

LICENSEE EVENT REPORT (LER)

(See reverse for required number of
digits/characters for each block)

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FACILITY NAME (1)

Palo Verde Nuclear Generating Station-Unit 1

DOCKET NUMBER (2)

05000528

PAGE (3)

1 OF 5

TITLE (4)

Main Steam Safety Valve Lift Pressures Outside of Technical Specification Limits Due to Setpoint Drift

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 NAME	DOCKET NUMBER
09	22	1999	1999	005	00	10	19	1999	N/A	
OPERATING MODE (9)		1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)		100	20.2201(b)		20.2203(a)(2)(v)		X		50.73(a)(2)(i)	50.73(a)(2)(viii)
			20.2203(a)(1)		20.2203(a)(3)(i)				50.73(a)(2)(ii)	50.73(a)(2)(x)
			20.2203(a)(2)(i)		20.2203(a)(3)(ii)				50.73(a)(2)(iii)	73.71
			20.2203(a)(2)(ii)		20.2203(a)(4)				50.73(a)(2)(iv)	OTHER
			20.2203(a)(2)(iii)		50.38(c)(1)				50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 365A
			20.2203(a)(2)(iv)		50.38(c)(2)		X		50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME

Daniel G. Marks, Section Leader, Nuclear Regulatory Affairs

TELEPHONE NUMBER (Include Area Code)

623-393-6492

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
X	SB	RV	D243	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO
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EXPECTED SUBMISSION DATE (15)

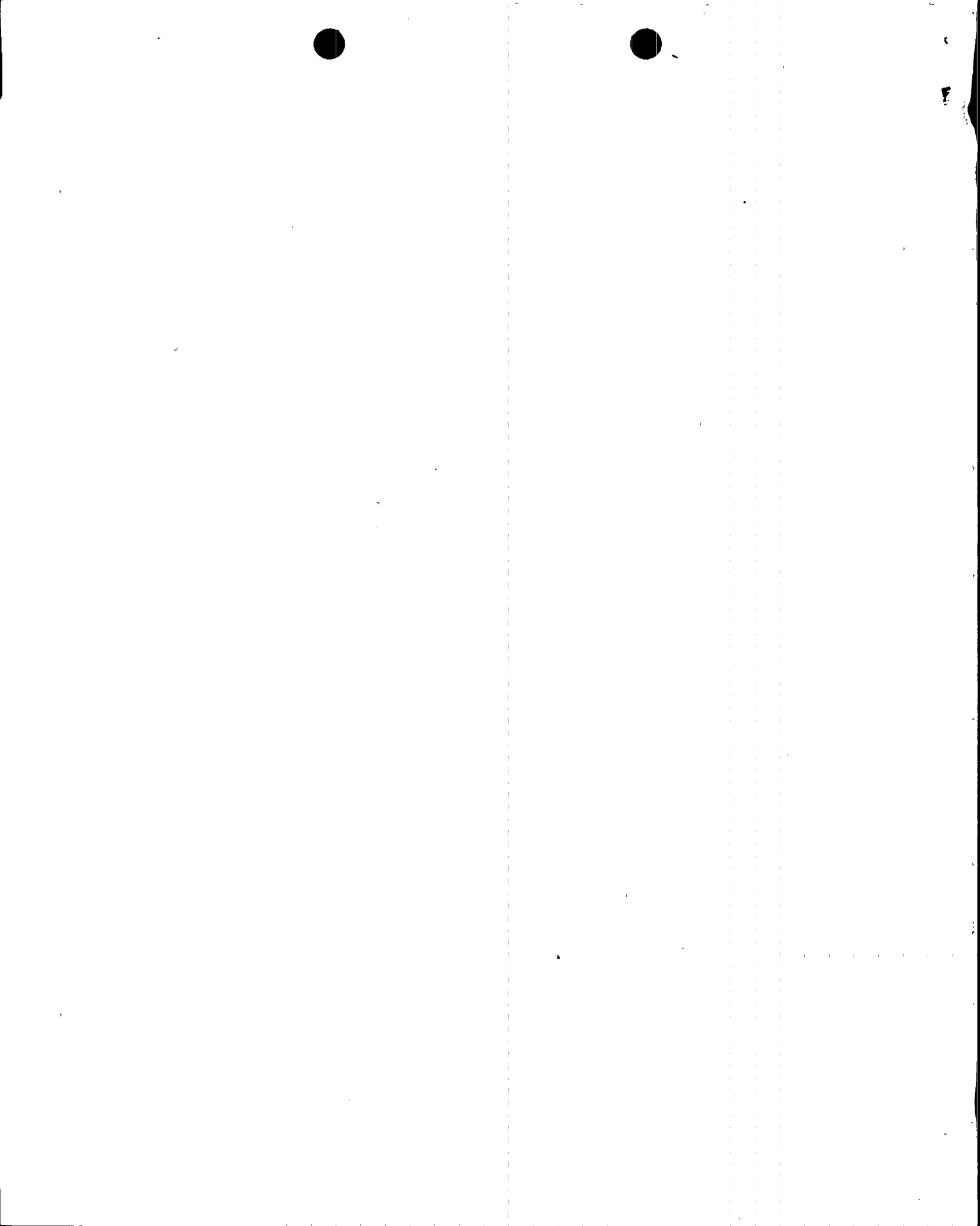
MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On September 22, 1999, during lift pressure verification testing conducted in accordance with surveillance procedure requirements, two (of twenty) Unit 1 main steam safety valves (MSSVs) were identified as having as-found settings which were outside of the Technical Specification limits of +/- 3 percent of design lift pressure.

The out of tolerance as-found MSSV condition appears to be the result of setpoint drift. The affected Unit 1 valves were adjusted and retested in accordance with procedure requirements and were returned to service on September 22, 1999. APS engineering has implemented an augmented testing program to gather additional data on MSSV performance and is evaluating industry operating experience for actions that may assist us in improving MSSV performance and reliability.

