

June 23, 1981

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Docket No. 50-206
LS05-81-06-087

Mr. R. Dietch, Vice President
Nuclear Engineering and Operations
Southern California Edison Company
2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770

Dear Mr. Dietch:

SUBJECT: Administrative Changes to the Safety Evaluation on Equipment
Qualification for San Onofre Nuclear Generating Station Unit 1

Reference (a): NRC letter of June 2, 1981, transmitting the
Safety Evaluation for the Environmental Qualification
of Safety-Related Electrical Equipment

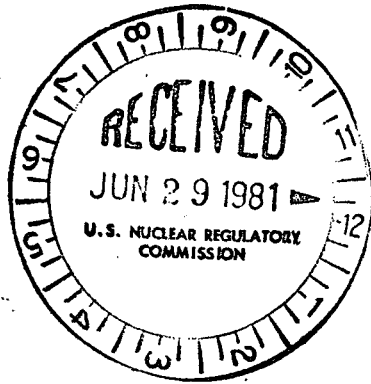
This letter transmits page changes to Reference (a). These changes are
the result of our identification of inconsistencies between the Safety
Evaluation Report (SER) and the Technical Evaluation Report. Please
replace the effected pages with those attached to this letter.

Sincerely,
Original signed by
Dennis M. Crutchfield

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosures:
As stated above

cc w/enclosures:
See attached



8107070558 810623
PDR ADOCK 05000206
PDR

OFFICE	DL:ORB #5/LA	DL:ORB #3/PM	DL:ORB #5/C				
SURNAME	HSmith	SNowicki	DCrutchfield				
DATE	6/23/81	6/23/81	6/23/81				



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

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Mr. R. Dietch

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cc w/enclosure:
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General Counsel
James Beoletto, Esquire
Southern California Edison Company
Post Office Box 800
Rosemead, California 91770

David R. Pigott
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Three Embarcadero Center
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San Francisco, California 94111

Harry B. Stoehr
San Diego Gas & Electric Company
P. O. Box 1831
San Diego, California 92112

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San Clemente, California 92672

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San Clemente, California 92672

Chairman
Board of Supervisors
County of San Diego
San Diego, California 92101

California Department of Health
ATTN: Chief, Environmental
Radiation Control Unit
Radiological Health Section
714 P Street, Room 498
Sacramento, California 95814

U. S. Environmental Protection Agency
Region IX Office
ATTN: EIS COORDINATOR
215 Fremont Street
San Francisco, California 94111

The following safety evaluation incorporates the SCE submittal and the Franklin Research Center technical evaluation report (TER).

3.1 COMPLETENESS OF SAFETY-RELATED EQUIPMENT

In accordance with the DOR guidelines, the licensee was directed to establish a list of systems and display instrumentation needed to mitigate the consequences of a LOCA or HELB, inside or outside containment, and reach safe shutdown. The lists of safety-related systems and display instrumentation were developed from a review of plant safety analyses and emergency procedures. The display instrumentation selected includes parameters to monitor overall plant performance as well as to monitor performance of the systems on the list. The systems list was established on the basis of the functions that must be performed for mitigation of the consequences of a LOCA or HELB without regard to a potentially hostile environment. The staff has determined and verified that the systems considered by the licensee are those required to achieve or support: (1) emergency reactor shutdown, (2) containment isolation, (3) reactor core cooling, (4) containment heat removal, (5) core residual heat removal, and (6) prevention of significant release of radioactive material to the environment. The staff concludes that the systems identified by the licensee are acceptable with the exception of those items discussed in section 5.0 of this report. The systems and instrumentation list is contained in Appendix D.

The licensee submitted an extensive list of safety-related electrical equipment. The list was evaluated and identical components within a plant area exposed to the same environment were grouped; 71 item types of equipment were identified and assessed by the staff.

APPENDIX B:

List of Equipment in Section 4.2, Equipment Requiring

Additional Information And/Or Corrective Action

NOTE: (R) Licensee has committed to replace equipment

LEGEND:
DESIGNATION FOR Deficiency

- | | |
|---|---|
| R - Radiation | M - Margin |
| T - Temperature | I - HELB Evaluation Outside Containment Not Completed |
| QT - Qualification Time | QM - Qualification Method |
| RT - Required Time | RPN - Equipment Relocation or Replacement, Adequate Schedule Not Provided |
| P - Pressure | EXN - Exempted Equipment Justification Inadequate |
| H - Humidity | SEN - Separate Effects Qualification Justification Inadequate |
| CS - Chemical Spray | QI - Qualification Information Being Developed |
| A - Material Aging Evaluation, Replacement schedule, Ongoing Equipment Surveillance | RPS - Equipment Relocation or Replacement Schedule Provided |
| S - Submergence | |

TER Item No.	Equipment Description	Manufacturer	Model/ Type	Deficiency
5	Motor	Westinghouse	CS	QI
6	MOV	Teledyne	02112-002-5210 02112-003-5210	QI
10	MOV	Limitorque	SMA-1	QM,A
12	MOV	Limitorque	SMB-000-5	QM,A
19A	Flow Controller	Honeywell	IS HE-1	QI
19B	SOV Operator	ASCO	B8300-B56R1	QI
21	MOV	Limitorque	SMB-00	QM,A
*26	Transmitter	Foxboro	E13DM	QM,A,R
27A	SOV Operator	ASCO	WPLB 8300-861RV	QI
27B	SOV Operator	ASCO	U8302C26R	QI

*See Attachment 1: Foxboro letter (3/12/81), "Potential Deficiency Affecting Foxboro Transmitters," for corrective action.

