

Mr. Harold B. Ray
 Executive Vice President
 Southern California Edison Company
 San Onofre Nuclear Generating Station
 P.O. Box 128
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July 7, 2000

**SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION (SONGS), UNITS 2 AND 3 -
 ISSUANCE OF AMENDMENTS RE: ADMINISTRATIVE CONTROLS
 (TAC NOS. MA7291 AND MA7292)**

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No. ¹⁶⁸ to Facility Operating License No. NPF-10 and Amendment No. ¹⁵⁹ 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 December 2, 1999 (PCN 506), as supplemented by letters dated May 16 and June 16, 2000. These amendments approve your proposed changes to SONGS 2 and 3 Technical Specifications, Section 5.0 "Administrative Controls." Your proposed changes relating to SONGS Unit 1 will be addressed in a separate amendment.

Sincerely,
 /RA/

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. 168
 2. Amendment No. 159
 3. Safety Evaluation

cc w/encls: See next page

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to NPF-10 PDIV-2 Reading
 to NPF-15 RidsNrrDlpmLpdiv (SRichards)
 RidsNrrLACJamerson
 RidsNrrPMLRaghavan
 RidsOgcRp
 RidsAcrsAcnwMailCenter
 LHurley, RIV
 LSmith, RIV
 DBujol, RIV
 GHill (4)
 WBeckner
 WHuffman
 DDorman
 JWermiel
 CACarpenter
 ESullivan
 DTrimble

Accession No. ML0037

*See previous concurrence

**NLO, with editorial changes

OFFICE	PM:PDIV-2	LA:PDIV-2	TSB*	OGC*	SC:EMCB*	SC:IOLB*
NAME	LRaghavan:led	CJamerson	RDenning	RWeisman**	PPatnaik for ESullivan	DTrimble
DATE	7/5/00	6/30/00	5/1/00	06/27/00	3/15/00	3/6/00
OFFICE	SC:IQMB*	SC:SRXB*	SC:EMEB*	RGEB*	SC:PDIV-2	
NAME	DDorman	JWermiel	DTerao	BZalcman for CCarpenter	SDembek	
DATE	2/29/00	3/1/00	5/30/00	5/24/00	7/6/00	

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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. 168
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 2, 1999, as supplemented May 16, and June 16, 2000, 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. 168 , 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
and Environmental Protection Plan

Date of Issuance: July 7, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 168

FACILITY OPERATING LICENSE NO. NPF-10

DOCKET NO. 50-361

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

Appendix A - Technical Specifications

<u>REMOVE</u>	<u>INSERT</u>
5.0-1	5.0-1
5.0-3	5.0-3
5.0-4	5.0-4
5.0-5	5.0-5
5.0-6	5.0-6
5.0-8	5.0-8
5.0-13	5.0-13
5.0-19a	5.0-19a
5.0-19b	5.0-19b
5.0-28	5.0-28
5.0-29	5.0-29
5.0-32	5.0-32
5.0-33	5.0-33
5.0-34	--

Appendix B - Environmental Protection Plan

3-1	3-1*
3-2	3-2
4-1	4-1
4-2	4-2*

*Overleaf pages provided to maintain document completeness. No changes on these pages.

5.0 ADMINISTRATIVE CONTROLS

5.1 Responsibility

- 5.1.1 The Vice President-Nuclear Generation shall be responsible for overall unit operation and maintenance of Units 2 and 3 at San Onofre Nuclear Generating Station, and all site support functions. He shall delegate in writing the succession to this responsibility during his absence.
- 5.1.2 The Shift Manager shall be responsible for the ultimate command decision authority for all unit activities and operations which affect the safety of the plant, site personnel, and/or the general public. A management directive to this effect, signed by the Vice President-Nuclear Generation shall be reissued to all site/station personnel on an annual basis.
- 5.1.3 The Control Room Supervisor (CRS) shall be responsible for the Control Room command function. A management directive to this effect, signed by the Vice President-Nuclear Generation, shall be issued annually to all site/station personnel. The confines of the Control Room Area shall be defined as depicted in the Licensee Controlled Specification (LCS). During any absence of the CRS from the Control Room Area while the Unit is in MODE 1, 2, 3, or 4, an individual with an active Senior Reactor Operator's (SRO) license shall be designated to assume the Control Room command function. During any absence of the CRS from the Control Room Area while the Unit is in MODE 5 or 6, an individual with an active SRO license or Reactor Operator's license shall be designated to assume the Control Room command function.
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5.2 Organization (continued)

5.2.2 UNIT STAFF

The unit staff organization shall include the following:

- a. A non-Licensed Operator shall be assigned to each reactor containing fuel and an additional non-Licensed Operator shall be assigned for each unit when a reactor is operating in MODES 1, 2, 3, or 4.

With both units shutdown or defueled, a total of three non-Licensed operators are required for the two units.

- b. At least one licensed Reactor Operator (RO) shall be in the Control Room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3 or 4, at least one licensed Senior Reactor Operator (SRO) shall be in the Control Room Area.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A health physics technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- e. Administrative controls shall be developed and implemented to limit the working hours of personnel who perform safety-related functions (e.g., senior reactor operators, reactor operators, auxiliary operators, health physicists, and key maintenance personnel). The controls shall include guidelines on working hours that ensure that adequate shift coverage is maintained without routine heavy use of overtime for individuals.

Any deviation from the working hour guidelines shall be authorized in advance by the cognizant Vice President within the Nuclear Organization, or designees, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

(continued)

5.2 Organization (continued)

5.2.2 UNIT STAFF (continued)

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the cognizant Vice President within the Nuclear Organization, or designees, to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines shall not be authorized.

