

# REGULATOR INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8705270654 DOC. DATE: 87/05/20 NOTARIZED: NO DOCKET #  
 FACIL: STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Publi 05000529  
 AUTH. NAME AUTHOR AFFILIATION  
 BRADISH, T. R. Arizona Nuclear Power Project (formerly Arizona Public Serv  
 HAYNES, J. G. Arizona Nuclear Power Project (formerly Arizona Public Serv  
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-007-00: on 870423, time interval for sampling  
 concentration of hydrogen & oxygen in gaseous radwaste sys  
 exceeded, contrary to Tech Spec 3.3.9. Caused by cognitive  
 personnel error. New form used to aid personnel. W/870520 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4  
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: Standardized plant. M. Davis, NRR: 10y.

05000529

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD5 LA	1 1	PD5 PD	1 1
	LICITRA, E	1 1	DAVIS, M	1 1
INTERNAL:	ACRS MICHELSON	1 1	ACRS MOELLER	2 2
	AEOD/DOA	1 1	AFOD/DSP/ROAB	2 2
	AEOD/DSP/TPAB	1 1	DEURO	1 1
	NRR/DEST/ADE	1 0	NRR/DEST/ADS	1 0
	NRR/DEST/CEB	1 1	NRR/DEST/ELB	1 1
	NRR/DEST/ICSB	1 1	NRR/DEST/MEB	1 1
	NRR/DEST/MTB	1 1	NRR/DEST/PSB	1 1
	NRR/DEST/RSB	1 1	NRR/DEST/SGB	1 1
	NRR/DLPQ/HFB	1 1	NRR/DLPQ/QAB	1 1
	NRR/DOEA/EAB	1 1	NRR/DREP/RAB	1 1
	NRR/DREP/RPB	2 2	NRR/PMAS/ILRB	1 1
	NRR/PMAS/PTSB	1 1	REC FILE 02	1 1
	RES DEPY GI	1 1	RCRS FILE 01	1 1
EXTERNAL:	EG&G GROH, M	5 5	H ST LOBBY WARD	1 1
	LPDR	1 1	NRC PDR	1 1
	NSIC HARRIS, J	1 1	NSIC MAYS, G	1 1

NOTES: 1 1

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Palo Verde Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 5 2 9					PAGE (3) 1 OF 0 3	
--	--	--	--	--	--	--	--	--	--	--------------------------------------	--	--	--	--	----------------------	--

TITLE (4) Personnel Error Causes Chemistry Sample Interval to be Exceeded																
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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	4	2	3	8	7	8	7	0	0	7	N/A				0 5 0 0 0								
0	4	2	3	8	7	8	7	0	0	0	5	2	0	8	7	N/A				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) 1 0 0	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)												
	20.406(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)												
	20.406(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)												
	20.406(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)													
	20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)													
	20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)													

LICENSEE CONTACT FOR THIS LER (12)										TELEPHONE NUMBER				
NAME Thomas R. Bradish, Compliance Supervisor (ext. 6936)										AREA CODE 6 0 2				
										9 3 2 - 5 3 0 0				

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

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 0001 on April 23, 1987 Palo Verde Unit 2 was in Mode 1 (POWER OPERATION) at 100 percent power when the time interval for sampling the concentration of hydrogen and oxygen in the gaseous radioactive waste system was exceeded. Grab Samples of the gaseous radioactive waste system were being taken daily as required by Technical Specification 3.3.3.9 ACTION 39 due to the inoperability of the inline hydrogen and oxygen analyzing system. Monitoring is conducted to detect the buildup of potentially explosive concentrations of hydrogen and oxygen in the system.

The root cause of the event was a cognitive personnel error by a chemistry technician (utility non-licensed) responsible for tracking performances of chemistry samples.

To prevent recurrence, a form is now in use to aid the chemistry technicians in determining what samples are required and when they need to be taken to fulfill Technical Specification ACTION requirements.

Although other similar events of missed chemistry samples have been reported, there have been no similar events where a surveillance test had been performed late due to a tracking system entry error.

