

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8807060418 DOC.DATE: 88/06/27 NOTARIZED: NO DOCKET #  
 FACIL:STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Publi 05000529  
 AUTH.NAME AUTHOR AFFILIATION  
 SHRIVER,T.D. Arizona Nuclear Power Project (formerly Arizona Public Serv  
 HAYNES,J.G. Arizona Nuclear Power Project (formerly Arizona Public Serv  
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 88-010-01:on 880415,surveillance interval exceeded for  
 plant vent monitors.

W/8 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 6  
 TITLE: 50.73 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
PD5 LA	1 1	PD5 PD	1 1
LICITRA,E	1 1	DAVIS,M	1 1
INTERNAL: ACRS MICHELSON	1 1	ACRS MOELLER	2 2
AEOD/DOA	1 1	AEOD/DSP/NAS	1 1
AEOD/DSP/ROAB	2 2	AEOD/DSP/TPAB	1 1
ARM/DCTS/DAB	1 1	DEDRO	1 1
NRR/DEST/ADS 7E	1 0	NRR/DEST/CEB 8H	1 1
NRR/DEST/ESB 8D	1 1	NRR/DEST/ICSB 7	1 1
NRR/DEST/MEB 9H	1 1	NRR/DEST/MTB 9H	1 1
NRR/DEST/PSB 8D	1 1	NRR/DEST/RSB 8E	1 1
NRR/DEST/SGB 8D	1 1	NRR/DLPQ/HFB 10	1 1
NRR/DLPQ/QAB 10	1 1	NRR/DOEA/EAB 11	1 1
NRR/DREP/RAB 10	1 1	NRR/DREP/RPB 10	2 2
NRR/DRPS/SIB 9A	1 1	NUDOCS-ABSTRACT	1 1
REG FILE 02	1 1	RES TELFORD,J	1 1
RES/DE/EIB	1 1	RES/DRPS DEPY	1 1
RGN5 FILE 01	1 1		
EXTERNAL: EG&G WILLIAMS,S	4 4	FORD BLDG HOY,A	1 1
H ST LOBBY WARD	1 1	LPDR	1 1
NRC PDR	1 1	NSIC HARRIS,J	1 1
NSIC MAYS,G	1 1		

NOTES: 1 1

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Palo Verde Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 5 2 9 1										PAGE (3) OF 0 5	
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TITLE (4)  
Surveillance Interval Exceeded for Plant Vent Monitors

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)					
0	4	15	88	010	01	06	27	88	N/A						0 5 0 0 0					
									N/A						0 5 0 0 0					

OPERATING MODE (9) 6		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)											
POWER LEVEL (10) 0 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)									
	20.405(a)(1)(i)	50.36(e)(1)	50.73(a)(2)(v)	73.71(c)									
	20.405(a)(1)(ii)	50.36(e)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 368A)									
	20.405(a)(1)(iii)	50.73(a)(2)(ii)	50.73(a)(2)(vii)(A)										
	20.405(a)(1)(iv)	50.73(a)(2)(iii)	50.73(a)(2)(viii)(B)										
	20.405(a)(1)(v)	50.73(a)(2)(iv)	50.73(a)(2)(ix)										

LICENSEE CONTACT FOR THIS LER (12)													
NAME Timothy D. Shriver, Compliance Manager										TELEPHONE NUMBER 6 0 2 3 9 3 - 2 5 2 1			

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM

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)  
This is a supplement to LER 88-010-00

At approximately 0900 MST, on April 15, 1988, Palo Verde Unit 2 was in Mode 6 (REFUELING) when Chemistry personnel (utility and contractor, non-licensed) determined that the allowable surveillance test interval had been exceeded for the Plant Vent System monitors (RU-143 and RU-144)(IL)(MON). Subsequent to the discovery that the surveillance test interval had been exceeded, the S.T. was satisfactorily performed on April 15, 1988 at approximately 0946 MST for the low range monitor (RU-143) and on April 16, 1988 at approximately 1015 MST for the high range monitor (RU-144).

The root cause of the event was a cognitive personnel error by a Chemistry technician (contractor, non-licensed) to complete the S.T. within the allowable interval. The technician misinterpreted the requirement to perform the S.T. on a "daily" (i.e., once per calendar day) basis vice "once per 24 hours".

As immediate corrective action, the appropriate S.T. on Plant Vent System monitor was satisfactorily completed at 0946 MST on April 15, 1988. The corrective action to prevent recurrence was a change to S.T.(75ST-9ZZ07) to change the terminology to be consistent with the Technical Specification (T.S.) and a review of radioactive effluent S.T.s to ensure that the requirements of the T.S. are clearly and explicitly implemented.

