DOCKET FILES

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

July 12, 1991

Docket No. 50-361

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

Mr. Gary D. Cotton
Senior Vice President
Engineering and Operations
San Diego Gas & Electric Co.
101 Ash Street
San Diego, California 92112

Gentlemen:

SUBJECT: ISSUANCE OF AMENDMENT NO. 96 TO FACILITY OPERATING LICENSE NO. NPF-10 FOR THE SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 2 (TAC NO. 80448)

The Commission has issued the enclosed Amendment No. 96 to Facility Operating License No. NPF-10 for San Onofre Nuclear Generating Station, Unit No. 2. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated May 22, 1991, designated by you as PCN-355.

This amendment revises Surveillance Requirement 4.8.1.1.2.d.1 in TS 3/4.8.1, "A.C. Sources." This amendment permits a surveillance interval extension of up to one month, from 24 to 25 months, on a one-time basis for Cycle 5 to perform certain inspection activities. Additionally, this amendment corrects a typographical error that was found on TS page 3/4 8-3.

Also, this letter corrects an editorial error on TS page 3/4 7-16a (Unit 2 Amendment 95) and TS page 3/4 7-17a (Unit 3 Amendment 85). We regret any inconvenience this may have caused you.

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,

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

Enclosures:
1. Amendment No. 96 to NPF-10
2. Safety Evaluation

cc w/enclosures:
See next page

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Sincerely,
Original signed by:

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

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2. Safety Evaluation

cc w/enclosures: See next page

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CGrimes	GHill (4)	RZimmerman	GPA/PA		

*See previous concurrence

OFC	:LA/PDV/DRPW	:PM/PDV/DRPW	:SECB/DST	:OGC	:D/PDV/DRPW
NAME	:RCesaro	:LKokajko/vw	:FRosa*	: *	:JDyer for JD
DATE	:06/13/91	:06/17/91	:06/10/91	:06/15/91	:06/12/91

OFFICIAL RECORD COPY Document Name: SO 2/3 AMEND TAC NO 80448

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NAME	:RCesaro	:LKokajko/vw	:FRosa	:	:JDyer
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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. 96
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 May 22, 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, 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. 96 , 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

H. Rood for

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 12, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 96

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	INSERT
3/4 8-3	3/4 8-3

SURVEILLANCE REQUIREMENTS (Continued)

a) Manual
b) Simulated loss of offsite power by itself
c) Simulated loss of offsite power in conjunction with an ESF actuation test signal

5. Verifying the generator is synchronized, loaded to greater than or equal to 4700 kw in less than or equal to 77 seconds*, and operates with a load greater than or equal to 4700 kW for at least an additional 60 minutes, and

6. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.

b. At least once per 31 days and after each operation of the diesel where the period of operation was greater than or equal to 1 hour by checking for and removing accumulated water from the day tank.

c.1. At least once per 92 days and from new fuel oil prior to addition to the storage tanks by verifying that a sample obtained in accordance with ASTM-D4057-81 has a water and sediment content of less than or equal to .05 volume percent and a kinematic viscosity @ 40°C of greater than or equal to 1.9 but less than or equal to 4.1 when tested in accordance with ASTM-D975-81.

2. At least once every 92 days by obtaining a sample of fuel oil in accordance with ASTM-D4057-81 and verifying that particulate contamination is less than 10mg/liter when checked in accordance with ASTM-D2276-83, Method A.

d. At least once per refueling interval (The provisions of Technical Specification 4.0.2 are not applicable) by:

1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service.**

2. Verifying the generator capability to reject a load of greater than or equal to 655.7 kW while maintaining voltage at 4360 ± 436 volts and frequency at 60 ± 6.0 Hz.

3. Verifying the generator capability to reject a load of 4700 kW without tripping. The generator voltage shall not exceed 5450 volts during and following the load rejection.

*All engine starts for the purpose of this surveillance testing may be preceded by an engine prelube period and/or other warmup procedures recommended by the manufacturer so that mechanical stress and wear on the diesel engine is minimized.

**For cycle 5 only, this Specification 4.8.1.1.2.d.1 surveillance interval may exceed the 24 month refueling interval but may not exceed 25 months.

SURVEILLANCE REQUIREMENTS (Continued)

4. Simulating a loss of offsite power by itself, and:

   a) Verifying de-energization of the emergency busses and load shedding from the emergency busses.

   b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 10 seconds and operates for greater than or equal to 5 minutes while its generator is loaded with the permanently connected loads. After energization, the steady state voltage and frequency of the emergency busses shall be maintained at 4360 ± 436 volts and 60 ± 1.2 Hz during this test.

5. Verifying that on an ESF test signal, without loss of offsite power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The steady state generator voltage and frequency shall be 4360 ± 436 volts and 60 ± 1.2 Hz within 10 seconds after the auto-start signal; the generator voltage and frequency shall be maintained within these limits during this test.

6. Deleted.

7. Simulating a loss of offsite power in conjunction with an ESF test signal, and

   a) Verifying de-energization of the emergency busses and load shedding from the emergency busses.

   b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 10 seconds, energizes the auto connected emergency (accident) loads through the load sequence and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After loading, the steady state voltage and frequency of the emergency busses shall be maintained at 4360 ± 436 volts and 60 + 1.2/-0.3 Hz during this test.

   c) Verifying that all automatic diesel generator trips, except engine overspeed, generator differential and low-low lube oil pressure, are automatically bypassed.

