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)
Received ESF Actuation While Removing Channel Bypass

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
1 1	2 1	8 5	8 5	–	0 7 7	–	0 0	1 2	2 3	8 5		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)	0 0 0	20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(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
	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 1408 on November 21, 1985, with Palo Verde Unit 1 in Mode 5 (COLD SHUTDOWN), a Balance of Plant Engineered Safety Features Actuation System (BOP-ESFAS) Train A Containment Purge Isolation Actuation Signal (CPIAS) was initiated.

During the performance of the radiation monitoring unit Channel Functional Test Procedure, a Channel "A" CPIAS was received while removing the channel bypass. A cross-channel trip to the Control Room Essential Filtration Actuation Signal (CREFAS) "A" occurred along with a cross-train trip to CPIAS "B" and CREFAS "B". These trips are in accordance with plant design and all associated equipment operated satisfactorily.

The root cause of the CPIAS was determined to be an improper "reset" by a Control Room Operator Trainee. A bypass reset step is being incorporated into the procedure as a corrective action. Training currently addresses the BOP-ESFAS familiarity in the licensed operator requalification training classes, and the use of the Unit 3 BOP-ESFAS system will be made available to non-licensed trainees.

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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 5	— 0 7 7	— 0 0	0 2 OF 0 2

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

At 1408 on November 21, 1985, with Palo Verde Unit 1 in Mode 5 (COLD SHUTDOWN), a Balance of Plant Engineered Safety Features Actuation System (BOP-ESFAS) (JE) Train A Containment Purge Isolation Actuation Signal (CPIAS) (JM) was initiated.

A Radiation Protection Technician had completed a routine test on a radiation monitoring unit and a Non-Licensed Control Room Operator Trainee was removing the CPIAS key lock bypass when the initiation of CPIAS Train A occurred. This caused the Control Room Essential Filtration System (CREFAS) Train A to actuate. Actuation of one train will cause a cross-trip of the other train. These trips are in accordance with plant design and all associated equipment operated satisfactorily. The initiation was suspended before sequencer action could occur.

A Radiation Protection Technician was asked to repeat the radiation monitoring unit functional test two additional times, and successfully placed BOP-ESFAS into, and out of, bypass. All indications available on the radiation monitors showed they had returned to pre-event status, and the radiation monitors remained operable.

An additional test was performed utilizing Radiation Protection, Operations Engineering and a Licensed Control Room Operator to attempt to simulate the earlier actuation. CPIAS Train A was placed in bypass and the radiation monitoring unit was tripped and reset as indicated on the BOP-ESFAS. CPIAS Train A was removed from bypass and the trip/reset button was immediately depressed. This caused the module to trip producing results identical to those experienced with the initial actuation.

This duplication of the CPIAS actuation supported the conclusion that the root cause of the event was that the BOP-ESFAS was reset in the incorrect sequence by the Control Room Operator Trainee.

All Engineered Safety Features (ESF) equipment was actuated and the CPIAS Train A was initiated from the radiation monitoring unit with no bypass in place. All testing was satisfactory, the system was reset, and the plant was restored by the Shift Supervisor. A similar occurrence transpired on November 10, 1985, and was reported in LER 85-084-00.

As corrective action, reference to the BOP-ESFAS reset procedure is being implemented in the Radiation Protection functional test procedure. BOP-ESFAS familiarity training is addressed in the Licensed Operator Training requalification sessions and non-licensed trainees will soon be able to use the identical Unit 3 BOP-ESFAS panel, until that unit enters preoperational phase.

As a result of this event, no systems other than those which are expected to perform as a result of a CREFAS were affected. All safety systems, including initiation of the CREFAS, performed as required at all times during the event and subsequent recovery. This event did not result in any challenges to fission barriers, or result in the release of radioactive materials. Had the event occurred in Modes 1 through 4, the result would have been the same.

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

December 23, 1985
ANPP-34319-EEVB/KLM-98.07

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 85-077-00
File: 85-020-404

Dear Sirs:

Attached please find Licensee Event Report (LER) No. 85-077-00 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/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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