

# CATEGORY 1

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9808050086    DOC.DATE: 98/07/30    NOTARIZED: NO    DOCKET #  
 FACIL:STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Publi 05000529  
 AUTH.NAME                      AUTHOR AFFILIATION  
 MARKS,D.G.                    Arizona Public Service Co. (formerly Arizona Nuclear Power  
 OVERBECK,G.R.                Arizona Public Service Co. (formerly Arizona Nuclear Power  
 RECIP.NAME                    RECIPIENT AFFILIATION

SUBJECT: LER 98-004-00:on 980630, personnel discovered that pressure  
 safety valve had not received periodic set pressure test for  
 ASME Class 1 pressure safety valve.Caused by personnel  
 error.Pressure safety valve reviewed.W/980730 ltr.

DISTRIBUTION CODE: IE22T    COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 6  
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:Standardized plant.

05000529

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD4-2 PD	1 1	FIELDS,M	1 1
INTERNAL:	ACRS	1 1	AEOD/SPD/RAB	2 2
	AEOD/SPD/RRAB	1 1	<del>FILE CENTER</del>	1 1
	NRR/DE/ECGB	1 1	NRR/DE/EELB	1 1
	NRR/DE/EMEB	1 1	NRR/DRCH/HICB	1 1
	NRR/DRCH/HOHB	1 1	NRR/DRCH/HQMB	1 1
	NRR/DRPM/PECB	1 1	NRR/DSSA/SPLB	1 1
	RES/DET/EIB	1 1	RGN4 FILE 01	1 1
EXTERNAL:	L ST LOBBY WARD	1 1	LITCO BRYCE,J H	1 1
	NOAC POORE,W.	1 1	NOAC QUEENER,DS	1 1
	NRC PDR	1 1	NUDOCS FULL TXT	1 1

**NOTE TO ALL "RIDS" RECIPIENTS:**

PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS  
 OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL  
 DESK (DCD) ON EXTENSION 415-2083

FULL TEXT CONVERSION REQUIRED

TOTAL NUMBER OF COPIES REQUIRED: LTTR 23 ENCL 23

AD4





Palo Verde Nuclear  
Generating Station

Gregg R. Overbeck  
Vice President  
Nuclear Production

TEL 602/393-5148  
FAX 602/393-6077

Mail Station 7602  
P.O. Box 52034  
Phoenix, AZ 85072-2034

192-01024-GRO/DGM/RJH  
July 30, 1998

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station P1-37  
Washington, D.C. 20555-0001

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)**  
**Unit 2**  
**Docket No. STN 50-529**  
**License No. NPF-51**  
**Licensee Event Report 98-004-00**

Attached please find Licensee Event Report (LER) 98-004-00 prepared and submitted pursuant to 10 CFR 50.73. This LER reports a Technical Specification (TS) violation due to exceeding the surveillance testing interval for an ASME Class 1 pressure safety valve for the safety injection system.

In accordance with 10CFR50.73(d), a copy of this LER is being forwarded to the Regional Administrator, NRC Region IV. If you have any questions, please contact Daniel G. Marks, Section Leader, Regulatory Affairs, at (602) 393-6492.

Sincerely,

GRO/DGM/RJH/rjh

Attachment

cc: E. W. Merschoff (all with attachment)  
P. H. Harrell  
J. H. Moorman  
INPO Records Center

9808050086 980730  
PDR ADDCK 05000529  
S PDR

1/1  
IE 22



# LICENSEE EVENT REPORT (LER)

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

TITLE (4)  
**Missed TS 4.0.5 Surveillance Requirement for ASME Safety Injection Pressure Safety Valve**

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 NUMBERS
0 6	3 0	9 8	9 8	- 0 0 4	- 0 0	0 7	3 0	9 8	N/A		0 5 0 0 0 0
									N/A		0 5 0 0 0 0

OPERATING MODE (9) **1**

POWER LEVEL (10) **1 0 0**

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

20.402(b)	20.405(c)	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 <b>Daniel G. Marks, Section Leader, Regulatory Affairs</b>	TELEPHONE NUMBER AREA CODE <b>6 0 2 3 9 3 - 6 4 9 2</b>
--	---

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)

YES (If yes, complete EXPECTED SUBMISSION DATE) <input type="checkbox"/> NO <input checked="" type="checkbox"/>	EXPECTED SUBMISSION DATE (15)	MONTH DAY YEAR
---	-------------------------------	----------------

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

On June 30, 1998, at approximately 1330 MST, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION), operating at approximately 100 percent power when APS Engineering personnel discovered that pressure safety valve (PSV) (2JSIAPSV469) had not received the periodic (5 year) set pressure test for an ASME Class 1 PSV as required by Surveillance Requirement (SR) 4.0.5. The omission was discovered during a transportability review of a similar condition in Unit 3. The periodic test for this valve was required to be complete by February 18, 1998. On July 1, 1998 pressure testing of this valve was satisfactorily completed as required by TS SR 4.0.5.