- f. The Manager, Unit 2/3 Plant Operations (at time of appointment), Shift Managers, and Control Room Supervisors shall hold a Senior Reactor Operator's license. The Control Operators and Assistant Control Operators shall hold a Reactor Operator's license or Senior Reactor Operator's license.
 - g. The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Manager in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. The STA shall have a Bachelor's Degree or equivalent in a scientific or engineering discipline with specific training in plant design and in the response and analysis of the plant for transients and accidents.
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(continued)

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except a) the Health Physics Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and b) multi-discipline supervisors who shall meet or exceed the qualifications listed below.

In addition, the Shift Technical Advisor shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

Multi-discipline supervisors shall meet or exceed the following qualifications:

- a. Education: Minimum of a high school diploma or equivalent.
 - b. Experience: Minimum of four years of related technical experience which shall include three years power plant experience of which one year is at a nuclear plant.
 - c. Training: Complete the multi-discipline supervisor training program.
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5.0 ADMINISTRATIVE CONTROLS

5.4 Technical Specifications (TS) Bases Control

- 5.4.1 Changes to the Bases of the TS shall be made under appropriate administrative controls.
- 5.4.2 Changes to the Bases may be made without prior NRC approval provided the changes do not involve either of the following:
- a. A change in the TS incorporated in the license; or
 - b. A change to the updated FSAR or Bases that involves an unreviewed safety question as defined in 10 CFR 50.59.
- 5.4.3 The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.
- 5.4.4 Proposed changes that meet the criteria of (a) or (b) above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC within 6 months following every Unit 3 refueling, not to exceed 24 months. This schedule is consistent with SCE's submittal of UFSAR updates as allowed by the NRC approved exemption from 10 CFR 50.71(e) dated April 27, 1999.
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5.5 Procedures, Programs, and Manuals (continued)

5.5.2 Programs and Manuals

The following programs and manuals shall be established, implemented, and maintained.

5.5.2.1 Offsite Dose Calculation Manual (ODCM)

- a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the Radiological Environmental Monitoring Program;
- b. The ODCM shall also contain the Radioactive Effluent Controls required by Specification 5.5.2.3 and the Radiological Environmental Monitoring programs required by the LCS, and descriptions of the information that should be included in the Annual Radiological Environmental Operating Report and the Radioactive Effluent Release Report required by Specification 5.7.1.2 and Specification 5.7.1.3.

5.5.2.1.1 Licensee-initiated changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
 1. Sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s);
 2. A determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.106, 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
 3. Documentation of the fact that the change has been reviewed and found acceptable.
- b. Shall become effective upon review and approval by the Vice President-Nuclear Generation or his designee.

(continued)

5.5 Procedures, Programs, and Manuals (continued)

5.5.2.8 Primary Coolant Sources Outside Containment Program (continued)

system (post-accident sampling return piping only). The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.2.9 Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containment, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. Program itself is relocated to the LCS.

5.5.2.10 Inservice Inspection and Testing Program

This program provides controls for inservice inspection of ASME Code Class 1, 2, and 3 components and Code Class CC and MC components including applicable supports. The program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program itself is located in the LCS.

5.5.2.11 Steam Generator (SG) Tube Surveillance Program

This program provides controls for monitoring SG tube degradation. Each SG shall be demonstrated OPERABLE by meeting the requirements of Specification 5.5.2.11 and by meeting an augmented inservice inspection program based on a modification of Regulatory Guide 1.83, Revision 1, which includes at least the following:

a. SG Sample Selection and Inspection

Each SG shall be determined OPERABLE during shutdown by selecting and inspecting at least the minimum number of SG specified in Table 5.5.2.11-1 and 5.5.2.11-2.

b. SG Tube Sample Selection and Inspection

The SG tube and sleeve minimum sample size, inspection result classification, and the corresponding action required shall be as specified in Table 5.5.2.11-1 and 5.5.2.11-2. The inservice inspection of SG tubes and sleeves shall be performed at the frequencies specified in Specification 5.5.2.11.e and the inspected tubes shall be verified acceptable per the acceptance criteria of Specification 5.5.2.11.f. The tubes selected for each inservice inspection shall include at least 3% of the total

(continued)

5.5 Procedures, Programs, and Manuals (continued)

5.5.2.11 Steam Generator Tube Surveillance Program

TABLE 5.5.2.11-1 (page 1 of 1)
STEAM GENERATOR TUBE INSPECTION
SUPPLEMENTAL SAMPLING REQUIREMENTS

1st Sample Inspection			2nd Sample Inspection		3rd Sample Inspection	
Sample Size	Result	Action Required	Result	Action Required	Result	Action Required
A minimum of S tubes per SG	C-1	None	N/A	N/A	N/A	N/A
	C-2	Plug or repair by sleeving defective tubes and inspect an additional 2S tubes in this SG.	C-1	None	N/A	N/A
			C-2	Plug or repair by sleeving defective tubes and inspect an additional 4S tubes in this SG.	C-1	NONE
					C-2	Plug or repair by sleeving defective tubes.
					C-3	Perform action for C-3 result of first sample.
	C-3	Perform action for C-3 result of first sample.	N/A	N/A		
	C-3	Inspect all tubes in this SG, plug or repair by sleeving defective tubes and inspect 2S tubes in each other SG. Notification to NRC pursuant to 5.7.2	All other SGs C-1	None	N/A	N/A
			Some SGs C-2 but no other is C-3	Perform action for C-2 result of second sample.	N/A	N/A
			Additional SG is C-3	Inspect all tubes in each SG and plug or repair by sleeving defective tubes. Notification to NRC pursuant to 5.7.2	N/A	N/A

S = $3 N/n$ % Where N is the number of SGs in the unit and n is the number of SGs inspected during an inspection.

