

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8901180407 DOC.DATE: 89/01/11 NOTARIZED: NO DOCKET #  
 FACIL:50-362 San Onofre Nuclear Station, Unit 3, Southern Californ 05000362  
 AUTH.NAME AUTHOR AFFILIATION  
 MORGAN,H.E. Southern California Edison Co.  
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 88-011-00:on 880928,continuous air ejector sampling  
 requirements not met due to misaligned auxiliary pump.  
 W/8 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED:LTR / ENCL / SIZE: 6  
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

### NOTES:

|           | RECIPIENT<br>ID CODE/NAME | COPIES<br>LTTR ENCL | RECIPIENT<br>ID CODE/NAME | COPIES<br>LTTR ENCL |
|-----------|---------------------------|---------------------|---------------------------|---------------------|
|           | PD5 LA                    | 1 1                 | PD5 PD                    | 1 1                 |
|           | HICKMAN,D                 | 1 1                 |                           |                     |
| INTERNAL: | ACRS MICHELSON            | 1 1                 | ACRS MOELLER              | 2 2                 |
|           | ACRS WYLIE                | 1 1                 | AEOD/DOA                  | 1 1                 |
|           | AEOD/DSP/TPAB             | 1 1                 | AEOD/ROAB/DSP             | 2 2                 |
|           | ARM/DCTS/DAB              | 1 1                 | DEDRO                     | 1 1                 |
|           | NRR/DEST/ADE 8H           | 1 1                 | NRR/DEST/ADS 7E           | 1 0                 |
|           | NRR/DEST/CEB 8H           | 1 1                 | NRR/DEST/ESB 8D           | 1 1                 |
|           | NRR/DEST/ICSB 7           | 1 1                 | NRR/DEST/MEB 9H           | 1 1                 |
|           | NRR/DEST/MTB 9H           | 1 1                 | NRR/DEST/PSB 8D           | 1 1                 |
|           | NRR/DEST/RSB 8E           | 1 1                 | NRR/DEST/SGB 8D           | 1 1                 |
|           | NRR/DLPQ/HFB 10           | 1 1                 | NRR/DLPQ/QAB 10           | 1 1                 |
|           | NRR/DOEA/EAB 11           | 1 1                 | NRR/DREP/RAB 10           | 1 1                 |
|           | NRR/DREP/RPB 10           | 2 2                 | NRR/DRIS/SIB 9A           | 1 1                 |
|           | NUDOCS-ABSTRACT           | 1 1                 | <del>REG FILE</del> 02    | 1 1                 |
|           | RES/DSIR/EIB              | 1 1                 | RES/DSR/PRAB              | 1 1                 |
|           | RGN5 FILE 01              | 1 1                 |                           |                     |
| EXTERNAL: | EG&G WILLIAMS,S           | 4 4                 | FORD BLDG HOY,A           | 1 1                 |
|           | H ST LOBBY WARD           | 1 1                 | LPDR                      | 1 1                 |
|           | NRC PDR                   | 1 1                 | NSIC HARRIS,J             | 1 1                 |
|           | NSIC MAYS,G               | 1 1                 |                           |                     |

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,  
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION  
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 45 ENCL 44

