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 2	0 5 0 0 0 5 2 9	1 OF 0 2

TITLE (4)

ESF Actuation Caused by Personnel Error During Troubleshooting of a Radiation Monitor

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 2	0 8	8 6	8 6	–	0 0 6	–	0 0	0 3	1 0	8 6		0 5 0 0 0

OPERATING MODE (9)	5	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)		20.405(c)	X	50.73(a)(2)(iv)		72.71(b)	
			20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)	
			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)		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
William F. Quinn, Manager - Nuclear Licensing (Extension 4087)	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
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

At 1239 on February 8, 1986, Palo Verde Unit 2 was in Mode 5 (COLD SHUTDOWN), when a Containment Purge Isolation Actuation Signal (CPIAS) and Control Room Essential Filtration Actuation Signal (CREFAS) were actuated on both channels.

A contract Instrument and Control (I and C) Technician was troubleshooting the Control Room Ventilation Channel "B" Radiation Monitor (RU-30) Remote Indicating Control Unit (RIC) per direction of a utiltity I and C Technician. While attempting to connect a recorder to the 120VAC input terminals of RU-30's RIC a momentary power loss to the Containment Purge Channel "B" Radiation Monitor (RU-38) occurred causing a Train "B" CPIAS. The Train "B" CPIAS cross channel tripped the Train "B" CREFAS along with a cross train trip to Train "A" CPIAS and CREFAS. The trips that occurred are in accordance with plant design and all associated equipment operated satisfactorily. There were no component or system failures that contributed to the event.

The cause of this incident was the failure of the technician to fully analyze the effects of his actions prior to commencing work.

To prevent recurrence, the Unit I and C Technicians will attend a training/briefing session on the importance of recognizing and evaluating the effects of their actions prior to commencing work. This is forecast for completion by March 21, 1986.

IE22

NRC Form 366

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 6	— 0 0 6	— 0 0	0 2 OF 0 2

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

At 1239 on February 8, 1986, Palo Verde Unit 2 was in Mode 5 (COLD SHUTDOWN), when a Containment Purge Isolation Actuation Signal (CPIAS) (JE) and Control Room Essential Filtration Actuation Signal (CREFAS) (JE) were actuated on both channels. This was discovered by the control room personnel as a result of main control board annunciation.

A contract Instrument and Control (I and C) Technician was troubleshooting the Remote Indicating Control Unit (RIC) for the Control Room Ventilation Channel "B" Radiation Monitor (RU-30) (IL) per direction of a utility I and C Technician. While determining their troubleshooting path on the power distribution print, the Technicians failed to note a duel power feed (120VAC) to the Containment Purge Channel "B" Radiation Monitor (RU-38) RIC. Channel "B" CREFAS was verified in bypass, however, the contract technician failed to question the presence of an extra pair of leads. While he loosened the terminals to attach the recorder leads, a momentary power loss to the RU-38 RIC occurred which caused the Train "B" CPIAS to actuate. The Train "B" CPIAS cross channel tripped the Train "B" CREFAS along with a cross train trip to Train "A" CPIAS and CREFAS.

The root cause of the incident was a cognitive personnel error attributable to the technician's failure to fully analyze the effects of his actions prior to commencing work. There were no unusual characteristics of the work location that directly contributed to the event. The troubleshooting was being conducted under the control of a work order. Work orders are controlled by the approved "Work Control" procedure. The work being done was not contrary to an approved procedure, and there were no errors in the procedure that contributed to the event.

The trips that occurred are in accordance with plant design and all associated equipment operated satisfactorily. There were no component, system, or safety train failures that contributed to the event.

No safety limits were approached, no fission product barriers were challenged, and all equipment functioned as designed. Therefore, there was no threat to the health and safety of the public.

To prevent recurrence, the Unit I and C Technicians will attend a training/briefing session on the importance of recognizing and evaluating the effects of their actions prior to commencing work. This is forecast for completion by March 21, 1986.

A similar event occurred in Unit 2 and was reported in LER 86-004-00.

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

March 10, 1986
ANPP-35493-EEVB/KLM/98.05

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 (License NPF-46)
Licensee Event Report - 86-006-00
File: 86-020-404

Dear Sirs:

Attached please find Licensee Event Report (LER) No. 86-006-00 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 question, 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

IE22
1/1