Previous similar events have been reported in LERs 50-529/99-002, 50-530/98-003, 50-528/98-004, 50-529/97-001, and 50-530/97-003.



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LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Palo Verde Nuclear Generating Station Unit 1	05000528	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 5
		1999	- 005 -	00	

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

I. REPORTING REQUIREMENT(S):

On September 22, 1999, during the 18 month frequency surveillance testing of the Unit 1 main steam safety valves (MSSVs) (EIS: RV, SB), as-found lift pressures for two of the twenty Unit 1 MSSVs were found to be low and outside of Technical Specification limits.

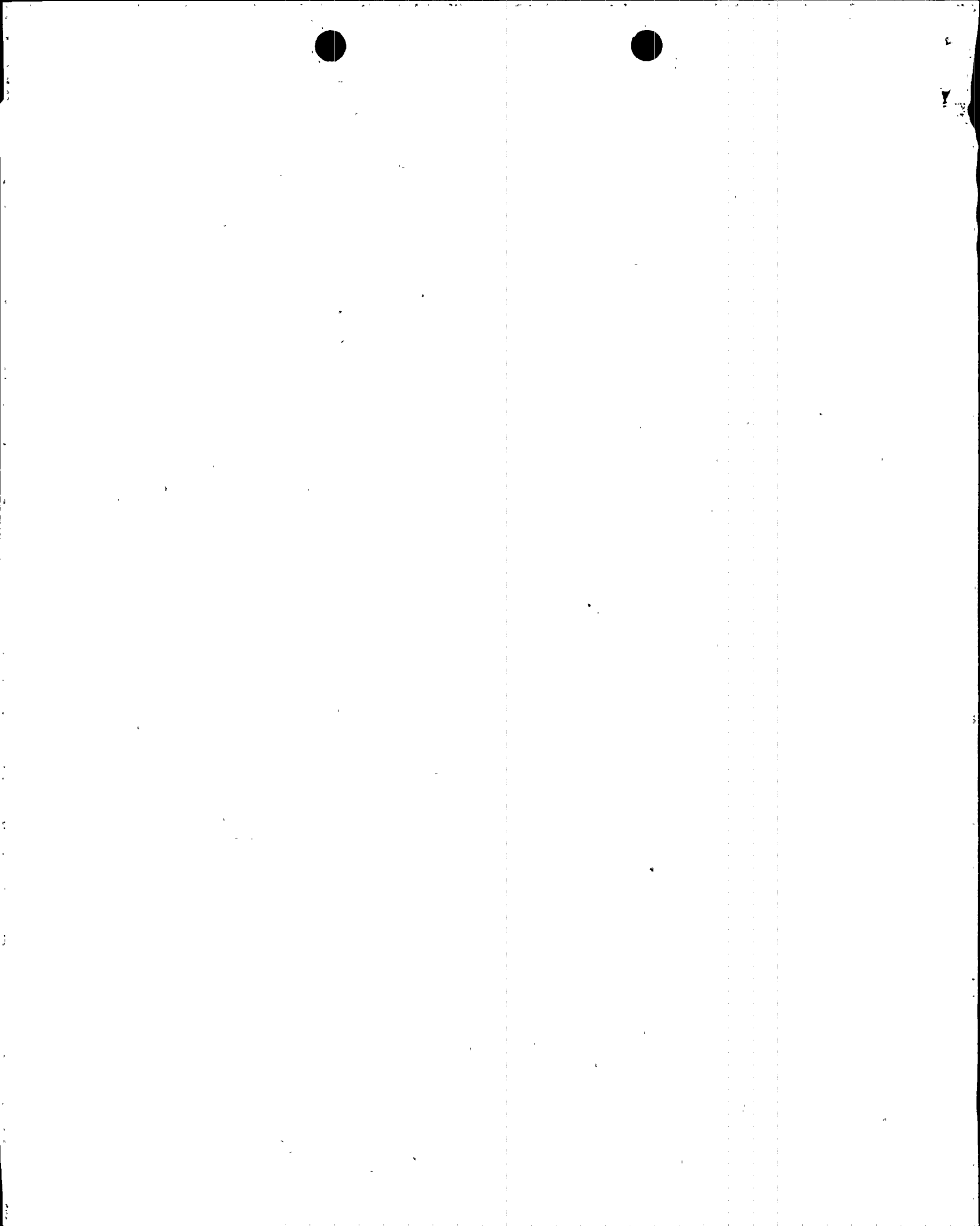
This LER is being submitted because the existence of similar out-of-tolerance conditions in multiple MSSVs is an indication that the condition developed over a period of time and it is reasonable to assume the condition existed during plant operation in excess of Technical Specification (TS) Limiting Condition of Operation (LCO) Action completion times. Therefore, the condition is reportable under 10 CFR 50.73(a)(2)(i)(B) "Any operation or condition prohibited by the plant's Technical Specifications."

In addition, this LER is being submitted pursuant to 10 CFR 50.73 (a)(2)(vii) because it is reasonable to assume that a single cause or mechanism served as a common input to the multiple MSSV out-of-tolerance conditions in a single system designed to mitigate the consequences of an accident.

II. DESCRIPTION OF STRUCTURE(S), SYSTEM(S) OR COMPONENT(S):

There were no structures, systems, or components that were inoperable that contributed to this condition. There were no failures that rendered a train of a safety system inoperable and no failures of components with multiple functions were involved.

