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)	DOCKET NUMBER (2)	PAGE (3)
Palo Verde Unit 1	0 5 0 0 0 5 2 8	1 OF 0 2

TITLE (4)

Inadequate Monitoring of Gaseous Radwaste During Degassing of Primary Coolant

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 5 0 0 0
0 1	1 1	8 6	8 6	–	0 0 5	–	0 0	0 2	1 0	8 6		0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
3	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
0 1 0	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	X 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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
William F. Quinn, Manager - Nuclear Licensing (Extension 4087)	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
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

At approximately 0400 on January 11, 1986, Palo Verde Unit 1 was in Mode 3, HOT STANDBY, when the plant was operated in a condition prohibited by the Technical Specifications. The Technical Specifications require sampling of the Gaseous Radwaste System either continuously by the Explosive Gas Monitor, or manually every four hours during degassing operations and daily during system operation. At approximately 0959 on January 10, degassing of the Reactor Coolant System was initiated, however, automatic sampling of the Gaseous Radwaste System was not available, and manual sampling was not accomplished until approximately 1700.

Root causes of this event were mechanical failure and inadequate assurance that Chemistry was aware of the status of the gas stripper. The operators on-shift did not assure that the Chemistry technicians were performing the necessary surveillances. Corrective actions will include sampling of the system every 4 hours regardless of degassing operation until the Hydrogen/Oxygen monitor is returned to service.

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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 5	— 0 0	0 2 OF 0 2

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

At approximately 0400 on January 11, 1986, Palo Verde Unit 1 was in Mode 3, HOT STANDBY, when the plant was operated in conditions prohibited by Technical Specifications. At approximately 0959, the operating staff initiated the automatic operation of the gas stripper to allow the letdown of the reactor coolant from the Reactor Coolant System (AB) to the Holdup Tank. The operation of the gas stripper results in the removal of dissolved gases from the reactor coolant, and directs them to the Waste Gas Decay Tanks of the Gaseous Radwaste System (WE).

The gaseous Radwaste System is designed to be continuously monitored for buildup of an explosive gas mixture by a Hydrogen/Oxygen monitor which measures the relative concentrations of these gases. The automated monitoring system has been out of service due to a design deficiency, which allows excessive moisture to build up in the sample lines and adversely affect the monitor.

Technical Specification 3.3.3.9 requires the Gaseous Radwaste System Explosive Gas Monitoring System to be OPERABLE during operation of the Gaseous Radwaste System, or to initiate sampling of the system every four hours during degassing, and daily during system operation. The initiation of gas stripper operation, at approximately 0959, initiated degassing of the primary system coolant. It is not determined from current records whether the degassing remained in continuous operation. Some known mechanical difficulties existed, and the gas stripper was in and out of operation for a period of approximately 12 hours.

Samples were taken and analyzed at 1700, on January 10, 1986. This system was sampled again at 0400 on January 11, 1986 and every 4 hours after degassing was in progress. Results indicated that the concentration of the gases was within specification during this period. A miscommunication existed between the control room and chemistry personnel in the need to begin primary system coolant sampling.

The root causes of this event were mechanical failure and that the Licensed Operators in the control room did not assure that Chemistry personnel were aware of the current status of the gas stripper in order to comply with Technical Specification requirements. This was due to the inoperability of the automated monitoring system, and failure to ensure that the appropriate chemistry personnel were performing the correct tasks to assure compliance with the associated ACTION statement.

This event did not significantly affect the safe operation of the facility due to the verification before and after the event that the concentration of gases did not approach their combustible limits.

To prevent recurrence of this event, samples are currently being taken every 4 hours, regardless of degassing operation. Long term corrective action will include returning the automatic gas monitoring system to service. It is undetermined at this time when the Hydrogen/Oxygen monitor will be returned to service.

A similar occurrence transpired on September 13, 1985, and was reported in LER 85-072-00.

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

February 10, 1986
ANPP-34969-EEVB/KLM/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 No. NPF-41
Licensee Event Report - 86-005-00
File: 86-020-404

Dear Sirs:

Attached please find Licensee Event Report (LER) No. 86-005-00 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)
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