

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3DOCKET NUMBER (2)
0 5 0 0 0 3 6 2PAGE (3)
1 OF 0 2TITLE (4)
DNBR REACTOR TRIPEVENT DATE (5)
MONTH DAY YEAR
0 6 1 1 8 4LER NUMBER (6)
YEAR SEQ. NUMBER REV. NUMBER
8 4 - 0 2 4 - 0 0 0REPORT DATE (7)
MONTH DAY YEAR
7 0 9 8 4OTHER FACILITIES INVOLVED (8)
FACILITY NAMESDOCKET NUMBER(S)
0 5 0 0 0

0 5 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)
OPERATING MODE (9) 1
POWER LEVEL (10) 1 0 0
20.402(d) 20.405(c) X 50.73(a)(2)(iv) 73.1(b)
20.405(a)(1)(i) 50.36(c)(1) 50.73(a)(2)(v) 73.1(c)
20.405(a)(1)(ii) 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) 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 MANAGERTELEPHONE NUMBER
AREA CODE
7 1 4 4 9 2 - 7 7 0 0

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
X	J/C	C/P/U	C 4 9 0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) X NO
EXPECTED SUBMISSION DATE (15)

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

On June 11, 1984, at 1817, with Unit 3 in Mode 1 at 100% power, a spurious penalty factor from Control Element Assembly Calculator (CEAC) 1 caused all four Core Protection Calculators (CPC's) to generate Low Departure from Nucleate Boiling Ratio (DNBR) trip signals to the four Reactor Protection System channels. The reactor tripped, and the Emergency Feedwater System actuated on low steam generator level due to shrink. No systems or components malfunctioned during this event.

The cause of the trip was an intermittent hardware failure on one of five computer boards. All five boards have been replaced, and no further failures have been observed. No other corrective action is planned.

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LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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

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

On June 11, 1984, at 1817, with Unit 3 in Mode 1 at 100% power, a spurious penalty factor from Control Element Assembly Calculator (CEAC) (EIIS Component Identifier CPU) 1 caused all four Core Protection Calculators (EIIS Component Identifier CPU) to generate low Departure from Nucleate Boiling Ratio (DNBR) trip signals to all four Reactor Protection System (EIIS System Identifier JC) channels. The reactor tripped, and the Emergency Feedwater System (EIIS System Identifier BA) actuated on low steam generator level due to shrink. No systems or components malfunctioned during this event.

CEAC's are designed to generate penalty factors which are transmitted to the CPC's for use in the DNBR calculation if Control Element Assemblies (CEA's) (EIIS Component Identifier ROD) deviate significantly from other CEA's in their subgroup. A review of the CEAC 1 trip buffer revealed that all CEA's were in their proper position, and no penalty factor should have been generated. It is suspected that a spurious CEA deviation was calculated by CEAC 1 due to an intermittent computer processor fault. Three Central Processing Unit circuit boards and two memory boards (EIIS Component Identifier CPU) in CEAC 1 have been replaced and tested. No further failures have been observed, and no other corrective action is planned.

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

J. G. HAYNES
STATION MANAGER

July 9, 1984

TELEPHONE
(714) 492-7700

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

Subject: Docket No. 50-362
30-Day Report
Licensee Event Report No. 84-024
San Onofre Nuclear Generating Station, Unit 3

Pursuant to 10 CFR 50.73(a)(2)(iv), this submittal provides the required 30-day written Licensee Event Report (LER) for an occurrence involving the actuation of the Reactor Protection System and the Emergency Feedwater System. Neither the health and safety of the public nor plant personnel were affected by this event.

If you require any additional information, please so advise.

Sincerely,

Enclosure: LER No. 84-024

cc: A. E. Chaffee (USNRC 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)

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