

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Palo Verde Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 5 2 1 8	PAGE (3) 1 OF 0 2
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TITLE (4)
Spurious ESF Actuation Initiated by Electrical Noise

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	2	21	8	6	8	0	3	2			0 5 0 0 0
			6	0	1	4	8	6			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) 0 1 0 0	20.402(b)	20.405(e)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	73.71(b)					
	20.405(a)(1)(i)	50.36(e)(1)		50.73(a)(2)(v)	73.71(e)					
	20.405(a)(1)(ii)	50.36(e)(2)		50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)					
	20.405(a)(1)(iii)	50.73(a)(2)(ii)		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 William F. Quinn, Manager - Nuclear Licensing (Extension 4087)							TELEPHONE NUMBER			
							AREA CODE			
							6 0 2	9 4 3 - 7 2 0 0		

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)									
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	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)

On February 21, 1986 at 2231, Palo Verde Unit 1 was in Mode 1 (POWER OPERATION) at 100 percent reactor power, when a spurious high radiation signal on spent fuel pool area radiation monitor RU-31 occurred, resulting in the actuation of a Fuel Building Essential Ventilation Actuation Signal (FBEVAS). This represents the actuation of an Engineered Safety Feature. The actuation of the FBEVAS resulted in a crosstrip actuation of the Control Room Essential Filtration Actuation Signal (CREFAS).

The actuations were per design and all associated equipment operated satisfactorily.

There were no component or system failures that contributed to the event.

The root cause of the actuation is believed to have been electrical noise, which originated in the grounding system.

To prevent recurrence, a design change will be implemented to install a separate isolated grounding system for the Radiation Monitoring System, projected to be completed by July 1, 1986.

There were no personnel errors.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Palo Verde Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 5 2 8 8 6 --	LER NUMBER (8)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		0 1 3	--	0 0	0 2	OF 0 2

TEXT (if more space is required, use additional NRC Form 365A's) (17)

On February 21, 1986 at 2231, Palo Verde Unit 1 was in Mode 1 (POWER OPERATION) at 100 percent reactor power, when a spurious high radiation signal on spent fuel pool area radiation monitor RU-31 (MON) occurred, resulting in the actuation of the train A Fuel Building Essential Ventilation Actuation Signal (FBEVAS)(JE). This represents the actuation of an Engineered Safety Feature. The actuation of the FBEVAS resulted in a crosstrip of both trains of the Control Room Essential Filtration Actuation Signal (CREFAS)(JE) and the Train B FBEVAS. The actuations were per design and all associated equipment operated satisfactorily. Surveys taken in the area found no abnormal radiation levels. The CREFAS and FBEVAS were reset at 2244 on February 21, 1986.

There were no component or system failures that contributed to the event.

The root cause of the actuation is believed to have been electrical noise, which originated in the grounding system. To prevent recurrence, a design change will be implemented to install a separate isolated grounding system (FC) for the Radiation Monitoring System (IL), projected to be completed by July 1, 1986.

There were no personnel errors.

Since the FBEVAS and CREFAS actuation which occurred were due to spurious signal spikes, and not due to an actual high area radiation level in the fuel building, no threat to the safe operation of the plant or to the general public existed during this event. Surveys taken in the area found no abnormal radiation levels in the fuel building. However, had a high radiation level existed during this event, the safety of the plant and the public would have been ensured by the proper operation of the CREFAS and FBEVAS safety features.

Similar events have occurred in Unit 1 and were reported in LERs 85-064-00, 85-011-00, 85-022-00, 85-053-00, 85-062-00.



Arizona Nuclear Power Project

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March 24, 1986
ANPP-35643-EEVB/PGN/98.05

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

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 1
Docket No. STN 50-528 (License NPF-41)
Licensee Event Report - 86-013-00
File: 86-020-404

Dear Sirs:

Attached please find Licensee Event Report (LER) No. 86-013-00 prepared and submitted pursuant to 10 CFR 50.73. In accordance with 10 CFR 50.73(d), we are herewith forwarding a copy of the LER to the Regional Administrator of the Region V Office.

If you have any questions, please contact me.

Very truly yours,

E. E. Van Brunt, Jr.
Executive Vice President
Project Director

EEVB/PGN/rw
Attachment

cc: J. B. Martin (all w/a)
R. P. Zimmerman
A. L. Hon
E. A. Licitra
A. C. Gehr
INPO Records Center

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