May 17, 1995

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

SUBJECT: ISSUANCE OF AMENDMENT FOR SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 2 (TAC NO. M88183) AND UNIT NO. 3 (TAC NO. M88184)

Dear Mr. Rav:

The Commission has issued the enclosed Amendment No. ¹¹⁹ to Facility Operating License No. NPF-10 and Amendment No. 108 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Unit Nos. 2 and 3. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated November 3, 1993.

These amendments revise the operability requirements for the containment isolation valves listed in Table 3.6-1 of TS 3/4.6.3, "Containment Isolation Valves," to require that valves in Section D of the table enter an action statement when secured in their engineered safety feature actuation system (ESFAS) actuated position. Previously, when these valves were secured in their ESFAS actuated position, they were considered to be operable even though they were not able to perform their containment isolation function. The associated Bases are revised to reflect these changes.

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.

Original Signed By Mel B. Fields, Project Manager Project Directorate IV-2 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

1. Amendment No.119 to NPF-10 Enclosures: 2. Amendment No.108 to NPF-15 3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION

Docket File	Public	MShuaibi	EPeyton
DHagan, T4A43	GHill (4), T5C3	OPA, 02G5	OC/LFDCB, T9E10
EAdensam	PDIV-2/RF	WBateman	OGC, 015B18
CGrimes, OllE22	ACRS (10), T2E26	Region IV	MFields
KPerkins, RIV/WCFO (4)	LHurley, RIV	EButcher	RBarrett
- / / /	*For previous con	currences see	attached ORC

DOCUMENT NAME: S088183.AMD

OFC	LA/DRPW	SCSB*	SPSB*	OTSB *	PM/PD4-2	OGC *	
NAME	EPeyton	RBarrett	EButcher	CGrimes	MF/jelds:pk	EHoller	6
DATE	₽ 7 11/95	3/23/95	4/11/95	4/28/95	3 #//(/95	5/8 / 95	Dro
9: PI	506020268 950517 DR ADOCK 05000	OFFICIAJ 7 361	L RECORD CO	РҮ		F CENT	RCOPY

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May 17, 199

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

SUBJECT: ISSUANCE OF AMENDMENT FOR SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 2 (TAC NO. M88183) AND UNIT NO. 3 (TAC NO. M88184)

Dear Mr. Ray:

1. . . .

The Commission has issued the enclosed Amendment No. ¹¹⁹ to Facility Operating License No. NPF-10 and Amendment No. ¹⁰⁸ to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Unit Nos. 2 and 3. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated November 3, 1993.

These amendments revise the operability requirements for the containment isolation valves listed in Table 3.6-1 of TS 3/4.6.3, "Containment Isolation Valves," to require that valves in Section D of the table enter an action statement when secured in their engineered safety feature actuation system (ESFAS) actuated position. Previously, when these valves were secured in their ESFAS actuated position, they were considered to be operable even though they were not able to perform their containment isolation function. The associated Bases are revised to reflect these changes.

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

Sincerely,

Original Signed By Mel B. Fields, Project Manager Project Directorate IV-2 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosures: 1. Amendment No.119 to NPF-10 2. Amendment No.108 to NPF-15 3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION Docket File Public MShuaibi EPevton DHagan, T4A43 GHill (4), T5C3 OPA, 02G5 OC/LFDCB, T9E10 EAdensam PDIV-2/RF WBateman OGC, 015B18 CGrimes, OllE22 ACRS (10), T2E26 Region IV MFields KPerkins, RIV/WCFO (4) LHurley, RIV EButcher RBarrett *For previous concurrences see attached ORC

DOCUMENT NAME: SO88183.AMD

OFC	LA/DRPW	SCSB*	SPSB*	OTSB *	PM/PD4-2	OGC *
NAME	EPeyton	RBarrett	EButcher	CGrimes	MF/ieids:pk	EHoller
DATE	新 11/95	3/23/95	4/11/95	4 /28/ 95	A// /95	5/8 / 95
OFFICIAL RECORD COPY						



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

May 17, 1995

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

SUBJECT: ISSUANCE OF AMENDMENT FOR SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 2 (TAC NO. M88183) AND UNIT NO. 3 (TAC NO. M88184)

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No. 119 to Facility Operating License No. NPF-10 and Amendment No. 108 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Unit Nos. 2 and 3. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated November 3, 1993.

These amendments revise the operability requirements for the containment isolation valves listed in Table 3.6-1 of TS 3/4.6.3, "Containment Isolation Valves," to require that valves in Section D of the table enter an action statement when secured in their engineered safety feature actuation system (ESFAS) actuated position. Previously, when these valves were secured in their ÉSFAS actuated position, they were considered to be operable even though they were not able to perform their containment isolation function. The associated Bases are revised to reflect these changes.

