

LICENSEE EVENT REPORT (LER)

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

TITLE (4)

INCORRECT GASEOUS EFFLUENT MONITOR SETPOINT DURING CONTAINMENT VENTING

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)							
1	0	2	3	8	5	8	5	0	5	3	0	5	0	0	0		
OPERATING MODE (9) 1			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)														
POWER LEVEL (10) 1 0 0			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)			<input checked="" type="checkbox"/> 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)			<input checked="" type="checkbox"/> 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)(3)								
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 7 1 4 3 6 8 - 6 2 4 1
--	---

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)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
--	--	-------------------------------	-------	-----	------

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

On October 23, 1985, from 1630 to 2010, with Unit 2 at 100% power, containment venting was performed to reduce containment pressure. The effluent release was monitored by Noble Gas Activity Monitor 2RT-7828 and remained well below Technical Specification limits. At 2045, it was determined that the alarm/trip setpoint for 2RT-7828 during the release was less conservative than the required setpoint determined by the Offsite Dose Calculation Manual, contrary to Technical Specification 3.3.3.9.

The improper alarm/trip setpoint was a result of a processing error when the gaseous release permit was prepared. A setpoint of 2.18E+5 cpm associated with Containment Purge Isolation System Airborne Monitor 2RT-7804 was used rather than the required setpoint of 8.42E-3 microcuries/cc for 2RT-7828, the monitor used for the release. The Chemistry Foreman failed to ensure proper review of the release permit and procedures did not require a verification of which monitor was to be used for the release. No provision for an independent verification of release permit parameters existed.

This event will be reviewed with all Chemistry Technicians at Unit 1 and Units 2 and 3. The procedure for gaseous release permits has been revised to require verification of the proper monitor. Also, procedures for gaseous and liquid release permits will be revised to require independent verification of appropriate release permit parameters.

There was no safety significance to this event since Monitor 2RT-7804 remained operable and would have terminated the release in the event of an accident.

IE 22
11

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 3 6 1	8 5	- 0 5 3	- 0 0	0 2	OF	0 3

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

On October 23, at 1630, with Unit 2 in Mode 1 at 100% power, containment venting was initiated to reduce containment pressure; and at 2010 containment venting was secured. The effluent release was monitored by Containment Purge System Noble Gas Activity Monitor 2RT-7828 (EIIS System Code IL). The release remained well below Technical Specification limits.

Technical Specification 3.3.3.9 for Radioactive Gaseous Effluent Monitoring Instrumentation requires alarm/trip setpoints be set to ensure that the limits of Specification 3.11.2.1 are not exceeded. Technical Specification 3.3.3.9, Action "a" requires that with the alarm/trip setpoint less conservative than that required by the Specification the release of radioactive gaseous effluents is to be immediately suspended or the channel be declared inoperable. At approximately 2045, it was determined that the alarm/trip setpoint on 2RT-7828 (EIIS Component Code RT) during the release was less conservative than the Technical Specification limit. Subsequent investigation determined that the erroneous setpoint was the result of a processing error when the gaseous release permit was prepared.

Prior to a gaseous release, samples are taken and analyzed for isotopic concentrations and setpoints are determined based on release rate, duration and Offsite Dose Calculation Manual limits. In accordance with SCE's Chemistry Program, these calculations are required to be made or supervised by a Nuclear Chemistry Technician (NCT) who has been qualified to perform such analyses. Recommended monitor setpoints along with other gaseous release data are then entered on the "Units 2/3 Gaseous Effluent Release Permit" form by the qualified NCT, and the permit is given to the Shift Superintendent for processing. An I&C Technician then makes the setpoint changes prior to the release, and restores the setpoints to their original value following the release.

On 10/23/85, a permit was initiated for the planned Unit 2 containment vent release. The Chemistry Foreman assigned the preparation of the release permit to an assistant NCT (trainee) as an opportunity for qualification training. Qualification status is controlled by NCT Qualification Manual, which has a listing of specific tasks for each chemistry technician. The Chemistry Foreman is required to place a signature by the specific task after the technician has demonstrated proficiency with that task. The assistant NCT had not been signed-off in the NCT Qualification Manual as being qualified to prepare gaseous release permits, and in accordance with the Chemistry Program and NCT training program, the Chemistry Foreman was required to supervise the preparation of the release permit. However, the Chemistry Foreman did not provide adequate supervision in this instance.

