April 30, 1982



Docket No: 50-361

Mr. Robert Dietch Vice President Southern California Edison Company 2244 Walnut Grove Avenue Post Office Box 800 Rosemead, California 91770 Mr. Gary D. Cotton Mr. Louis Bernath San Diego Gas & Electric Company 101 Ash Street Post Office Box 1831 San Diego, California 92112

Dear Gentlemen:

Subject: Issuance of Amendment No. 2 to Facility Operating License NPF-10 San Onofre Nuclear Generating Station, Unit 2

The Nuclear Regulatory Commission has issued Amendment No. 2 to Facility Operating License NPF-10 for the San Onofre Nuclear Station, Unit 2, located in San Diego County, California.

This amendment is in response to your letter dated April 7, 1982. The amendment (1) clarifies the testing and acceptance criteria for low and medium voltage circuit breakers and (2) deletes the nominal trip setpoint and start circuit response time values contained in the Technical Specifications. Telephone approval was given to Southern California Edison Company on April 9, 1982 authorizing the implementation of the proposed change. The amendment is effective as of April 9, 1982.

A copy of the related safety evaluation supporting Amendment No. 2 to Facility Operating License NPF-10 is enclosed. Also enclosed is a copy of a related notice which has been forwarded to the Office of the Federal Register for publication.

			Sincerely,			
0			0 S F1	riginal signed h rank J. Miraglia	9 9	
5LH0				iraglia, Chief Branch No. 3 F Licensing		
8205170	Enclosures: 1. Amendment No. 2 2. Safety Evaluation 3. Federal Register N cc w/enclosures: See next page See attached sheet/for .DL:LB#3		al alitettation and	und E		DL:DIR DEisenhut 4/ /82
	.DL:LB#3DL:LB#3 Ulee ph HRood	0ELD LChandler	OELD JRutherg	ATG AToal ton	DLAN#A FMila	DL(AP): L RTedesco
DATE	4/15 /B2 4/ 19 /82	4/27 /82	4/ 782	4/ 782	4/ 29 /82	4/ 08 /82
NRC FORM	318 (10/80) NRCM 0240	OFFICIAL	RECORD C	OPY		☆ USGPO: 1980329-824

- -

. . .

Document Control (50-361) NRC PDR L PDR TERA NSIC TIC LB#3 File HRood JLee FMiraglia LChandler, OELD JRutberg, OELD DEisenhut/RPurple AToalston, AIG **IBailly** ΙE IE Region V MPA TBarnhart (4 cys) WMiller, ADM IDinitz WJones, OA (10 cys) ACRS (16 cys) PCotter, ASLAB ASLBP

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. 2 License No. NPF-10

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the San Onofre Nuclear Generating Station, Unit 2 (the facility) Facility Operating License No. NPF-10 filed by the Southern California Edison Company on behalf of itself and San Diego Gas and Electric Company, The City of Riverside and The City of Anaheim, California (licensees) dated April 7, 1982, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as set forth in 10 CFR Chapter 1;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the 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 set forth in 10 CFR Chapter I;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - 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.

8205170477 P

				·····		r	· · · · · · · · · · · · · · · · · · ·
OFFICE	•••••						
SURNAME	•••••			••••••			·····
DATE	•••••	•••••		••••••	•••••		
NRC FORM 318	(10-80) NRCM 0240	······································	OFFICIAL	RECORD C	OPY		USGPO: 1981-335-960

- 2 -

3

- 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

1

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 2, are hereby incorporated in the license. SCE shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of April 9, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

15/

Frank J. Miraglia, Chief Licensing Branch No. 3 Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: April 30, 1982

			no lego	election of	have i se	L			
OFFICE	D(.:\\ \$ #3	DL:LB#3	OELD \	N	OEtt	AH	2	DL:LR#A	العديدة (ا المعالية (العديدة (ا
SURNAME	JLee.ph	HRood V	LChand	er	JRutber	ATC	balston	FMiragija	
DATE	4/ 15 /82	4/ 19 /82	4/ 23	/82	4/ /8	2 4/	/82	4/ 2/82	·····
NRC FORM	JRC FORM 318 (10/80) NRCM 0240 OFFICIAL RECORD COPY \$\$ USGPO: 1980-329-824								

ATTACHMENT TO LICENSE AMENDMENT NO. 2

FACILITY OPERATING LICENSE NO. NFE-10

DOCKET NO. 50-361

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Overleaf Page	Amended Page
3/4 8-15	3/4 8-16 3/4 8-17 3/4 8-18
	3/4 8-19 3/4 8-20 3/4 8-21
	3/4 8-22 3/4 8-23 3/4 8-24
	3/4 8-25 3/4 8-26 3/4 8-27
	3/4 8-28 3/4 8-29 3/4 8-30

 	 •••••	

¥.