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,

Mel B. Fields

Mel B. Fields, Project Manager Project Directorate IV-2 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

1. Amendment No. 119 to NPF-10 Enclosures: 2. Amendment No. 108 to NPF-15 3. Safety Evaluation

cc w/encls: See next page

Mr. Harold B. Ray

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cc:

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

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

Alan R. Watts, Esq. Rourke & Woodruff 701 S. Parker St. No. 7000 Orange, California 92668-4702

Mr. Sherwin Harris Resource Project Manager Public Utilities Department City of Riverside 3900 Main Street Riverside, California 92522

Dr. Harvey Collins, Chief Division of Drinking Water and and Environmental Management California Department of Health Services P. O. Box 942732 Sacramento, California 94234-7320

Regional Administrator, Region IV U.S. Nuclear Regulatory Commission Harris Tower & Pavilion 611 Ryan Plaza Drive, Suite 400 Arlington, Texas 76011-8064

Mr. Richard Krumvieda Manager, Nuclear Department San Diego Gas & Electric Company P.O. Box 1831 San Diego, California 92111

Mr. Steve Hsu Radiologic Health Branch State Department of Health Services Post Office Box 942732 Sacramento, California 94234 Resident Inspector/San Onofre NPS c/o U.S. Nuclear Regulatory Commission Post Office Box 4329 San Clemente, California 92674

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



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 NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 119 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 November 3, 1993, 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.

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- 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) <u>Technical Specifications</u>

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The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 119, 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 to be implemented 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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Mel B. Fields, Project Manager Project Directorate IV-2 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: May 17, 1995

- 2 -

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 119TO 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 Amendment number and contain marginal lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

REMOVE

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INSERT

	3/4	6-18	3/4	6-18
	3/4	6–19	3/4	6-19
	3/4	6-22	3/4	6-22
	3/4	6-23	3/4	6-23
			3/4	6-23a
			3/4	6-23b
B	3/4	6-5	B 3/4	6-5

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CONTAINMENT COOLING SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.3 Two independent groups of containment cooling fans shall be OPERABLE with two fan systems to each group.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one group of the above required containment cooling fans inoperable and both containment spray systems OPERABLE, restore the inoperable group of cooling fans to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With two groups of the above required containment cooling fans inoperable, and both containment spray systems OPERABLE, restore at least one group of cooling fans to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore both above required groups of cooling fans to OPERABLE status within 7 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With one group of the above required containment cooling fans inoperable and one containment spray system inoperable, restore the inoperable spray system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore the inoperable group of containment cooling fans to OPERABLE status within 7 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.3 Each group of containment cooling fans shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
 - 1. Starting each fan group from the control room and verifying that each fan group operates for at least 15 minutes.
 - 2. Verifying a cooling water flow rate of greater than or equal to 2000 gpm to each cooler.
- b. At least once per refueling interval by verifying that each fan group starts automatically on a Containment Cooling Actuation test signal.

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3 The containment isolation valves specified in Table 3.6-1 shall be OPERABLE with isolation times as shown in Table 3.6-1.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- 1. With one or more of the isolation valve(s) specified in Section A, B, C, and E of Table 3.6-1 inoperable, maintain at least one isolation valve OPERABLE in each affected penetration* that is open and either:
 - Restore the inoperable valve(s) to OPERABLE status within 4 hours, or
 - b. Isolate each affected penetration within 4 hours by use of at least one automatic valve secured** in the isolation position, or one closed manual valve or blind flange, or
 - c. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- 2. With one or more of the valves specified in Section D1 of Table 3.6-1 inoperable, within 4 hours secure the inoperable valve(s) in its ESFAS actuated position, and restore the inoperable valve(s) to OPERABLE status during the next cold shutdown or 30 days, whichever is shorter; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- 3. With one or more of the valves specified in Section D2 of Table 3.6-1 inoperable, within 4 hours secure the inoperable valve(s) in its ESFAS actuated position, and restore the inoperable valve(s) to OPERABLE status during the next cold shutdown; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- 4. The provisions of Specification 3.0.4 are not applicable.

****** Locked, sealed or otherwise prevented from unintentional operation.

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^{*} Any flow path from the atmosphere or a piping system inside of containment to the atmosphere or a piping system outside of containment. Each flow path is considered as a separate "penetration".

SURVEILLANCE REQUIREMENTS

4.6.3.1 The isolation valves specified in Section A, B, and E of Table 3.6-1 shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by performance of testing pursuant to Specification 4.0.5. Valves secured** in their isolated position are considered OPERABLE pursuant to this specification.