The MSSVs are Dresser/Consolidated 3700 series valves designed for nuclear service and certified under Section III, class 2, of the ASME Code. Palo Verde's specific valves are Maxiflow, spring-loaded, direct acting, model No. 3707-R, with 6 inch 1500 pound inlets and 10 inch 300 pound outlets. Five MSSVs are located on each of the four main steam lines, outside containment (EIS: NH), upstream of the main steam isolation valves (EIS: ISV, SB). The total relieving capacity of the MSSVs is divided equally between the main steam lines and is sufficient to pass the steam flow equivalent to 105 percent of the plant's maximum steam flow. The MSSV design includes staggered setpoints so that only the number of valves needed will actuate. The primary purpose of the MSSVs is to provide overpressure protection for the secondary system. The MSSVs also provide protection against overpressurizing the reactor coolant pressure boundary (EIS: AB) by providing a heat sink for the removal of energy from the reactor coolant system (EIS: AB) if the preferred heat sink, provided by the condenser (EIS: SG) and circulating water system (EIS: KI, KE) is not available.



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MSSVs are required to be tested once per five years by Technical Specification (TS) Surveillance Requirement (SR) 3.7.1.1 and the ASME Code requirements, however, Palo Verde tests the valves prior to each refueling outage in accordance with previously specified corrective actions. The MSSVs are tested in accordance with approved procedures under normal operating pressure and temperature conditions. SR 3.7.1.1 requires that each MSSV lift setpoint must be within +/- 3 percent of the design lift setting. Upon completion of valve testing, the MSSVs must be returned to +/- 1 percent of the design lift setting.

III. INITIAL PLANT CONDITIONS:

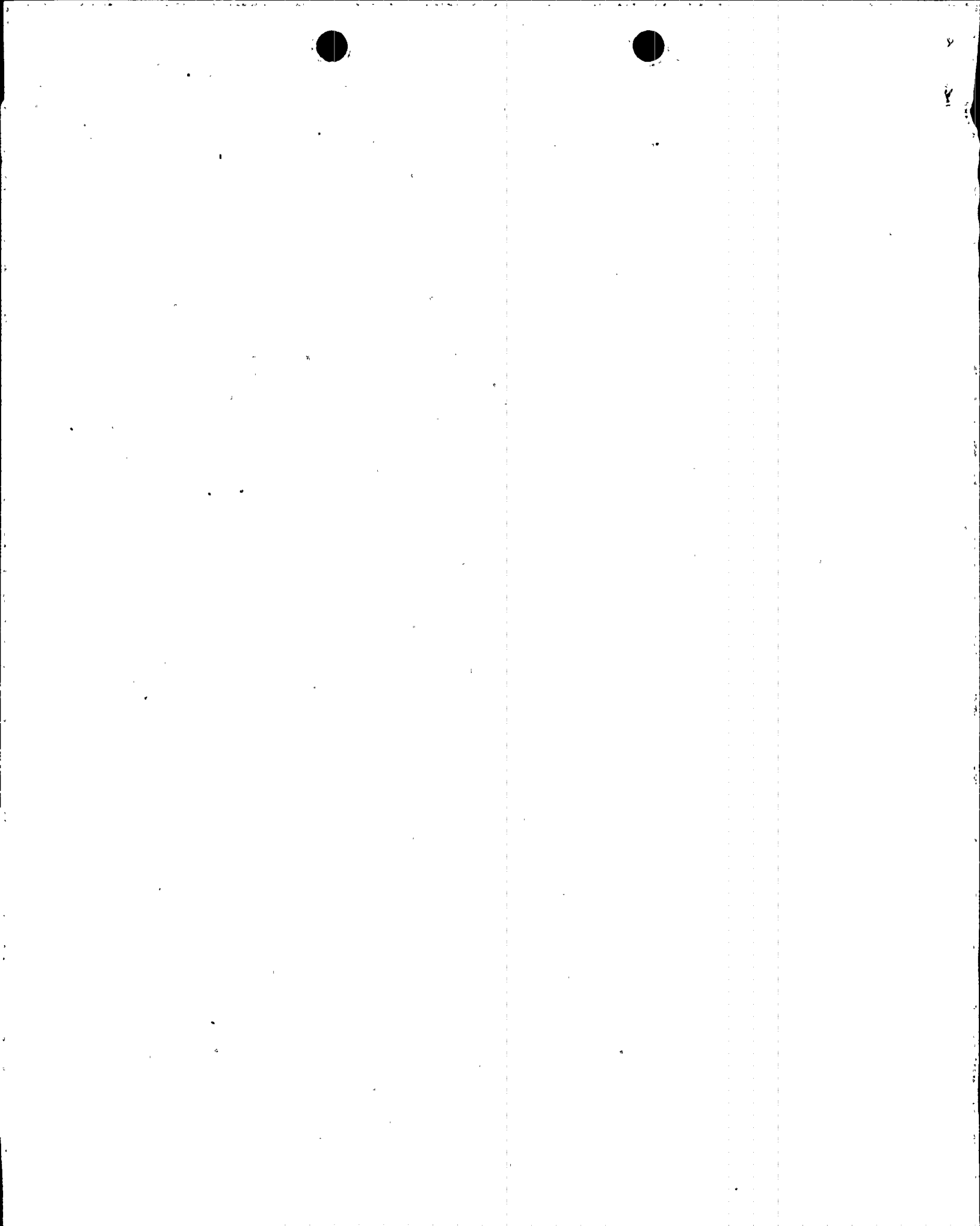
Unit 1 MSSV lift testing occurred between September 21, and September 23, 1999, prior to the eighth refueling outage (which began on October 2, 1999). During the MSSV testing period, Palo Verde Unit 1 was in Mode 1 (Power Operation) at 100 percent power.

IV. EVENT DESCRIPTION:

Prior to Unit 1's eighth refueling outage, valve set pressure verification testing began on the MSSVs using the Furmanite Digital Trevitest method. The testing revealed that the as-found lift pressures for two Unit 1 MSSVs were low and outside of the Technical Specification limits of +/- 3 percent of design lift pressure. During the Unit 1 MSSV testing, there were no safety system actuations and none were required. The following paragraphs provide the dates and times of the discoveries, immediate corrective actions taken, and the limiting condition of operation required actions that were entered and exited as a result of MSSV testing.

