



Southern California Edison Company

SAN ONOFRE NUCLEAR GENERATING STATION

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March 26, 1992

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

Subject: Docket No. 50-362
30-Day Report
Licensee Event Report No. 92-001
San Onofre Nuclear Generating Station, Unit 3

Pursuant to 10 CFR 50.73(d), this submittal provides the required 30-day written licensee Event Report (LER) for an occurrence involving an unplanned Containment Purge Isolation System (CPIS) actuation. Neither the health nor the safety of plant personnel or the public was affected by this occurrence or condition.

If you require any additional information, please so advise.

Sincerely,

Enclosure: LER No. 92-001

cc: C. W. Caldwell (USNRC Senior Resident Inspector, Units 1, 2 and 3)

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

Institute of Nuclear Power Operations (INPO)

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LICENSEE EVENT REPORT (LER)

Facility Name (1)	Docket Number (2)	Page (3)
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Title (4)

CONTAINMENT PURGE ISOLATION SYSTEM (CPIS) ACTUATION WHILE TRANSPORTING RADIOACTIVE MATERIAL NEAR CPIS MONITOR

EVENT DATE (5)			LIE NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
Month	Day	Year	Year	Sequential Number	Revision Number	Month	Day	Year	Facility Name	Docket Number(s)	
0 2	2 5	9 2	9 2	0 0 1	0 0	0 3	2 6	9 2	NONE	0 5 0 0 0 1	
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)								
POWER LEVEL (10)			20.402(b)			20.405(c)			50.73(a)(2)(iv)		
0 0 0			20.405(a)(1)(i)			50.36(c)(1)			50.73(a)(2)(v)		
			20.405(a)(1)(ii)			50.36(c)(2)			50.73(a)(2)(vii)		
			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)(ix)		

LICENSEE CONTACT FOR THIS LER (12)

Name	TELEPHONE NUMBER
R. W. Krieger, Station Manager	AREA CODE: 7 7 3 4 3 6 8 - 3 2 5 5

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NFRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NFRDS

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15)	Month	Day	Year
Yes, if yes, complete EXPECTED SUBMISSION DATE) [XX] NO			

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

At 1917 on 2/25/92, with Unit 3 in Mode 6 for the Cycle 6 refueling outage, the Containment Purge Isolation System (CPIS) actuated when radioactive equipment was transported near a CPIS radiation monitor. Upon local annunciation of the actuation, the equipment was removed from the area and secured in a shielded location. After verifying that all CPIS components operated in accordance with design and that local containment radiation levels were normal, CPIS was reset and containment purge was restored.

Plant personnel involved with moving the equipment failed to notify the Control Room that this activity may result in a CPIS actuation. The personnel involved were aware of the location of the CPIS radiation monitor and had planned the movement to preclude actuation. However, the actuation setpoint of the CPIS radiation monitor was erroneously believed to be set at a level high enough such that the radiation levels associated with the equipment would not cause an actuation. Thus, the Control Room was not notified and the actuation could not be considered pre-planned.

This event will be reviewed with appropriate Health Physics and Maintenance personnel involved in containment activities. Plant procedures addressing the movement of radioactive material in the vicinity of the CPIS monitors will be strengthened, and signs will be installed near the monitors reminding personnel of their responsibility for Control Room notification of the potential for CPIS actuations resulting from work activities.

There is no safety significance to this event since all CPIS components operated as designed.

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Plant: San Onofre Nuclear Generating Station
 Unit: Three
 Reactor Vendor: Combustion Engineering
 Event Date: 2-25-92
 Time: 1917

A. CONDITIONS AT TIME OF THE EVENT:

Mode: 6, Refueling
 RCS Temperature: 80 F

B. BACKGROUND INFORMATION:

There are two independent Containment Purge Isolation System (CPIS) [VA] trains which isolate the containment ventilation system penetrations when radiation levels exceed the setpoint of the associated detector [DET] in containment. Each train is comprised of a containment airborne radiation monitor [RIT], an area radiation monitor, and a set of containment purge isolation valves [ISV].

The area radiation monitors (3RT-7856 for Train "A" and 3RT-7857 for Train "B") are set to actuate and isolate containment purge if the containment area radiation levels are in excess of 325 mR/hr in Modes 1 through 4. The actuation setpoint is reduced to 2.4 mR/hr in Mode 6 in accordance with Technical Specifications (TS). During refueling outages, the transportation of radioactive material associated with routine refueling activities near these monitors has the potential for causing a CPIS actuation. If movement of such material in the vicinity of the monitors cannot be avoided, then the control room operators are notified of the anticipated CPIS actuation. If a preplanned CPIS actuation is not desirable, then the monitor can be bypassed, effectively removing the actuation function of the monitor.