ELECTRICAL POWER SYSTEMS

ONSITE POWER DISTRIBUTION SYSTEMS

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.3.2 As a minimum, the following electrical busses shall be energized in the specified manner:

- a. One division of A.C. Emergency Buses consisting of one 4160-volt and one 480-volt A.C. Emergency Bus.
- b. 2 120 volt A.C. Vital Busses energized from their associated inverters connected to their respective D.C. Busses.
- c. 2 125 volt D.C. Busses energized from their associated battery banks.

APPLICABILITY: MODES 5 and 6

ACTION:

With any of the above required electrical busses not energized in the required manner, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, or movement of irradiated fuel, initiate corrective action to energize the required electrical busses in the specified manner as soon as possible.

SURVEILLANCE REQUIREMENTS

4.8.3.2 The specified busses shall be determined energized in the required manner at least once per 7 days by verifying correct breaker alignment and indicated voltage on the busses.

ELECTRICAL POWER SYSTEMS

3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

LIMITING CONDITION FOR OPERATION

3.8.4.1 All containment penetration conductor overcurrent protective devices shown in Table 3.8-1 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the above required containment penetration conductor overcurrent protective device(s) inoperable:

- a. Restore the protective device(s) to OPERABLE status or de-energize the circuits(s) by tripping the associated backup circuit breaker or racking out or removing the inoperable circuit breaker within 72 hours, declare the affected system or component inoperable, and verify the backup circuit breaker to be tripped or the inoperable circuit breaker racked out, or removed, at least once per 7 days thereafter; the provisions of Specification 3.0.4 are not applicable to overcurrent devices in circuits which have their backup circuit breakers tripped, their inoperable circuit breakers racked out, or removed, or
- b. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.4.1 All containment penetration conductor overcurrent protective devices shown in Table 3.8-1 shall be demonstrated OPERABLE:

- a. At least once per 18 months:
 - 1. By verifying that the medium voltage (4-15 KV) circuit breakers are OPERABLE by selecting, on a rotating basis, at least 10% of the circuit breakers of each voltage level, and performing the following:
 - (a) A CHANNEL CALIBRATION of the associated protective relays, and
 - (b) An integrated system functional test which includes simulated automatic actuation of the system and verifying that each relay and associated circuit breakers and control circuits function as designed.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- (c) For each circuit breaker found inoperable during these functional tests, an additional representative sample of at least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested.
- 2. By selecting and functionally testing a representative sample of at least 10% of each type of lower voltage circuit breakers. Circuit breakers selected for functional testing shall be selected on a rotating basis. Testing of these circuit breakers shall consist of injecting a current in excess of the breakers' nominal setpoint and measuring the response time. The measured response time will be compared to the manufacturer's data to insure that it is less than or equal to a value specified by the manufacturer. Circuit breakers found inoperable during functional testing shall be restored to OPERABLE status prior to resuming operation. For each circuit breaker found inoperable during these functional tests, an additional representative sample of at least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested.
- b. At least once per 60 months by subjecting each circuit breaker to an inspection and preventive maintenance in accordance with procedures prepared in conjunction with its manufacturer's recommendations.

.

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device	Backup Device		
Number	• Number	Service Description	
2B0106	2BLP0101	Containment Normal Cooling Fan E-387	1
280107	2BLP0102	CEDM Cooling Supply Fan E-403B	
2B0109	2BLP0103	CEDM Cooling Supply Fan E-403A	1
2B0111	2BLP0104	Standby Containment Normal Cooling Fan E-393	
2B0209	2BLP0201	Containment Normal Cooling Fan E-394	
2B0406	2BLP0301	Hydrogen Recombiner E-145 Power Panel L-160	
2B0409	2BLP0302	Upper Dome Air Circulator A-071	
2B0410	2BLP0303	Containment Emergency Fan E-399	
2B0411	2BLP0304	Containment Emergency Fan E-401	
2B0419	2BLP0305	Standby Upper Dome Air Circulator A-074	
2B0606	2BLP0401	Hydrogen Recombiner E-146 Power Panel L-161	
280609	2BLP0402	Upper Dome Air Circulator A-072	
2B0610	2BLP0403	Containment Emergency Fan E-400	
280611	2BLP0404	Containment Emergency Fan E-402	
2B0619	2BLP0405	Standby Upper Dome Air Circulator A-073	
2B0809	2BLP0501	Containment Normal Cooling Fan E-396	
2B0811	2BLP0601	Containment Normal Cooling Fan E-398	
2B0903	2BLP0701	Containment Recirculation Unit E-333	C
2B0906	2BLP0702	Polar Crane (Containment) ROO1 (C)	1
280907	2BLP0703	Standby Control Element Drive Mechanism Cooling Supply Fan E-404A	
280909	2BLP0704	Standby CEDM Cooling Supply Fan E-404B	
280911	` 2BLP0705	Containment Recirculating Unit Heater E~568	I
2BA02	2BLP0812	CCW from RCP P-001 Seal Heat Exchanger TV-9144	1
2BA03	2BLP0813	CCW from RCP P-003 Seal Heat Exchanger TV-9154	
2BA04	2BLP0801	CEDM Cooling Supply Fan E-403A	
(2BA04-A)		(Enclosure Heater)	

