



Palo Verde Nuclear
Generating Station

William E. Ide
Vice President
Nuclear Production

TEL (623) 393-6116
FAX (623) 393-6077

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

192-01062-WEI/RAS
March 31, 2000

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

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 1
Docket No. STN 50-528
License No. NPF-41
Licensee Event Report 2000-001-00**

Attached please find Licensee Event Report (LER) 50-528/2000-001-00 that has been prepared and submitted pursuant to 10CFR50.73. This LER reports a condition where a surveillance test of the Unit 1 radiation monitoring system was not completed within the required testing interval. Subsequent surveillance testing was performed and satisfactorily completed. No commitments are made to the NRC in this submittal.

In accordance with 10CFR50.73(d), a copy of this LER is being forwarded to the Regional Administrator, NRC Region IV and to the Resident Inspector. If you have questions regarding this submittal, please contact Daniel G. Marks, Section Leader, Regulatory Affairs, at (623) 393-6492.

Sincerely,

WEI/RAS/ras

Attachment

cc: E. W. Merschoff (all with attachment)
J. H. Moorman
M. B. Fields
INPO Records Center

IE22

LICENSEE EVENT REPORT (LER)

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

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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TITLE (4)
Missed Shiftly Channel Check Causes Condition Prohibited by Technical Specifications

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
03	05	2000	2000	001	00	03	31	2000	N/A	
									FACILITY NAME	DOCKET NUMBER
									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	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(2)(v)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)						
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(x)						
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(iii)	73.71						
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(iv)	OTHER						
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A						
<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 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
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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

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)		
YES (If yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/>	NO		MONTH	DAY	YEAR

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

On March 5, 2000, at 2003 mountain standard time (MST), Unit 1 was at approximately 100 percent power when a containment vent was commenced to lower containment pressure. At 2200 MST, during the containment vent, control room personnel were informed that shiftly channel checks had not been maintained current for the power access purge area radiation monitors as required by Technical Specification (TS) 3.3.8. Radiological monitoring department personnel had promptly completed a channel check of RU-37 at 2140 MST upon recognizing the shiftly channel checks were not current. However, the shiftly channel check exceeded the TS surveillance testing interval by approximately 75 minutes.

Subsequent channel check testing of RU-37 and RU-38 demonstrated there was no loss of quality or functional capability and therefore, there were no safety consequences as a result of this event. Likewise, this event does not represent a safety system function failure because the condition alone did not prevent, or would not have prevented, the fulfillment of a safety function of structures or systems.

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

I. REPORTING REQUIREMENT(S):

This LER (50-528/2000-001-00) is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B) to report an event that resulted in a condition prohibited by the plant's Technical Specifications (TS).

Specifically, on March 5, 2000 at 2200 Mountain Standard Time (MST), during a containment vent, control room personnel were informed that shiftly channel checks had not been performed for the power access purge area radiation monitors as required by TS 3.3.8 CONTAINMENT PURGE ISOLATION ACTUATION SIGNAL.

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

The power access purge area radiation monitors 1JSQARU0037 (RU-37) and 1JSQBRU0038 (RU-38) (EIS: IL, MON) are located outside the containment building between the power access purge exhaust and refueling purge exhaust ducts. RU-37 and RU-38 monitor the purge ducts for airborne radioactivity concentrations that could potentially result in an offsite dose exceeding 10CFR100 limits. The primary function of these monitors is to provide an actuation signal (when setpoint values are reached) for the engineered safety feature actuation system (ESFAS) to initiate a containment purge isolation actuation signal (CPIAS)(EIS: BD). RU-37 and RU-38 also provide associated control room indication and annunciation.

III. INITIAL PLANT CONDITIONS:

On March 5, 2000, at 2003 MST, Unit 1 was at approximately 100 percent power with reactor coolant system (RCS) (EIS: AB) at approximately 581 degrees Fahrenheit (F) and 2252 pounds per square inch absolute pressure (psia), when a containment vent was commenced to lower containment (EIS: NH) pressure. Prior to the containment vent evolution, at 0525 MST on March 5, 2000, TS surveillance requirement (SR) 3.3.8.1 had been satisfied with the performance of a shiftly channel check of RU-37.

Other than RU-37 and RU-38, there were no structures, systems, or components that were inoperable that contributed to this event.