No similar events have been reported.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

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 8	0 1 0	0 1	0 2	OF	0	5

TEXT (If more space is required, use additional NRC Form 364A's) (17)

This supplement is submitted to correct a typographical error on page 1 in block 5, Event Date.

## I. DESCRIPTION OF WHAT OCCURRED

## A. Initial Conditions:

At the time of the event, approximately 0820 MST, on April 15, 1988, Palo Verde Unit 2 was in Mode 6 (REFUELING) during the first refueling outage.

## B. Reportable Event Description (Including Dates and Approximate Times of Major Occurrences):

Event Classification: Condition Contrary to the Plant's Technical Specifications

At approximately 0900 MST, on April 15, 1988, Chemistry Effluent personnel (utility and contractor, non-licensed) determined that the allowable surveillance test interval had been exceeded for the radioactive gaseous effluent monitoring system. Technical Specification (T.S.) 4.3.3.8, Table 4.3-8, item 4 requires a CHANNEL CHECK of the Plant Vent System monitors (RU-143 and RU-144)(IL)(MON) at least once per 24 hours. On April 14, 1988 at approximately 0220 MST, a Surveillance Test (S.T.) of the Plant Vent System effluent monitor was completed. The next S.T. was due on April 15, 1988 at 0738 MST (this includes the 25 percent tolerance allowed by T.S. 4.0.2.b).

Following the discovery that the S.T. interval had been exceeded, the S.T. was satisfactorily performed on April 15, 1988 at approximately 0946 MST for the low range monitor (RU-143). At this time authorized maintenance was being performed on the communications link between the high range monitor and the remote computer (IL)(CPU). This work hindered the performance of the S.T. and a test log documentation was made.

The maintenance performed on the communications link did not cause the high range monitor to be inoperable. The high range monitor would still have alarmed and the samples could have been analyzed using the Post Accident Monitoring Unit (IL).

Subsequent to the successful surveillance testing of the low range monitor (RU-143) on April 15, 1988 at approximately 0946 MST, the low range monitor was declared administratively inoperable due to surveillance testing of the plant vent flow transmitter (FT) power supply (EC) at approximately 2150 MST on April 15, 1988. At this time the high range monitor is dependent on the low range monitor for operability. Following the surveillance test on the power supply, on April 16, 1988, at approximately 1015 MST, the S.T. was successfully completed on the high and low range monitors (RU-143 and RU-144).

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

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

- C. Status of structures, systems, or components that were inoperable at the start of the event that contributed to the event:

Although the maintenance on the high range monitor (RU-144) did not cause the component to be inoperable, the work on the communication link to the remote computer contributed to the S.T. not being performed in the specified interval as discussed in Section I.B.

- D. Cause of each component or system failure, if known:

Not applicable - No component or system failures were involved; however, the plant vent monitors RU-143 and RU-144 were administratively inoperable when the surveillance test interval was exceeded. Subsequently, the low range monitor was declared administratively inoperable due to surveillance testing of the plant vent flow transmitter power supply which caused the high range monitor to also be inoperable as discussed in Section I.B.

- E. Failure mode, mechanism, and effect of each failed component, if known:

Not applicable - No component failures were involved.

- F. For failures of components with multiple functions, list of systems or secondary functions that were also affected:

Not applicable - No component failures were involved.

- G. For failure that rendered a train of a safety system inoperable, estimated elapsed time from the discovery of the failure until the train was returned to service:

The low range monitor (RU-143) was administratively inoperable for approximately 2 hours and 8 minutes during the time the S.T. interval was exceeded. The low range monitor was subsequently inoperable for approximately 12 hours and 25 minutes during the S.T. of the plant vent flow transmitter power supply.

The high range monitor (RU-144) was administratively inoperable for approximately 13 hours and 12 minutes during the time the S.T. interval was exceeded. The high range monitor was subsequently administratively inoperable for approximately 12 hours and 25 minutes during the S.T. of the plant vent flow transmitter power supply.

- H. Method of discovery of each component or system failure or procedural error:

During the investigation of this event, the procedure title and objective were determined to have misled the effluent chemistry



## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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APPROVED OMB NO. 3150-0104

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TEXT (If more space is required, use additional NRC Form 368A's) (17)

technician to believe the S.T. could be completed on a "daily basis" (i.e., once per calendar day) vice "once per 24 hours."

I. Cause of Event:

At approximately 0015 MST on April 15, 1988, an attempt was made by a Chemistry technician (contractor, non-licensed) to perform procedure 75ST-9ZZ07 "Effluent Monitoring System Daily Surveillance Testing." When attempting to perform 75ST-9ZZ07 on RU-143/144, the Effluent technician discovered that RU-144 (the high-range portion of the plant vent system monitor) was in the "local" mode.