C. DESCRIPTION OF THE EVENT:

1. Event:

On February 25, 1992, at 1917, with Unit 3 in Mode 6 with core alterations complete and containment purge in operation, CPIS Train "B" actuated when a damaged Control Element Assembly (CEA) extension shaft was transported by plant personnel in the vicinity of Area Radiation Monitor 3RT-7857. The radiation level at the CPIS monitor resulting from the damaged CEA extension shaft was approximately 2.8 mR/hr which is above the CPIS actuation setpoint of 2.4 mR/hr. Upon local annunciation of the actuation, the CEA extension shaft was removed from the vicinity of the radiation monitor and secured in a shielded location. At 1934, after verifying that all CPIS Train "B" components operated in accordance with design and that local

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containment radiation levels had decreased below the actuation setpoint, CPIS was reset and containment purge was restored. The containment equipment and personnel hatches remained open during the event.

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

None

3. Sequence of Events:

DATE	TIME	ACTION
2/25	1917	CPIS Train "B" actuated.
2/25	1934	After verifying the cause to be the movement of radioactive material and that local containment radiation levels had decreased below the actuation set point, Train "B" CPIS was reset and containment purge restored.

4. Method of Discovery:

Control Room indications and alarms alerted the operators to the Train "B" CPIS actuation.

5. Personnel Actions and Analysis of Actions:

Operators responded properly to the CPIS actuation by verifying that system operation was proper and local containment radiation levels had decreased below the actuation set point, prior to returning CPIS to standby and restoring containment purge.

6. Safety System Responses:

All CPIS Train "B" components operated in accordance with design.

D. CAUSE OF THE EVENT:

The CPIS actuation occurred when plant personnel involved with moving the equipment failed to notify the Control Room that the proposed activity may result in CPIS actuation. The personnel involved were aware of the location of the CPIS radiation monitor and had planned the GEA extension shaft movement to preclude actuation. However, the actuation setpoint of the CPIS radiation monitor was erroneously believed to be set at a level high enough such that the radiation levels associated with the equipment

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would not cause an actuation. Thus, the Control Room was not notified and the actuation could not be considered pre-planned.

E. CORRECTIVE ACTIONS:

1. Corrective Actions Taken:

- a. This event, including the need to contact the Control Room prior to moving any radioactive material in the vicinity of the CPIS radiation monitors, has been reviewed by the plant personnel involved.
- b. Signs have been installed adjacent to both the Unit 2 and 3 CPIS radiation monitors 2RT-7856/7 and 3RT-7856/7 identifying the trip setpoints and the need to notify the Control Room prior to movement of radioactive material in the vicinity of the monitors.
- c. The floor of containment surrounding both the Unit 2 and 3 CPIS radiation monitors 2RT-7856/7 and 3RT-7856/7 has been labeled as a low radiation area.

2. Planned Corrective Actions:

- a. A review of Health Physics and Maintenance procedures will be performed to identify areas that can be strengthened regarding the transportation of radioactive material near the CPIS radiation monitors.
- b. This event, including the need to contact the Control Room prior to moving radioactive material in the vicinity of the CPIS radiation monitors, will be reviewed by Maintenance and Health Physics personnel involved in containment activities.

F. SAFETY SIGNIFICANCE OF THE EVENT:

There is no safety significance to this event since all CPIS components operated as designed.

G. ADDITIONAL INFORMATION:

1. Component Failure Information:

Not applicable.

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2. Previous LERs for Similar Events:

Similar CPIS actuations due to transporting radioactive material past the Containment Area Monitors were reported in LER 88-006 (Docket No. 50-362). As corrective action, appropriate plant decontamination personnel were instructed to assess the movement path and to provide the CPIS instrument number of the monitor involved when requesting permission to transport radioactive material past the CPIS monitors. Unit 2 and 3 operators were also instructed, via pre-shift briefings, to obtain the instrument number prior to granting permission for the transportation of radioactive material past the CPIS monitors. Neither of these corrective actions would have prevented this event (LER 92-001) because of their limited scope. The previous corrective actions focused on plant decontamination personnel and as such were not broad enough to include Health Physics and Maintenance personnel.