

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8708180174 DOC. DATE: 87/08/07 NOTARIZED: NO DOCKET #
 FACIL: STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Publi 05000529
 AUTH. NAME AUTHOR AFFILIATION
 BRADISH, T. R. 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 87-016-00: on 870718, contents of chemical waste
 neutralization tank released to onsite evaporation pond
 exceeding Tech Spec 3.11.1.1 limit for Mo-99. Caused by
 personnel error. Briefing session planned. W/870807 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: Standardized plant. M. Davis, NRR: 1Cy.

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
	DEDRO	1 1	NRR/DEST/ADE	1 0
	NRR/DEST/ADS	1 0	NRR/DEST/CEB	1 1
	NRR/DEST/ELB	1 1	NRR/DEST/ICSB	1 1
	NRR/DEST/MEB	1 1	NRR/DEST/MTB	1 1
	NRR/DEST/PSB	1 1	NRR/DEST/RSB	1 1
	NRR/DEST/SGB	1 1	NRR/DLPQ/HFB	1 1
	NRR/DLPQ/QAB	1 1	NRR/DOEA/EAB	1 1
	NRR/DREP/RAB	1 1	NRR/DREP/RPB	2 2
	NRR/PMAS/ILRB	1 1	<u>REG FILE</u> 02	1 1
	RES DEPY GI	1 1	RES TELFORD, J	1 1
	RES/DE/EIB	1 1	RGN5 FILE 01	1 1
EXTERNAL:	EG&G GROH, M	5 5	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 1 9										PAGE (3) 1 OF 0 1 3																													
TITLE (4) Chemical Waste Neutralization Tank Discharged to Onsite Evaporation Pond While Exceeding Tech Spec 3.11.1.1 Limit for Mo-99																																																	
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)												
																											N/A										0 5 0 0 0 0												
0 7			1 8			8 7			8 7			0 1			6			0 0			8 0			7 8			7			N/A										0 5 0 0 0 0									
OPERATING MODE (9) 1										THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																																							
POWER LEVEL (10) 1 0 0										20.402(b)										20.405(c)										50.73(a)(2)(iv)										73.71(b)									
										20.405(a)(1)(i)										50.38(c)(1)										50.73(a)(2)(v)										73.71(c)									
										20.405(a)(1)(ii)										50.38(c)(2)										50.73(a)(2)(vi)										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)(vii)(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)(ix)																			
LICENSEE CONTACT FOR THIS LER (12)																																																	
NAME Thomas R. Bradish, Compliance Supervisor																				TELEPHONE NUMBER AREA CODE 6 0 2										3 1 9 3 1 - 1 3 5 3 1																			
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																																																	
CAUSE			SYSTEM			COMPONENT			MANUFACTURER			REPORTABLE TO NPDs						CAUSE			SYSTEM			COMPONENT			MANUFACTURER			REPORTABLE TO NPDs																			
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)

At approximately 0200 MST on July 18, 1987, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION) at 100 percent power, when the ACTION requirement for Technical Specification 3.11.1.1 was not complied with. A Chemistry Technician had performed Surveillance Test 74ST-2ZZ02 for release of liquid effluents from the secondary plant in accordance with Technical Specification 3.11.1.1. The Technician reviewed and accepted the Surveillance Test and released the contents of the chemical waste neutralization tank to the onsite evaporation pond with an analytical lower limit of detectability (LLD) value greater than the limit of the Technical Specification.

The root cause of the event has been determined to be a cognitive personnel error in that the Technician did not recognize that the LLD value for Molybdenum - 99 was greater than allowed by Technical Specification 3.11.1.1. Additionally, the Technician did not follow established Department Instructions applicable to generation, review and approval of analytical data.

As corrective action, the Chemistry Technician received appropriate disciplinary action. As additional corrective action to prevent recurrence, briefing sessions will be conducted with all Chemistry Technicians by the respective Unit Chemistry Supervisors to discuss this event and re-emphasize the review and approval process for analytical data.