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device	Backup Device	
Number	Number	Service Description
2BA04	2BLP0802	CEDM Cooling Supply Fan E-403B
(2BA04-B)		(Enclosure Heater)
2BA04	2BLP0814	Standby Containment Normal Cooling Fan E-393
(2BA04-C)		(Enclosure Heater)
2BA04	2BLP0826	Containmnt Normal Cooling Fan E-394
(2BA04-D)		(Enclosure Heater)
2BA04	2BLP0828	Containment Normal Cooling Fan E-397
(2BA04-E)		
2BA08	2BLP0803	Movable Incore Detector Drive Package W338A
2BA11	2BLP0905	Cont. Structure Electric Heater E-467
2BA25	2BLP0910	Cont. Cooling Unit E-393 Circ. Water Outlet HV-9940FB
2BA26	2BLP0911	Cont. Cooling Unit E-394 Circ. Water Outlet HV-9930EB
2BA27	2BLP0912	Cont. Cooling Unit E-397 Circ. Water Outlet HV-9940D8
2BA31	28LP0913	Cont. Cooling Unit E-393 Circ. Water Outlet HV-9940FC
2BA32	2BLP0914	Cont. Cooling Unit E-394 Circ. Water Inlet HV-9940EC
2BA33	2BLP0915	Cont. Cooling Unit E-397 Circ. Water Inlet HV-9940DC
2BA36	2BLP0808	RCP 1A Oil Lift Pump 1A1 P-260
2BA37	2BLP0809	RCP 1B Oil Lift Pump 1B1 P-264
2BA38	2BLP0810	RCP 2B 0il Lift Pump 2B1 P-262
2BA39	2BLP0901	Reactor Coolant Drain Pump (W) P-023
2BA40	2BLP0811	RCP 2A Oil Lift Pump 2A1 P-266
2BA41	2BLP0817	RCP 1A Anti Rev. Rotation Device Lube Pump 1 P-399
2BA42	2BLP0818	RCP 2B Anti Rev. Rotation Device Lube Pump 1 P-401
2BA43	2BLP0819	RCP 1B Anti Rev. Rotation Device Lube Pump 1 P-403
2BA44	2BLP0820	RCP 2A Anti Rev. Rotation Device Lube Pump 1 P-405
2BA45	2BLP0902	Reactor Cavity Cooling Fan A-313
2BA46	2BLP0903	Standby Reactor Cavity Cooling Fan A-321

SAN ONOFRE-UNIT 2

3/4 8-19

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Backup Device	
Number	Service Description
2BL 20807	Charging Line to Reactor Cooling Loop 1A HV-9203
	Reactor Cavity Cooling Unit C HV-9905C
	Reactor Cavity Cooling Unit A HV-9905A
	Quench Tank to Reactor Drain Tank HV-9101
2BLP0805	RCP Bleed Off to Quench Tank HV-9216
2BLP0916	CEDM Cooling Unit E-403 CCW Outlet HV-9907AA
28LP0917	CEDM Cooling Unit E-403 CCW Inlet HV-9907AC
2BLP0806	Safety Injection Tank to Reactor Drain Tank HV-9335
	Welding Receptacles Containment (50 KVA)
2BLP0824	Recept. for Portable Cont. Sump Pump (H.P.) P-005 (A)
2BLP0906	Containment Elevator P-002 (A)
2BLP0815	Lower Level Air Circulator A-031
2BLP0816	Lower Level Air Circulator A-033
	Saf. Inj. Tank Drain to Refueling Wtr Tank HV-9334
2BLP1002	Saf. Inj. Tk T-007 to Reactor Coolant Loop 1B HV-9350
2BLP1003	Saf. Inj. Tk T-009 to Reactor Coolant Loop 2A HV-9360
	Auxiliary Spray to Pressurizer HV-9201
	CCW Noncritical Cont. Inlet Isolation Valve HV-6223
	Shutdn Coolant Flow from Reac. Coolant Loop 2 HV-933
2BLP1015	Reac. Coolant Drain Tk Sample Cont. Isolation HV-0516
2BLP1016	Containment Isolation Reactor Coolant Drain to Radwaste System HV-7512
× 2BLP1017	Quench Tank Vapor Sample Cont. Isol. HV-0514
	Containment Sump to Radwaste Sump HV-5803
	Containment Purge Inlet HV-9949
2BLP1018	Containment Emergency Sump Oulet HV-9305
	Number 2BLP0807 2BLP0821 2BLP0822 2BLP0804 2BLP0805 2BLP0916 2BLP0917 2BLP0904 2BLP0904 2BLP0906 2BLP0815 2BLP0816 2BLP1001 2BLP1002 2BLP1003 2BLP1010 2BLP1015 2BLP1016 2BLP1017 2BLP1021