(continued)

5.5 Procedures, Programs, and Manuals (continued)

5.5.2.11 Steam Generator Tube Surveillance Program (continued)

Table 5.5.2.11-2 (page 1 of 1)

Steam Generator Sleeved Tube Inspection

1st Sample Inspection			2nd Sample Inspection	
Sample Size	Result	Action Required	Result	Action Required
A minimum of 20% of the sleeves.	C-1	None	N.A.	N.A.
	C-2	Plug defective repaired tubes and inspect 100% of the sleeves in this SG	C-1	None
			C-2	Plug defective, repaired tubes.
			C-3	Perform action for C-3 result of first sample.
	C-3	Inspect all repaired tubes in this SG, plug defective repaired tubes, and inspect 20% of the sleeves in the other SG. Notification to NRC pursuant to 5.7.2	Other SG is C-1	None
			Other SG is C-2	Perform action for C-2 result of first sample.
			Other SG is C-3	Inspect all repaired tubes in both SG's and plug defective repaired tubes. Notification to NRC pursuant to 5.7.2

(continued)

5.7 Reporting Requirements (continued)

5.7.1.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

- 3.b.2 Letter, O. D. Parr (NRC) to A. E. Scherer (CE), dated December 9, 1975 (NRC Staff Review of the Proposed Combustion Engineering ECCS Evaluation Model Changes)

(Methodology for Specification 3.2.1 for Linear Heat Rate)
- 4.a.1 "Calculative Methods for the C-E Small Break LOCA Evaluation Model," CENPD-137P, August 1974
- 4.a.2 "Calculative Methods for the C-E Small Break LOCA Evaluation Model," CENPD-137, Supplement 1-P, January 1977
- 4.a.3 "Calculative Methods for the ABB C-E Small Break LOCA Evaluation Model," CENPD-137, Supplement 2-P-A, April 1998
- 4.b.1 Letter, K. Kniel (NRC) to A. E. Scherer (CE), dated September 27, 1977 (Evaluation of Topical Report CENPD-133, Supplement, 3-P and CENPD-137, Supplement 1-P)

(Methodology for Specification 3.2.1 for Linear Heat Rate)
- 4.b.2 Letter, T. H. Essig (NRC) to I. C. Rickord (ABB), "Acceptance for Referencing of the Topical Report CENPD-137(P), Supplement, 2, 'Calculative Methods for the C-E Small Break LOCA Evaluation Model' (TAC M95687)," December 16, 1997.
- 5. "Modified Statistical Combination of Uncertainties," CEN-356(V)-P-A, May 1988

(Methodology for Specifications 3.2.4 for Departure From Nucleate Boiling Ratio, and 3.2.5 for Axial Shape Index)
- 6.a "Reload Analysis Methodology for the San Onofre Nuclear Generating Station Units 2 and 3," SCE-9801-P, November 1998

(continued)

5.7 Reporting Requirements (continued)

5.7.1.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

- 6.b "Identification of NRC Safety Evaluation Report Limitations and/or Constraints on Reload Analysis Methodology," CEN-635(S), Rev. 00, February 1999
- 6.c Letter, Stephen Dembek (NRC) to Harold B. Ray (SCE), dated June 2, 1999, "San Onofre Nuclear Generating Station Units 2 and 3 - Evaluation of Reload Analysis Methodology Technology Transfer (TAC Nos. MA4289 and MA4290)"
- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal hydraulic limits, Emergency Core Cooling System (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.
- d. The COLR, including any mid-cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.7.1.6 Not Used

5.7.1.7 Hazardous Cargo Traffic Report

Hazardous cargo traffic on Interstate 5 (I-5) and the AT&SF railway shall be monitored and the results submitted to the NRC Regional Administrator once every three years.

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5.0 ADMINISTRATIVE CONTROLS

5.8 High Radiation Area

5.8.1 Each high radiation area as defined in 10 CFR 20 shall be barricaded and conspicuously posted as a high radiation area, and entrance thereto shall be controlled by requiring issuance of a Radiation Exposure Permit (REP).

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area,
- b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rates in the area have been determined and personnel have been made knowledgeable of them,
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device. This individual is responsible for providing positive radiation protection control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the radiation protection procedures or the applicable REP.

(continued)

5.8. High Radiation Area (continued)

- 5.8.2 In addition, areas that are accessible to personnel and that have radiation levels greater than 1.0 rem (but less than 500 rads at 1 meter) in 1 hour at 30 cm from the radiation source, or from any surface penetrated by the radiation, shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the shift supervisor on duty or health physics supervisor. Doors shall remain locked except during periods of access by personnel under an approved REP that specifies the dose rates in the immediate work areas and the maximum allowable stay time for individuals in that area. In lieu of a stay time specification on the REP, direct or remote continuous surveillance (such as closed circuit TV cameras) may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.
- 5.8.3 Individual high radiation areas that are accessible to personnel, that could result in radiation doses greater than 1.0 rem in 1 hour, and that are within large areas where no enclosure exists to enable locking and where no enclosure can be reasonably constructed around the individual area shall be barricaded and conspicuously posted. A flashing light shall be activated as a warning device whenever the dose rate in such an area exceeds or is expected to exceed 1.0 rem in 1 hour at 30 cm from the radiation source or from any surface penetrated by the radiation.
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3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such changes, tests or experiments do not involve an unreviewed environmental question. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to this requirement. Activities governed by Section 3.3 are not subject to the requirements of this section.

Before engaging in unauthorized construction or operational activities which may affect the environment, the licensee shall prepare and record an environmental evaluation of such activity.* When the evaluation indicates that such activity involves an unreviewed question, the licensee shall provide a written evaluation of such activities and obtain prior approval from the NRC.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the final environmental statement (FES) as modified by the staff's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level (in accordance with 10 CFR Part 51.5(b)(2)) or (3) a matter not previously reviewed and evaluated in the documents specified in (1) of this subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this subsection. These records shall include a written evaluation which provide bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question.

*Activities are excluded from this requirement if all measurable nonradiological effects are confined to the on-site areas previously disturbed during site preparation and plant construction.