Since the technician could not determine why RU-144 was in the "local" mode, the technician then made a cognitive personnel error and decided not to perform procedure 75ST-9ZZ07 on the plant vent system monitor or ensure the plant vent monitors were declared inoperable. The technician elected to turn over the performance of the S.T. to the dayshift when the actual status of RU-144 could be readily ascertained by the appropriate personnel. The technician could foresee no problems with this decision to turn over the performance of 75ST-9ZZ07 to the day shift because of the belief that as long as the S.T. was performed sometime that day, all T.S. requirements would be satisfied. This belief was based upon management interpretation of terms in the T.S. and specifically with defining the terms "daily", "weekly", "semi-monthly", and "monthly." The Palo Verde Management resolution to the definition of the term "daily" is as follows "daily means once per calendar day." Since Section 1.0 of 75ST-9ZZ07, Rev. 3, PCN 2 stated that the surveillance requirements were to be performed "daily", the technician felt confident that the decision to turn the S.T. over to the dayshift was in compliance with PVNGS Management requirements. The interpretation was intended for terms in the T.S. but was inappropriately used to interpret the S.T. procedure.

At approximately 0900 MST on April 15, 1988, the day shift technician (contractor, non-licensed) suspected that a problem existed with the performance interval for 75ST-9ZZ07. The day shift technician informed the Chemistry Department Supervision (utility, non-licensed) that the surveillance had a frequency of once per 24 hours per T.S. and not the "daily" frequency. Chemistry Supervision concurred. The surveillance requirements for effluent monitor CHANNEL CHECKS are listed in 4.3.3.8, Table 4.,3-B, items 3, 4, and 5, as "D" requirements. These are defined in Table 1.1 as "At least once per 24 hours."

No unusual characteristics of the work location or other personnel errors contributed to the event.



## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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APPROVED OMB NO 3150-0104

EXPIRES: 8/31/88

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## J. Safety System Responses:

No safety system responses occurred or were expected.

## K. Failed Component Information:

Not applicable - No component failures were involved.

## II. ASSESSMENT OF THE SAFETY CONSEQUENCES AND IMPLICATIONS OF THIS EVENT:

No adverse safety consequences or implications occurred due to this event. The S.T. was satisfactorily performed before and after the event. Although the Plant Vent Monitors were administratively inoperable, the requirements of the action statements were met (i.e., No releases were in progress. This was substantiated by the plant vent monitors during the event).

## III. CORRECTIVE ACTIONS:

## A. Immediate:

The immediate corrective action was to perform the appropriate S.T (75ST-9ZZ07) on the low range monitor (RU-143), which was satisfactorily completed at approximately 0946 MST on April 15, 1988. The surveillance test was not performed on the high range monitor (RU-144) and appropriate test-log documentation was made.

The appropriate S.T. (75ST-9ZZ07) was performed on April 16 at approximately 1015 MST when the power was restored to the plant vent flow transmitter.

## B. Action to Prevent Recurrence:

TPCN No. 3 was issued for 75ST-9ZZ07 to change the terminology to be consistent with the T.S. Long term corrective action is to review and revise as appropriate the Radioactive Effluent S.T.s to ensure that the requirements of the T.S. are clearly and explicitly implemented. Appropriate management has evaluated the extent of inconsistent terminology used in S.T.s and determined this to be limited to Radioactive Effluent S.T.s.

Personnel will be instructed to ensure equipment is declared inoperable if appropriate S.T.s can not be performed.

## IV. PREVIOUS SIMILAR EVENTS:

No similar events, involving failure to perform a S.T. based on a misunderstanding of S.T. interval, have been reported.





## Arizona Nuclear Power Project

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

192-00389-JGH/TDS/JJN  
June 27, 1988

U. S. Nuclear Regulatory Commission  
NRC Document Control Desk  
Washington, D.C. 20555

Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 2  
Docket No. STN 50-529 (License NPF-51)  
Licensee Event Report 2-88-010-01  
File: 88-020-404

Attached please find Supplement No. 1 to Licensee Event Report (LER) No. 2-88-010-01 prepared and submitted pursuant to the requirements of 10CFR 50.73(d). We are herewith forwarding a copy of this report to the Regional Administrator of the Region V Office.

If you have any questions, please contact T. D. Shriver, Compliance Manager at (602) 393-2521.

Very truly yours,

J. G. Haynes  
Vice President  
Nuclear Production

JGH/TDS/JJN/kj

Attachment

cc: O. M. DeMichele (all w/a)  
E. E. Van Brunt, Jr.  
J. B. Martin  
T. J. Polich  
E. A. Licitra  
A. C. Gehr  
INPO Records Center

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