

## 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 2										
TITLE (4) Reactor Trip Due to Loss of Offsite Power																								
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)											
1	0	0	7	8	5	8	5	-	0	7	6	-	0	0	1	1	0	6	8	5	0 5 0 0 0			
OPERATING MODE (9) 3			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																					
POWER LEVEL (10) 0 1 0 1 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 366A)									
			20.406(a)(1)(iii)				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)																								
NAME William F. Quim, Manager-Nuclear Licensing (Extension 4087)										TELEPHONE NUMBER AREA CODE 6 1 0 2 9 4 3 1 - 7 2 0 0														
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																								
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC														
X	EIA	MPX	T	0 8 3	N																			
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 1958 on October 7, 1985, Unit 1 was in Mode 3, with the reactor coolant system (AB) pressure of approximately 2250 psia and temperature of approximately 565F, when a loss of power (LOP) from offsite sources caused a reactor trip. The part length and shut-down Control Element Assemblies (AA) had been withdrawn in preparation for startup.

The reactor coolant pumps (AB) speed decreased as a result of the LOP. The plant protection system (JC) sensed low reactor coolant system flow, measured by steam generator differential pressure, and initiated a reactor trip. The LOP occurred while troubleshooting was being conducted on the Plant Multiplexer (PMUX)(EA). Due to the LOP, both emergency diesel generators (EK) started and loaded, and the Engineered Safety Features (JE) system actuated.

To prevent recurrence of the reactor trip, the switchyard breakers that were affected by the apparent PMUX failure have been hardwired, effectively bypassing the PMUX breaker control.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

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

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

At 2017 on October 7, 1985, the NRC Operations Center was notified, via the Emergency Notification System, of the declaration of a NOTIFICATION OF UNUSUAL EVENT for Unit 1 of the Palo Verde Nuclear Generating Station.

At approximately 1958, the plant was in Mode 3, with reactor coolant system (AB) pressure of approximately 2250 psia and temperature of approximately 565 degrees F, when a loss of power to the unit from offsite sources caused a reactor trip. The part length and shutdown Control Element Assemblies (AA) had been withdrawn in preparation for startup.

The loss of power (LOP) occurred while troubleshooting was being conducted on the plant multiplexer (PMUX)(EA). The problems in PMUX had caused another reactor trip on October 3, 1985.

The plant protection system (JC) sensed low reactor coolant system flow, measured by steam generator differential pressure, and initiated a reactor trip. The reactor coolant system was cooled via natural circulation following the loss of forced circulation.

In response to the loss of offsite power to the essential power buses (EB), both diesel generators (EK) started and loaded as designed. The transient also caused the initiation of Control Room Essential Filtration, Fuel Building Essential Ventilation, and Containment Purge Isolation. All are part of the Engineered Safety Features System (JE). All safety systems performed as designed, and in a conservative manner.

At 2003, the shift supervisor declared a NOTIFICATION OF UNUSUAL EVENT, and made the appropriate notifications.

The plant was stabilized using natural circulation to remove decay heat via the steam generators. There was not sufficient decay heat to require the use of steam bypass or atmospheric dump valves. The transient did not result in any challenges to the fission product barriers, or result in any releases of radioactive materials, therefore, the health and safety of the public was not jeopardized.

Offsite power was restored to the unit at approximately 2011, and a reactor coolant pump was returned to service at about 2042, thereby restoring forced circulation. The NOTIFICATION OF UNUSUAL EVENT was terminated at 2044.

This reactor trip is similar to the reactor trip that occurred on October 3, 1985. The October 3 reactor trip was reported in LER 85-058-00. Both of the reactor trips were the result of an apparent failure in the PMUX. The corrective action stated in LER 85-058-00 had not been completed when the second trip occurred. Therefore, no further corrective action will be required.

To prevent recurrence of the reactor trips, the switchyard breakers that were affected by the apparent PMUX failure have been hardwired. The PMUX breaker control was bypassed as a result of the hardwiring.



## Arizona Nuclear Power Project

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

November 6, 1985  
ANPP-33949 EEVB/GEC

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 - Reactor Trip Due To Loss  
Of Offsite Power  
File: 85-056-026; G.1.01.10

Dear Sirs:

Attached please find Licensee Event Report (LER) No. 85-076-00 prepared and submitted pursuant to 10 CFR 50.73. This LER addresses a reactor trip due to the loss of offsite power. 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/GEC/bg  
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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