3.2 Reporting Related to the NPDES Permits and State Certifications

Violations of the NPDES Permit or State certification (pursuant to Section 401 of the Clean Water Act) shall be reported to the NRC by submittal of copies of the reports required by the NPDES Permit or certification. The licensee shall also provide the NRC with a copy of the results of the following studies at the same time they are submitted to the permitting agency:

Section 316(b) Demonstration Study

Changes and additions to the NPDES Permit or the State certification shall be reported to the NRC within 30 days following the date the change is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, or local environmental regulations are not subject to the requirements of Section 3.1.

4.0 Environmental Conditions

4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to station operation shall be recorded and promptly reported to the NRC within 24 hours followed by a written report within 30 days. No routine monitoring programs are required to implement this condition.

The written report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided a copy of such report as soon as practical but no later than 30 days after it is submitted to the other agency.

The following are examples of unusual or important events: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973; unusual fish kills; increase in nuisance organisms or conditions; and unanticipated or emergency discharge of waste water or chemical substances.

4.2 Environmental Protection Program

4.2.1 Cultural Resources Data Recovery Program

Fourteen archeological sites have been identified within the San Onofre 230 kV transmission line rights-of-way which have been determined to be eligible for the National Register of Historic Places. It has been agreed by the NRC, the

State Historic Preservation Officer (SHPO) and the licensee that the 14 sites would be adversely affected by the expected operation and maintenance activities of the licensee. It was further agreed that the appropriate action to be taken for negating the adverse effects would be a data recovery program; such action would permit documentation of "no adverse effect" determinations.

The licensee is required to provide the NRC with a data recovery program which has been developed in consultation with the SHPO and concurred in by the SHPO. The 14 sites involved in the data recovery program are designated as ORA-495, ORA-496, ORA-499, ORA-825, ORA-830, ORA-831, SDi-6140, ORA-824, ORA-498, SDi-6130, SDi-6149, ORA-447, ORA-725, and ORA-438. The applicant will follow the guidelines presented in "Treatment of Archeological Properties, A Handbook" published by the Advisory Council on Historic Preservation (ACHP), November 1980 and in the Code of Federal Regulations referred to therein.

After ACHP comment is received by the NRC, the data recovery program will be revised, if necessary, to incorporate any comments provided by the ACHP. The applicant will then proceed, in consultation with the SHPO, to implement the data recovery program. Upon completion of the data recovery program, a report shall be submitted to the NRC which will include a description of the results of the program and the disposition of the data recovered. Upon submittal of this report, this section of the EPP is fully satisfied with no further action required.



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. 159
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 2, 1999, as supplemented May 16, and June 16, 2000, 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. 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
and Environmental Protection Plan

Date of Issuance: July 7, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 159

FACILITY OPERATING LICENSE NO. NPF-15

DOCKET NO. 50-362

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

Appendix A - Technical Specifications

<u>REMOVE</u>	<u>INSERT</u>
5.0-1	5.0-1
5.0-3	5.0-3
5.0-4	5.0-4
5.0-5	5.0-5
5.0-6	5.0-6
5.0-8	5.0-8
5.0-13	5.0-13
5.0-19a	5.0-19a
5.0-19b	5.0-19b
5.0-28	5.0-28
5.0-29	5.0-29
5.0-32	5.0-32
5.0-33	5.0-33
5.0-34	--

Appendix B - Environmental Protection Plan

3-2	3-2
4-1	4-1

5.0 ADMINISTRATIVE CONTROLS

5.1 Responsibility

- 5.1.1 The Vice President-Nuclear Generation shall be responsible for overall unit operation and maintenance of Units 2 and 3 at San Onofre Nuclear Generating Station, and all site support functions. He shall delegate in writing the succession to this responsibility during his absence.
- 5.1.2 The Shift Manager shall be responsible for the ultimate command decision authority for all unit activities and operations which affect the safety of the plant, site personnel, and/or the general public. A management directive to this effect, signed by the Vice President-Nuclear Generation shall be reissued to all site/station personnel on an annual basis.
- 5.1.3 The Control Room Supervisor (CRS) shall be responsible for the Control Room command function. A management directive to this effect, signed by the Vice President-Nuclear Generation, shall be issued annually to all site/station personnel. The confines of the Control Room Area shall be defined as depicted in the Licensee Controlled Specification (LCS). During any absence of the CRS from the Control Room Area while the Unit is in MODE 1, 2, 3, or 4, an individual with an active Senior Reactor Operator's (SRO) license shall be designated to assume the Control Room command function. During any absence of the CRS from the Control Room Area while the Unit is in MODE 5 or 6, an individual with an active SRO license or Reactor Operator's license shall be designated to assume the Control Room command function.
-

5.2 Organization

5.2.2 UNIT STAFF

The unit staff organization shall include the following:

- a. A non-Licensed Operator shall be assigned to each reactor containing fuel and an additional non-Licensed Operator shall be assigned for each unit when a reactor is operating in MODES 1, 2, 3, or 4.

With both units shutdown or defueled, a total of three non-Licensed operators are required for the two units.

- b. At least one licensed Reactor Operator (RO) shall be in the Control Room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3 or 4, at least one licensed Senior Reactor Operator (SRO) shall be in the Control Room Area.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A health physics technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- e. Administrative controls shall be developed and implemented to limit the working hours of personnel who perform safety-related functions (e.g., senior reactor operators, reactor operators, auxiliary operators, health physicists, and key maintenance personnel). The controls shall include guidelines on working hours that ensure that adequate shift coverage is maintained without routine heavy use of overtime for individuals.

Any deviation from the working hour guidelines shall be authorized in advance by the cognizant Vice President within the Nuclear Organization, or designees, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

(continued)

5.2 Organization

5.2.2 UNIT STAFF (continued)

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the cognizant Vice President within the Nuclear Organization, or designees, to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines shall not be authorized.

