

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2	DOCKET NUMBER (2) 05000361	PAGE (3) 1 OF 2
--	-------------------------------	--------------------

TITLE (4)
COMPONENT COOLING WATER TRAINS INOPERABLE

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQ. NUMBER	REV. NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
08	15	84	84	046	01	11	16	84	Unit 3		05000362
08	15	84	84	046	01	11	16	84			05000362

OPERATING MODE (9) 1

POWER LEVEL (10) 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	X 50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME J. G. HAYNES, STATION MANAGER	TELEPHONE NUMBER 714 492-7700
---------------------------------------	----------------------------------

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (if yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

Abstract (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On August 15, 1984, at 1130, with Unit 2 in Mode 1 at 80 percent power and Unit 3 in Mode 1 at 100 percent power, the local readout for saltwater cooling flow to the Train B Component Cooling Water (CCW) Heat Exchanger indicated a fault condition. The Train A CCW Heat Exchanger indicated a fault condition. The Train A CCW Heat Exchanger was out of service for cleaning. Because a high differential pressure existed across the Train B CCW Heat Exchanger, it was conservatively assumed that Train B saltwater cooling flow was less than the flow required for system operability. Train B CCW was declared inoperable, and Limiting Condition for Operation (LCO) 3.0.3 was invoked on Unit 2. Emergency Chiller E-335 was declared inoperable since Train B CCW was supplying its cooling water. Loss of E-335 renders two vital inverters inoperable in each unit, and LCO 3.0.3 was also invoked for Unit 3. Shutdown of both units was initiated. A Train B Saltwater Cooling Pump in the Unit 2 intake was started, and the differential pressure across the heat exchanger decreased. At 1230 the saltwater cooling flow indication was restored. Saltwater cooling flow was determined to be above the minimum required flow, and LCO 3.0.3 was exited.

The saltwater cooling flow indication was restored by switching readout channels. It is suspected that the initial fault indication was due to reading an inoperable channel. Saltwater cooling flow indication has been installed in the control building to provide remote indication to the operating staff.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQ. NUMBER	REV. NUMBER			
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2	0 5 0 0 0 0 3 6 1	8 4	- 0 4 6	- 0 1	0 2	OF	0 2

TEXT (If more space is required, use additional NRC Form 366A's) (17)

On August 15, 1984, at 1130, with Unit 2 in Mode 1 at 80 percent power and Unit 3 in Mode 1 at 100 percent power, the readout for saltwater cooling flow to the Train B Component Cooling Water (CCW) Heat Exchanger (EIIS Component Identifier HX) indicated a fault condition. Train A CCW HX was out of service for cleaning. Because a high differential pressure existed across the Train B CCW HX, it was conservatively assumed that Train B saltwater cooling flow was less than the flow required for CCW system (EIIS System Identifier CC) operability. The Train B CCW system was declared inoperable, and Limiting Condition for Operation (LCO) 3.0.3 was invoked on Unit 2 based on failure to meet LCO 3.7.3. Additionally, Emergency Chiller E-335 (EIIS Component Identifier CHU) was declared inoperable since Train B CCW was supplying its cooling water. Loss of E-335 renders two vital inverters inoperable in each unit, and since the Action Statement of the associated LCO (LCO 3.8.3.1) addresses only the loss of one inverter, LCO 3.0.3 was invoked on Unit 3. Shutdown of both Units was initiated. A Train B Saltwater Cooling Pump (EIIS Component Identifier P) was stopped and restarted, and the differential pressure across the Train B HX decreased. At 1230 the saltwater cooling flow indication fault condition cleared. Saltwater cooling flow was verified as greater than the minimum required for CCW operability, and LCO 3.0.3 was exited.

The saltwater cooling flow indication was restored by switching local readout channels. It is suspected that the initial fault indication was due to reading an inoperable channel. Saltwater cooling flow indication has been installed in the control building to provide remote indication to the operating staff.

There are no reasonable alternative conditions under which this event would have been more severe.

Southern California Edison Company

SAN ONOFRE NUCLEAR GENERATING STATION
P.O. BOX 128
SAN CLEMENTE, CALIFORNIA 92672

SCE

J. G. HAYNES
STATION MANAGER

TELEPHONE
(714) 492-7700

November 16, 1984

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Subject: Docket No. 50-361
30-Day Report
Licensee Event Report No. 84-046, Revision 1
San Onofre Nuclear Generating Station, Units 2 and 3

Reference: Letter, J. G. Haynes (SCE) to USNRC Document Control Desk,
dated September 17, 1984, Licensee Event Report No. 84-046

The referenced letter provided the required 30-day written Licensee Event Report for an occurrence involving the Saltwater Cooling System. The referenced letter stated that saltwater cooling flow indication would be input to the plant computer to provide remote indication. An evaluation of this commitment determined that the most direct and timely means to provide remote saltwater cooling flow indication was to install a remote readout behind the Control Room panel that ties directly to the flow measuring instrumentation. This action has been accomplished. Enclosed is LER 84-046, Revision 1, which changes our corrective action as discussed above.

If you require any additional information, please so advise.

Sincerely,

J. G. Haynes

Enclosure LER No. 84-046, Revision 1

cc: F. R. Huey (USNRC Senior Resident Inspector, Units 1, 2 and 3)
J. P. Stewart (USNRC Resident Inspector, Units 2 and 3)

J. B. Martin, (Regional Administrator, NRC Region V)

Institute of Nuclear Power Operations (INPO)

IE22
1/1