SAN ONOFRE-UNIT 2

•••

.

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE_DEVICES

Primary Device	Backup Device	
Number	Number	Service Description
2BE46	2BLP1011	CCW Noncritical Containment Isolation Valve HV-6336
2BF08	2BLP0823	Containment Sump Pump P-008
2BF09	28LP1220	Containment Sump Pump P-007
2BJ05	28LP1101	Shutdn Coolant Flow from Reac. Coolant Loop 2 HV-9339
2BJ06	28LP1104	Saf. Inj. Tk T-008 to Reactor Coolant Loop 1A HV-9340
20000	20171104	Sal. IIIJ. IK 1008 to Reactor coorant Loop IA IN 5540
2BJ07	2BLP1105	Saf. Inj. Tk T-010 to Reactor Coolant Loop 2B HV-9370
2BJ17	2BLP1123	RCP Bleed off to Volume Control Tank HV-9217
2BJ21	2BLP1106	Cont. Isol. Safety Injection Tank Vent Header HV-7258
2BJ22	2BLP1115	Reactor Coolant Hot Leg Sample Cont. Isol. HV-0508
2BJ23	2BLP1116	Reactor Coolant Hot Leg Sample Cont. Isol. HV-0517
2BJ26	2BLP1117	Pressurizer Vapor Sample Containment Isol. HV-0510
2BJ27	2BLP1121	Pressur. Surge Line Liquid Smpl. Cont. Isol. HV-0512
2BJ29	2BLP1110	Containment Purge Outlet HV-9950
2BJ30	2BLP1102	Hydrogen Purge Exhaust Unit Inlet HV-9917
2BJ31	2BLP1103	Hydrogen Purge Supply Unit Discharge HV-9946
2BJ34	28LP1118	Containment Emergency Sump Outlet HV-9304
2BJ47	2BLP1124	Containment Normal Cooling Supply Isol. Valve HV-9400
2BJ48	2BLP1125	Containment Normal Cooling Return Isol. Valve HV-9971(
2BN04	28LP1201	Movable Incore Detector Drive Pack W-3383
2BN07	2BLP1304	Containment Structure Electric Heater E-466
20		
2BN21	2BLP1206	Charging Line to Reactor Coolant Loop 2A HV-9202
2BN24	2BLP1301	Reactor Cavity Cooling Fan A-320
2BN25	` 2BLP1302	Standby Reactor Cavity Cooling Fan A-322
2BN26	2BLP1226	CCW from RCP P-004 Seal Heat Exchanger TV-9164
2BN27	2BLP1227	CCW from RCP P-002 Seal Heat Exchanger TV-9174