On September 22, 1999 at 1532 MST, Unit 1 Control Room personnel declared SGE-PSV-578 inoperable and entered TS LCO 3.7.1 CONDITION A, because the as-found lift setting was 1226 pounds per square inch gauge (psig) or 5 percent below the design lift pressure of 1290 psig. After lift set adjustments were made, the as-left setting of SGE-PSV-578 was 1298 psig or 0.6 percent above design lift pressure. Upon successful completion of valve set pressure verification, SGE-PSV-578 was declared operable at 1632 MST on September 22, 1999 and TS LCO 3.7.1 CONDITION A was exited.

On September 22, 1999 at 1643 MST, Unit 1 Control Room personnel declared SGE-PSV-579 inoperable and entered TS LCO 3.7.1 CONDITION A, because the as-found lift setting was 1184 psig or 5.3 percent below the design lift pressure of 1250 psig. After lift set adjustments were made, the as-left setting of SGE-PSV-579 was 1243 psig or 0.6 percent below the design lift pressure. Upon successful completion of valve set pressure verification, SGE-PSV-579 was



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TEXT CONTINUATION**

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Palo Verde Nuclear Generating Station Unit 1	05000528	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4 OF 5
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declared operable at 1710 MST on September 22, 1999 and TS LCO 3.7.1 CONDITION A was exited.

V. SAFETY CONSEQUENCES:

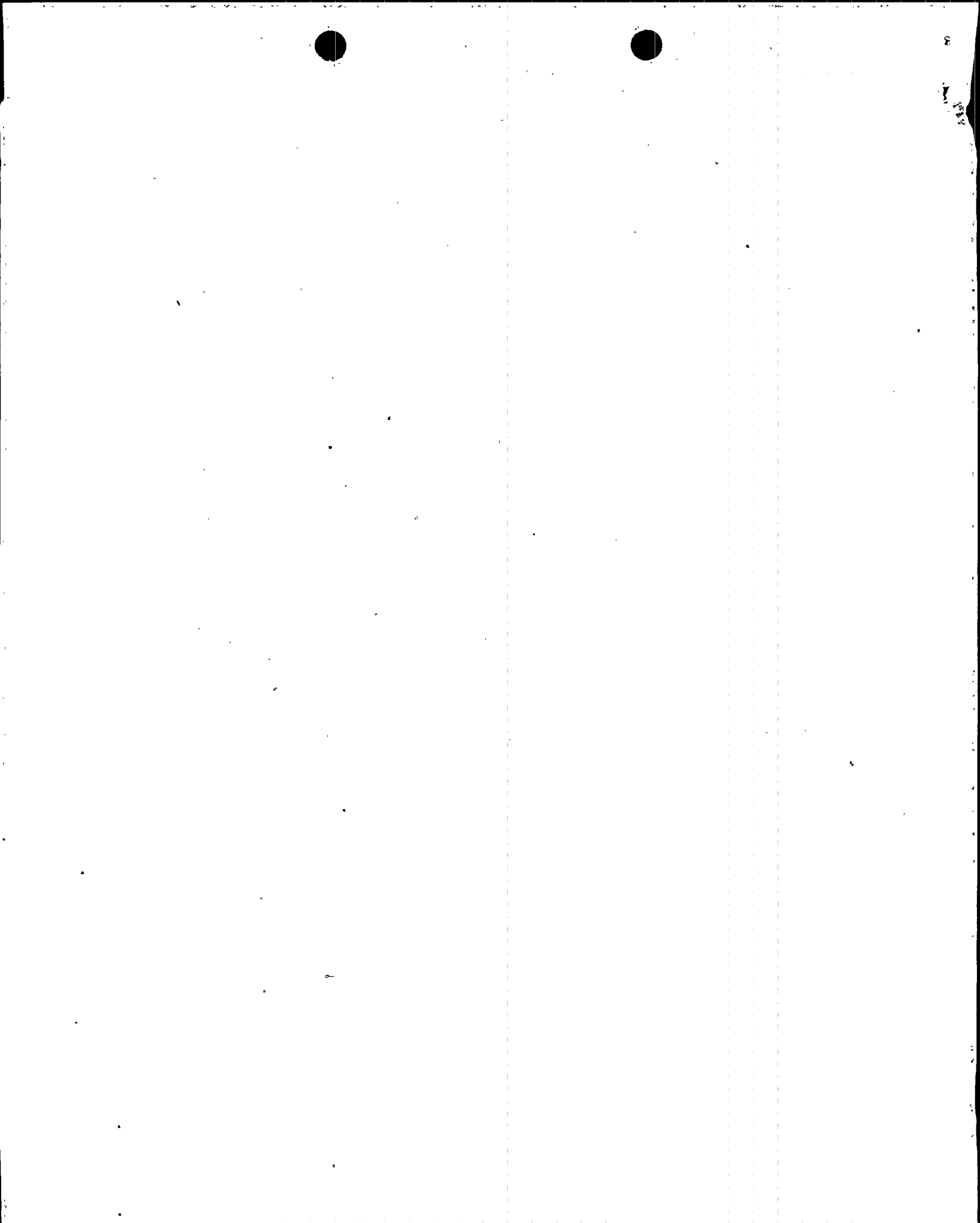
An analysis of the safety consequences of the Unit 1 as-found MSSV testing results is being conducted in accordance with PVNGS procedures. This analysis will include the effects of the two MSSVs with low as-found lift pressures that were identified prior to Unit 1's eighth refueling outage. The analysis will determine if the primary or secondary design peak pressures would have been exceeded under accident conditions. A preliminary assessment indicates this condition would be bounded by current analysis for the primary or secondary peak pressures under accident conditions. Other accident consequences will also be evaluated to determine the effect of the MSSVs as-found condition. If the safety analysis results in any unacceptable consequences, APS will provide the results in a supplement to this LER.