R  
I  
D  
S  
/  
A  
D  
S  
/  
A  
D  
D  
S

AlD4  
8/

# LICENSEE EVENT REPORT (LER)

|   |        |   |               |  |                 |  |           |   |                     |  |  |  |     |                            |                       |  |  |
|---|--------|---|---------------|--|-----------------|--|-----------|---|---------------------|--|--|--|-----|----------------------------|-----------------------|--|--|
| Facility Name (1)<br>SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3  |        |   |               |  |                 |  |           |   |                     | Docket Number (2)<br>0   5   0   0   0   3   6   2                         |  |  |     | Page (3)<br>1   of   0   5 |                       |  |  |
| Title (4)<br>CONTINUOUS AIR EJECTOR SAMPLING REQUIREMENTS NOT MET DUE TO MISALIGNED AUXILIARY SAMPLE PUMP   |        |   |               |  |                 |  |           |   |                     |  |  |  |     |                            |                       |  |  |
| EVENT DATE (5)  |        |   |               | LER NUMBER (6)   |                 |  |           | REPORT DATE (7)                               |                     |  |  | OTHER FACILITIES INVOLVED (8)              |     |                            |                       |  |  |
| Month   | Day    | Year                                      | Year          | Sequential Number  | Revision Number | Month  | Day       | Year  | Facility Names      |  |  |  |     |                            | Docket Number(s)      |  |  |
| 0   9   | 2   8  | 8   8                                     | 8   8         | 0   1   1  | 0   0           | 0   1  | 1   1     | 8   9   | NONE                |  |  |  |     |                            | 0   5   0   0   0   1 |  |  |
| OPERATING MODE (9)<br>1   |        |   |               | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11) |                 |  |           |   |                     |  |  |  |     |                            |                       |  |  |
| POWER LEVEL (10)<br>1   0   0<br>////////////////////////////////////<br>////////////////////////////////////<br>////////////////////////////////////<br>////////////////////////////////////<br>//////////////////////////////////// |        |   |               | <input type="checkbox"/> 20.402(b)   |                 | <input type="checkbox"/> 20.405(c)                 |           | <input type="checkbox"/> 50.73(a)(2)(iv)      |                     |  |  | <input type="checkbox"/> 73.71(b)          |     |                            |                       |  |  |
|   |        |   |               | <input type="checkbox"/> 20.405(a)(1)(i)   |                 | <input type="checkbox"/> 50.36(c)(1)               |           | <input type="checkbox"/> 50.73(a)(2)(v)       |                     |  |  | <input type="checkbox"/> 73.71(c)          |     |                            |                       |  |  |
|   |        |   |               | <input type="checkbox"/> 20.405(a)(1)(ii)  |                 | <input checked="" type="checkbox"/> 50.36(c)(2)    |           | <input type="checkbox"/> 50.73(a)(2)(vii)     |                     |  |  | <input type="checkbox"/> Other (Specify in |     |                            |                       |  |  |
|   |        |   |               | <input type="checkbox"/> 20.405(a)(1)(iii)   |                 | <input checked="" type="checkbox"/> 50.73(a)(2)(i) |           | <input type="checkbox"/> 50.73(a)(2)(viii)(A) |                     |  |  | Abstract below and in text)                |     |                            |                       |  |  |
|   |        |   |               | <input type="checkbox"/> 20.405(a)(1)(iv)  |                 | <input type="checkbox"/> 50.73(a)(2)(ii)           |           | <input type="checkbox"/> 50.73(a)(2)(viii)(B) |                     |  |  |  |     |                            |                       |  |  |
| <input type="checkbox"/> 20.405(a)(1)(v)  |        | <input type="checkbox"/> 50.73(a)(2)(iii) |               | <input type="checkbox"/> 50.73(a)(2)(x)  |                 |  |           |   |                     |  |  |  |     |                            |                       |  |  |
| LICENSEE CONTACT FOR THIS LER (12)  |        |   |               |  |                 |  |           |   |                     |  |  |  |     |                            |                       |  |  |
| Name<br>H. E. Morgan, Station Manager   |        |   |               |  |                 |  |           |   |                     | TELEPHONE NUMBER<br>AREA CODE<br>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                                 | MANUFAC-TURER | REPORTABLE TO NPRDS  | CAUSE           | SYSTEM   | COMPONENT | MANUFAC-TURER                                 | REPORTABLE TO NPRDS |  |  |  |     |                            |                       |  |  |
|   |        |   |               |  |                 |  |           |   |                     |  |  |  |     |                            |                       |  |  |
|   |        |   |               |  |                 |  |           |   |                     |  |  |  |     |                            |                       |  |  |
|   |        |   |               |  |                 |  |           |   |                     |  |  |  |     |                            |                       |  |  |
| SUPPLEMENTAL REPORT EXPECTED (14)   |        |   |               |  |                 |  |           |   |                     | Expected Submission Date (15)  |  | Month                                      | Day | Year                       |                       |  |  |
| <input type="checkbox"/> Yes (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO   |        |   |               |  |                 |  |           |   |                     |  |  |  |     |                            |                       |  |  |
| ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)  |        |   |               |  |                 |  |           |   |                     |  |  |  |     |                            |                       |  |  |

At 1337 on 9/27/88, with Unit 3 in Mode 1, Condenser Evacuation System Radiation Monitor 3RI-7870 was removed from service for performance of the 92-day Technical Specification (TS) required surveillance of the monitor. Since redundant monitor 3RI-7818 was inoperable, TS 3.3.3.9 required the collection of continuous particulate and iodine samples and 12-hour gaseous grab samples. Prior to removing 3RI-7870 from service, TS sampling was initiated via an auxiliary sample pump. On 9/28 at 2100, while collecting the required 12-hour gas sample, a Chemistry Technician found the pump misaligned such that the continuous sample was not being collected as required.

