

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)  
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2DOCKET NUMBER (2)  
0 5 0 0 0 3 6 1PAGE (3)  
1 OF 1

TITLE (4)

## REACTOR TRIP - NON-1E INSTRUMENT BUS TRANSIENT

EVENT DATE (5)  
MONTH DAY YEAR  
08 01 85  
LER NUMBER (6)  
YEAR SEQ. NUMBER REV. NUMBER  
85 041 000  
REPORT DATE (7)  
MONTH DAY YEAR  
08 29 85  
OTHER FACILITIES INVOLVED (8)  
FACILITY NAMES  
DOCKET NUMBER(S)  
0 5 0 0 0 0 0 0OPERATING MODE (9)  
1  
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) X 50.73(a)(2)(iv) 73.71(b)  
POWER LEVEL (10) 100 20.405(a)(1)(i) 50.36(c)(1) 50.73(a)(2)(v) 73.71(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  
H. E. MORGAN, STATION MANAGER  
TELEPHONE NUMBER  
AREA CODE  
711 4 492 - 7700

## 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

## SUPPLEMENTAL REPORT EXPECTED (14)

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

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

On 8/1/85, at 1535, with Unit 2 at 100% power, the reactor (EIIS Component Code RCT) tripped in response to Loss of Load trip signals. The Loss of Load signals were generated as result of a spurious turbine (EIIS Component Code TRB) trip. All safety systems were verified to have functioned properly.

The spurious turbine trip was caused by a voltage transient on Phase 'A' of the non-1E uninterruptible power supply (UPS)(EIIS System Code EE) inverter (EIIS Component Code INVT) 2Y012. This inverter supplies power to two auxiliary relays (EIIS Component Code RLY) associated with the Control Element Drive Mechanism (CEDM) (EIIS Component Code DRIV) undervoltage relays which make up part of the turbine trip circuitry. The transient de-energized the auxiliary relays, closed their contacts and completed the turbine trip logic. The transient was verified to have occurred based on alarms on several instruments powered by Phase 'A' and no such indications on instruments powered by other phases of the UPS. No defects were found in inverter 2Y012. The cause of the voltage transient is unknown.

As corrective action, a design change has been implemented which re-arranged the auxiliary relays, so that a single phase voltage transient will not cause a turbine trip.

Since all safety systems functioned properly, there are no reasonable or credible circumstances under which this event would have been more severe.

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*Southern California Edison Company*

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H. E. MORGAN  
STATION MANAGER

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August 29, 1985

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

Subject: Docket No. 50-361  
30-Day Report  
Licensee Event Report No. 85-041  
San Onofre Nuclear Generating Station, Unit 2

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 Reactor Protection System. Neither the health and safety of plant personnel nor the health and safety of the public was affected by this event.

If you require any additional information, please so advise.

Sincerely,

*H E Morgan*

Enclosure: LER No. 85-041

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

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

Institute of Nuclear Power Operations (INPO)

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