On March 10, 1999, at approximately 1330 MST, Palo Verde Unit 1 experienced a reactor trip as a result of high pressurizer pressure (reference: LER 50-528/99-001-00). Subsequent to the reactor trip, secondary pressure exceeded 1250 psig and MSSVs SGE-PSV-572, SGE-PSV-579, SGE-PSV-578, and SGE-PSV-554 lifted to relieve secondary pressure. Based upon available instrument readings, the four MSSVs that lifted maintained secondary peak pressure at or below 1282 psig during the event. The Unit 1 trip demonstrated that the main steam safety valves will perform their intended safety function and prevent overpressurization of the secondary system. APS is investigating the performance of the MSSVs during the overpressurization event to determine if there is any correlation between the event and the current as-found conditions. Although isolated MSSV setpoint drift conditions continue to occur, APS is confident that the MSSVs will perform as designed and relieve secondary pressure when setpoint pressures are reached.

VI. CAUSE OF THE EVENT:

APS is investigating this event in accordance with the Palo Verde corrective action program and it appears that the low as-found setpoint condition was the result of setpoint drift. APS is working vigorously to identify the exact mechanisms that adversely affect MSSV setpoint stability and several specific mechanisms are under evaluation at this time.

APS engineering has implemented an augmented testing program to gather additional data on MSSV performance and is evaluating industry operating experience for actions that may assist us in improving MSSV performance and reliability. In addition, APS is participating in an EPRI



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collaborative project that is evaluating MSSV performance. As a result, APS may implement additional actions if they can be demonstrated to be effective in improving MSSV performance.

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

VII. CORRECTIVE ACTIONS:

Unit 1 MSSVs (SGE-PSV-578 and SGE-PSV-579) discovered to have as-found lift pressures outside of the TS limit were adjusted and retested in accordance with procedure requirements and were returned to service on September 22, 1999.

VIII. PREVIOUS SIMILAR EVENTS:

Previous similar events have been reported when MSSV as-found setpoints exceeded the +/- 3 percent TS limit. However, the last reported instance where as-found lift settings were below the TS limit was on November 22, 1993 (LER 50-528/93-009). Previous corrective actions included controls to limit the time refurbished/recertified MSSVs are stored in the PVNGS Warehouse, and an increase in testing frequency from five years to 18 months. Augmented testing has been applied to select MSSVs to gather additional performance data and can be credited with exposing setpoint drift conditions earlier. Although these corrective actions have proven effective in improving MSSV performance, they have not completely eliminated setpoint drift anomalies.

8/31/99

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Distribution Sheet

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Subject:

Event tracking sheet re 980514 event involving Unit 1, "A", high pressure safety injection discharge check valve failed backleakage surveillance.

Body:

Docket: 05000528, Notes: STANDARDIZED PLANT

Docket: 05000529, Notes: Standardized plant.

OEAB EVENT TRACKING SHEET

No. Sort Specified
QUERY> Event Number >= 34227 & Event Number <= 34227

Plant: PALO VERDE Unit: 1,2 Engineer: HODGE V.
Event: 05/14/98 Morning Report: Briefing:
50.72#: 34227 LER#: 050000009800000 PN#:
Other Notification: #34246
System: Component:

OPERATING MODE

- ① - Operation
- 2 - Startup
- 3 - Hot Standby
- 4 - Hot Shutdown
- 5 - Cold Shutdown
- 6 - Refueling
- 7 - Other _____

SIGNIFICANCE

- A - Reactor Protection System
- ② - Safety-Related Cooling System
- C - Fuel Cladding
- D - Reactor Coolant Pressure Boundary
- E - Containment
- F - Plant Power
- G - Unexpected Plant Performance
- H - Other:

CAUSE

- 1 - Equipment Failure
- 2 - Design or Installation Error
- 3 - Operating Error
- ④ - Maintenance Error
- 5 - External
- 6 - Other _____

EVENT TYPE

- SIG - Significant Event
- EOI - Event of Interest
- TBD - To Be Determined
- OTH - Other

POTENTIAL AO:

Criterion: _____

Proposed By: HODGE V.
Engineer

Vern Hodge 9/10/97

Approved:

Section Leader

J.E. Lyons 11/6/99
Deputy Branch Chief

R. Gray 11/9/98
closure:

EVENTS ASSESSMENT PANEL

First Screening:

