NRC Form 366 (9/83)								LICE	NSEE	EVEN	IT RE	PORT (	LER)	U.S. NUCLEAR REGULATORY COMMISSION APPROVED OMB NO. 3150-0104 EXPIRES: 8/31/85						
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Abstract (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

SUPPLEMENTAL REPORT EXPECTED (14)

|X|C|V | H|0|3|5

YES (If yes, complete EXPECTED SUBMISSION DATE)

On 1/27/85, at 1320, with Unit 3 in Mode 1 at 100% power, a Reactor Coolant System (RCS) water inventory balance indicated a 2.97 gpm leakage rate, of which 1.73 gpm was determined to be unidentified leakage, exceeding the 1.0 gpm limit of LCO 3.4.5.2. At 1330, the RCS was isolated. At 1350, it was determined the leak rate had not been reduced, and at 1412 a reactor shutdown was commenced and an Unusual Event was declared.

At 2248, and again at 0140 on 1/28/85, Containment Purge Isolation System (CPIS) Train 'A' actuated from containment airborne iodine resulting from the leak. The mini-purge in progress at 2248 was isolated. No purge was in progress at 0140.

Subsequent investigation determined the unidentified leakage was due to failure of the stem packing on Pressurizer Spray Valve 3PV-0100B. The pressurizer spray valve stem packing is currently under repair. To prevent recurrence, the pressurizer spray valve packing and pressurizer spray valve system will be modified during the first refueling outage.

This submittal also provides the report pursuant to Limiting Condition for Operation 3.4.7, Action Statement 'd', for RCS specific activity exceeding 1.0 microcuries/gram Dose Equivalent I-131, which was caused by iodine spiking following the shutdown.

There are no reasonable or credible circumstances which could have increased the severity of this event.

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DATE (15)

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NRC Form 366A

# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

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

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

On January 27, 1985, at 0810, with Unit 3 in Mode 1 at 100% power, operations personnel observed the temperature of the Reactor Coolant Drain Tank (RCDT) (EIIS Component Code TK) to be increasing. At 0900, a four hour Reactor Coolant System (RCS) (EIIS System Code AB) water inventory balance was commenced in accordance with Operations Procedure S023-3-3.37, "Reactor Coolant System Water Inventory Balance." In an attempt to determine the source of the leak, a reactor coolant pump gasket leakage surveillance was performed in accordance with Engineering Procedure S023-V-8.6, "Reactor Coolant Pump Gasket Leakage Monitoring." The gasket leakage surveillance results were satisfactory. At 1320, the 4 hour RCS water inventory balance was completed. The total leakage rate was calculated to be 2.97 gpm, of which 1.73 gpm was unidentified.

At 1330, charging and letdown were secured and a second water inventory balance was commenced with the RCS isolated. At 1350, it was determined that the RCS leakage had not decreased by isolating the RCS, therefore, the water inventory balance calculation was terminated. At 1407, discussions with plant management concluded that the leak was unidentified and could not be isolated. Preparations for plant shutdown were commenced which included returning charging and letdown to service. At 1412, a reactor shutdown was commenced, and in accordance with Emergency Plan Implementing Procedures, an Unusual Event was declared. The sual Event was terminated at 1255 on Japane 28 in accordance with Emergency Plan Implementing Procedures.

Subsequent investigation revealed the cause of the unidentified leakage was failure of the stem packing on Pressurizer Spray Valve 3PV-0100B (EIIS Component Code XCV). Complete valve disassembly, inspection and replacement of the valve stem packing on 3PV-0100A and 3PV-0100B will be accomplished prior to the unit returning to service. Previous investigations determined that the valve stem packing arrangement on the pressurizer spray valves required modification. To prevent recurrence, the pressurizer spray valves and pressurizer spray system will be modified during the first refueling outage for both units. This modification is complete on Unit 2 except for final startup tests.

At 1720 on January 27, with Unit 3 in Mode 2, RCS sample analysis indicated that RCS specific activity exceeded 1.0 microcurie/gram Dose Equivalent (DE) I-131. RCS specific activity was reduced to less than 1.0 microcurie/gram DE I-131 by purification flow at 1705 on January 29, 1985. This event was an indication of iodine spiking. Similar occurrences were previously reported in LERs 83-111, 84-005, 84-013, 84-015, 84-023, 84-037, 84-038, and 84-039.

