NRC FORM 366 (12-81) 10 CFR 50

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

APPROVED BY OMB 3150-0011

CONTROL BLOCK: [| | | | | |] (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1	LICENSEE CODE: C A S O S 3 (2) LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3) LICENSE TYPE: 4 1 1 1 1 (4) CAT: (5)
CON'T 0 1	REPORT SOURCE: L (6) DOCKET NUMBER: 0 5 0 0 0 3 6 2 (7) EVENT DATE: 1 0 1 7 8 3 (8) REPORT DATE: 0 1 3 1 8 4 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On 10/17/83, with Unit 2 in Mode 1, the undervoltage (UV) armatures for
0 3 Reactor Trip Breakers (RTB's) 4 and 8 were found not to be fully picked-
0 4 up. On 10/28/83, with Unit 3 in Mode 3, RTB's 5 and 8 were observed to
0 5 be in the same condition. On 10/31/83, with both Units 2 and 3 in
0 6 Mode 1, Unit 2 RTB 4 and Unit 3 RTB's 5 and 8 were found in this con-
0 7 dition. (See attachment.)
0 8

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	I A (11)	E (12)	B (13)	C K T B R K (14)	A (15)	Z (16)

(17) LER/RO REPORT NUMBER: EVENT YEAR 8 3 — SEQUENTIAL REPORT NO. 0 9 1 / OCCURRENCE CODE 0 1 REPORT TYPE X — REVISION NO. 1

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER (26)
E (18)	X (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	N (25)	G 0 8 0

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 UV armatures not being fully picked-up is the result of interference
1 1 between the UV armature and the copper shading ring around the coil core.
1 2 All affected RTB's were reset. As corrective action, visual verification
1 3 and manual adjustment of proper closed air gap position is required
1 4 following energization of the UV device. Diode elimination is being investigated.

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	B (28)	0 0 0 (29)	NA	B (31)	Surveillance Testing

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	NA	NA

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	NA

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	NA

8402150218 840131
PDR ADOCK 05000362
S PDR

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE	DESCRIPTION
1 9	Z (42)	NA

IE22 1/1

PUBLICITY

	ISSUED	DESCRIPTION (45)	NRC USE ONLY
2 0	N (44)	NA	

NAME OF PREPARER: J. G. HAYNES JH PHONE: 714/492-7700

ATTACHMENT TO LER 83-091, REVISION 1
SOUTHERN CALIFORNIA EDISON COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION
UNITS 2 AND 3, DOCKET NOS. 50-361 AND 50-362

SUPPLEMENTAL INFORMATION FOR EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

Based on vendor tests, the abnormal armature position has little or no detectable effect on the ability of the UV trip device to trip the breaker on loss of voltage. Public health and safety were unaffected since the shunt trip feature functioned properly. See LER 83-125 (Docket No. 50-361).

2448u

Southern California Edison Company

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

J. G. HAYNES
STATION MANAGER

TELEPHONE
(714) 492-7700

January 31, 1984

U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region V
1450 Maria Lane, Suite 210
Walnut Creek, California 94596-5368

Attention: Mr. J. B. Martin, Regional Administrator

Dear Sir:

Subject: Docket Nos. 50-361 and 50-362
Licensee Event Report No. 83-091, Revision 1,
(Docket No. 50-361)
San Onofre Nuclear Generating Station, Units 2 and 3

Reference: Letter, J. G. Haynes (SCE) to J. B. Martin (NRC), "14-Day Follow-Up Report, Licensee Event Report 83-091 (Docket No. 50-362)," dated November 18, 1983

The referenced letter provided the 14-Day Follow-Up Report and a copy of the Licensee Event Report (LER) form for an occurrence involving operation of Reactor Trip Breakers (RTB's) on their undervoltage (UV) trip devices. (As in the past, the breakers continue to function acceptably using the shunt trip device.) As stated in that letter, our investigation into UV armatures not fully picking up as a result of interference between the UV armature and the copper shading ring around the core of the coil was continuing with the assistance of SCE and CE organizations and the vendor.

Based on tests conducted by the vendor (General Electric), it has been concluded that the armature in this abnormal position has little or no detectable effect on the ability of the UV trip device to trip the breaker on loss of voltage, therefore, no immediate changes to the UV device settings or configuration of parts was recommended. As stated in the referenced letter, we have implemented their recommendation that following energization of the UV device on the RTB's, the position of the armature should be visually inspected and, if necessary, manually assisted to the proper closed air gap position before closing the breaker, in order to assure the armature is in the optimum position for subsequent tripping.

IE 22

Revision 1 to LER 83-091 is enclosed. If you require any additional information, please so advise.

Sincerely,

JG Haynes

Enclosure: LER No. 83-091, Revision 1, (Docket No. 50-361)

cc: A. E. Chaffee (USNRC Resident Inspector, Units 1, 2 and 3)
J. P. Stewart (USNRC Resident Inspector, Units 2 and 3)

U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement

U. S. Nuclear Regulatory Commission
Division of Technical Information and Document Control

Institute of Nuclear Power Operations (INPO)