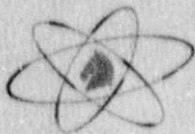


**PG&E**



Portland General Electric Company  
Trojan Nuclear Plant  
71760 Columbia River Hwy.  
Rainier, Oregon 97048  
(503) 556-3713

August 1, 1990  
WRR-048-90

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington DC 20555

Gentlemen:

Licensee Event Report No. 90-30 is attached. This report discusses an event in which a momentary spike on the Containment Iodine Activity Radiation Monitor caused a spurious Containment ventilation isolation.

Sincerely,

W. R. Robinson  
General Manager  
Trojan Nuclear Plant

c: Mr. John B. Martin  
Regional Administrator, Region V  
U.S. Nuclear Regulatory Commission

Mr. David Stewart-Smith  
State of Oregon  
Department of Energy

Mr. R. C. Barr  
USNRC Resident Inspector  
Trojan Nuclear Plant

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ESTIMATED HOURS PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING AUSEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F530) U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (2150-0104) OFFICE OF MANAGEMENT AND BUDGET WASHINGTON DC 20503.

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Most Probably Due to a Loose Cable-to-Connector Connection

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)	
									n/a	0 5 0 0 0 1 1	
0 7	0 2 9	0 9 0		0 3 0	0 0	0 8	0 1 9	0		0 5 0 0 0 1 1	

OPERATING MODE (B)		THIS REPORT IS EVALUATED PURSUANT TO THE REQUIREMENTS OF 16 CFR § 1.11 (Check one or more of the following) (1)				
	3	20.400a(1)	20.400a(2)	X	20.730a(2)(iv)	73.71(a)
POWER LEVEL (D)	0000	20.400a(1)(i)	20.400a(2)(i)		20.730a(2)(iv)	73.71(a)
		20.400a(1)(ii)	20.400a(2)(ii)		20.730a(2)(iv)	OTHER (Specify in Abstract and in Text, NRC Form 300A)
		20.400a(1)(iii)	20.400a(2)(iii)		20.730a(2)(iv)(A)	
		20.400a(1)(iv)	20.400a(2)(iv)		20.730a(2)(iv)(B)	
		20.400a(1)(v)	20.400a(2)(v)		20.730a(2)(v)	

TELEPHONE NUMBER

AREA CODE

51 013 | 51 516 | -1 515 | 213

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	

EXPECTED  
SUBMISSION  
DATE (YY)

MONTH	DAY	YEAR
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YES (If yes, complete EXPECTED SUBMISSION DATE)

40

ABSTRACT (Limit to 1400 words) : 4007840000 // FROM MEDICAL-DEPT'S PUBLIC-HEALTH DIVISION (16)

This event was not a result of an elevated count rate in Containment, but was the result of an equipment malfunction that placed Containment ventilation in its "Engineered Safety Features" lineup. Therefore, this event had no effect on public health and safety.



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-430), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

TROJAN NUCLEAR PLANT

0 5 0 0 0 3 4 4

YEAR SEQUENTIAL REVISION  
NUMBER NUMBER NUMBER

9 0 0 3 0 0 0 0 2 CF 0 3

TEXT (If more space is required, use additional NRC Form 305A's) (7)

Description of Event

On July 2, 1990, the Plant was in Mode 3 (Hot Shutdown) with the Reactor Coolant System at 555 degrees F and 2220 psig. The Containment Hydrogen Vent System was in operation to reduce Containment pressure, with the Containment Process Radiation Monitoring (PRM) System aligned to monitor the effluent pathway. At 0939 hours, the Iodine Activity Monitor (PRM-1B) spiked from approximately 50 counts per minute (cpm) to approximately 470 cpm. The spike caused a Containment ventilation isolation signal which closed the Containment Hydrogen Vent System valves. The setpoint for PRM-1B, when aligned for Containment pressure reduction, is less than or equal to two times the monitor's background reading.

After the Containment ventilation isolation occurred, PRM-1B was declared inoperable, and the required action of Technical Specification 3.3.2, "Engineered Safety Feature Actuation System Instrumentation", to maintain the Containment ventilation valves closed was followed.

Cause of Occurrence

Since there were no corresponding changes in the readings of the Particulate Activity Monitor (PRM-1A), Low Level Noble Gas Monitor (PRM-1C), or Intermediate Level Noble Gas Monitor (PRM-1D), it was concluded that the spike was caused by a malfunction in PRM-1B and not an actual release of radioactive material. The cause of PRM-1B spiking high is believed to be a loose connection found in a high voltage cable-to-connector assembly.

The cable is retained in the connector by a friction clamping force between the coaxial cable shield, folded back over a ferrule, and the body of the connector. Aiding in retaining the cable in the connector was a rubber grommet that fits around the cable. It appears that the loose connection occurred because the actual length of the shield that was folded back over the ferrule may not have been sufficient to assure a tight fit. Maintenance records show no previous work in the interface junction box on this connector.

Corrective Actions

The connector was repaired. Other similar cables in PRM-1 were checked to be properly retained within the connector by ensuring that the cable was held tight by the connector assembly. A similarly loose cable was identified on PRM-1D and repaired.

Due to the repetitive nature of spiking on PRM-1 (five events in three years), an inspection of the skid-mounted equipment and process cabinet equipment of PRM-1 will be performed. This inspection will focus on areas that are not routinely

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION PROJECT: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104) OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

TROJAN NUCLEAR PLANT

0 5 0 0 0 3 4 4

YEAR

SEQUENTIAL NUMBER

REVISION NUMBER

9 0

0 3 0

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3 OF 0 3

TEXT (If more space is required, use additional NRC Form 355A's) (17)

inspected in conjunction with surveillance activities. The inspection will be performed per criteria specified in the Plant procedure for cabinet cleanliness and inspection. Two other process radiation monitors, PRM-2 and PRM-6, which are similar to PRM-1, will also be inspected. These inspections will be performed during the next calibration of each PRM.

Significance of Occurrence

This event was not a result of an elevated count rate in Containment, but was the result of an equipment malfunction that placed Containment ventilation in its Engineered Safety Feature lineup. Therefore, this event had no effect on public health or safety.

Similar Events

Six similar events were identified. The LER numbers and titles are:

LER 89-27 Containment Ventilation Isolation due to Spurious Electronic Noise Spike (PRM-1D).

LER 88-49 Partial Containment Isolations Result from Signal Spikes and Operator Error (PRM-10).

LER 88-46 Containment Ventilation Isolation - Suspected Cause is an Electronics Spike (PRM-1C).

LER 88-23 Containment Ventilation Isolation due to Spurious Spike on PRM-1C.

LER 87-28 Containment Ventilation Isolation due to Spurious Actuation of PRM-1A.

LER 87-25 Containment Ventilation Isolation due to Spurious Actuation of PRM-1C.

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