4.6.3.2 Each isolation valve (except check valves) specified in Section A, B, and E of Table 3.6-1 shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE at least once per refueling interval by verifying that on an ESFAS test signal, each isolation valve actuates to its isolation position.

4.6.3.3 The isolation time of each power operated or automatic valve (except check valves) in Section A and B of Table 3.6-1 shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

4.6.3.4 The manual isolation values specified in Section C of Table 3.6-1 shall be demonstrated OPERABLE in accordance with Specifications 4.6.1.1.a and 4.6.1.2.d.

4.6.3.5 The isolation valves specified in Section D1 and D2 of Table 3.6-1 shall be demonstrated OPERABLE as required by Specification 4.0.5 and surveillance requirements associated with those Limiting Conditions for Operation pertaining to each valve or system in which it is installed. Specification 4.0.5 is not applicable when the valves are secured open.

** Locked, sealed or otherwise prevented from unintentional operation.

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PENETRATION NUMBER		VALVE NUMBER FUNCTION		ISOLATION TIME (SEC)
A.	AUTOMATIC	CONTAINMENT ISOLA	TION (Cont.)	
	43 45 46 46 47 47 68 77 77	HV-6216 HV-9900 HV-9920 HV-9971 HV-9921 HV-7258 HV-7259 2"-129-A-554 HV-5434 2"-108-C-627	Component cooling water outlet Containment normal A/C chilled water inlet Containment normal A/C chilled water outlet Containment normal A/C chilled water outlet Containment normal A/C chilled water outlet Containment waste gas vent header Containment waste gas vent header Charging line to auxiliary spray check valve Nitrogen supply to safety injection tanks Nitrogen supply to safety injection tanks check valve	40 40 40 40 40 40 40 NA 40 NA
Β.	CONTAINMEN	NT PURGE (CPIS)		
	18 18 18 19 19 19 19	HV-9949** HV-9948** HV-9821 HV-9823 HV-9950** HV-9951** HV-9824 HV-9825	Containment purge inlet (normal) Containment purge inlet (normal) Containment mini-purge inlet Containment mini-purge inlet Containment purge outlet (normal) Containment purge outlet (normal) Containment mini-purge outlet	12 12 5 5 12 12 5 5
C.	MANUAL*			
	6 9 9 9 10B 10B 16A 16A 16B 16B 16B 20	2"-099-C-334 HV-9337#@ HV-9377#@ HV-9336#@ HV-9379#@ 3/4"-038-C-396 3/4"-039-C-396 HV-0500 HV-0501 HV-0501 HV-0502 - HV-0503 2"-321-C-376	Safety injection drain to RWST Shutdown cooling to LPSI pumps Shutdown cooling to LPSI pumps Shutdown cooling to LPSI pumps Shutdown cooling to LPSI pumps Integrated leak rate test pressure sensor Integrated leak rate test pressure sensor Post LOCA hydrogen monitor Post LOCA hydrogen monitor Post LOCA hydrogen monitor Post LOCA hydrogen monitor Quench tank makeup	NA NA NA NA NA NA NA NA NA NA NA

*Manual valves may be opened on an intermittent basis under administrative control. **Power to the valve removed in accordance with Specification 3.6.1.7. #Not subject to Type C leakage tests. @Shutdown cooling valves may be opened in MODE 4.

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AMENDMENT NO. 46

PENETRATION NUMBER		VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION <u>TIME (SEC)</u>	
C.	MANUAL*	(Cont.)			
	21 25 31 31 68 70 70	2"-055-C-387 10"-100-C-212 10"-101-C-212 HV-9946 HCV-9945 2"-130-C-334 2"-037-C-387 2"-038-C-387	Service air supply line Refueling canal fill and drain Refueling canal fill and drain Containment hydrogen purge inlet Containment hydrogen purge inlet Charging line to auxiliary spray Auxiliary steam inlet to utility stations Auxiliary steam inlet to utility stations	NA NA NA NA NA NA	
	74 74	HV-9917 HCV-9918	Containment hydrogen purge outlet Containment hydrogen purge outlet	NA NA	

Amendment No. 46, 119

. . .

^{*} Manual valves may be opened on an intermittent basis under administrative control.

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PENETRATION NUMBER		VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION <u>TIME (SEC)</u>	
D1.	SAFETY	INJECTION			
	3 5 5 39 39 41 41 48 49 50 51	HV-9323# HV-9324# HV-9326# HV-9327# HV-9329# HV-9330# HV-9332# HV-9322# HV-9325# HV-9328# HV-9331#	High Pressure Safety Injection High Pressure Safety Injection Low Pressure Safety Injection	NA NA NA NA NA NA NA NA NA	
D2.	OTHER				
	8 10A 27A 40A 73A 52 53 56 57 58 59 60 61 62 63	HV-9200 HV-0352A# HV-0352D# HV-0352C# HV-9367 HV-9368 HV-6366 HV-6372 HV-6368 HV-6370 HV-6369 HV-6371 HV-6367 HV-6373	Charging line to regenerative heat exchanger Containment pressure detectors Containment pressure detectors Containment pressure detectors Containment pressure detectors Containment spray inlet Containment spray inlet Containment emergency A/C cooling water outlet Containment emergency A/C cooling water outlet	NA NA NA NA NA NA NA NA NA NA NA	

#Not subject to Type C leakage tests.