An investigation into the cause of the event was unable to identify the reason for the misalignment of the sample pump. However, it is believed that the sample pump was inadvertently disturbed in such a manner as to cause the suction hose to become disconnected. It is further believed that a member of the plant staff observed the condition and while attempting to correct it, misaligned the pump.

Corrective actions which are being taken include: 1) clamps have been added to all the Chemistry sample pumps to prevent inadvertent disconnection of the suction hoses from the pumps, 2) discharge hoses which could possibly be inadvertently attached to the pump's suction have been removed from the sample pumps and, 3) procedures will be revised requiring caution signs to be added to all sample pump skids (when in service) to indicate that the collection of TS required samples is being performed and to notify Chemistry prior to moving or disconnecting.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

|   |                           |                         |                |
|---|---------------------------|-------------------------|----------------|
| SAN ONOFRE NUCLEAR GENERATION STATION<br>UNIT 3 | DOCKET NUMBER<br>05000362 | LER NUMBER<br>88-011-00 | PAGE<br>2 OF 5 |
|---|---------------------------|-------------------------|----------------|

Plant: San Onofre Nuclear Generating Station  
Unit: Three  
Reactor Vendor: Combustion Engineering  
Event Date: 09-28-88

A. CONDITIONS AT TIME OF THE EVENT:

Mode: 1, Power Operation

B. BACKGROUND INFORMATION:

In addition to providing indication of primary to secondary leakage, the Condenser Air Ejector Evacuation System (EIS System Code SH) Radiation Monitors (RI-7818 and RI-7870) are used to monitor radioactivity of the condenser air ejector exhaust, which is a continuous release path to the environment. Noble gas, particulate, and iodine activities are monitored and in the event that radiation levels exceed a preset maximum, an alarm is provided in the control room to alert operators. In the event that both monitors are removed from service, Technical Specifications (TS) allow effluent releases via the air ejector to continue, provided particulate and iodine samples are continuously collected with auxiliary sampling equipment. Noble gas samples are also required to be taken at least once per 12 hours and analyzed for gross activity within 24 hours.

C. DESCRIPTION OF THE EVENT:

1. Event:

At 1337 on 9/27/88, with Unit 3 in Mode 1, Condenser Evacuation System Radiation Monitor 3RI-7870 was removed from service for performance of the 92-day Technical Specification (TS) required surveillance of the monitor. Since redundant monitor 3RI-7818 was inoperable, TS 3.3.3.9 required the collection of continuous particulate and iodine samples and 12-hour gaseous grab samples. Prior to removing 3RI-7870 from service, TS sampling was initiated via an auxiliary sample pump. On 9/28 at 2100, while collecting the required 12-hour gas sample, a Chemistry Technician (utility-nonlicensed operator) found the pump misaligned such that the continuous sample was not being collected as required. Specifically, the suction hose had been disconnected from the auxiliary sample pump, preventing the condenser air ejector exhaust from being drawn through the filter. Also, the discharge hose, which normally directs flow to the atmosphere, had been attached to the pump suction.

2. Inoperable Structures, Systems or Components that Contributed to the Event:

None.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

SAN ONOFRE NUCLEAR GENERATION STATION  
UNIT 3

DOCKET NUMBER  
05000362

LER NUMBER  
88-011-00

PAGE  
3 OF 5

3. Sequence of Events:

| <u>TIME</u>  | <u>DATE</u> | <u>ACTION</u>  |
|--------------|-------------|--|
| 1337         | 9/27/88     | Radiation Monitor 3RI-7870 was removed from service for performance of the 92-day TS surveillance.   |
| 1430 approx. | 9/27/88     | Auxiliary sampling method established.   |
| 2100         | 9/27/88     | Chem. Tech. collects 12-hour noble gas sample. Sample pump alignment and proper operation verified.  |
| 0900         | 9/28/88     | Chem. Tech. collects 12-hour noble gas sample, weekly Tritium sample, and changes out cartridge filter. Sample pump alignment and proper operation verified. |
| 2100         | 9/28/88     | During collection of 12-hour noble gas sample, auxiliary sample pump found misaligned. The pump was immediately aligned correctly.                           |

4. Method of Discovery:

On 9/28 at 2100, while collecting the required 12-hour gas sample, a Chemistry Technician (utility-nonlicensed operator) found the pump misaligned such that the continuous sample was not being collected as required.