••

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device	Backup Device	Couvies Description	
Number	Number	Service Description	
2BN28	2BLP1207	Reactor Cavity Cooling Unit D HV-9905D	
2BN29	2BLP1208	Reactor Cavity Cooling Unit B HV-9905B	
2BN30	2BLP1209	RCP 1A Oil Lift Pump 1A2 P-261	
2BN30 2BN31	2BLP1210	RCP 1B Oil Lift Pump 1B2 P-265	c
2BN32	2BLP1211	RCP 2B 0il Lift Pump 2B2-263	('
2BN33	2BLP1212	RCP 2A Oil Lift Pump 2A2-267	
2BN34	2BLP1303	Reactor Coolant Drain Tank Pump (E) P-022	
2BN37	2BLP1213	RCP 1A Anti Rev. Rotation Device Lube Pump 2 P-400	
2BN38	2BLP1214	RCP 2B Anti Rev. Rotation Device Lube Pump 2 P-402	
2BN39	2BLP1215	RCP 1B Anti Rev. Rotation Device Lube Pump 2 P-404	
2BN40	2BLP1216	RCP 2A Anti Rev. Rotation Device Lube Pump 2 P-406	
2BN42	2BLP1305	Welding Recpt. Cont. (50KVA) 2R005A, 2R005b, 2R005C	
2BN43	2BLP1217	CEA Change Mechanism Transfer Machine Control Console (8 KVA) L-023	
2BN44	2BLP1306	Welding Recpt. Cont. (50 KVA) 2R007A, 2R007B, 2R007C	
2BN45	2BLP1218	Refueling Pool End Junction Box (8KVA) L-371	
2BN46	2BLP1308	Welding Recpt. Cont. (50KVA) 2R013A, 2R013B, 2R013C	
2BN47	2BLP1219	Receptable for Portable Cont. Sump Pump (1hp) P-005	(
2BN49	2BLP1319	Equipment Hatch 200R, Electrical Hoist Z-028, Z-029	×.
2BN52	2BLP1221	Lower Level Air Circulator A-032	
2BN53	2BLP1222	Lower Level Air Circulator A-024	
2BN56	2BLP1310	Cont. Cooling Unit E-346 Circ. Water Outlet HV-9940BB	
2BN57	* 28LP1311	Cont. Cooling Unit E-396 Circ. Water Inlet HV-9940BC	
2BN58	2BLP1312	Cont. Coolng Unit E-348 Circ. Water Outlet HV-9940CB	
2BN59	2BLP1313	Cont. Cooling Unit E-398 Circ. Water Inlet HV-9940CC	
2BN60	2BLP1314	CEDM Cooling Unit E-404 CCW Outlet HV-9907BA	

•

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device	Backup Device		
Number	Number	Service Description	
2BN61	2BLP1315	CEDM Cooling Unit E-404 CCW Inlet HV-9907BC	
2BN62	2BLP1223	Containment Recirculation Unit A-353	
(2BN62-A)		(Motor Enclosure Heater)	
2BN62	2BLP1224	CEDM Cooling Supply Fan E-404A	1
(2BN62-B)		(Motor Enclosure Heater)	(
2BN62	2BLP1225	CEDM Cooling Supply Fan E-404B	
(2BN62-C)		(Motor Enclosure Heater)	
2BN62	2BLP1202	Containment Normal Cooling Fan A-398	
(2BN62-H)		(Motor Enclosure Heater)	
2BN62	2BLP1228	Containment Normal Cooling Fan E-398	
(2BN62-G)		(Motor Enclosure Heater)	
L0108	L0101	Panel 2LP4 Emergency Lighting	
L0118	L0101	Panel 2LP11 Emergency Lighting	
L0120	L0101	Panel 2LP16 Emergency Lighting	
2BHP0201	2B0205	Backup Pressurizer Heater E-607	
2BHP0202	2B0205	Backup Pressurizer Heater E-608	
2BHP0203	280205	Backup Pressurizer Heater E-609	
2BHP0204	2B0205	Backup Pressurizer Heater E-610	
2BHP0301	2B0206	Backup Pressurizer Heater E-611	(
2BHP0302	280206	Backup Pressurizer Heater E-612	
2BHP0303	2 <u>8</u> 0206	Backup Pressurizer Heater E-613	
2BHP0304	280206	Backup Pressurizer Heater E-614	
2BHP0101	2B0210	Proportional Pressurizer Heater E-601	
2BHP0102	2B0210	Proportional Pressurizer Heater E-602	
2BHP0103	2B0210	Proportional Pressurizer Heater E-603	
2BHP0401	280402	Backup Pressurizer Heater E-615	

·..