The cause of the event was attributed to personnel error. Review of the pump and valve testing program procedure revealed that this valve was correctly identified as a Class 1 valve but incorrectly specified the test frequency as 10 years. The set pressure testing schedules for the remaining PSVs were reviewed for all three units and concluded that all other testing was performed at the required frequencies.

A previous similar event was reported under LER 50/528-97-006-00.



# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME	DOCKET NUMBER	LER NUMBER			PAGE		
Palo Verde Unit 2		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9   8	-   0   0   4	-   0   0	0   2	of	0   5

## TEXT

### 1. REPORTING REQUIREMENT:

This LER 529/98-004-00 is being written to report an event that resulted in an operation or condition prohibited by the plant's Technical Specifications (TS) as specified in 10 CFR 50.73(a)(2)(i)(B).

Specifically, at approximately 0938 MST on June 30, 1998, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION), operating at approximately 100 percent power when control room personnel (utility-licensed operator) had entered (LCO) 3.7.11 ACTION A and (LCO) 3.3.3.5 ACTION B to declare Shutdown Cooling (BP) Train "B" inoperable to allow maintenance to be performed on 2JSIBPSV0755(PCV) pressure relief valve and 2JSIBUV652 (ISV) Shutdown Cooling isolation valve.

At approximately 1330 MST on June 30, 1998, APS Engineering personnel discovered that pressure safety valve (PCV) (2JSIAPSV469) had not received the periodic (5 year) set pressure test for an ASME Class 1 PSV as required by Surveillance Requirement (SR) 4.0.5. Control Room personnel entered TS Limiting Condition for Operation (LCO).3.7.11 ACTION B and declared Shutdown Cooling Train "A" inoperable.

Subsequently, control room personnel invoked Surveillance Requirement 4.0.3 which allowed delaying the ACTION B requirements of LCO 3.7.11 for 24 hours. All operator actions were appropriately entered into the Unit log.

At approximately 1632 MST on June 30, 1998 maintenance activities were completed and control room personnel declared Shutdown Cooling Train "B" operable and transitioned from ACTION B to ACTION A of LCO 3.7.11 and Shutdown Cooling Train "A" remained inoperable.

TS Surveillance Requirement (SR) 4.0.5 requires testing of ASME Code Class 1,2, and 3 components in accordance with each applicable specified interval.

The testing for PSV (2JSIAPSV469) was required to be completed on February 18, 1998 but was not completed until July 1, 1998.





# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME	DOCKET NUMBER	LER NUMBER			PAGE		
Palo Verde Unit 2		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9   8	-   0   0   4	-   0   0	0   3	of	0   5

TEXT

2. EVENT DESCRIPTION:

On June 30, 1998, at approximately 1330 MST, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION), operating at approximately 100 percent power when APS Engineering personnel (other utility personnel) discovered that pressure safety valve 2JSIAPSV469 (PCV) had not received the periodic (5 year) set pressure test for an ASME Class 1 PSV as required by Surveillance Requirement (SR) 4.0.5. The omission was discovered during a transportability review of a similar condition in Unit 3. The periodic test for this valve was required to be complete on February 18, 1998. On July 1, 1998 pressure testing of this valve was satisfactorily completed as required by TS SR 4.0.5.

At the time of discovery, Unit 2 was in Mode 1 (POWER OPERATION), operating at approximately 100 percent power, control room personnel had previously entered (LCO) 3.7.11 ACTION A and (LCO) 3.3.3.5 ACTION B to declare Shutdown Cooling Train "B" inoperable to allow maintenance to be performed on pressure safety valve 2JSIBPSV755 (PCV) and Shutdown Cooling isolation valve 2JSIBUV652 (ISV).

On June 30, 1998 a CRDR was initiated to document the deficiency for Shutdown Cooling Train "A" and to determine reportability. As a result of two trains of Shutdown Cooling being inoperable, control room personnel invoked Surveillance Requirement 4.0.3 which allowed delaying the ACTION B requirements of LCO 3.7.11 for 24 hours. At approximately 1632 MST on June 30, 1998 maintenance activities were completed and control room personnel declared Shutdown Cooling Train "B" operable and transitioned from ACTION B to ACTION A of LCO 3.7.11 and Shutdown Cooling Train "A" remained inoperable.