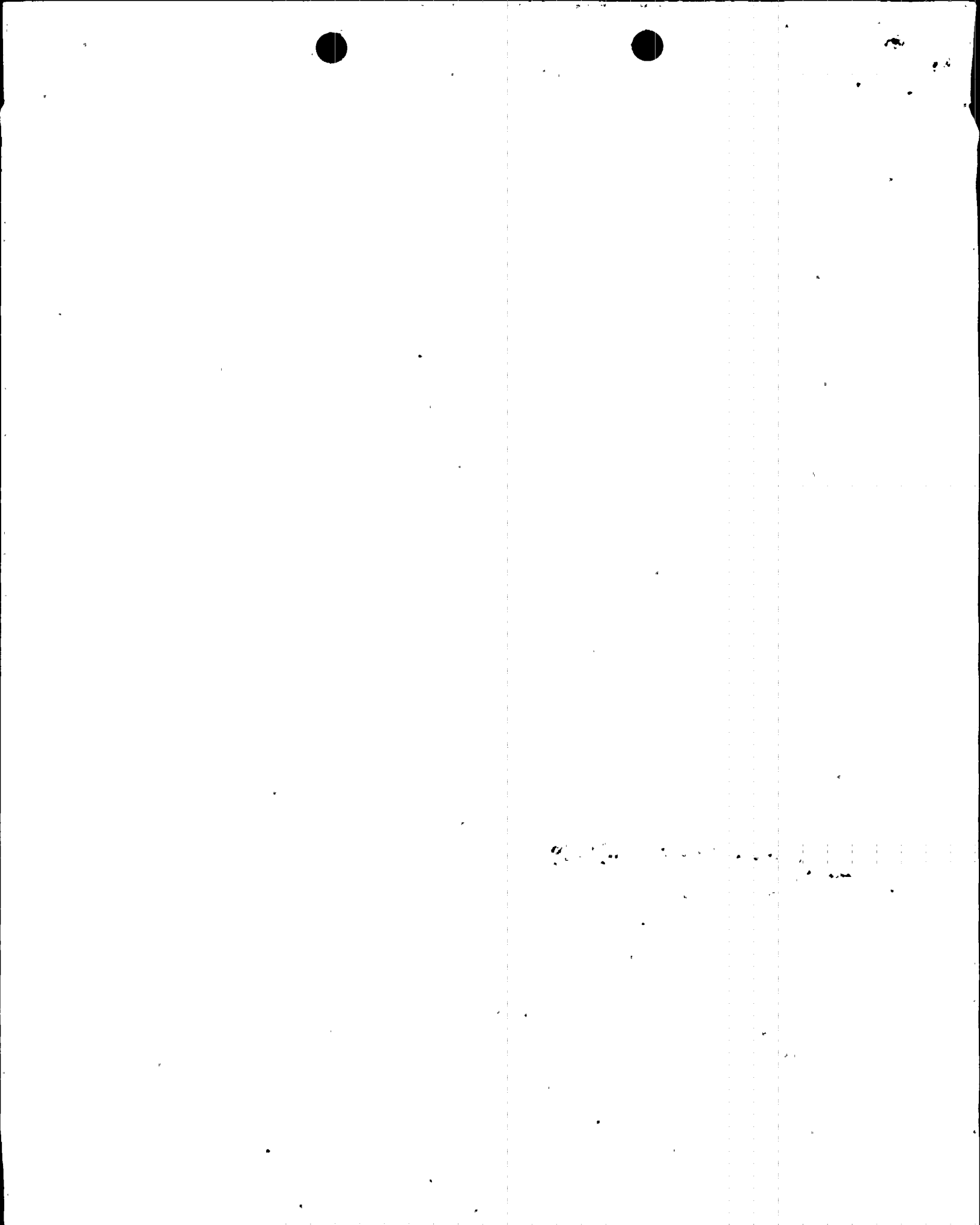
Significance Description:

On 5/14/98, the licensee reported that the Unit 1, train 'A', high pressure safety injection (HPSI) discharge check valve failed its backleakage surveillance. Subsequent testing of Unit 2, train 'B' HPSI discharge check valve on 5/15/98, revealed that it also failed the backleakage surveillance. The region is currently carrying out a special inspection to investigate this problem and plans to exit on 6/12/98.

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DFX2

993280147



EVENT FOLLOW-UP ASSIGNMENT SHEET

No Sort Specified

QUERY> "HODGE" \$ Assigned To & Event Number >= 34227 & Event Number <= 34227

ASSIGNMENT DATE: 05/16/98
ASSIGNED TO: HODGE V.
PLANT & UNIT: PALO VERDE 1,2
EVENT DATE: 05/14/98
50.72 REPORT NO: 34227
DAILY REPORT DATE:
OTHER REPORT: #34246

EVENT DESCRIPTION

On 5/14/98, the licensee reported that the Unit 1, train 'A', high pressure safety injection (HPSI) discharge check valve failed its backleakage surveillance. Subsequent testing of Unit 2, train 'B' HPSI discharge check valve on 5/15/98, revealed that it also failed the backleakage surveillance. The region is currently carrying out a special inspection to investigate this problem and plans to exit on 6/12/98.

SPECIFIC FOLLOW-UP ASSIGNMENT

Determine details, evaluate safety significance and generic implications. In addition, address the following specific concerns:

The failure of the HPSI discharge check valves is significant because if, during a design basis event, one HPSI pump fails, the discharge check valve from the failed pump is needed to meet the design basis minimum flow to the core by preventing diversion of flow away from the core.

SAFETY SIGNIFICANCE: SIGEVENT AO OTHER

OR BRIEFING:

EVENT FOLLOW-UP REPORT:

CLOSEOUT DESCRIPTION

8/31/99: Reassigned from C. Lauron to V. Hodge

SUBMITTED BY: HODGE V.
APPROVED BY:
CLOSEOUT NARRATIVE ENTERED:

DATE:
DATE:
DATE:

ASSIGNMENT SHEET- PART 21PANEL -- ☐ YES ☒ NO

ASSIGNED TO:	<u>Hodge</u>	ASSIGNMENT DATE	<u>05/14/98</u>
PLANT & UNIT/VENDOR	<u>Palo Verde 1,2</u>		
REPORTED BY:	<u></u>	REPORT DATE	<u></u>
EN NO:	<u>34227</u>	EVENT DATE	<u>05/14/98</u>
MR NO:	<u></u>	EVENT TYPE	<u></u>
PN NO:	<u></u>	SPECIALITY CODE	<u></u>
ACCESSION NO:	<u></u>	PART 21 NO	<u></u>
OTHER SOURCE REPORT:	<u>EN 34246</u>		
RELATED REPORTS:	<u></u>		

EVENT/CONDITION SUMMARY

On 5/14/98, the licensee reported that the Unit 1, train 'A', high pressure safety injection (HPSI) discharge check valve failed its backleakage surveillance. Subsequent testing of Unit 2, train 'B' HPSI discharge check valve on 5/15/98, revealed that it also failed the backleakage surveillance. The region is currently carrying out a special inspection to investigate this problem and plans to exit on 6/12/98.

SPECIFIC FOLLOW-UP ASSIGNMENT

DETERMINE DETAILS, EVALUATE SAFETY SIGNIFICANCE AND GENERIC IMPLICATIONS. IN ADDITION, ADDRESS THE FOLLOWING SPECIFIC CONCERNS:

The failure of the HPSI discharge check valves is significant because if, during a design basis event, one HPSI pump fails, the discharge check valve from the failed pump is needed to meet the design basis minimum flow to the core by preventing diversion of flow away from the core.