-

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

rimary Device	Backup Device	
umber	Number	Service Description
2BHP0402	280402	Backup Pressurizer Heater E-616
2BHP0403	2B0402	Backup Pressurizer Heater E-617
2BHP0404	2B0402	Backup Pressurizer Heater E-618
2BHP0601	2B0805	Backup Pressurizer Heater E-619
2BHP0602	2B0805	Backup Pressurizer Heater E-602
2BHP0603	280805	Backup Pressurizer Heater E-621
2BHP0604	280805	Backup Pressurizer Heater E-622
2BHP0701	2B0806	Backup Pressurizer Heater E-623
2BHP0702	2B0806	Backup Pressurizer Heater E-624
2BHP0703	280806	Backup Pressurizer Heater E-625
2BHP0704	280806	Backup Pressurizer Heater E-626
BHP0501	280810	Proportional Pressurizer Heater E-604
2BHP0502	280810	Proportional Pressurizer Heater E-605
2BHP0503	280810	Proportional Pressurizer Heater E-606
2BHP0801	280602	Backup Pressurizer Heater E-627
2BHP0802	280602	Backup Pressurizer Heater E-628
2BHP0803	28060 2	Backup Pressurizer Heater E-639
2BHP0804	2B0602	Backup Pressurizer Heater E-630
2BY40	2BLP1013	Cont. Bldg. Emer. A/C Unit E-399 (Motor Enclos. Htr.)
2BY40	2BLP1014	Cont. Bldg. Emer. A/C Unit E-401 (Motor Enclos. Htr.)
2BZ32	2BLP1111	Reactor Coolant Regen. Heat Exch. Isol. Valve TV-9267
2BZ38	2BLP1112	Containment Bldg. Emergency A/C Unit E-400
2BZ38	2BLP1126	Containment Bldg. Emergency A/C Unit E-403
2001704	20017	Containment Reactor Cavity Cooling Fan E-319
	(Main Breaker)	(Motor Enclosure Heater)
2001706	20017	Containment Reactor Cavity Cooling Fan A-321
	(Main Breaker)	(Motor Enclosure Heater)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device	Backup Device				
lumber	Number	Service Description			
2Q01724	2Q017 (Main Breaker)	Containment Sump Inlet Flow 2FT5799A/B, 2FT5802A/B			
2002801	2Q028 (Main Breaker)	RCP P-001 (Motor Enclosure Heater)			
2002802	20028 (Main Breaker)	RCP P-004 (Motor Enclosure Heater)			
2002803	20028 (Main Breaker)	RCP P-002 (Motor Enclosure Heater)			
2002804	20028 (Main Breaker)	Containment Reactor Cavity Cooling Fan A-320 (Motor Enclosure Heater)			
2002805	2Q028 (Main Breaker)	RCP P-003 (Motor Enclosure Heater)			
2002808	2Q028 (Main Breaker)	Containment Reactor Cavity Cooling Fan (Motor Enclosure Heater)			
2Q03904	20039 (Main Breaker)	Dome Circulating Fan A-071 (Motor Enclosure Heater)			
2Q03906	20039 (Main Breaker)	Dome Circulating Fan A-074 (Motor Enclosure Heater)			
2004104	2Q041 (Main Breaker)	Standby Dome Circulating Fan A-072 (Motor Enclosure Heater)			
2004106	20041 (Main Breaker)	Standby Dome Circulating Fan A-073			
2D5P108	20503	Panel 2LP4 Emergency Lighting			
2D5P109 2D5P118	2D503 2D503	Panel 2LP11 Emergency Lighting Panel 3LP16 Emergency Lighting			
2A0101	2A0102 2A0104 2A0105	Reactor Coolant Pump P-001 Reactor Coolant Pump P-001 Reactor Coolant Pump P-001			

SAN ONOFRE-UNIT 2

•

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

rimary Device	Backup Device		
lumber	Number	Service Description	
2A0103	2A0102	Reactor Coolant Pump P-004	
2110200	2A0104	Reactor Coolant Pump P-004	
	2A0105	Reactor Coolant Pump P-004	
2A0201	2A0202	Reactor Coolant Pump P-002	(
	2A0204	Reactor Coolant Pump P-002	
	2A0205	Reactor Coolant Pump P-002	
2A0203	2A0202	Reactor Coolant Pump P-003	
	2A0204	Reactor Coolant Pump P-003	
	2A0205	Reactor Coolant Pump P-003	
CEA04	CB3001	CEA4	
CEA05	CB3001	CEA5	
CEA06	CB3001	CEA6	
CEA07	CB3001	CEA7	
CEA08	CB3002	CEA8	•
CEA09	CB3002	CEA9	
CEA10	CB3002	CEA10	
CEA11	CB3002	CEA11	(
CEA12	CB3003	CEA12	
CEA14	CB3003	CEA14	
CEA16	CB3003	CEA16	
CEA18	CB3003	CEA16	
CEA13	CB3004	CEA13	
CEA15	CB3004	CEA15	
CEA17	CB3004	CEA17	
CEA19	CB3004	CEA19	

SAN ONOFRE-UNIT 2

3/4 8-26

۰.