5. Personnel Actions and Analysis of Actions:

When the Chemistry Technician found the pump misaligned such that the continuous sample was not being collected as required, he immediately realigned the pump.

6. Safety System Responses:

Not applicable.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

SAN ONOFRE NUCLEAR GENERATION STATION  
UNIT 3

DOCKET NUMBER  
05000362

LER NUMBER  
88-011-00

PAGE  
4 OF 5

D. CAUSE OF THE EVENT:

1) Root Causes:

Investigation into the cause of the misalignment of the sample pump included: 1) inspection of the misaligned sample pump, 2) interviews with Chemistry Technicians, 3) reviews of Chemistry work activities in the vicinity of the sample pump, and 4) interviews with Radiation Monitoring Technicians working in the vicinity of the sample pump.

The investigation into the cause of the event was unable to identify the reason for the misalignment of the sample pump. However, it is believed that the sample pump was inadvertently disturbed in such a manner as to cause the suction hose to become disconnected. It is further believed that a member of the plant staff observed the condition and while attempting to correct it, misaligned the pump.

A review was undertaken to determine if tampering may have been the cause of the misalignment. Although there was no way of knowing if tampering had taken place, it was discounted as being the most probable cause.

E. CORRECTIVE ACTIONS:

1. Corrective Actions Taken:

- a) Clamps have been added to all the Chemistry sample pumps to prevent inadvertent disconnection of the suction hoses from the pumps.
- b) Discharge hoses which could possibly be inadvertently attached to the pump's suction have been removed from the sample pumps.

2. Planned Corrective Actions:

- a) Procedures will be revised requiring caution signs to be added to all sample pump skids (when in service) to indicate that the collection of TS required samples is being performed and to notify Chemistry prior to moving or altering the equipment.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

|   |                           |                         |                |
|---|---------------------------|-------------------------|----------------|
| SAN ONOFRE NUCLEAR GENERATION STATION<br>UNIT 3 | DOCKET NUMBER<br>05000362 | LER NUMBER<br>88-011-00 | PAGE<br>5 OF 5 |
|---|---------------------------|-------------------------|----------------|

F. SAFETY SIGNIFICANCE OF THE EVENT:

There was no safety significance to this event since no detectable primary-to-secondary leaks existed. Also, in the event of a Steam Generator tube leak, activity in the secondary side would have been detected by the Steam Generator Blowdown Monitor.

G. ADDITIONAL INFORMATION:

1. Component Failure Information:

Not applicable.

2. Previous LERs on Similar Events:

LER 85-25 (Docket No. 50-361) reported two events describing improper installation of the auxiliary sample pump. The cause of the improper installation was personnel error. Corrective action taken was to discuss the event with appropriate personnel, emphasizing the importance of using procedures. In addition, the technician responsible for the improper installation received disciplinary action.

3. Results of NPRDS Search:

Not applicable.

4. Reportability Evaluation:

In October, following the investigation into this event, a judgement of non-reportability was made based upon guidance provided in NUREG-1022, Supplement 1. It was determined that since there was no compelling evidence defining the time at which the pump became misaligned, NUREG-1022, Question and Answer 2.3, implied that an LER was not required.

As a result of renewed interest into the event (associated with a tampering event reported in Security Event Report 88-S10, Docket Number 50-361), on December 12, 1988, SCE contacted NRC Region V to discuss the event and reporting requirements which may have been affected. The discussion concluded that SCE incorrectly applied the guidance contained in NUREG-1022, Supplement 1, and that an LER was in fact required.

This event will be reviewed with Compliance personnel responsible for making reportability determinations.

*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

January 11, 1989

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

Subject: Docket No. 50-362  
30-Day Report  
Licensee Event Report No. 88-011  
San Onofre Nuclear Generating Station, Unit 3

Pursuant to 10 CFR 50.36(c)(2) and 50.73(a)(2)(i), this submittal provides the required 30-day written Licensee Event Report (LER) for an occurrence involving a continuous air ejector sample pump. Neither the health and safety of plant personnel or the public was affected by this occurrence.

If you require any additional information, please so advise.

Sincerely,

*H. E. Morgan*

Enclosure: LER No. 88-011

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*  
*11*