

# 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 4</b>
---	---	-----------------------------

TITLE (4)  
**Surveillance test deficiency found during quality assurance audit leads to TS 3.0.3/4.0.3 entry**

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	
									N/A	0 5 0 0 0	
0 3	0 1	9 8	9 8	- 0 0 1	- 0 0	0 3	2 1	9 8	N/A	0 5 0 0 0	

OPERATING MODE (9) <b>1</b>	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10) <b>1 0 0</b>	20.402(b)		20.405(a)(1)(i)		20.405(c)(1)		50.73(a)(2)(v)		73.71(b)	
	20.405(a)(1)(ii)		20.405(c)(2)		50.73(a)(2)(vi)		50.73(a)(2)(vii)(A)		73.71(c)	
	20.405(a)(1)(iii)		<input checked="" type="checkbox"/> 50.73(a)(2)(i)		50.73(a)(2)(viii)(B)		50.73(a)(2)(ix)		OTHER (Specify in Abstract below and in Text, NRC Form 368A)	
	20.405(a)(1)(iv)		50.73(a)(2)(ii)							
	20.405(a)(1)(v)		50.73(a)(2)(iii)							

LICENSEE CONTACT FOR THIS LER (12)

NAME <b>Daniel G. Marks, Section Leader, Regulatory Affairs</b>	TELEPHONE NUMBER <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)				EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO							

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

On March 1, 1998, at approximately 1645 MST, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION), operating at approximately 100 percent power when Control Room personnel declared both trains of the emergency core cooling system (ECCS) inoperable due to exceeding the specified surveillance interval, including the maximum allowable extension of 25 percent as specified in Technical Specifications (TS) Surveillance Requirement (SR) 4.0.2, and entered TS Limiting Condition for Operation (LCO) 3.0.3. Control Room personnel invoked the provisions of TS SR 4.0.3 to allow up to 24 hours to permit the completion of the missed surveillance prior to commencing a plant shutdown. TS SR 4.5.2.d.3 (pH of trisodium phosphate) was satisfactorily completed within the 24 hours. Control Room personnel exited TS LCO 3.0.3 at approximately 0445 MST on March 2, 1998.

The cause of the event was attributed to personnel error during the performance of the SR. As corrective action, personnel responsible for the inadequately performed SR were coached.

There have been no previous similar events reported pursuant to 10CFR50.73.

9803310150 980321  
PDR ADOCK 05000529  
S PDR



# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME	DOCKET NUMBER	LER NUMBER			PAGE		
Palo Verde Unit 2		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		98	- 001	- 00	02	of	04

TEXT

**1. REPORTING REQUIREMENT:**

This LER 529/98-001-00 is being written to report a condition prohibited by the plant's Technical Specifications (TS) as specified in 10 CFR 50.73(a)(2)(i)(B).

Specifically, at approximately 1645 MST on March 1, 1998, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION) operating at approximately 100 percent power when Control Room personnel declared both trains of the emergency core cooling system (ECCS) (BP/BQ) inoperable due to exceeding the specified surveillance interval including the maximum allowable extension of 25 percent as specified in TS Surveillance Requirement (SR) 4.0.2, and entered TS Limiting Condition for Operation (LCO) 3.0.3. Control Room personnel invoked the provisions of TS SR 4.0.3 to allow up to 24 hours to permit the completion of the missed surveillance prior to commencing a plant shutdown. TS SR 4.5.2.d.3 [pH of trisodium phosphate (TSP)] was satisfactorily completed within the 24 hours. Control Room personnel exited TS LCO 3.0.3 at approximately 0445 MST on March 2, 1998.

**2. EVENT DESCRIPTION:**

Prior to the event, during a Nuclear Assurance (NA) Chemistry/Radiological Monitoring Audit, Chemistry and NA personnel discovered that the September 10, 1997 performance of TS SR 4.5.2.d.3 was incorrectly performed in Unit 2. TS SR 4.5.2.d.3 requires every 18 months the verification that when a representative sample of 3.5 +/- 0.005 grams of anhydrous TSP (corrected for moisture content) from a TSP storage basket is submerged, without agitation, in boric acid solution, the pH of the solution is raised to  $\geq 7$  within 4 hours. NA personnel notified Control Room personnel of the discrepancy. Control Room personnel declared both trains of ECCS inoperable due to exceeding the specified surveillance interval including the maximum allowable extension of 25 percent as specified in SR 4.0.2, and entered TS LCO 3.0.3. Control Room personnel invoked the provisions of TS SR 4.0.3 to allow up to 24 hours to permit the completion of the missed surveillance prior to commencing a plant shutdown. TS SR 4.5.2.d.3 was satisfactorily completed within the 24 hours. Control Room personnel exited TS LCO 3.0.3 at approximately 0445 MST on March 2, 1998.

There were no safety system actuations and none were required.

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

The Bases for TS SR 4.5.2.d.3 (sample from the TSP baskets provides adequate pH adjustment of borated water) states that the TSP will increase the water pH to  $\geq 7$ . Maintaining the pH  $\geq 7$  prevents a significant



# 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   1	-   0   0	0   3	of	0   4

TEXT

fraction of dissolved iodine from converting to a volatile form and minimizes the potential of stress corrosion cracking of austenitic stainless steel components in containment (NH) following a loss of coolant accident (LOCA). The requirement for TSP to raise the pH to 7.0 was met, with less than the amount specified in TS SR 4.5.2.d.3. Therefore, the ECCS was capable of performing its specified design basis function during the period the TS SR was not met.

The event did not result in any challenges to the fission product barriers or result in any release of radioactive materials. Therefore, 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.

## 4. CAUSE OF THE EVENT:

An independent investigation of this event is being conducted in accordance with the APS Corrective Action Program. A review of the surveillance test procedure indicated that a calculational error had been made during the performance of the test, which caused the tolerance of  $\pm 0.005$  grams TSP as required by TS to be missed. The error occurred when the weight of the drying dish was not subtracted from the total weight of the TSP (SALP Cause Codes: A: Personnel Error). The equivalent weight of TSP used for the performance of the ST was 3.377 grams, which was outside the tolerance of  $3.5 \pm 0.005$  grams. Although a lesser amount of TSP was dissolved than specified in TS SR 4.5.2.d.3, the SR acceptance criteria (i.e., pH to  $\geq 7$ ) was met because there was a conservative amount of TSP present.

The investigation also determined that with the implementation of Improved Technical Specifications in July 1998, this event would not be reportable because the tolerance as specified in the Bases section would be changed from a tolerance of  $3.5 \pm 0.005$  grams to a maximum of  $\leq 3.5005$  grams under the TS Bases Control Program.

No unusual characteristics of the work location (e.g., noise, heat, poor lighting) directly contributed to this event. No procedural errors contributed to this event.

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

Although the ECCS was declared inoperable for a lapsed surveillance requirement, there were no component or system failures involved in this event. No failures of components with multiple functions were involved.



# 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 1	- 0 0	0 4	of	0 4

TEXT      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 coaching the Chemistry technician (other utility personnel) on attention to detail and procedural adherence. Cognitive personnel errors that are the result of mental lapses are not normally correctable with revised procedures or additional training. Therefore, no further actions were determined to be necessary.

7.      PREVIOUS SIMILAR EVENTS:

Although previous events have been reported pursuant to 10 CFR 50.73 in the past three years for missing TS surveillance requirements, the causes discussed in the previous events have not been similar to this event. Therefore, the corrective actions of the previous events would not have prevented this event.