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PENETRATION NUMBER		VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION TIME (SEC)	
E.	OTHER				
	3	3"-018-A-551#	High pressure safety injection	NA	
	5	3"-019-A-551#	High pressure safety injection	NA	
	8	2"-122-C-554	Charging line to regenerative heat exchanger	NA	
	17	HV-4058#*	Steam generator secondary coolant sample	NA	
	32	HV-8202#	Mainsteam isolation bypass	NA	
	33	HV-8203#	Mainsteam isolation bypass	NA	
	36	HV-4054#*	Steam generator blowdown	NA	
	37	HV-4053#*	Steam generator blowdown	NA	
	39	3"-020-A-551#	High pressure safety injection	NA	
	41	3"-021-A-551#	High pressure safety injection	NA	
	44	HV-4057#*	Steam generator secondary coolant sample	NA	
	48	8"-072-A-552#	Low pressure safety injection	NA	
	49	8"-073-A-552#	Low pressure safety injection	NA	
	50	8"-074-A-552#	Low pressure safety injection	NA	
	51	8"-075-A-552#	Low pressure safety injection	NA	
	52	8"-004-C-406	Containment spray inlet	NA	
	53	8"-006-C-406	Containment spray inlet	NA	
	54	HV-9304#@	Containment emergency sump recirculation	NA	
	54	HV-9302#@	Containment emergency sump recirculation	NA	
	55	HV-9305#@	Containment emergency sump recirculation	NA	
	55	HV-9303#@	Containment emergency sump recirculation	NA	
	67	3"-157-A-550	Hot leg injection	NA	
	67	HV-9434	Hot leg injection	NA	
	71	3"-158-A-550	Hot leg injection	NA	
	71	HV-9420	Hot leg injection	NA	

Not subject to Type C leakage tests.

- * Manual valves may be opened on an intermittent basis under administrative control.
- @ These valves are surveilled for position and power available by Technical Specification 3/4 5.2.

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SAN ONOFRE - UNIT 2

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BASES

3/4.6.3 CONTAINMENT ISOLATION VALVES (Continued)

Section C of Table 3.6-1 contains a listing of manual valves that are normally closed and assumed to be closed under design basis accident conditions, but which may be opened intermittently for service, maintenance or test during normal operation provided adequate administrative controls are implemented to ensure operator action is taken to close such valves in the event of an accident.

All valves in Section A, B, C, or E are considered OPERABLE for containment isolation purpose if they are indeed locked, sealed or otherwise secured in the closed position and leakage through the affected flow path is shown to be within limits when tested pursuant to 10 CFR 50 Appendix J.

Sections D1 and D2 of Table 3.6-1 each contain a listing of valves which operate automatically to open on an ESFAS signal to prevent or mitigate the consequences of the design basis accident. Surveillance requirement 4.6.1.1.a is not applicable to such valves. The OPERABILITY of such valves is determined by ESFAS response time testing of Specification 3/4.3.2.

Section E of Table 3.6-1 contains a listing of valves which operate automatically to close on an ESFAS signal, valves with dual ESFAS functions (Open/Close), and check valves. Surveillance Requirement 4.6.1.1.a is not applicable to such valves. The OPERABILITY of such valves is determined by ESFAS response time testing of Specification 3/4.3.2. The appropriate Action statement(s) of those Limiting Conditions for Operation pertaining to the valve(s) or system in which it is installed shall be applicable.

3/4.6.4 COMBUSTIBLE GAS CONTROL

The OPERABILITY of the equipment and systems required for the detection and control of hydrogen gas ensures that this equipment will be available to maintain the hydrogen concentration within containment below its flammable limit during post-LOCA conditions. Either recombiner unit is capable of controlling the expected hydrogen generation associated with 1) zirconium-water reactions, 2) radiolytic decomposition of water and 3) corrosion of metals within containment. These hydrogen control systems are consistent with the recommendations of Regulatory Guide 1.7, "Control of Combustible Gas Concentrations in Containment Following a LOCA", March 1971.

The containment dome air circulators are provided to ensure adequate mixing of the containment atmosphere following a LOCA. The mixing action of the containment dome air circulators combined with the containment spray system and the containment emergency fan coolers will prevent localized accumulations of hydrogen from exceeding the flammable limit.