•

•

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

		Backup Device	Primary Device
	Service Description	Number	Number
		CB3005 CEA20	CEA20
		CB3005 CEA21	CEA21
		CB3005 CEA22	CEA22
ſ		CB3005 CEA23	CEA23
X		CB3006 CEA24	CEA24
		CB3006 CEA25	CEA25
		CB3006 CEA26	CEA26
		CB3006 CEA27	CEA27
		CB3007 CEA28	CEA28
		CB3007 CEA30	CEA30
		CB3007 CEA32	CEA32
		CB3007 CEA34	CEA34
	,	CB3008 CEA29	CEA29
		CB3008 CEA31	CEA31
		CB3008 CEA33	CEA33
		CB3008 CEA35	CEA35
(CB3009 CEA36	CEA36
Υ.		CB3009 CEA38	CEA38
		CB3009 CEA40	CEA40
		CB3009 CEA42	CEA42
		CB3010 CEA37	CEA37
		• CB3010 CEA39	CEA39
		CB3010 CEA41	CEA41
		CB3010 CEA43	CEA43

SAN ONOFRE-UNIT 2

•

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device	Backup Device		Commiss Description	
lumber	Number		Service Description	
05444	CB3023	CEA44		
CEA44	CB3023	CEA45		
CEA45	CB3023	CEA46		
CEA46	CB3023	CEA47		\sim
CEA47	000020			
CEA48	CB3024	CEA48		
CEA50	CB3024	CEA50		
CEA52	CB3024	CEA52		
CEA54	CB3024	CEA54		
CENO I				
CEA49	CB3011	CEA49		
CEA51	CB3011	CEA51		
CEA53	CB3011	CEA53		
CEA55	CB3011	CEA55		
		05456		
CEA56	CB3012	CEA56		
CEA57	CB3012	CEA57		
CEA58	CB3012	CEA58		
CEA59	CB3012	CEA59		
	CB3013	CEA60		(
CEA60	CB3013	CEA62		ζ.
CEA62	CB3013	CEA64		
CEA64	CB3013	CEA66		
CEA66	(0)010	02.000		
CEA61	CB3014	CEA61		
CEA63	CB3014	CEA63		
CEA65	CB3014	CEA65		
CEA67	CB3014	CEA67		
LEAD7				

SAN ONOFRE-UNIT 2

3/4 8-28

•

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device	Backup Device			
Nümber	Number		Service Description	
CEA68	CB3015	CEA68		
CEA71	CB3015	CEA71		
CEA74	CB3015	CEA74		
CEA77	CB3015	CEA77		
CEA69	CB3016	CEA69		
CEA72	CB3016	CEA72		
CEA75	CB3016	CEA75		
CEA78	CB3016	CEA78		
CEA70	CB3017	CEA70		
CEA73	CB3017	CEA73		
CEA76	CB3017	CEA76		
CEA79	CB3017	CEA79		
CEA80	CB3018	CEA80	•	
CEA82	CB3018	CEA82		
CEA84	CB3018	CEA84		
CEA86	CB3018	CEA86		
CEA81	CB3019	CEA81		
CEA83	CB3019	CEA83		
CEA85	CB3019	CEA85		
CEA87	CB3019	CEA87		
CEA88	CB3020	CEA88		
CEA89	CB3020	CEA89		1
CEA90	CB3020	CEA90		
CEA91	CB3020	CEA91		

SAN ONOFRE-UNIT 2

3/4 8-29

•••

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device	Backup Device				
Number	Number	Service Description			
CEA02 CEA03	CB3025 CB3025	CEA2 CEA3			
CEA01	CB3026	CEA1		C	

SAFETY EVALUATION

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2

DOCKET NO. 50-361

Introduction

By letter dated April 7, 1982 the Southern California Edison Company, the licensee, requested a change to the San Onofre Nuclear Generating Station, Unit 2 Technical Specifications, Sections 4.8.4.1.a.l.b, and Table 3.8-1 (Containment Penetration Conductor Overcurrent Protection Devices) to clarify the testing and acceptance criteria for low and medium voltage circuit breakers and to delete the nominal trip setpoint and short circuit response time values from the Technical Specifications. The change specifies testing of the low and medium voltage circuit breakers in accordance with the manufacturer's recommendations. Surveillance testing as previsouly required by the Technical Specifications may cause damage to the low and medium voltage breakers.

Evaluation

By letter dated April 7, 1982 the licensee requested that the nominal trip setpoint and the short circuit response times be deleted from Technical Specification Table 3.8-1 and that testing of these circuit breakers be in accordance with the manufacturer's recommendations without reference to the short circuit response time. The values for the nominal trip setpoint as previously listed represent the short circuit trip setpoint. Testing of these circuit breakers will consist of injecting a current in excess of the breakers' normal setpoint and measuring the response time. The measured response time will be compared to the manufacturer's data to ensure that it is less than or equal to a value specified by the manufacturer. These data will be listed in the appropriate station procedures.

