Arizona Nuclear Power Project
P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

February 14, 1986
ANPP-35137-EEVB/KLM/98.05
CORRECTED ANPP 35241

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 No. NPF-41
Licensee Event Report - 86-009-00
File: 86-020-404

Dear Sirs:

Attached please find Licensee Event Report (LER) No. 86-009-00 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

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

EEVB/KLM/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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NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1): Palo Verde Unit 1

DOCKET NUMBER (2): 0 5 0 0 0 5 2 8

PAGE (3): 1 OF 0 1 2

TITLE (4): Failure to Isolate Waste Gas Holdup System Due to Personnel Error

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR
0 1	1 8	8 6	8 6	0 0 9	0 0	0 2	1 4	8 6

OTHER FACILITIES INVOLVED (8)	
FACILITY NAMES	DOCKET NUMBER(S)
	0 5 0 0 0
	0 5 0 0 0

OPERATING MODE (9): 3

POWER LEVEL (10): 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

	20.402(b)		20.405(c)
	20.405(a)(1)(i)		50.36(c)(1)
	20.405(a)(1)(ii)		50.36(c)(2)
	20.405(a)(1)(iii)	X	50.73(a)(2)(i)
	20.405(a)(1)(iv)		50.73(a)(2)(ii)
	20.405(a)(1)(v)		50.73(a)(2)(iii)

	50.73(a)(2)(iv)
	50.73(a)(2)(v)
	50.73(a)(2)(vii)
	50.73(a)(2)(viii)(A)
	50.73(a)(2)(viii)(B)
	50.73(a)(2)(x)

	73.71(b)
	73.71(c)
	OTHER (Specify in Abstract below and in Text, NRC Form 366A)

LICENSEE CONTACT FOR THIS LER (12)

NAME: William F. Quinn, Manager - Nuclear Licensing (Extension 4087)

TELEPHONE NUMBER — AREA CODE: 6 0 2 9 1 4 3 1 - 1 7 2 0 1 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
	YES (If yes, complete EXPECTED SUBMISSION DATE)				
X	NO				

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

At 1815 on January 18, 1986, Palo Verde Unit 1 was in Mode 3, HOT STANDBY, when the Hydrogen/Oxygen Analyzer was declared inoperable and a Chemistry Technician failed to notify affected personnel that the oxygen concentration in the Waste Gas Holdup System exceeded 4% by volume. This failure ultimately resulted in the failure to isolate the Waste Gas Surge Tank and inputs to the Waste Gas Holdup System as required by Technical Specification 3.11.2.5.

The root cause of this event was a combination of personnel and procedural error. The Chemistry Technician failed to notify the appropriate parties when the oxygen concentration exceeded 4% by volume and the procedure did not address action to be taken when samples were being taken manually.

To prevent further occurrences of this event, the procedure addressing the operation of the Gaseous Radwaste System has been revised to include steps to be taken in the event that (1) the hydrogen analyzer is declared inoperable and, (2) the oxygen concentration exceeds 4% by volume.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Palo Verde Unit 1	0 5 0 0 0 5 2 8	8 6	— 0 0 9	— 0 0	0 2 OF 0 2

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

At 1815 on January 18, 1986, Palo Verde Unit 1 was in Mode 3, HOT STANDBY, when the Hydrogen/Oxygen Analyzer (WE) was declared inoperable and a Chemistry Technician failed to notify affected personnel that the oxygen concentration in the Waste Gas Holdup System exceeded 4% by volume. This failure ultimately resulted in the failure to isolate the Waste Gas Surge Tank and inputs to the Waste Gas Holdup System as required by Technical Specification 3.11.2.5.

The Chemistry Technician notified the control room that the oxygen concentration was 4% by volume, but failed to follow up with a call when the concentration exceeded 4% by volume.

The root cause of this event was that the Chemistry Technician failed to recognize the significance of the event and notify the control room accordingly. Additionally, the procedure did not address action to be taken by the Chemistry Technician when the oxygen concentration exceeded 4% by volume and samples were being taken manually. Only the automatic sampling actions, when the analyzer is in operation, were addressed in the procedure.

Following identification of the problem, the Waste Gas Holdup System was isolated, the oxygen concentration was reduced to less than 4% by volume within 6 hours, as required by the Technical Specification, and no safety systems were degraded. At no time during this event was there any risk to public health and safety. In this event, the maximum concentration present during the event was approximately one tenth of a percent greater than the Technical Specification limit. Therefore, an explosive concentration was not approached and no danger to equipment or public safety was credible.

To prevent further occurrences of this event, the procedure addressing the operation of the Gaseous Radwaste System has been revised to include steps to be taken in the event that the Hydrogen/Oxygen Analyzer is inoperable and the oxygen concentration in the Waste Gas Holdup System exceeds 4% by volume.

A similar event of this nature occurred on January 11, 1986, and was reported in LER 86-005-00.