PREPARE TO BRIEF: ☐ YES ☐ NO

TARGET CLOSEOUT SCHEDULE:

INITIAL SCREENING BY PANEL

REGULATORY ASSESSMENT:

EVENT/CONDITION SAFETY SIGNIFICANCE: ☐ OTH ☐ EOI ☐ SIG ☐ AO

REMAINING OR ADDITIONAL FOLLOW-UP ITEMS:

CLOSEOUT TEXT

SUMMARY ASSESSMENT: (Abstract of Closeout/Findings)

CLOSEOUT/FINDINGS:

8/31/99: Reassigned from C. Lauron to V. Hodge

The two event notifications on which this assignment is based are summarized as follows:

<u>EN No.</u>	<u>Plant</u>	<u>Date</u>	<u>Description</u>
34227	Palo1	980514	While the reactor was at full power, the licensee discovered that the A train high pressure safety injection (HPSI) pump discharge check valve had 33 gpm backleakage. The licensee believes that the valve disc was incorrectly aligned during the last refueling outage. The valve was worked on about four weeks earlier. On reassembly, the valve met ASME Section XI test requirements.
34246	Palo2	980515	While the reactor was at full power, the licensee discovered that the B train high pressure safety injection (HPSI) pump discharge check valve had 37.5 gpm backleakage. The licensee believes that the valve disc was incorrectly aligned, allowing the excessive leakage. This condition may exist in other HPSI discharge check valves.

On April 9, 1998, during a Unit 1 refueling outage surveillance test, Valve 1PSIA-V404, the Unit 1 Train A HPSI pump discharge check valve, failed to meet its acceptance criterion for reverse flow during a flow test. The cause of the condition was determined to have been vertical misalignment of the valve disc within the valve body, which caused the disc to become jammed and not seat properly. On May 7, 1998, the licensee concluded that the amount of leakage resulted in a condition outside the design basis of the facility.

Valve 1PSIA-V404 was repaired; its post-maintenance test was completed satisfactorily. However, on May 13, 1998, with Unit 1 operating, the check valve system engineer determined that the valve had been repaired incorrectly. Additional testing confirmed that the valve was inoperable because of excessive reverse leakage. The licensee repaired the valve and returned the Unit 1 HPSI system to an operable condition on May 15, 1998.

During its review of the applicability of the vertical misalignment issue to other HPSI pump discharge check valves, the licensee performed non-intrusive measurements of valve dimensions and reviewed previous surveillance test data. On May 14, 1998, the licensee determined that Valve 2PSIB-V405, the Unit 2 Train B HPSI pump discharge check valve, was also misaligned. Testing confirmed that the valve had excessive reverse flow. The licensee repaired the valve and returned the Unit 2 HPSI system to an operable condition on May 16, 1998 [Licensee Event Report (LER) 50-528(529,530)/98-06].

The reverse leakage conditions were masked prior to April 9, 1998, due to an inadequate surveillance test. Specifically, the surveillance test in use only measured the injection flow rate to the reactor vessel under limited conditions and did not quantify the reverse flow leakage through the check valves.

The significance of the reverse flow condition is that the redundant emergency core cooling system then does not contain an independent operable flowpath. The safety-related function of the HPSI pump discharge check valves is to close to prevent diversion of flow between the redundant systems.

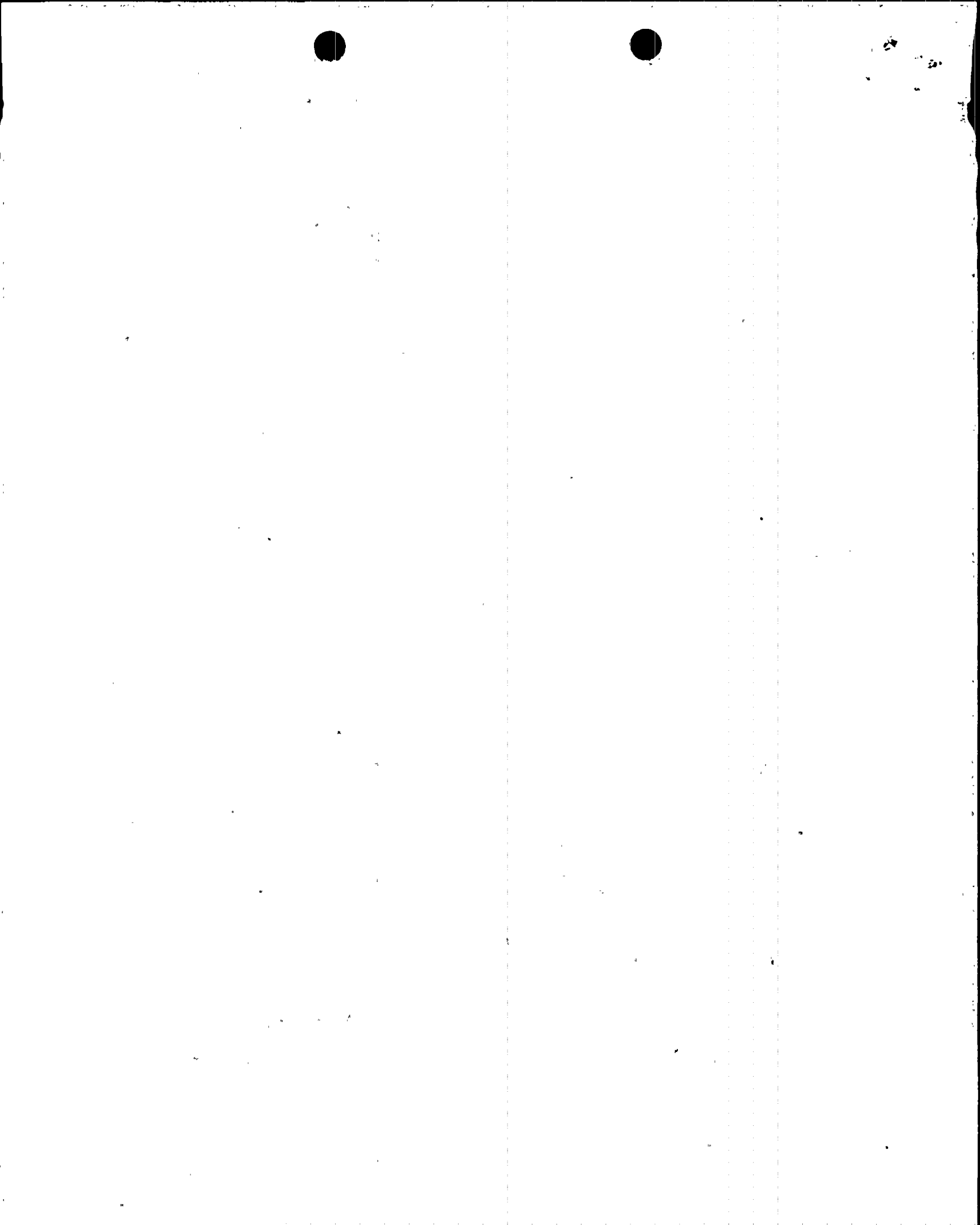
The NRC conducted a special inspection [Inspection Report 50-528 (529, 530)/98-14]. The inspectors reviewed, among other items, the licensee's response to NRC Information Notice 89-62, "Malfunction of Borg-Warner Pressure Seal Bonnet Check Valves Caused By Vertical Misalignment of Disc," dated August 31, 1989. As explained in this notice, the assembly instructions for the subject valves were missing an essential assembly step, which, if not implemented, would result in the disc assembly being suspended too low inside the body of the valve. If the disc assembly was suspended too low, the valve may initially seat acceptably but still become jammed after forward flow exercised the valve, thus preventing proper valve seating and subsequently allowing reverse flow leakage. The original factory assembly process included a step that unthreaded the bonnet retaining ring after it bottomed in the valve body until the correct disc height was obtained. Backing out the retaining ring to achieve the correct vertical dimension was not included as a required step in the licensee's original procedure.