These circuit breakers are designed by the manufacturer to respond to an overcurrent condition with an inverse time delay trip; i.e., the larger the overcurrent, the sooner the trip occurs after the overcurrent starts. Lower voltage circuit breakers are normally "molded case" type breakers with a thermal-type trip element. While designed to protect circuits from short circuit conditions, these breakers are not designed to be repeatedly tested at short circuit conditions. They are, however, designed to be tested at some nominal value above the lowest trip setpoint but below the short circuit trip setpoint and will respond in accordance with the manufacturer's response time curve. Therefore, if the breakers are tested at or above this nominal value and they respond in accordance with the manufacturer's specifications, they properly are considered OPERABLE per the Technical Specifications. This amendment clarifies the required methods of testing the Containment Penetration Conductor Overcurrent Protection Devices but does not alter the intent of the Technical Specification nor does this clarification require any alteration of the physical station.

IRC FORM 318 (10/80) NRCM 0240 OFFICIAL RECORD COPY						☆ USGPO: 1980-329-824	
DATE	• • • • • • • • • • • • • • • • • • • •		•••••	•••••	•••••	•••••	
			•		***************	• • • • • • • • • • • • • • • • • • • •	****************
	8205	170478	ρ				
OFFICE							

Environmental Consideration

We have determined that this amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR Section 51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appriasal need not be prepared in connection with the issuance of this amendment.

- 2 -

Conclusion

Based upon our evaluation of the proposed change to the San Onofre Unit 2 Technical Specifications, we have concluded, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered, does not involve a significant decrease in a safety margin, and does not increase the possibility of an accident of a type different than any previously evaluated, the amendment therefore does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public. We, therefore, conclude that the proposed changes are acceptable.

Dated: April 30, 1982

	A					
OFFICE SURNAME	DL:18#3 HRood:ph 4/28/82	DI 1073 FJM 74.elia 4/ 782				
	(10-80) NRCM 0240	•	OFFICIAL	RECORD C	OPY	 USGPO: 1981-335-960

Environmental Consideration

We have determined that this amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR Section 51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appriasal need not be prepared in connection with the issuance of this amendment.

- 2 -

Conclusion

Based upon our evaluation of the proposed change to the San Onofre Unit 2 Technical Specifications, we have concluded, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public. We, therefore, conclude that the proposed changes are acceptable.

Dated:

	Re						
OFFICE	DL:LB#3	DL:LB#3					
SURNAME	.HRood an	FJMiraglia		•••••			
DATE	4/19/82	4/ /82	•••••				
NRC FORM	318 (10/80) NRCM	0240	OFFICIAL	RECORD C	OPY	l	* USGPO: 1980-329-824

UNITED STATES NUCLEAR REGULATORY COMMISSION DOCKET NO. 50-361 SOUTHERN CALIFORNIA EDISON COMPANY, ET AL NOTICE OF ISSUANCE OF AMENDMENT FACILITY OPERATING LICENSE NO. NPF-10

The U. S. Nuclear Regulatory Commission (the Commision) has issued Amendment No. 2 to Facility Operating License No. NPF-10, issued to Southern California Edison Company, San Diego Gas and Electric Company, The City of Riverside, California and The City of Anaheim, California (licensees) for the San Onofre Nuclear Generating Station, Unit 2 (the facility) located in San Diego County, California. The amendment is effective as of April 9, 1982.

This amendment (1) clarifies the testing and acceptance criteria for low and medium voltage circuit breakers and (2) deletes the nominal trip setpoint and short circuit response time values contained in the Technical Specifications.

Issuance of this amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d) (4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment. 8205170481 $\sqrt{2}$

NRC FORM	1 318 (10/80) NRCM	0240	OFFICIAL	RECORD C	OPY		☆ USGPO: 1980329-824
	<u> </u>	••••••	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	•••••	• • • • • • • • • • • • • • • • • • • •
DATE							N
SURNAME							
OFFICE							

For further details with respect to this action, see (1) Southern California Edison Company's letter dated April 7, 1982, (2) Amendment No. 2 to Facility Operating License No. NPF-10 and (3) the Commission's related Safety Evaluation.

These items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C., and the Mission Viejo Branch Library, 24851 Chrisanta Drive Mission Viejo, California 02676. A copy of these items may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 30thday of April, 1982.

FOR THE NULCEAR REGULATORY COMMISSION

15/

Frank J. Miraglia, Chief Licensing Branch No. 3 Division of Licensing

							DL:DIR DEisenhut 4/ /82
OFFICE SURNAME DATE	.BL: 18#3 J. Dec. ph 4/ TS. /82.	DL:LB#3.10 HRood 10 4/ 10 /82	OELD W	0ELD JRutberg	AToalsten 4/ X82	DL: 17 FMT 11a 4/ 2/ 782	DI CHO: L RIGGESCO 19782
NRC FORM 318	(10-80) NRCM 0240		OFFICIAL	RECORD C	OPY	L	USGPO: 1981-335-960

- 2 -