TABLE 4.7-2
SNUBBER VISUAL INSPECTION INTERVAL

NUMBER OF INOPERABLE SNUBBERS

Population or Category (Notes 1 and 2)	Column A Extend Interval (Notes 3 and 6)	Column B Repeat Interval (Notes 4 and 6)	Column C Reduce Interval (Notes 5 and 6)
1	0	0	1
80	0	0	2
100	0	1	4
150	0	3	8
200	2	5	13
300	5	12	25
400	8	18	36
500	12	24	48
750	20	40	78
1000 or greater	29	56	109

Note 1: The next visual inspection interval for a snubber population or category size shall be determined based upon the previous inspection interval and the number of INOPERABLE snubbers found during that interval. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. However, the licensee must make and document that decision before any inspection and shall use that decision as the basis upon which to determine the next inspection interval for that category.

Note 2: Interpolation between population or category sizes and the number of INOPERABLE snubbers is permissible. Use next lower integer for the value of the limit for Columns A, B, or C if that integer includes a fractional value of INOPERABLE snubbers as determined by interpolation.

Note 3: If the number of INOPERABLE snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval but not greater than 48 months.

Note 4: If the number of INOPERABLE snubbers is equal to or less than the number in Column B, but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.

SURVEILLANCE REQUIREMENTS (Continued)

TABLE 4.7-2
SNUBBER VISUAL INSPECTION INTERVAL

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 96 TO

FACILITY OPERATING LICENSE NO. NPF-10

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 NO. 2

DOCKET NO. 50-361

1.0 INTRODUCTION

By letter dated May 22, 1991, Southern California Edison Company, et. al. (SCE or the licensee) requested changes to the Technical Specifications (TS) for Facility Operating License No. NPF-10 that authorizes operation of San Onofre Nuclear Generating Station, Unit No. 2, in San Diego County, California. The licensee proposed to revise Surveillance Requirement (SR) 4.8.1.1.2.d.1 in TS 3/4.8.1, "A.C. Sources." This revision would permit a surveillance interval extension of up to one month, from 24 to 25 months, on a one-time basis for Cycle 5 to perform certain inspection activities. These activities would be performed once per refueling interval, which is nominally 24 months. However, the provisions of TS 4.0.2, allowing a 25% surveillance interval extension, are not applicable, which creates a scheduling impact.

2.0 EVALUATION

The licensee requested this one-time, one month surveillance interval extension during Cycle 5 operation in order to avoid a potentially significant impact on the schedule for the Cycle 6 refueling outage, which is scheduled to begin on August 17, 1991. The surveillance requirement under review requires extensive maintenance and testing be performed on the diesel generators on a refueling interval (nominal 24 months) basis. These activities include teardown and inspection, taking from 4 to 6 weeks to complete. Since TS 4.0.2 allowing a 25% surveillance interval extension is not applicable to this specification, a

scheduling impact could occur. On account of Cycle 5 operation being extended due to significant unplanned outages (e.g., steam generator feedring repair and reactor coolant pump seal package replacement), this extension has been requested to avoid the possible suspension of refueling activities during the Cycle 6 refueling outage as a result of an administratively inoperable diesel generator.

Schedule impact could occur since the specification surveillance interval for the "A" diesel generator could expire before the surveillance for "B" diesel generator can be completed. The possibility exists for the "A" diesel generator to be declared administratively inoperable while the "B" diesel generator is inoperable for surveillance activities. If this occurred, both diesel generators would be considered inoperable, causing refueling activities (fuel movement) to cease. This administrative problem could occur as early as September 21, 1991. The licensee has requested the one month surveillance extension to preclude this possibility.

The licensee states that the effect of a one month extension on a 24 month interval would be minimal. This extension increases the surveillance interval approximately 4 percent (vs. 25% of TS 4.0.2). All other diesel generator surveillances remain on their original schedules and serve to assure continued diesel generator operability. Since the diesel generator must run at least once every 31 days, operability problems are generally identified during this run rather than during the refueling interval maintenance activities. Moreover, other operability checks help ensure that the diesel generator remains operable. Additionally, the licensee states that there have been only seven valid test failures out of over 260 valid test runs, indicating a 97 percent success record. (San Onofre Unit No. 2 experienced only three of the valid test failures.)

Additionally, the diesel generator manufacturer, MKW Power Systems, Inc., authorized a surveillance interval extension of three months in a letter dated May 6, 1991. This authorization is dependent upon: 1) all fluid systems are visually inspected for leakage during every scheduled start; 2) critical system temperatures and pressures are monitored/trended during monthly surveillance testing; and 3) lube oil filter replacement must be performed as scheduled (recommended on a yearly basis). The licensee is committed to performing these items.

The staff has determined that this extension would not significantly affect the capability of the diesel generators to perform their intended function. The diesel generators are run at least every 31 days, which provides a high degree of confidence that they are operable. Also, the NRC staff agrees that the Cycle 6 refueling outage schedule could be adversely affected by an administratively inoperable diesel generator. Therefore, based upon the information presented above, the NRC staff approves the one-time, one month extension during Cycle 5 operation of the Surveillance Requirement 4.8.1.1.2.d.1, in Technical Specification 3/4.8.1, "A.C. Power Sources," effectively changing the surveillance interval from 24 to 25 months for San Onofre Nuclear Generating Station, Unit No. 2.

Finally, the staff discovered a typographical error on TS page 3/4 8-3; specifically, the word "preceded" was misspelled. With agreement by the licensee in a telephone conversation on June 7, 1991, this typographical error was corrected in this amendment.

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 amendment changes 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 amendment involves 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 amendment involves no significant hazards consideration, and there has been no public comment on such finding. Accordingly, the amendment meets 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 amendment.

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 Contributor: Lawrence E. Kokajko

Date: July 12, 1991