At 2248, on January 27, while in Mode 3 the Containment Purge Isolation System (CPIS) Train 'A' (EIIS System Code VA) actuated on a high iodine signal from Containment Airborne Radiation Monitor 2RT-7804 (EIIS Component Code RIT). A containment mini-purge in progress was terminated, and all CPIS Train 'A' components actuated as required. Redundant Monitor 2RT-7807 was inoperable for maintenance.

On January 28, at 0140, with purge secured, a second CPIS Train 'A' actuation occurred, again due to high iodine on 2RT-7804. Concurrent with this second high iodine actuation, 2RT-7804 initiated a CPIS noble gas signal. This signal was verified as spurious by operators checking the reading on the noble gas monitor indicator. After each occurrence, the charcoal filters (EIIS Component Code FLT) in 2RT-7804 were replaced and CPIS was restored to operability.

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# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104

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FACILITY NAME(1)	DOCKET NUMBER (2)	LER NUMBER (6)					P	PAGE (3)							
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UNIT 3	0  5  0  0  0   3   6   2	0 2	-	0 0 1	-	00	0 3	OF	0	0					

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

There are no reasonable or credible circumstances which could have increased the severity of this event. Neither the health and safety of plant personnel nor the public was affected by this event.

Pursuant to Limiting Condition for Operation (LCO) 3.4.7, Action Statement 'd', this submittal also provides the required 30-day written report for the occurrence of RCS high specific activity, which was caused by fodine spiking following the shutdown. Additional information, required by LCO 3.4.7, Action Statement 'd', is provided in the tables below. Although the unit has a degasification path which operates continuously and takes pressurizer steam, condenses it and directs it to Liquid Radwaste, degassing history is not applicable, because this system reduces the noble gas content of the RCS but has no effect on Iodine.

### CLEANUP FLOW HISTORY

PERIOD					AVERAGE CLEANUP FLOW (gpm)
1/25/85,	0100	to	1/27/85,	1500	81.0
1/27/85,	1500	to	1/27/85,	1800	30.3
1/27/85,	1800	to	1/27/85,	2100	92.5
			1/27/85,		44.3
1/27/85,	2400	to	1/28/85,	0816	42.5 *
1/28/85,	0816	to	1/29/85,	1705	85.0 *

<sup>\*</sup> Hourly cleanup flow data not available. Figure used is taken from average flow with either one or two charging pumps in operation.

#### REACTOR POWER HISTORY

PERIOD	REACTOR POWER
1/25/85, 0100 to 1/27/85, 1400	97% Rated Power
1/27/85, 1400 to 1/27/85, 1700	97% to 44%
1/27/85, 1700 to 1/27/85, 1800	44% to 0%
1/27/85, 1800 to 1/29/85, 1705	0%

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

## REACTOR COOLANT SYSTEM SPECIFIC ACTIVITY ANALYSIS

DATE	TIME	DE I-131 MICROCURIES/GRAM
1/27/85	1720	1.32
1/27/85	2120	6.83
1/28/85	0120	8.97
1/28/85	0515	94
1/28/85	0750	5.90
1/28/85	1150	5.00
1/28/85	1550	3.92
1/28/85	1950	2.76
1/28/85	2150	2.92
1/29/85	0150	2.25
1/29/85	0550	1.79
1/29/85	0950	1.38
1/29/85	1350	1.01
1/29/85	1705	0.83

#### LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104 EXPIRES: 8/31/85 DOCKET NUMBER (2) LER NUMBER (6) PAGE (3) SEQUENTIAL NUMBER REVISION SAN ONOFRE NUCLEAR GENERATING YEAR STATION, UNIT 3 0 |5 |0 |0 |0 |3 | 6 | 2 | 8 | 5 | - |0 | 0 | 1 | - | 0 | 0 | 5 | OF | 0 | 6 007 0000 TEXT (If more space is required, use additional NRC Form 386A's) (17) 138-07 683 0000 0000 1987 0000 0 5-16 8-1 36-0 8 2 1 8 2 9 10 8 9 36 0 34.0 1116-111-6 34-0 150-98-04 9-358 12-150 34-000 66-04 8-779 36-331 81-02 9-186 111-178 36-000 132-04 51-36 8-753 36-364 9-621 5-891 148-02 97-02 9-855 12-013 36-000 10.527 65-02 9-200 111-262 35-000 80-04 10-222 12-546 36-000 31-02 863 36-02 50-04 9-054 11-176 36-060 48-04 211 1 23-06 8-771 10-810 36-000 35-04 8-975 11-105 34-000 4950 0380 652 9000 0000 0000 4500 02 113-012-3 5.5 38.0 13.5 1040 1900 SURE 38 22-0\* 8-933 35-02 9-244 35-000 10-271 12-648 36-103 63-02 9-972 2-163 95-01 10-513 12-542 39-000 3.466 129-01 13-275 12-505 36-303 0800 2400 03 12.8 8 ... - MM MA 111-094 11-07 8-640 10-726 32-0 00 35-34 10-227 12-620 36-000 47-62 9-964 12-184 36-303 10-350 10-350 12-550 38-000 1111-01 10-466 12-682 38-000 0000 00000 2000 0.1 62-0 10-7 15-1 1128-0111-0 2000 DUTPUE 20-04 10-248 12-447 34-300 76-03 11:129 13:577 36:300 93-01 5222 000 4 2000 22.41 9.8 10.0 10.12. 2000 3-2-2 34.000 60-03 10-942 13-478 34-000 36.300 10.054 75-31 10-475 12-706 36-000 92-13 11-152 13-524 39-000 109-01 10-563 12-744 36-000 125-03 111-202 13-568 36-000 NNEO 19-0 9-57 11-837 34-30 143-0 PE 2-05 7-253 8-919 ONE 10.261 12.261 34.300 18-0 12-559 34-000 \$1-32 9-851 12-122 36-300 10.754 59-01 13-569 36-100 74-03 11-118 13-608 35-300 91-11 108-03 25-31 5.58 8-680 10-328 34-090 29-04 10-202 12-596 36-000 58-03 10-851 13-235 36-000 73-01 10-536 12-603 36-000 90-03 10-925 13-556 34-000 10.425 10.425 12.733 36.000 113.567 200 2000 141-01 34.000 12.2 1011 38.5.2588 38.5.2588 36.9698 36.000 28-02 9-295 111-451 36-000 57-02 10-056 12-261 36-000 106-03 42-04 10-348 12-759 36-000 886 388 000 983 89-0 12-5 36-0 EXW 36. 500 AL 35.3765 35.3765 35.3765 35.3765 36.3765 36.3765 88-04 13-740 15-261 35-000 \*\*\* 258 NOOD 1050 0230 5-0 848 0-6 1900 35.00 35.0 122 36 4710 20004 5-871 25-32 7-331 9-282 35-000 40-04 35-161 35-161 35-161 55-02 9-308 111-394 36-300 10-04 10-305 12-694 35-300 87-02 3-301 34-106 104-04 121-02 SERGLY SERVING 103-62 9-712 11-349 9552 90000 0440 4460 34.3 86-12-3 34-0 10000 1-00 10° 36.59 2000 NO BE 53-05 7-255 8-832 34-000 68-07 8-178 11-065 34-000 5-01 .613 .6555 CMAIL OF MALK 2000 34190 34501 ASSE MANIE LOCAL 32-05 9-256 32-000 5-882 7-276 0000 7.548 9.211

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO 3150-0104
EXPIRES 8/31/85

## Southern California Edison Company



SAN ONOFRE NUCLEAR GENERATING STATION

P.O. BOX 128

SAN CLEMENTE, CALIFORNIA 92672

J. G. HAYNES

TELEPHONE (714) 492-7700

February 26, 1985

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

Dear Sir:

Subject: Docket No. 50-362

30-Day Report

Licensee Event Report No. 85-001

San Onofre Nuclear Generating Station, Unit 3

Pursuant to 10 CFR 50.36(c)(2), 10 CFR 50.73(a)(2)(i)(B), 10 CFR 50.73(a)(2)(iv), and Limiting Condition for Operation 3.4.7, Action Statement 'd' of Appendix A, Technical Specifications to Facility Operating License NPF-15 for San Onofre Unit 3, this submittal provides the required 30-day written Licensee Event Report (LER) for an occurrence involving unidentified reactor coolant system leakage. Neither the health and safety of plant personnel nor the public were affected by this event.

If you require any additional information, please so advise.

Sincerely, Vf. Haynes

Enclosure: LER No. 85-001

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

J. P. Stewart (USNRC Resident Inspector, Units 2 and 3)

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

Institute of Nuclear Power Operations (INPO)