- f. The Manager, Unit 2/3 Plant Operations (at time of appointment), Shift Managers, and Control Room Supervisors shall hold a Senior Reactor Operator's license. The Control Operators and Assistant Control Operators shall hold a Reactor Operator's license or Senior Reactor Operator's license.
 - g. The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Manager in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. The STA shall have a Bachelor's Degree or equivalent in a scientific or engineering discipline with specific training in plant design and in the response and analysis of the plant for transients and accidents.
-
-

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except a) the Health Physics Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and b) multi-discipline supervisors who shall meet or exceed the qualifications listed below.

In addition, the Shift Technical Advisor shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

Multi-discipline supervisors shall meet or exceed the following requirements:

- a. Education: Minimum of a high school diploma or equivalent.
 - b. Experience: Minimum of four years of related technical experience which shall include three years power plant experience of which one year is at a nuclear plant.
 - c. Training: Complete the multi-discipline supervisor training program.
-

5.0 ADMINISTRATIVE CONTROLS

5.4 Technical Specifications (TS) Bases Control

- 5.4.1 Changes to the Bases of the TS shall be made under appropriate administrative controls.
- 5.4.2 Changes to the Bases may be made without prior NRC approval provided the changes do not involve either of the following:
- a. A change in the TS incorporated in the license; or
 - b. A change to the updated FSAR or Bases that involves an unreviewed safety question as defined in 10 CFR 50.59.
- 5.4.3 The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.
- 5.4.4 Proposed changes that meet the criteria of (a) or (b) above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC within 6 months following every Unit 3 refueling, not to exceed 24 months. This schedule is consistent with SCE's submittal of UFSAR updates as allowed by the NRC approved exemption for 10 CFR 50.71(e) dated April 27, 1999.
-

5.5 Procedures, Programs, and Manuals (continued)

5.5.2 Programs and Manuals

The following programs and manuals shall be established, implemented, and maintained.

5.5.2.1 Offsite Dose Calculation Manual (ODCM)

- a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the Radiological Environmental Monitoring Program;
- b. The ODCM shall also contain the Radioactive Effluent Controls required by Specification 5.5.2.3 and the Radiological Environmental Monitoring programs required by the LCS, and descriptions of the information that should be included in the Annual Radiological Environmental Operating Report and the Radioactive Effluent Release Report required by Specification 5.7.1.2 and Specification 5.7.1.3.

5.5.2.1.1 Licensee-initiated changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
 1. Sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s);
 2. A determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.106, 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
 3. Documentation of the fact that the change has been reviewed and found acceptable.
- b. Shall become effective upon review and approval by the Vice President-Nuclear Generation or his designee.

(continued)

5.5 Procedures, Programs, and Manuals (continued)

5.5.2.8 Primary Coolant Sources Outside Containment Program (continued)

system (post-accident sampling return piping only). The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.2.9 Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containment, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. Program itself is relocated to the LCS.

5.5.2.10 Inservice Inspection and Testing Program

This program provides controls for inservice inspection of ASME Code Class 1, 2, and 3 components and Code Class CC and MC components including applicable supports. The program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. Program itself is located in the LCS.

5.5.2.11 Steam Generator (SG) Tube Surveillance Program

This program provides controls for monitoring SG tube degradation. Each SG shall be demonstrated OPERABLE by meeting the requirements of Specification 5.5.2.11 and by meeting an augmented inservice inspection program based on a modification of Regulatory Guide 1.83, Revision 1, which includes at least the following:

- a. SG Sample Selection and Inspection

Each SG shall be determined OPERABLE during shutdown by selecting and inspecting at least the minimum number of SG specified in Table 5.5.2.11-1 and 5.5.2.11-2.

- b. SG Tube Sample Selection and Inspection

The SG tube and sleeve minimum sample size, inspection result classification, and the corresponding action required shall be as specified in Table 5.5.2.11-1 and 5.5.2.11-2. The inservice inspection of SG tubes and sleeves shall be performed at the frequencies specified in Specification 5.5.2.11.e and the inspected tubes shall be verified acceptable per the acceptance criteria of Specification 5.5.2.11.f. The tubes selected for each inservice inspection shall include at least 3% of the total

(continued)

5.5 Procedures, Programs, and Manuals (continued)

5.5.2.11 Steam Generator Tube Surveillance Program

TABLE 5.5.2.11-1 (page 1 of 1)

STEAM GENERATOR TUBE INSPECTION
SUPPLEMENTAL SAMPLING REQUIREMENTS

1st Sample Inspection			2nd Sample Inspection		3rd Sample Inspection	
Sample Size	Result	Action Required	Result	Action Required	Result	Action Required
A minimum of S tubes per SG	C-1	None	N/A	N/A	N/A	N/A
	C-2	Plug or repair by sleeving defective tubes and inspect an additional 2S tubes in this SG.	C-1	None	N/A	N/A
			C-2	Plug or repair by sleeving defective tubes and inspect an additional 4S tubes in this SG.	C-1	NONE
					C-2	Plug or repair by sleeving defective tubes.
					C-3	Perform action for C-3 result of first sample.
	C-3	Perform action for C-3 result of first sample.	N/A	N/A		
	C-3	Inspect all tubes in this SG, plug or repair by sleeving defective tubes and inspect 2S tubes in each other SG. Notification to NRC pursuant to 5.7.2	All other SGs C-1	None	N/A	N/A
			Some SGs C-2 but no other is C-3	Perform action for C-2 result of second sample.	N/A	N/A
			Additional SG is C-3	Inspect all tubes in each SG and plug or repair by sleeving defective tubes. Notification to NRC pursuant to 5.7.2	N/A	N/A

S = $3 N/n$ % Where N is the number of SGs in the unit and n is the number of SGs inspected during an inspection.