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 NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 108 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 November 3, 1993, 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) <u>Technical Specifications</u>

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The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 108, 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 to be implemented 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Mel B. Fiche

Mel B. Fields, Project Manager Project Directorate IV-2 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: May 17, 1995

- 2 -

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 108 TO FACILITY OPERATING LICENSE NO. NPF-15

DOCKET NO. 50-362

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by Amendment number and contain marginal lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

REMOVE

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INSERT

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3/4 6-19	3/4	6-19
3/4 6-20	3/4	6-20
3/4 6-23	3/4	6-23
3/4 6-24	3/4	6-24
	3/4	6-24a
	3/4	6-24b
B 3/4 6-5	B 3/4	6-5

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3 The containment isolation valves specified in Table 3.6-1 shall be OPERABLE with isolation times as shown in Table 3.6-1.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- 1. With one or more of the isolation valve(s) specified in Section A, B, C, and E of Table 3.6-1 inoperable, maintain at least one isolation valve OPERABLE in each affected penetration* that is open and either:
 - a. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or
 - b. Isolate each affected penetration within 4 hours by use of at least one automatic valve secured** in the isolation position, or one closed manual valve or blind flange, or
 - c. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- 2. With one or more of the valves specified in Section D1 of Table 3.6-1 inoperable, within 4 hours secure the inoperable valve(s) in its ESFAS actuated position, and restore the inoperable valve(s) to OPERABLE status during the next cold shutdown or 30 days, whichever is shorter; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- 3. With one or more of the valves specified in Section D2 of Table 3.6-1 inoperable, within 4 hours secure the inoperable valve(s) in its ESFAS actuated position, and restore the inoperable valve(s) to OPERABLE status during the next cold shutdown; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN with the following 30 hours.
- 4. The provisions of Specification 3.0.4 are not applicable.

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^{*} Any flow path from the atmosphere or a piping system inside of containment to the atmosphere or a piping system outside of containment. Each flow path is considered as a separate "penetration".

^{**}Locked, sealed or otherwise prevented from unintentional operation.

SURVEILLANCE REQUIREMENTS

4.6.3.1 The isolation values specified in Section A, B, and E of Table 3.6-1 shall be demonstrated OPERABLE prior to returning the value to service after maintenance, repair or replacement work is performed on the value or its associated actuator, control or power circuit by performance of testing pursuant to Specification 4.0.5. Values secured** in their isolated position are considered OPERABLE pursuant to this specification.

4.6.3.2 Each isolation valve (except check valves) specified in Section A, B, and E of Table 3.6-1 shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE at least once per refueling interval by verifying that on an ESFAS test signal, each isolation valve actuates to its isolation position.

4.6.3.3 The isolation time of each power operated or automatic valve (except check valves) in Section A and B of Table 3.6-1 shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

4.6.3.4 The manual isolation values specified in Section C of Table 3.6-1 shall be demonstrated OPERABLE in accordance with Specifications 4.6.1.1.a and 4.6.1.2.d.

4.6.3.5 The isolation valves specified in Section D1 and D2 of Table 3.6-1 shall be demonstrated OPERABLE as required by Specification 4.0.5 and surveillance requirements associated with those Limiting Conditions for Operation pertaining to each valve or system in which it is installed. Specification 4.0.5 is not applicable when the valves are secured open.

**Locked, sealed or otherwise prevented from unintentional operation.

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PENETRATION NUMBER		VALVE NUMBER	FUNCTION	ISOLATION TIME (SEC)	
C.	MANUAL*	(Cont.)			
	21	2"-055-C-387	Service air supply line	NA	
	25	10"-100-C-212	Refueling canal fill and drain	NA	
	25	10"-101-C-212	Refueling canal fill and drain	NA	
	31	HV-9946	Containment hydrogen purge inlet	NA	
	31	HCV-9945	Containment hydrogen purge inlet	NA	
	68	2"-130-C-334	Charging line to auxiliary spray	NA	
	70	2"-037-C-387	Auxiliary steam inlet to utility stations	NA	
	70	2"-038-C-387	Auxiliary steam inlet to utility stations	NA	
	74	HV-9917	Containment hydrogen purge outlet	NA	
	74	HCV-9918	Containment hydrogen purge outlet	NA	

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MAXIMUM

^{*} Manual valves may be opened on an intermittent basis under administrative control.

