

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Palo Verde Unit 2	DOCKET NUMBER (2) 050000529	PAGE (3) 1 OF 03
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TITLE (4)
MSIS Actuation Due to an Incorrect Amperage Fuse

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)																																																																																				
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<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">OPERATING MODE (8) 5</td> <td style="width:15%;">POWER LEVEL (10) 01010</td> <td colspan="10">THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)</td> </tr> <tr> <td></td> <td></td> <td>20.402(b)</td> <td></td> <td>20.405(e)</td> <td><input checked="" type="checkbox"/></td> <td>50.73(a)(2)(iv)</td> <td></td> <td>73.71(b)</td> <td colspan="3"></td> </tr> <tr> <td></td> <td></td> <td>20.405(a)(1)(i)</td> <td></td> <td>50.36(c)(1)</td> <td></td> <td>50.73(a)(2)(v)</td> <td></td> <td>73.71(c)</td> <td colspan="3"></td> </tr> <tr> <td></td> <td></td> <td>20.405(a)(1)(ii)</td> <td></td> <td>50.36(c)(2)</td> <td></td> <td>50.73(a)(2)(vi)</td> <td></td> <td>OTHER (Specify in Abstract below and in Text NRC Form 366A)</td> <td colspan="3"></td> </tr> <tr> <td></td> <td></td> <td>20.405(a)(1)(iii)</td> <td></td> <td>50.73(a)(2)(i)</td> <td></td> <td>50.73(a)(2)(vii)(A)</td> <td></td> <td></td> <td colspan="3"></td> </tr> <tr> <td></td> <td></td> <td>20.405(a)(1)(iv)</td> <td></td> <td>50.73(a)(2)(ii)</td> <td></td> <td>50.73(a)(2)(vii)(B)</td> <td></td> <td></td> <td colspan="3"></td> </tr> <tr> <td></td> <td></td> <td>20.405(a)(1)(v)</td> <td></td> <td>50.73(a)(2)(iii)</td> <td></td> <td>50.73(a)(2)(ix)</td> <td></td> <td></td> <td colspan="3"></td> </tr> </table>												OPERATING MODE (8) 5	POWER LEVEL (10) 01010	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)												20.402(b)		20.405(e)	<input checked="" type="checkbox"/>	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)(vi)		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)(vii)(A)								20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(vii)(B)								20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(ix)					
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LICENSEE CONTACT FOR THIS LER (12)

NAME William F. Quinn, Manager - Nuclear Licensing (Extension 4087)	TELEPHONE NUMBER AREA CODE: 602, NUMBER: 943-7200
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS
B	J/E	F/U	X1999	N					

SUPPLEMENTAL REPORT EXPECTED (14)

<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH: 05, DAY: 01, YEAR: 86
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ABSTRACT (Limit to 1400 spaces; - 8, approximately fifteen single space typewritten lines) (16)

On February 19, 1986, at 1647, with Palo Verde Unit 2 in Mode 5 (COLD SHUTDOWN) at 0 percent reactor power, a Train B Main Steam Isolation System (MSIS) actuation occurred. All equipment operated as designed.

The cause of the event was the application of an incorrect amperage fuse. The fuse was found to be a four amp fuse used in a location where the design requires an eight amp fuse.

As an immediate corrective action, an eight amp fuse was installed in the affected path. An investigation is being conducted into the root cause of how and when the original fuse was installed. A supplement is forecast for submittal by May 1, 1986.

A similar event is being reported in LER 86-002-00.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

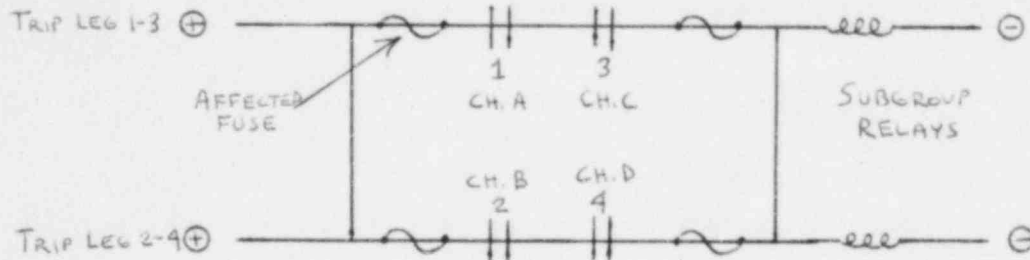
FACILITY NAME (1) Palo Verde Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 5 2 9	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 6	- 0 0 9	- 0 0	0 2	OF	0 3

TEXT (If more space is required, use additional NRC Form 365A's) (17)

On February 19, 1986, at 1647, with Palo Verde Unit 2 in Mode 5 (COLD SHUTDOWN) at 0 percent reactor power, a Train B Main Steam Isolation System (MSIS) (JE) actuation occurred. This was an automatic actuation of an Engineered Safety Feature (ESF). All other equipment operated as designed.

The MSIS occurred during initial performance of the surveillance test of the Plant Protection System (PPS) Monthly Functional Test. As a part of this surveillance test, the initiation logic trip paths (1-3 and 2-4) are tested for MSIS. At the time of the Train B MSIS actuation, the 2-4 leg was in test (tripped) when the 1-3 leg actuated, causing the MSIS. Prior to this event, the 1-3 leg had been tested and reset without incident.

The cause of this event was an undersized fuse (FU) in the 1-3 leg for Train B MSIS circuitry. With the 2-4 leg in test, all circuit current was passing through this fuse, which resulted in exceeding its current rating and causing the fuse to open.



The root cause of the event was an incorrect amperage fuse (vendor: Bussman, Model Number: KLM4), which caused the trip on the MSIS 1-3 leg. The fuse was found to be a 4 amp fuse in a location where the design calls for an 8 amp fuse. An investigation is being conducted into the root cause of how and when the fuse was installed.

As an immediate corrective action, an 8 amp fuse was installed in the affected path. As corrective action, a work order has been developed to verify that the fuses in similar circuits in Unit 1 are appropriately sized. Performance of the work order is scheduled during the March 1986 outage. Work orders have been completed to verify all fuses in similar locations in Unit 2. The surveillance test has been satisfactorily completed in Units 1 and 2.

No personnel errors have been identified at this time.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT (if more space is required, use additional NRC Form 386A's) (17)

The work being done was not contrary to an approved procedure, and there were no errors in the procedure that contributed to the event that have been identified to date. There were no unusual characteristics of the work location that directly contributed to the event that have been identified at this time.

A supplement is forecast for submittal by May 1, 1986.

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. There were no safety train failures.

A similar event occurred in Unit 2 and is being reported in LER 86-002-00.



Arizona Nuclear Power Project

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

March 21, 1986
ANPP-35639-EEVB/BJA/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 - 86-009-00
File: 86-020-404

Dear Sirs:

Attached please find Licensee Event Report (LER) No. 86-009-00 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,

EE Van Brunt Jr./JA
E. E. Van Brunt, Jr.
Executive Vice President
Project Director

EEVB/BJA/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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