(continued)

5.5 Procedures, Programs, and Manuals (continued)

Table 5.5.2.11-2 (page 1 of 1)

Steam Generator Sleeved Tube Inspection

1st Sample Inspection			2nd Sample Inspection	
Sample Size	Result	Action Required	Result	Action Required
A minimum of 20% of the sleeves.	C-1	None	N.A.	N.A.
	C-2	Plug defective repaired tubes and inspect 100% of the sleeves in this SG	C-1	None
			C-2	Plug defective, repaired tubes.
			C-3	Perform action for C-3 result of first sample.
	C-3	Inspect all repaired tubes in this SG, plug defective repaired tubes, and inspect 20% of the sleeves in the other SG. Notification to NRC pursuant to 5.7.2	Other SG is C-1	None
			Other SG is C-2	Perform action for C-2 result of first sample.
			Other SG is C-3	Inspect all repaired tubes in both SG's and plug defective repaired tubes. Notification to NRC pursuant to 5.7.2

(continued)

5.7 Reporting Requirements (continued)

5.7.1.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

- 3.b.2 Letter, O. D. Parr (NRC) to A. E. Scherer (CE), dated December 9, 1975 (NRC Staff Review of the Proposed Combustion Engineering ECCS Evaluation Model Changes)

(Methodology for Specification 3.2.1 for Linear Heat Rate)
- 4.a.1 "Calculative Methods for the C-E Small Break LOCA Evaluation Model," CENPD-137P, August 1974
- 4.a.2 "Calculative Methods for the C-E Small Break LOCA Evaluation Model," CENPD-137, Supplement 1-P, January 1977
- 4.a.3 "Calculative Methods for the ABB C-E Small Break LOCA Evaluation Model," CENPD-137, Supplement 2-P-A, April 1998
- 4.b.1 Letter, K. Kniel (NRC) to A. E. Scherer (CE), dated September 27, 1977 (Evaluation of Topical Report CENPD-133, Supplement, 3-P and CENPD-137, Supplement 1-P)

(Methodology for Specification 3.2.1 for Linear Heat Rate)
- 4.b.2 Letter, T. H. Essig (NRC) to I. C. Rickord (ABB), "Acceptance for Referencing of the Topical Report CENPD-137(P), Supplement, 2, 'Calculative Methods for the C-E Small Break LOCA Evaluation Model' (TAC M95687)," December 16, 1997.
- 5. "Modified Statistical Combination of Uncertainties," CEN-356(V)-P-A, May 1988

(Methodology for Specifications 3.2.4 for Departure From Nucleate Boiling Ratio, and 3.2.5 for Axial Shape Index)
- 6.a "Reload Analysis Methodology for the San Onofre Nuclear Generating Station Units 2 and 3," SCE-9801-P, November 1998

(continued)

5.7 Reporting Requirements (continued)

5.7.1.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

6.b "Identification of NRC Safety Evaluation Report Limitations and/or Constraints on Reload Analysis Methodology," CEN-635(S), Rev. 00, February 1999

6.c Letter, Stephen Dembek (NRC) to Harold B. Ray (SCE), dated June 2, 1999, "San Onofre Nuclear Generating Station Units 2 and 3 - Evaluation of Reload Analysis Methodology Technology Transfer (TAC Nos. MA4289 and MA4290)"

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal hydraulic limits, Emergency Core Cooling System (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any mid-cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.7.1.6 Not Used

5.7.1.7 Hazardous Cargo Traffic Report

Hazardous cargo traffic on Interstate 5 (I-5) and the AT&SF railway shall be monitored and the results submitted to the NRC Regional Administrator once every three years.

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.8 High Radiation Area

- 5.8.1 Each high radiation area as defined in 10 CFR 20 shall be barricaded and conspicuously posted as a high radiation area, and entrance thereto shall be controlled by requiring issuance of a Radiation Exposure Permit (REP)

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area,
- b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rates in the area have been determined and personnel have been made knowledgeable of them,
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device. This individual is responsible for providing positive radiation protection control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the radiation protection procedures or the applicable REP.

(continued)

5.8. High Radiation Area (continued)

- 5.8.2 In addition, areas that are accessible to personnel and that have radiation levels greater than 1.0 rem (but less than 500 rads at 1 meter) in 1 hour at 30 cm from the radiation source, or from any surface penetrated by the radiation, shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the shift supervisor on duty or health physics supervisor. Doors shall remain locked except during periods of access by personnel under an approved REP that specifies the dose rates in the immediate work areas and the maximum allowable stay time for individuals in that area. In lieu of a stay time specification on the REP, direct or remote continuous surveillance (such as closed circuit TV cameras) may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.
- 5.8.3 Individual high radiation areas that are accessible to personnel, that could result in radiation doses greater than 1.0 rem in 1 hour, and that are within large areas, where no enclosure exists to enable locking and where no enclosure can be reasonably constructed around the individual area shall be barricaded and conspicuously posted. A flashing light shall be activated as a warning device whenever the dose rate in such an area exceeds or is expected to exceed 1.0 rem in 1 hour at 30 cm from the radiation source or from any surface penetrated by the radiation.
-

3.2 Reporting Related to the NPDES Permits and State Certifications

Violations of the NPDES Permit or State certification (pursuant to Section 401 of the Clean Water Act) shall be reported to the NRC by submittal of copies of the reports required by the NPDES Permit or certification. The licensee shall also provide the NRC with a copy of the results of the following studies at the same time they are submitted to the permitting agency:

Section 316(b) Demonstration Study

Changes and additions to the NPDES Permit or the State certification shall be reported to the NRC within 30 days following the date the change is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, or local environmental regulations are not subject to the requirements of Section 3.1.

4.0 Environmental Conditions

4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to station operation shall be recorded and promptly reported to the NRC within 24 hours followed by a written report within 30 days. No routine monitoring programs are required to implement this condition.