Deleted Intentionally

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PENETRATION NUMBER		VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION TIME (SEC)	
D1.	SAFETY	INJECTION			
	3	HV-9323#	High Pressure Safety Injection	NA	
	3	HV-9324#	High Pressure Safety Injection	NA	
	5	HV-9326#	High Pressure Safety Injection	NA	
	5	HV-9327#	High Pressure Safety Injection	NA	
	39	HV-9329#	High Pressure Safety Injection	NA	
	39	HV-9330#	High Pressure Safety Injection	NA	
	41	HV-9332#	High Pressure Safety Injection	NA	
	41	HV-9333#	High Pressure Safety Injection	NA	
	48	HV-9322#	Low Pressure Safety Injection	NA	
	49	HV-9325#	Low Pressure Safety Injection	NA	
	50	HV-9328#	Low Pressure Safety Injection	NA	
	51	HV-9331#	Low Pressure Safety Injection	NA	
D2.	OTHER				
	8	HV-9200	Charging line to regenerative heat exchanger	NA	
	10A	HV-0352A#	Containment pressure detectors	NA	
	27A	HV-0352D#	Containment pressure detectors	NA	
	40A	HV-0352B#	Containment pressure detectors	NA	
	73A	HV-0352C#	Containment pressure detectors	NA	
	52	HV-9367	Containment spray inlet	NA	
	53	HV-9368	Containment spray inlet	NA	
	56	HV-6366	Containment emergency A/C cooling water inlet	NA	
	57	HV-6372	Containment emergency A/C cooling water inlet	NA	
	58	HV-6368	Containment emergency A/C cooling water inlet	NA	
	59	HV-6370	Containment emergency A/C cooling water inlet	NA	
	60	HV-6369	Containment emergency A/L cooling water outlet	NA NA	
	61	HV-6371	Containment emergency A/L cooling water outlet	, NA NA	
	62	HV-6367	Containment emergency A/L cooling water outlet	, INA NA	
	63	HV-6373	Containment emergency A/C cooling water outlet	, NA	

#Not subject to Type C leakage tests.

SAN ONOFRE - UNIT 3

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PENETRATION NUMBER		VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION
Ε.	OTHER			<u>- 11: (3:0)</u>
	3 5 8 17 32 33 36 37 39 41 44 48 49 50 51 52 53 54 55 55 67 67 71 71	3"-018-A-551# 3"-019-A-551# 2"-122-C-554 HV-4058#* HV-8202# HV-8203# HV-4054#* HV-4053#* 3"-020-A-551# 3"-021-A-551# HV-4057#* 8"-072-A-552# 8"-073-A-552# 8"-073-A-552# 8"-075-A-552# 8"-075-A-552# 8"-004-C-406 8"-006-C-406 8"-006-C-406 8"-006-C-406 HV-9304#@ HV-9302#@ HV-9302#@ HV-9303#@ 3"-157-A-550 HV-9434 3"-158-A-550 HV-9420	High pressure safety injection High pressure safety injection Charging line to regenerative heat exchanger Steam generator secondary coolant sample Mainsteam isolation bypass Mainsteam isolation bypass Steam generator blowdown Steam generator blowdown High pressure safety injection Steam generator secondary coolant sample Low pressure safety injection Low pressure safety injection Low pressure safety injection Low pressure safety injection Containment spray inlet Containment spray inlet Containment emergency sump recirculation Containment emergency sump recirculation Main emergency sump recirculation Containment emergency sump recirculation Main emergency sump recirculation Containment emergency sump recirculation Main leg injection Hot leg injection Hot leg injection	NA NA NA NA NA NA NA NA NA NA NA NA NA N

Not subject to Type C leakage tests.

^{*} Manual valves may be opened on an intermittent basis under administrative control.

[@] These valves are surveilled for position and power available by Technical Specification 3/4 5.2.

BASES

<u>3/4.6.3 CONTAINMENT ISOLATION VALVES</u> (Continued)

All valves in Section A, B, C, or E are considered OPERABLE for containment isolation purpose if they are indeed locked, sealed or otherwise secured in the closed position and leakage through the affected flow path is shown to be within limits when tested pursuant to 10 CFR 50 Appendix J.

Sections D1 and D2 of Table 3.6-1 each contain a listing of valves which operate automatically to open on an ESFAS signal to prevent or mitigate the consequences of the design basis accident. Surveillance requirement 4.6.1.1.a is not applicable to such valves. The OPERABILITY of such valves is determined by ESFAS response time testing of Specification 3/4.3.2.

Section E of Table 3.6-1 contains a listing of valves which operate automatically to close on an ESFAS signal, valves with dual ESFAS functions (Open/Close), and check valves. Surveillance Requirement 4.6.1.1.a is not applicable to such valves. The OPERABILITY of such valves is determined by ESFAS response time testing of Specification 3/4.3.2. The appropriate Action statement(s) of those Limiting Conditions for Operation pertaining to the valve(s) or system in which it is installed shall be applicable.