APPENDIX B, Continued.

TER Item No.	Equipment Description	Manufacturer	Model/ Type	Deficiency
*28	Transmitter	Foxboro	E11GM	QM,A,R
29	SOV Operator	ASCO	8300B61R	QI
30	SOV Operator	ASCO	8300B61	QI
31	SOV Operator	ASCO	WPLB8300B59	QI
32	SOV Operator	ASCO	HTX8210-27	QI
33	SOV Operator	ASCO	WP831735	QI
34	SOV Operator	ASCO	WP831735	QI
35	SOV Operator	ASCO	WP8300-B64R	QI
36	SOV Operator	ASCO	WPHTX832093	QI
37	SOV Operator	ASCO	WPLB-8300-B61RU	QI
38	Solenoid	Morotta valve	MV-583H-4A	QI
39	Solenoid	Morotta valve	MV-583H-4A	QI
40	SOV Operator	ASCO	8345C11	QI
41	SOV Operator	ASCO	WPLB-8300-B59RF	QI
42	SOV Operator	ASCO	WPLB-8300-B59	QI
43	SOV Operator	ASCO	WPHTX832093	QI
44	SOV Operator	ASCO	WPHTX832093	QI
45	Solenoid Operator	Atkomatic	3101	QI
46	Solenoid	Atkomatic	3101	QI
48	SOV Operator	ASCO	WPLB8300B59	QI
49	SOV Operator	ASCO	WPHTX832093	QI
50	Solenoid	Atkomatic	3101	QI

APPENDIX B, Continued

TER Item No.	Equipment Description	Manufacturer	Model/ Type	Deficiency
*51	Transmitter	Foxboro	E11GM Style C	QM,A,R
58	Solenoid	Valvair	5682-2	QI
*66	Transmitter	Foxboro	NE13DM	QM,A,QT,R
68	Cable	GE	EPR/Neoprene	QM,S
79	Resistance Temperature Detector	Weed Instruments	2004	QI
*1	Transmitter	Foxboro	E11DM	QM,A,QT,R
*3A	Transmitter	Foxboro	NE11GM	QM,A,QT,R
*3B	Transmitter	Foxboro	E11GM	QM,A,QT,R
*4	Transmitter	Foxboro	E13DH- HFD-SAH1	QM,A,QT,R
9	Transmitter	Foxboro	630-2AS	QI
11	Motor	Chempump	GPS-60L 46H-3T	QI
*13	Transmitter	Foxboro	E13DM Style C	QM,A,QT,R
47	SOV Operator	ASCO	UNK	QI
62	Temperature Sensor	Foxboro	DB-13V-26W	QI
16	Pump Motor	Westinghouse	CSP 65F15619	QI
22	Pump Motor	Westinghouse	AALG	QI

APPENDIX B, Continued

TER Item No.	Equipment Description	Manufacturer	Model/ Type	Deficiency
64	Motor	Pacific Pump	UNK	QI
67	Cable	GE	Vulkene	QI,A,R
71	Electrical Penetration	Viking	UNK	QI,QM,CS,R
73	Electrical Penetration	Amphenol	UNK	A,CS,S
*81	Transmitter	Foxboro	E11GM	QM,A,QT,R
(R) 92	Terminal Block	UNK	UNK	QI,A,QM,CS,R
*96	Transmitter	Foxboro	E13DM	QM,A,QT,S,R
100	Cable	UNK	UNK	QI,A,QM,S,CS

APPENDIX C

List of Equipment in Section 4.3,

Equipment Considered Acceptable or Conditionally Acceptable:

LEGEND: A - Material Aging Evaluation:

TER Item No.	Equipment Description	Manufacturer	Model/ Type	Deficiency
2	Transmitter	Foxboro	613DM	A
69	Cable	Flamtrol	Flamtrol	A
70	Cable	Rockbestos	Firewall III&SIS.	A
72	Electrical Penetrations	Conax	UNK	A
74	Cable Splice	Raychem	Thermofit	A
78	Limit Switch	NAMCO	EA-180	A
7	SOV Operator	ASCO	WPHT 8314	
8A	SOV Operator	ASCO	WPLB 8300B59	
8B	SOV Operator	ASCO	X-8302C25	
23	MOV	Limitorque	SMB-00	
15A	MOV	Limitorque	SMB-00	A
15B	MOV	Limitorque	SMB-00	A
18	MOV	Limitorque	SMB-00	A
24	MOV	Limitorque	SMB-00	A
60	MOV	Limitorque	SMB-00	A



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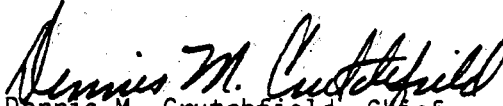
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APPENDIX C

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24	MOV	Limitorque	SMB-00	A
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