The written report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided a copy of such report as soon as practical but no later than 30 days after it is submitted to the other agency.

The following are examples of unusual or important events: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973; unusual fish kills; increase in nuisance organisms or conditions; and unanticipated or emergency discharge of waste water or chemical substances.

4.2 Environmental Protection Program

4.2.1 Cultural Resources Data Recovery Program

Fourteen archeological sites have been identified within the San Onofre 230 kV transmission line rights-of-way which have been determined to be eligible for the National Register of Historic Places. It has been agreed by the NRC, the



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 168 TO FACILITY OPERATING LICENSE NO. NPF-10
AND AMENDMENT NO. 159 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 December 2, 1999, as supplemented by letters dated May 16 and June 16, 2000, Southern California Edison Company (SCE or the licensee) proposed several changes to the San Onofre Nuclear Generating Station (SONGS) Units 1, 2 and 3 Technical Specifications (TS). Specifically, the licensee proposed changes to Section D6 and Section 5.0 "Administrative Controls" of the SONGS 1, and 2 and 3 TS, respectively. This safety evaluation addresses those changes relating to SONGS Units 2 and 3 only. The proposed changes relating to SONGS Unit 1 will be addressed in a separate safety evaluation. The licensee's May 16 and June 16, 2000, letters provided additional information and clarifications that were within the scope of the original *Federal Register* notice and did not change the staff's initial proposed no significant hazards consideration determination.

2.0 DESCRIPTION OF TS CHANGE

The SONGS Units 2 and 3 TS were upgraded based on the improved TS provided in NUREG-1432, "Standard Technical Specifications - Combustion Engineering Reactors," Revision 0, dated September 1992. The improved TS included a revised Section 5.0, Administrative Controls. The licensee proposed to revise Section 5.0 to reflect changes (1) in position titles and position responsibilities, (2) that would allow the cognizant Vice President within the Nuclear Organization to approve and review working hour deviations, (3) to add the qualification requirements for a multi-discipline supervisor, (4) to revise the Unit 2 schedule for providing TS Bases changes to the NRC to be the same as the Unit 3 schedule, (5) to remove the reference to the classes of American Society of Mechanical Engineers (ASME) code components, to change the steam generator inspection reporting references, (6) to add references in the Core Operating Limits Report, (7) to revise the requirements governing control of high radiation areas, and (8) to clarify requirements for providing copies of reports and changes to environmental permits to the NRC. The licensee indicated that the purpose of

these changes is to provide consistency and additional flexibility in its implementation of site programs. The staff evaluation of the proposed changes is discussed below.

3.0 EVALUATION

3.1 Administrative Changes

1. TS 5.1.2 and 5.2.2.f and g "Shift Superintendent" will be changed to "Shift Manager." In Section 5.2.2.f, "Plant Superintendent" is changed to "Manager, Unit 2/3 Plant Operations." These changes reflect title changes in the licensee's Operations organization.
2. TS 5.2.2.e is being revised to state that the cognizant Vice President in the Nuclear Organization will approve deviations from the working hour guidelines and review overtime hours. Currently, this section identifies only the Vice President - Nuclear Generation as an authorized approver of deviations from the normal working hours. Personnel that report to the Vice President - Engineering and Technical Services also perform safety-related work activities that are under the overtime requirements specified in this section. The proposed revision will allow the appropriate Vice President to approve and review working hour deviations for their respective divisions.
3. TS Tables 5.5.2.11-1 and -2 for Steam Generator Tube Inspection and Steam Generator Sleeved Tube Inspection are revised by replacing the 10 CFR 50.73 and 10 CFR 50.72 reporting requirement with a reference to TS 5.7.2. TS 5.7.2 provides the appropriate reporting requirements for Category 3 steam generator tube inspection results. The report must be submitted prior to resumption of power. Additional editorial changes are made on Table 5.5.2.11-1 to correct grammar and clarify the table.

The staff considers the above proposed changes to be acceptable since they are administrative only, and do not change the technical requirements in the TS.

3.2 TS Changes for consistency with previous approvals

1. TS 5.4.4 is being revised to indicate the changes to the TS Bases that were implemented per 10 CFR 50.59 without prior NRC approval would be submitted within 6 months following every Unit 3 refueling, not to exceed 24 months, consistent with the schedule for submitting Updated Final Safety Analysis Report (UFSAR) updates required by 10 CFR 50.71(e). By letter dated April 27, 1999, the NRC approved an exemption from certain requirements of 10 CFR 50.71(e). The exemption allowed the licensee to submit one UFSAR update for SONGS Units 2 and 3, 6 months following the Unit 3 refueling outage. This change would make submittal of the TS Bases changes consistent with the UFSAR updates.
2. TS 5.7.1.5, Core Operating Limits Report (COLR), is revised to add references regarding the reload analysis methodology technology transfer. The reload analysis topical, SCE-9801-P, was submitted to the NRC by letter dated November 30, 1998. Also, at the NRC's request, a topical report, CEN-635(S)-P, regarding the limitations contained in NRC safety evaluations on individual computer codes used by SCE was submitted by letter dated March 1, 1999. The NRC's evaluation of these reports and the technology

transfer for the reload analysis is documented and included with a letter dated June 2, 1999. The NRC concluded that SCE has the capability to perform reload design and non-loss-of-coolant accident analyses for San Onofre Units 2 and 3. The two reports and the NRC's evaluation are included as references in the COLR section.

As discussed above, these changes are administrative in nature and reflect previously approved license amendments or exemptions, and are, therefore, acceptable.