8705270654 870520  
PDR ADDCK 05000529  
S PDR

JE22  
Y

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Palo Verde Unit 2	0   5   0   0   0   5   2   9	8   7	—   0   0   7	—   0   0	0   2	OF	0   3

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

At 0001 on April 23, 1987, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION) at 100 percent power when the time limit for sampling the concentration of hydrogen and oxygen in the gaseous radioactive waste system (WE) was exceeded. This was discovered at approximately 0934 on April 23, 1987, by the oncoming shift chemistry technicians (utility non-licensed). Grab Samples of the gaseous radioactive waste system were being taken daily as required by Technical Specification 3.3.3.9 ACTION 39 due to the inoperability of the inline hydrogen and oxygen analyzing system. Monitoring is conducted to detect the buildup of potentially explosive concentrations of hydrogen and oxygen in the system.

At 2300 on April 21, 1987, grab sampling of the gaseous radwaste system was conducted. This was logged on the chemistry tracking system during the morning of April 22, 1987. The technician logged that the sample was taken on April 22, however, he should have logged that the sample was taken on the 21st. During the April 22 shifts, the chemistry technicians reviewed the tracking system and decided that a sample was not required since one had already been logged as taken.

The root cause of the event is considered to be a cognitive personnel error by the chemistry technician (utility non-licensed) responsible for logging the chemistry samples. This error is contrary to approved procedures. Procedures providing guidance in this area were reviewed and are considered adequate. A contributory factor to the error was the fact that times were not logged along with the dates of daily chemistry samples on the tracking system. Had the sample time been listed with the date, the oncoming shifts would have recognized that an error had been made on the tracking system. No unusual characteristics of the work location contributed to the error.

Two meetings were held as a result of this event with the PVNGS Plant Manager, members of his staff and Chemistry Supervision. The first meeting, involved discussions of the event and explored methods which could be utilized to ensure samples required by Technical Specifications would not be missed. As immediate corrective action implemented from this meeting, a "Current Chemistry Technical Specification Action Statement" form was developed. The form contains information as to what samples are required, and when the samples need to be taken in order to fulfill the appropriate Technical Specification ACTION requirements. The form also includes the time the analysis is completed.

A followup meeting was held to evaluate the effect of the immediate action. This meeting included the chemistry technician involved in this event and the Unit Lead Chemistry Technician. As a result of this meeting, it was decided to permanently implement the form discussed above into the Chemistry program. It is expected that this action should prevent recurrence.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1)  Palo Verde Unit 2	DOCKET NUMBER (2)  0 5 0 0 0 5 2 9	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 7	- 0 0 7	- 0 0	0 3	OF	0 3

TEXT (If more space is required, use additional NRC Form 368A's) (17)

There were no structures, components, or systems, other than the hydrogen and oxygen analyzer, that were inoperable at the start of the event that contributed to the event. There were no operator actions that affected this event. There were no automatically or manually initiated safety system responses.

Samples taken before and after the event showed the concentrations of hydrogen and oxygen were within allowable limits. During the event, the gas stripper was not in operation so the addition of substantial amounts of hydrogen and oxygen to the gaseous radwaste system was unlikely. Therefore, this event had no impact on the health and safety of the public.

Although other similar events of missed chemistry samples have been reported, there have been no similar events where a surveillance test had been performed late due to a tracking system entry error.

Should other information pertinent to this event be discovered, a supplement to this report will be issued.





## Arizona Nuclear Power Project

P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

192-00207-JGH/TRB/JHT

May 20, 1987

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

Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 2  
Docket No. STN 50-529  
Licensee Event Report 87-007-00  
File: 87-020-404

Dear Sirs:

Attached please find Licensee Event Report (LER) No. 87-007-00 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 T. R. Bradish, Compliance Supervisor at (602) 932-5300 Ext. 6936.

Very truly yours,

J. G. Haynes  
Vice President  
Nuclear Production

JGH/JHT/cld

Attachment

cc: O. M. DeMichele (all w/a)  
E. E. Van Brunt, Jr.  
J. B. Martin  
R. P. Zimmerman  
R. C. Sorensen  
E. A. Licitra  
A. C. Gehr  
INPO Records Center

IE22  
11