IV. EVENT DESCRIPTION:

On March 5, 2000 at approximately 2200 MST, control room personnel (utility: licensed) were notified by the night-shift radiological monitoring technician (utility: non-licensed) that the required shiftly channel checks for the power access purge area radiation monitors RU-37 and RU-38 had

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not been maintained current for the in-progress containment vent. The night-shift radiological monitoring technician also informed the control room staff that a channel check of RU-37 had been completed at 2140 MST, when it was recognized the shiftly channel checks were not current.

Upon notification, control room personnel performed a review to determine if and how the missed surveillance test impacted TS limiting conditions for operation (LCO) and associated required actions. Their review confirmed that TS LCO 3.3.8 requires at least one containment purge isolation channel of the engineered safety features to be operable in Modes 1 through 4, when the containment power access purge penetration is not isolated. It was also confirmed that the associated surveillance requirement (SR) 3.3.8.1 requires that channel checks of the radiation monitoring system be performed on a 12 hour (shiftly) frequency when the penetration is not isolated by at least one closed automatic valve, closed manual valve, or blind flange.

The control room personnel concluded that since a shiftly channel check had been completed for RU-37 by the time they were notified, entry into SR 3.0.3 and LCO 3.3.8 was not required because RU-37 was (by this time) operable and the TS required actions were no longer applicable.

However, since the SR was not completed within the specified frequency, control room personnel concluded that a condition prohibited by TS existed from 2025 MST (the last time the channel check was performed plus 12 hours for the shiftly frequency and the 3 hour extension allowed by SR 3.0.2), until 2140 MST when the SR was satisfied for RU-37.

V. SAFETY CONSEQUENCES:

Subsequent channel check testing of RU-37 and RU-38 demonstrated there was no loss of quality or functional capability and therefore, there were no safety consequences as a result of this event. Likewise, this event does not represent a safety system function failure because the condition alone did not prevent, or would not have prevented, the fulfillment of a safety function of structures or systems that are needed to: shutdown the reactor and maintain it in a safe shutdown condition; remove residual heat; control the release of radioactive material; or, mitigate the consequences of an accident.

This is an isolated failure to implement TS SR 3.3.8.1 that has no programmatic implications and no safety impact. The duration of the non-compliance with TS SR 3.3.8.1 was approximately 75 minutes. There was no increase in frequency for a large early release event. The CPIAS is produced by a multi-train (two train) system. A containment isolation function (purge valves

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closed) is also performed by the ESFAS containment isolation actuation signal, which is a diverse four channel, two train system. The failure of either of the power access purge valves to close upon receipt of an ESFAS actuation would be annunciated in the control room. Control room operators have procedural directions and a local single handswitch to promptly close each valve.

VI. CAUSE OF THE EVENT:

An investigation of this event was commenced and is being completed in accordance with the site corrective action program. Although the investigation has not been completed, preliminary investigation results indicate that:

The responsible day-shift radiological monitoring technician did not recognize that a channel check was needed as a result of a delay in the initiation of the containment vent. Contributing factors were a procedural weakness and a less than desirable understanding of the shiftly channel check requirements.

Additionally, control room personnel based the acceptability of performing the containment vent on having an acceptable containment vent permit rather than a direct confirmation that a shiftly channel check had been performed for RU-37 or RU-38. This error was caused by a misleading procedural step which led control room personnel to believe the containment vent permit assured the shiftly channel checks had been completed and that the containment vent was in accordance with TS requirements.

The oncoming night-shift radiological monitoring technician did not review the shift turnover log in a timely manner which allowed the error to go undetected until after the channel check test interval had been exceeded. The cause of this error appears to be that management's expectation for timely shift turnovers may not have been effectively communicated to this radiological monitoring technician.

Since the investigation has not been completed at this time, a supplemental LER will be submitted if substantial information is subsequently identified that would significantly change a reader's perception of the course or consequences of the event, or if there are substantial changes in the corrective actions described in this LER.

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VII. CORRECTIVE ACTIONS:

The operations department procedure which provides instructions for confirming that shiftly channel checks of the radiation monitoring instrumentation have been performed will be revised to clarify the requirements for performing this activity.

The chemistry department procedure which provides instructions for performing shiftly channel checks of the radiation monitoring instrumentation will be revised to clarify when the shiftly channel checks will be performed.

The management expectations that radiation monitoring technicians perform timely log reviews and thorough shift turnovers has been reiterated to the applicable personnel.

VIII. PREVIOUS SIMILAR EVENTS:

No previous similar events (involving missed surveillance requirements for the radiation monitoring system) have been reported pursuant to 10CFR50.73 in the past three years.