3.3 Changes to Appendix B of the license

3.3.1 Currently, Appendix B, Environmental Protection Plan, to the SONGS Units 2 and 3 licenses, Section 3.2, requires the licensee to provide copies to the NRC of the licensee's proposed changes and applications for renewal regarding the California Regional Water Control Board's National Pollutant Discharge Elimination System (NPDES) permit. The licensee proposes to delete this requirement to simplify the reporting requirements related to the NPDES Permits. As required by Appendix B Section 3.2, the licensee will continue to report to the NRC within 30 days all approved changes and additions to the NPDES Permit. The staff does not consider submittal of proposed changes and applications for renewal to the NRC to be necessary. Regulations at 10 CFR 51.10(c), recognizes that "responsibility for Federal regulation of nonradiological pollutant discharges into receiving waters rests by statute with the Environmental Protection Agency" and there is no action required by the NRC regarding the proposed changes and applications for renewal. Since the licensee will continue to report to the NRC within 30 days all approved changes and additions to the NPDES Permit, this requirement for submitting proposed changes and applications for NPDES renewal is not necessary. Therefore, the proposed change is acceptable.

3.3.2 The reporting requirements specified in Appendix B Section 4.1 are revised to provide the NRC copies of reports regarding unusual or important environmental events as soon as practical but no later than 30 days after it is submitted to the other agency. This change provides a definitive time and flexibility for providing copies to the NRC. In addition, it should be noted that pursuant to 10 CFR 50.72, the licensee is required to report within 4 hours any environmental event that results in a news release or report to another government agency. In view of the above, the staff finds the proposed change acceptable.

3.4 Changes for consistency with NRC guidance

3.4.1. TS 5.5.2.1.1 is being revised to delete references to the Licensee Controlled Specifications (LCS). The requirements for the records of reviews and approvals are now located in the Topical Report Quality Assurance Program. Deleting the LCS reference will make this section consistent with the Standard Technical Specifications NUREG-1432. Changes to the requirements for the records of reviews and approvals are controlled by 10 CFR 50.54(a), and no further control is necessary. Accordingly, this change is acceptable.

3.4.2 TS 5.8, High Radiation Area, is revised to be consistent with U.S. NRC Regulatory Guide (RG) 8.38, "Control of Access to the High and Very High Radiation Areas in Nuclear Power Plants," dated June 1993, Section 2.4, "Alternative Methods for Access Control."

This revision provides more flexibility in the handling of controls for high radiation areas. As indicated in Section 2.4 of the RG, this is an acceptable means for the control of access to high radiation areas and is consistent with SCE's radiation protection procedures and practices. At SONGS, a radiation work permit (RWP) is a radiation exposure permit (REP) and is so indicated in the text. All individuals entering a high radiation area at SONGS must do so under an REP. The discussion in the RG on exempting radiation protection qualified individuals (e.g., radiation protection technicians) from the REP requirements is not included. However, radiation protection qualified individuals enter under an REP with appropriate historical dose rate information (from previous surveys), and this information is adequate for purposes of conducting pre-work surveys to obtain current radiological conditions. The word "shall" is used in Section 5.8 in all places of the word "should" used in the RG. The above changes to the high radiation area access control program are consistent with RG 8.38. This guide describes methods acceptable to the NRC staff for implementing the access control requirements of 10 CFR Part 20, Subpart G, Section 20.1601, and, therefore, are acceptable to the staff.

3.3 Changes to TS 5.5.2.10, Inservice Inspection and Testing Program

Currently, TS 5.5.2.10, Inservice Inspection (ISI) and Testing Program, refers and applies to ASME Code Class 1, 2, and 3 components. With the NRC's revision of 10 CFR 50.55a in 1996, the licensee modified its LCS, ISI program and procedures to include ASME Code Class CC and MC components in addition to ASME Code Class 1, 2, and 3 components. This necessitates a revision to TS 5.5.2.10 to include the additional references to ASME Code Class CC and MC components. Since the ISI and testing program will continue to apply to ASME Code Class 1, 2, and 3 components and Code Class CC and MC components, the proposed changes do not involve any change to the technical requirements. Further, any changes to LCS are subject to 10 CFR 50.59 requirements. Therefore, the staff considers the proposed change to be administrative in nature and does not involve any change to technical requirements and therefore, acceptable.

3.6 Staff Qualifications

The licensee intends to utilize multi-discipline supervisors. At SONGS, multi-discipline work teams are responsible for performing multi-discipline activities (mechanical, electrical, and instrumentation and controls work) on plant systems and equipment. The supervisor of these teams is responsible for ensuring that all the activities performed by the team are completed in a quality and efficient manner. Therefore, the supervisor is accountable for the work performed by each individual discipline. Accordingly, the licensee proposed changes to TS 5.3, Unit Staff Qualifications, to include specific qualifications for a supervisor responsible for multi-discipline activities who is not required to be licensed.

ANSI N18.1-1971, Section 4.3.2, states that supervisors not requiring an NRC license shall have a high school diploma or equivalent and a minimum of 4 years of experience in the craft or discipline he/she supervises. The licensee proposes the same type of requirements for the multi-discipline supervisor. Accordingly, the multi-discipline supervisor will be required to have a high school diploma or equivalent with a minimum of 4 years experience in one or more technical disciplines. The 4-years' experience shall include 3 years of power plant experience, of which 1 year is at a nuclear power plant.

The licensee intends to provide the multi-discipline supervisor training in supervisory functions including station work practices, industrial safety practices, and skills necessary to effectively interact with the team. The licensee will also provide training to ensure the individual has a fundamental working knowledge of the multi-discipline tasks that will be performed. Continuing training will also be provided based on lessons learned, operational experience, industry events, procedure changes, and plant modifications. The training program at SONGS is based on the systems approach to training specified in 10 CFR 50.120.

The staff finds the proposed qualifications for a multi-discipline supervisor to be equivalent to that specified in ANSI N18.1-1971, as endorsed by RG 1.8, Revision 2. Such training is adequate for supervisors who are not required to be licensed by the NRC to perform these activities, and, therefore, the staff finds the proposed change to TS 5.3 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

These amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change 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 73096). The amendments also relate to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (10). 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.

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