The assistant NCT had properly performed an analysis and completed a release permit for a Unit 3 containment purge release the previous day. In order to produce a permit, a Gaseous Effluent Release Permit computer code (GERP) is run. This computer code provides calculated setpoints for monitors RT-7804, RT-7865 and RT-7828. For the Unit 3 release, monitor 3RT-7804C alarm/trip setpoints were properly written onto the permit form. The assistant NCT, unaware that for Unit 2 only 2RT-7828 or 2RT-7865 can be used for effluent monitoring of containment releases, entered 2RT-7804C and its associated setpoint on the form. The assistant NCT then asked the qualified NCT designated by the Chemistry Foreman to review the previous Unit 3 release permit, to review the GERP printout and the Release Permit form for the Unit 2 release. This was done; however, the NCT assumed that the assistant NCT would obtain a detailed review from the Chemistry Foreman. As a result, only a cursory review was performed and the improper monitor was not identified.

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 3 6 1	8 5	- 0 5 3	- 0 0	0 3	OF 0 3

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

The assistant NCT provided the Shift Superintendent with the completed permit. At this time, the Shift Superintendent noted that the permit reflected the incorrect monitor and instructed the assistant NCT to use 2RT-7828. The assistant NCT lined out 2RT-7804C and wrote in 2RT-7828 on the permit but did not revise the alarm/trip setpoint accordingly as he was unaware of the differences between the two monitors. The permit was returned to the Shift Superintendent for processing, the incorrect setpoint was installed into 2RT-7828, and the containment venting was performed.

At approximately 2045 following the containment venting, the I&C Technician restoring monitor 2RT-7828's setpoint noted the improper setpoint value of $2.18 \text{ E}+5$ installed for the release (since the range of 2RT-7828 is only six decades and its normal setpoint is $4.23 \text{ E}-3$). The setpoint for the release should have been $8.42 \text{ E}-3$.

The primary cause of this event is personnel error in that the assistant NCT, the qualified NCT, and the Chemistry Foreman failed to ensure a proper review of the release permit due to lack of attention to detail and due to insufficient supervision. This event will be reviewed with all Chemistry Technicians at Unit 1 and Units 2 and 3. Appropriate disciplinary action has been taken.

Procedure S0123-III-5.12.23, "Units 2/3 Gaseous Effluent Release Permit," does not require verification of the monitor to be used to monitor the effluent release. Although the Shift Superintendent identified the error, proper identification of the monitor to be used when the permit was initially completed may have prevented this event. S0123-III-5.12.23 has since been revised to require the verification of the proper monitor to be used. In addition, the GERP computer code will be modified such that for Unit 2 containment releases, monitor 2RT-7804C parameters will not be printed.

No provisions exist to require independent verification of the setpoints on the release permit. As additional corrective action to preclude error, liquid and gaseous release permits and procedures will be revised to include an independent verification of the release permit by a second qualified NCT including monitor designation and setpoints, flow rates, and nuclide concentrations. Also other items of potential impact on Chemistry/Effluent Technical Specifications will be reviewed to determine the need for additional provisions for independent verification.

There was no safety significance to this event since Containment Purge Isolation System Airborne Monitor 2RT-7804 remained operable and would have terminated the release in the event of an accident.



Southern California Edison Company

SAN ONOFRE NUCLEAR GENERATING STATION

P. O. BOX 128

SAN CLEMENTE, CALIFORNIA 92672

H. E. MORGAN
STATION MANAGER

TELEPHONE
(714) 368-6241

November 22, 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. 85-053
San Onofre Nuclear Generating Station, Unit 2

Pursuant to 10 CFR 50.73(a)(2)(i)(B), this submittal provides the required 30-day written Licensee Event Report (LER) for an occurrence involving gaseous effluent instrumentation during containment venting. Neither the health and safety of plant personnel nor the public was affected by this event.

If you require any additional information, please so advise.

Sincerely,

Enclosure: LER No. 85-053

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)

IE22
1/1