3/4.6.4 COMBUSTIBLE GAS CONTROL

The OPERABILITY of the equipment and systems required for the detection and control of hydrogen gas ensures that this equipment will be available to maintain the hydrogen concentration within containment below its flammable limit during post-LOCA conditions. Either recombiner unit is capable of controlling the expected hydrogen generation associated with 1) zirconium-water reactions, 2) radiolytic decomposition of water and 3) corrosion of metals within containment. These hydrogen control systems are consistent with the recommendations of Regulatory Guide 1.7, "Control of Combustible Gas Concentrations in Containment Following a LOCA", March 1971.

The containment dome air circulators are provided to ensure adequate mixing of the containment atmosphere following a LOCA. The mixing action of the containment dome air circulators combined with the containment spray system and the containment emergency fan coolers will prevent localized accumulations of hydrogen from exceeding the flammable limit.



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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 119TO FACILITY OPERATING LICENSE NO. NPF-10

AND AMENDMENT NO. 108TO 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 November 3, 1993, Southern California Edison Company, et al. (SCE or the licensee), submitted a request for changes to the Technical Specifications (TS) for San Onofre Nuclear Generating Station, Unit Nos. 2 and 3. The proposed changes would revise TS 3/4.6.3, "Containment Isolation Valves," TS Table 3.6-1, "Containment Isolation Valves," and the associated Bases, 3/4.6.3, to ensure that the containment isolation valves in Section D of the table are maintained functional. The proposed TS (1) require that these valves be in an ACTION statement when secured in their engineered safety feature actuation signal (ESFAS) actuated position and (2) limit the amount of time that these valves may be secured in their ESFAS position. Prior to these amendments, a footnote in TS 3/4.6.3 considered these valves operable as long as they were secured in their ESFAS actuated position, even though they were incapable of performing their containment isolation function.

2.0 EVALUATION

The function of the containment isolation valves is to isolate the containment atmosphere from the outside environment in the event of a postulated accident. TS 3/4.6.3 ensures this function by (1) requiring the valves listed in Sections A, B, C, and D of Table 3.6-1 to be operable in Modes 1 through 4, (2) specifying surveillance requirements (SRs) to verify operability of these valves, and (3) providing the actions to be taken when the operability requirements are not met.

Table 3.6-1 is currently divided into four sections. Section A, "Automatic Containment Isolation," contains containment isolation valves that are

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9506020282 950517 PDR ADOCK 05000361 P PDR actuated by a containment isolation actuation signal and check valves inside containment that are considered to be automatic containment isolation valves in accordance with 10 CFR Part 50 general design criteria. Section B, "Containment Purge," contains containment purge isolation valves that are actuated by the containment purge isolation signal. Section C, "Manual," contains manual valves that are assumed to be closed post-accident, but can, under administrative control, be opened during normal operation. Section D, "Other," contains valves whose normal safe post-accident position is open, check valves, valves with a closed ESFAS actuated position, and valves with dual ESFAS functions (open/close).

Existing TS consider valves in Section D of Table 3.6-1 operable when secured in their ESFAS actuated position. However, when secured, these valves may not be able to perform their containment isolation function. Additionally, existing TS do not limit the amount of time that these valves can be secured in their ESFAS actuated position. A footnote which allows securing check valves and valves with dual ESFAS positions in their ESFAS actuation positions is also inappropriately applied to some Section D valves. Therefore, the licensee proposes to reorganize the existing Section D valves into three sections (D1, D2 and E). In addition, the licensee proposes appropriate ACTION statements and allowable outage times (AOTs) for each of these sections.

The proposed reorganization of Section D was based on risk evaluations assessing the duration that these valves can be secured in the open position without significantly contributing to the risk of a significant offsite release. The acceptance criteria for the risk evaluations are as follows: (1) the risk of continued operation with the valves secured in their ESFAS actuated position shall be less than the risk of shutdown (core damage risk per shutdown is 5.0E-7), and (2) the increase in risk of core damage frequency and significant offsite release frequency with the valves secured in their ESFAS actuated position shall be less than 1 percent of current individual plant examination (IPE) values (1 percent of IPE values corresponds to less than 3.1E-7 per year for core damage and less than 4.9E-8 per year for significant offsite release).

The proposed Section D1 contains high-pressure safety injection (HPSI) and low-pressure safety injection (LPSI) valves that have been found to have an acceptable AOT of 90 days. Risk evaluations performed by the licensee for this section of valves found (1) that there is a bigger risk associated with shutdown than there is with continued operation with these valves secured in their ESFAS actuation positions and (2) that there is a less than 1 percent increase in current IPE core damage or significant offsite release frequencies associated with securing these valves in their ESFAS actuated positions for 90 days. An ACTION statement requiring inoperable valves to be secured in their ESFAS actuated position within 4 hours and restored to operable status during the next cold shutdown or 30 days, whichever is shorter, is provided for this category. If these requirements are not met, the plant is required to be in at least hot standby within 6 hours and cold shutdown within the following 30 hours. Although the 90-day AOT resulted in acceptable risk

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values, the licensee chose 30 days to provide additional conservatism for this group of containment isolation valves.

