NRC Form 366
(9/83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

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

TITLE (4)

SPURIOUS TOXIC GAS ISOLATION SYSTEM (TGIS) ACTUATIONS

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)
										SONGS UNIT 3	0 5 0 0 0 3 6 2
0 5	2 8	8 4	8 4	—	0 3 2	— 0 0	0 6	2 7	8 4		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)							
	1		20.402(b)		20.405(c)	X	50.73(a)(2)(iv)		73.71(b)
POWER LEVEL (10)	1 0 0		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	TELEPHONE NUMBER
	AREA CODE
J. G. HAYNES, STATION MANAGER	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 NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On May 28, 1984, at 0920, with both Units in Mode 1 at 100% power, a spurious Toxic Gas Isolation System (TGIS) actuation occurred. Subsequent to this date, additional spurious actuations occurred on May 30, 31, June 3, 7, 14, 18, 19 and 23. The Control Room Emergency Air Cleanup System (CREACUS) actuated on each TGIS. For each occurrence, the actuation was verified to be spurious and TGIS was immediately reset. See also LERs 84-006, 012, 021, and 026 (Docket No. 50-361).

The spurious TGIS actuations are the result of overly conservative alarm setpoints. In addition, one or more of the following conditions also contribute to spurious TGIS actuations: electrical noise, rapid temperature and pressure changes, radio transmissions, vibration, and dust and dirt accumulation. Corrective actions have been implemented and are continuing in order to eliminate these conditions. A proposed Technical Specification amendment has been submitted to permit more appropriate TGIS setpoints. In addition, a request for exemption from reporting invalid actuations of the TGIS under 10 CFR 50.72 and 10 CFR 50.73 is being prepared.

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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 3 6 1	8 4	- 0 3 2	- 0 0	0 2 OF 0 2

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

On May 28, 1984, at 0920, with Units 2 and 3 in Mode 1 at 100% power, a spurious Toxic Gas Isolation System (TGIS) (EIIS System Identifier JF) actuation occurred. Subsequent to this date, additional spurious actuations occurred on May 30, 31, June 3, 7, 14, 18, 19 and 23. The Control Room Emergency Air Cleanup System (CREACUS) (EIIS System Identifier VI) actuated on each TGIS. For each occurrence, the actuation was verified to be spurious and TGIS was immediately reset. No plant systems or components failed as a result of these events. See also LERs 84-006, 012, 021 and 026 (Docket No. 50-361).

The spurious TGIS actuations are the result of overly conservative alarm setpoints. In addition, one or more of the following conditions also contribute to spurious TGIS actuations: electrical noise levels, rapid temperature and pressure changes, radio transmissions, vibration, and dust and dirt accumulation. The actuation on May 30, 1984, was traced to dirty contacts on an oscillator, which created noise on the ammonia and CO_2 channels. The oscillator card was replaced and TGIS Train B was returned to service.

Several corrective actions have been implemented that have been effective in reducing, but not eliminating, the spurious TGIS actuations. These actions include sealing the door in the corridor housing the TGIS, which has reduced rapid temperature and pressure changes and dust accumulation; banning radios in the area; and reducing calibration and surveillance intervals on the TGIS analyzers. Additionally, the system has been instrumented with recorders in order to determine which of the analyzers are causing the trips.

A proposed Technical Specification amendment has been submitted to permit more appropriate TGIS setpoints. In addition, a request for exemption from reporting invalid actuations of the TGIS under 10 CFR 50.72 and 10 CFR 50.73 is being prepared. In the interim, corrective actions are continuing in order to eliminate the spurious TGIS actuations.

There are no reasonable or credible circumstances which could have increased the severity of these occurrences. Neither the health and safety of plant personnel nor the public were affected.

Southern California Edison Company

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June 27, 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. 84-032
San Onofre Nuclear Generating Station, Units 2 and 3

Pursuant to 10 CFR 50.73(a)(2)(iv), this submittal provides the required 30-day written Licensee Event Report (LER) for eleven occurrences involving the actuation of the Toxic Gas Isolation System (TGIS). Since these events involve shared systems between Units 2 and 3, these events have been combined into a single report in accordance with NUREG-1022. Neither the health and safety of plant personnel nor the public were affected by these events.

If you require any additional information, please so advise.

Sincerely,

J. G. Haynes

Enclosure: LER No. 84-032

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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