8708180174 870807
PDR ADDCK 05000529
S PDR

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 (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 7	— 0 1 6	— 0 0	0 2	OF	0 3

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

At approximately 0200 MST on July 18, 1987, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION) at 100 percent power, when the ACTION requirement for Technical Specification 3.11.1.1 (Secondary System Liquid Waste Discharges to Onsite Evaporation Ponds) (WH) was not complied with. A Chemistry Technician (utility non-licensed) had performed Surveillance Test 74ST-2ZZ02 (Chemical Waste Neutralization Tank Surveillance Test) for release of liquid effluents from the secondary plant in accordance with Technical Specification 3.11.1.1. The Technician reviewed and accepted the Surveillance Test and released the contents of the chemical waste neutralization tank (WH) to the onsite evaporation pond with an analytical lower limit of detectability (LLD) value greater than the limit of the Technical Specification.

On July 20, 1987 the Chemistry Supervisor (utility non-licensed), during his review of the Surveillance Test, identified that the chemical waste neutralization tank was discharged to the onsite evaporation pond contrary to Technical Specification 3.11.1.1. A Chemistry Technician performed the release to the onsite evaporation pond when the analyzed LLD for Molybdenum-99 (Mo-99) did not meet the required LLD specification of $\neq 5E-7$ micro-curies per cubic centimeter. The analyzed LLD value was $\neq 9E-7$ micro-curies per cubic centimeter.

The root cause of the event has been determined to be a cognitive personnel error in that the Technician did not recognize that the LLD value of the analysis for Mo-99 was greater than that allowed by Technical Specification 3.11.1.1. Additionally, the Technician did not follow established Department Instructions applicable to generation, review and approval of analytical data. Analytical results generated by a Chemistry Technician are to be reviewed by a second Technician, as a minimum, prior to distribution or release of analytical data, and in the case of Surveillance Tests, a review by the Unit Chemistry Supervisor or his designee. The error was contrary to an approved procedure. There were no errors in the procedure that contributed to the event. There were no unusual characteristics of the work location that contributed to the event.

As corrective action, the Chemistry Technician received appropriate disciplinary action. As additional corrective action to prevent recurrence, briefing sessions will be conducted with all Chemistry Technicians by the respective Unit Chemistry Supervisors to discuss this event and re-emphasize the review and approval process for analytical data.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Palo Verde Unit 2	0 5 0 0 0 5 2 9	8 7	— 0 1 6	— 0 0	0 3	OF	0 3

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

There were no structures, systems, or components inoperable prior to the event which contributed to the event. There were no operator actions that contributed to the event. There were no automatic or manual safety system responses.

The chemical waste neutralizing tank, capacity approximately 40,000 gallons, is discharged to the onsite evaporation pond via a retention basin which holds approximately 500,000 gallons. During this evolution the effluent becomes more dilute. Further dilution of the effluent occurs when it enters the onsite evaporation pond which covers approximately 250 acres. The half-life of Mo-99 is 66.02 hours, therefore after one half-life the activity of the effluent would be $4.5 \text{ E-}7$ micro-curies per cubic centimeter which is below the LLD. Accordingly, no MEMBER OF THE PUBLIC at the nearest exclusion area boundary would receive a total body annual exposure, from ground contamination, of greater than .5 roentgen. Therefore, this event had no effect on the health and safety of the public.

There have not been any similar events previously reported.



Arizona Nuclear Power Project

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

192-00251-JGH/TRB/JEM

August 7, 1987

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

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 2
Docket No. 50-529
Licensee Event Report 87-016-00
File: 87-020-404

Dear Sirs:

Attached please find Licensee Event Report (LER) No. 87-016-00 prepared and submitted pursuant to 10CFR 50.73. In accordance with 10CFR 50.73(d), we are herewith forwarding a copy of the LER to the Regional Administrator of the Region V Office.

If you have any questions, please contact T. R. Bradish, Compliance Supervisor at (602) 393-3531.

Very truly yours,

J. G. Haynes
Vice President
Nuclear Production

JGH/JEM/cld

Attachment

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

TE22
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