The proposed Section D2 contains valves that were found to have an acceptable indefinite AOT. Risk evaluations for this section of valves found (1) that there is a bigger risk associated with shutdown than with continued operation with these valves secured in their ESFAS actuation positions and (2) that there is a less than 1 percent increase in the updated IPE core damage or significant offsite release frequencies associated with securing these valves in their ESFAS actuated positions indefinitely or until the next cold shutdown. Inoperable valves in this category will be required to be secured in their ESFAS actuated position within 4 hours and operable prior to entry into Mode 4 from the next cold shutdown. Otherwise, the plant is required to be in at least hot standby within 6 hours and cold shutdown within the following 30 hours.

The proposed Section E contains valves that should not be secured open. These valves will be added to existing Action 1 of TS 3.6.3 and will, therefore, be treated like the valves of Sections A, B, and C. Action 1 requires that either the inoperable valve(s) be restored to OPERABLE status or the affected penetration be isolated within 4 hours. If this action is not satisfied, the plant is required to be in at least hot standby within 6 hours and cold shutdown within the following 30 hours.

Based on the above discussion the staff finds acceptable the licensee's request to (1) reorganize existing Section D in Table 3.6-1 into Sections D1, "Safety Injection," D2, "Other," and E, "Other," as explained above; (2) add "E" to existing ACTION Statement 1 to require that the valves of new Section E be bounded by ACTION 1 of TS 3/4.6.3; (3) replace existing ACTION 2 with "With one or more of the valves specified in Section D1 of Table 3.6-1 inoperable, within 4 hours secure the inoperable valve(s) in its ESFAS actuated position, and restore the inoperable valve(s) to OPERABLE status during the next cold shutdown or 30 days, whichever is shorter; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours"; and (4) add ACTION 3 stating "With one or more of the valves specified in Section D2 of Table 3.6-1 inoperable, within 4 hours secure the inoperable 3.6-1 inoperable, within 4 hours secure the inoperable 3.6-1 inoperable, within the following 30 hours"; and (4) add ACTION 3 stating "With one or more of the valves specified in Section D2 of Table 3.6-1 inoperable, within 4 hours secure the inoperable valve(s) to OPERABLE status during the next cold shutdown; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours."

The licensee also proposes to relocate ACTION 1.d, "The provisions of Specification 3.0.4 are not applicable," as ACTION 4. Thus, Specification 3.0.4 would not apply to any of the ACTION statements of this limiting condition for operation. This would allow the plant to continue operation, including mode changes, with containment isolation valves secured in their ESFAS actuated positions as long as the remaining Action statements are satisfied. The remaining ACTION statements limit the amount of time that these valves can be inoperable. As discussed earlier, these time constraints were conservatively derived from analyses of shutdown risk and core damage and

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significant offsite release frequencies resulting from securing the valves in their ESFAS actuated positions. Therefore, the staff finds the licensee's request to relocate ACTION 1.d as ACTION 4 acceptable.

The last sentence in SR 4.6.3.1 currently reads "Valves secured** in their actuated position are considered OPERABLE pursuant to this specification." After verbal discussions between the staff and the licensee, it was agreed that changing the word "actuated" to "isolated" would more clearly indicate to the operators that the valves would have to be in their closed position in order for the valves to be considered OPERABLE pursuant to this TS. The licensee requested that its submitted TS change request be amended to reflect this change.

In addition, the licensee proposes to (1) relocate SR 4.6.3.1 to the next page due to text overflow; (2) add "E" to SRs 4.6.3.1 and 4.6.3.2; (3) replace "D" with "D1" and "D2" in SR 4.6.3.5; (4) replace the last sentence of SR 4.6.3.5, "Valves secured** in the ESFAS actuated position are considered OPERABLE pursuant to this specification," with "Specification 4.0.5 is not applicable when the valves are secured open"; (5) delete or relocate footnotes in Table 3.6-1, as appropriate, based on the proposed reorganization of the existing Section D valves; and (6) revise the existing Bases to reflect the above changes. These changes were reviewed by the staff and found necessary to maintain consistency within the TS and provide appropriate SRs for the newly formed sections. Therefore, the staff finds these changes acceptable.

3.0 STATE CONSULTATION

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In accordance with the Commission's regulations, the California State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 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 (59 FR 7699) Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

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> 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: Mohammed Shuaibi

Date: May 17, 1995