Subsequent testing of PSV (2JSIAPSV469) was conducted on July 1, 1998 with satisfactory results. On July 2, 1998 at approximately 2115 MST Unit 2 control room personnel declared Shutdown Cooling Train "A" operable and exited ACTION A of LCO 3.7.11. At this time both trains of Shutdown Cooling were determined to be operable.

There were no safety system actuations and none were required.



# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME	DOCKET NUMBER	LER NUMBER			PAGE		
Palo Verde Unit 2		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9   8	-   0   0   4	-   0   0			
	0   5   0   0   0   5   2   9				0   4	of	0   5

TEXT

3. ASSESSMENT OF THE SAFETY CONSEQUENCES AND IMPLICATIONS OF THIS EVENT:

The function of the PSV (2JSIAPSV469) is to act as a thermal relief valve to prevent a hydraulic lock on Shutdown Cooling isolation valve 2JSIAUV651 in the event of a high energy line break inside containment. The satisfactory performance of the set pressure verification test demonstrated that PSV (2JSIAPSV469) would have performed its intended function and that system performance was not compromised.

The event did not result in any challenges to the fission product barriers or result in any release of radioactive materials. There were no adverse safety consequences or implications as a result of this event. This event did not adversely affect the safe operation of the plant or health and safety of the public in that satisfactory testing of the subject PSV demonstrated that the PSV would have performed its intended function.

4. CAUSE OF THE EVENT:

An independent investigation of this event is being conducted in accordance with the APS Corrective Action Program. A preliminary evaluation has determined that the apparent root cause is attributed to personnel error when Engineering (IST) failed to recognize that PSV (2JSIAPSV469) should have been scheduled as an ASME Class 1 valve. In addition, the station Pump and Valve In-service Testing Program Procedure component tables incorrectly identified the testing frequency for this valve as 10 years.

At the time of discovery, plant documentation indicated that PSV (2JSIAPSV469) was last tested on November 21, 1991. The IST Program 73DP-9XI02 "Pump and Valve Inservice Testing Program," section 3.3.6 requires that PSVs be tested in accordance with ASME/ANSI OM-1987 Part 1 (OM-1). OM-1 Section 1.3.3(b) identifies the test frequency for Class 1 PSVs as: "All valves of each type and manufacture shall be tested within each subsequent 5 year period with a minimum of 20% of the valves tested within any 24 months. The 20% shall be previously untested valves if they exist."

If the final evaluation results differ from this determination, a supplement to this report will be submitted to describe the final root cause determination. No unusual characteristics of the work location (e.g., noise, heat, poor lighting) directly contributed to this event.



# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME	DOCKET NUMBER	LER NUMBER			PAGE		
Palo Verde Unit 2		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9   8	- 0   0   4	- 0   0	0   5	of	0   5

**TEXT**

**5. STRUCTURES, SYSTEMS, OR COMPONENTS INFORMATION:**

There are no indications that any structures, systems, or components were inoperable at the start of the event, which contributed, to the event. No component or system failures were involved. No failures of components with multiple functions were involved. No failures that rendered a train of a safety system inoperable were involved.

**6. CORRECTIVE ACTIONS TO PREVENT RECURRENCE:**

An independent investigation of this event is being conducted in accordance with the APS Corrective Action Program. Actions to prevent recurrence included a transportability review of the PSVs set pressure testing schedule for all three Units.

Subsequent pressure testing for PSV (2JSIAPSV469) was conducted on July 1, 1998 with satisfactory results indicating that the subject PSV would have performed it's intended function. Therefore, there were no safety consequences as a result of the missed surveillance requirement.

The IST Program 73DP-9XI02 "Pump and Valve Inservice Testing Program" will be revised by August 28, 1998, to update the required testing frequencies for PSVs.

An additional evaluation to address personnel error is being conducted in accordance with the APS Corrective Action Program.

**7. PREVIOUS SIMILAR EVENTS:**

Although a previous event, LER 50/528-97-006-00, was reported pursuant to 10 CFR 50.73 for missing a TS surveillance requirement, the 1997 event occurred subsequent to the missed testing periods reported in LER 50/529-98-004-00. Therefore, the corrective actions of the previous events would not have prevented this event.