The licensee's maintenance procedure for Borg-Warner pressure seal bonnet check valves did not include adequate instructions for ensuring correct vertical disc alignment until November 1994. The inspectors concluded that the licensee missed an opportunity to identify and correct the vertical alignment issue at that time. Once the problem was recognized in 1998, the licensee developed and implemented an acceptable plan to identify and correct the adverse condition on all of the HPSI pump discharge check valves.

In summary, the inspectors found examples of an apparent violation of technical specifications for (1) inoperability of the Unit 1 Train B high-pressure safety injection flow path for approximately 6 years and the Unit 2 Train A high-pressure safety injection (HPSI) flow path for approximately 5 years, (2) inadequate logkeeping practices, and (3) not identifying and correcting excessive reverse flow through the Unit 2 Train B HPSI pump discharge check valve following two events in which the safety injection tank level decreased.

A review of 1997-1999 event notifications using the search string "reverse" disclosed the following similar reports.

<u>EN No.</u>	<u>Plant</u>	<u>Date</u>	<u>Description</u>
32531	Cat2	960623	The licensee discovered that a safety injection check valve and a chemical and volume control check valve had not been reverse flow tested in accordance with the ASME Section XI test program.
32577	Nin2	970702	The high pressure core spray suction check valve from the suppression pool failed the reverse flow test. However, this valve serves no safety-related function under reverse flow conditions, so the licensee retracted the report.
34886	Nin1	980707	During a surveillance test, a core spray keep-fill system check valve failed to seat to prevent reverse flow.
35397	Nin1	990224	During a surveillance test, the high pressure coolant injection discharge check valve failed open, causing reverse flow through the pump. A feedwater booster pump was observed to be rotating backwards.



35973 Nin2

990730 The licensee determined that the high pressure core spray pump suction check valve from the suppression pool is not in the inservice testing program plan for reverse flow testing and should be.

These events do not represent an industry trend. Only Events 34886 and 35397 at Nine Mile Point 1 appear to be closely related to the Palo Verde events discussed above. Event 35973 appears to be a recurrence of Event 32577 at Nine Mile Point 2.

A review of recent information notices using the search strings "reverse" and "check" did not disclose any new guidance on this subject. In the Palo Verde inspection discussed above, the inspectors reviewed the licensee inservice testing program and concluded that it was ineffective at demonstrating operability of the HPSI pump discharge check valves. NRC Generic Letter 89-04, "Guidance On Developing Acceptable Inservice Testing Programs," and NRC Information Notice 88-70, "Check Valve Inservice Testing Program Deficiencies," apply to this aspect of the discussion.

No further regulatory action is needed.

FINAL PANEL ASSESSMENT:

The panel considered the significance of this to be..... It was judged to (not) be generic. Factors impacting priority determination were....

EVENT/CONDITION SAFETY SIGNIFICANCE: _ OTH _ EOI _ SIG _ AO

BASIS: _ RISK _ PROGRAMMATIC _ MARGIN _ N/A

GENERIC FOLLOW-UP ACTION RECOMMENDED: _ YES _ NO _ PRIORITY (1,2,3,4)¹
_ IN _ BUL _ GL

FILE: g:\rexb\cvh\palo hpsi bklkg ets

BRIEF: _____

1. Priority endnote:

PRIORITY 1: Immediate assignment of resources (e.g., for highly risk-significant safety concerns)

PRIORITY 2: Near-term action (e.g., significant safety issues not warranting immediate action)

PRIORITY 3: Long-term action (e.g., issues of moderate to low safety significance)

PRIORITY 4: Resource dependent action (e.g., items that can be deferred)

