services
Post Office Box 942732
Sacramento, CA 94327-7320

Mr. Douglas K. Porter
Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, CA 91770

Mr. Ed Bailey, Radiation Program Director
Radiologic Health Branch
State Department of Health Services
Post Office Box 942732 (MS 178)
Sacramento, CA 94327-7320

Mr. David Spath, Chief
Division of Drinking Water and
Environmental Management
P. O. Box 942732
Sacramento, CA 94234-7320

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

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

Eileen M. Teichert, Esq.
Supervising Deputy City Attorney
City of Riverside
3900 Main Street
Riverside, CA 92522

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

Mr. Gary L. Nolff
Power Projects/Contracts Manager
Riverside Public Utilities
2911 Adams Street
Riverside, CA 92504

Mr. Dwight E. Nunn, Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, CA 92674-0128

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Mr. Robert A. Laurie, Commissioner
California Energy Commission
1516 Ninth Street (MS 31)
Sacramento, CA 95814

Mr. Michael Olson
San Onofre Liaison