ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8910030505 DOC.DATE: 89/09/28 NOTARIZED: NO DOCKET #
FACIL:STN-50-528 Palo Verde Nuclear Station, Unit 1, Arizona Publi 05000528
AUTH.NAME AUTHOR AFFILIATION
SHRIVER,T.D. Arizona Public Service Co. (formerly Arizona Nuclear Power
LEVINE,J.M. Arizona Public Service Co. (formerly Arizona Nuclear Power
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 88-006-01:on 880321,surveillance interval exceeded for incore detector sys.

W/8 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 6
TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: 05000528

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD5 LA	1	1	PD5 PD	1	1
	CHAN,T	1	1	DAVIS,M.	1	1
INTERNAL:	ACRS MICHELSON	1	1	ACRS MOELLER	2	2
	ACRS WYLIE	1	1	AEOD/DOA	1	1
	AEOD/DSP/TPAB	1	1	AEOD/ROAB/DSP	2	2
	DEDRO	1	1	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/PEB 10	1	1	NRR/DOEA/EAB 11	1	1
	NRR/DREP/RPB 10	2	2	NUDOCS-ABSTRACT	1	1
	REG FILE 02	1	1	RES/DSIR/EIB	1	1
	RGN5 FILE 01	1	1			
EXTERNAL:	EG&G WILLIAMS,S	4	4	L ST LOBBY WARD	1	1
	LPDR	1	1	NRC PDR	1	1
	NSIC MAYS,G	1	1	NSIC MURPHY,G.A	1	1
	NUDOCS FULL TXT	1	1			
NOTES:		1	1			

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK, ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

FULL TEXT CONVERSION REQUIRED
TOTAL NUMBER OF COPIES REQUIRED: LTTR 41 ENCL 41

RIDS/ADDS

RIDS/ADDS

Arizona Public Service Company

PALO VERDE NUCLEAR GENERATING STATION
P O BOX 52034 • PHOENIX, ARIZONA 85072-2034

192-00530-JML/TDS/JJN
September 28, 1989

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

Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 1
Docket No. STN 50-528 (License NPF-41)
Licensee Event Report 88-006-01
File: 89-020-404

Attached please find Supplement Number 1 to Licensee Event Report (LER) No. 88-006-00 prepared and submitted pursuant to the requirements of 10CFR 50.73. In accordance with 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. M. Levine
Vice President
Nuclear Production

JGH/TDS/JJN/kj

Attachment

cc: W. F. Conway (all w/a)
E. E. Van Brunt, Jr.
J. B. Martin
T. J. Polich
M. J. Davis
A. C. Gehr
INPO Records Center

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Palo Verde Unit 1	0 5 0 0 0 5 2 8	1 OF 0 5

TITLE (4)

Surveillance Interval Exceeded For Incore Detector System

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 3	2 0	8 8	8 8	0 0 6	0 1	0 9	2 8	8 9	N/A	0 5 0 0 0
									N/A	0 5 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)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Timothy D. Shriver, Compliance Manager	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 NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO		1 1	3 0	8 8

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

On March 21, 1988, Palo Verde Unit 1 was in Mode 1 (POWER OPERATION) at 100 percent power when engineering personnel (utility, non-licensed) determined that the allowable surveillance test interval had been exceeded for the incore detector system (IG). This resulted in the incore detector system and the Core Operating Limit Supervisory System (COLSS) (ID) becoming administratively inoperable.

The root cause of the event was a cognitive personnel error by engineering personnel (utility, non-licensed) responsible for assigning the performance of the surveillance test. To prevent recurrence, the individual will receive appropriate counseling and/or disciplinary action.

A preliminary evaluation has determined that a contributory cause was inadequate programmatic controls to ensure surveillance tests are conducted within the specified intervals. A review of the programmatic controls was performed and has identified several recommended corrective actions. As a result, Unit 1, 2, and 3 cross reference procedures for conditional STs were developed. However, this review was performed by an independent group, and additional recommended actions are being evaluated for implementation by the appropriate organizations. Review and disposition is expected to be completed by October 30, 1989. A supplement to this report will be issued by November 30, 1989 describing the approved corrective actions.

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

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

I. DESCRIPTION OF WHAT OCCURRED

A. Initial Conditions:

On March 21, 1988, Palo Verde Unit 1 was in Mode 1 (POWER OPERATION) (at normal operating pressures and temperatures) following the first refueling outage.

B. Reportable Event Description (Including Dates and Appropriate Times of Major Occurrences)

Event Classification: Condition Contrary to the Plants Technical Specifications

On March 21, 1988, engineering personnel (utility, non-licensed) determined that the allowable surveillance test interval had been exceeded for the incore detector system. Specification 4.3.3.2.a requires a CHANNEL CHECK of the incore detector system at least once per seven days. The incore detector system (IG) is required to be OPERABLE when the Core Operating Limit Supervisory System (COLSS)(ID) is utilized for monitoring the AZIMUTHAL POWER TILT, Radial Peaking Factors, Local Power Density, and Departure from Nucleate Boiling (DNB) Margin.

On March 11, 1988 at approximately 1150 MST, a surveillance test of the incore detector system was completed. The next surveillance test was due on March 20, 1988 at approximately 0550 MST (the interval includes the 25 percent tolerance allowed by Technical Specification 4.0.2). Subsequent to the discovery that the surveillance interval had been exceeded, the surveillance test was satisfactorily performed on March 21, 1988 at approximately 1032 MST.

On March 21, 1988, after the responsible engineer had informed the Shift Supervisor (utility, licensed) that the incore detector system and COLSS were inoperable, the surveillance test for COLSS out of service was initiated. To comply with the Limiting Condition for Operation T.S. 3.2.1, 3.2.2, 3.2.3 and 3.2.4, the reactor power was reduced to approximately 91 percent and appropriate surveillance tests conducted.

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

Other than described above, no structures, systems, or components were inoperable at the start of the event that contributed to the event.

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

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

D. Cause of each component or system failure:

Not applicable - no component or system failures were involved; however, the cause of the administrative inoperability of the incore detector system is considered to be a cognitive personnel error. Preliminary evaluation has determined that inadequate programmatic controls contributed to the event.

E. Failure mode, mechanism, and effect of each failed components:

Not applicable - no failures were involved.

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

Not applicable - no 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:

Not applicable. No safety system failures were involved; however, the surveillance test interval was exceeded on March 20, 1988 at approximately 0550 MST. On March 21, 1988 at approximately 0715 MST, the responsible engineer determined the surveillance test interval was exceeded and notified the Shift Supervisor (utility, licensed). The surveillance test was satisfactorily performed on March 21, 1988 at approximately 1032 MST. The incore detector system and COLSS were administratively inoperable for approximately 3 hours and 17 minutes.

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

Not applicable - no failures or procedural inadequacies were involved.

I. Cause of Event:

The cause of the event was identified as a cognitive personnel error. The responsible engineering personnel did not ensure that the surveillance test was conducted within the allowable time interval. The error was contrary to approved procedural controls. These procedural controls provide sufficient guidance in this area. There were no unusual characteristics of the work location or other personnel errors that contributed to the event.

Although the procedural controls were considered adequate, the lack of a specific proceduralized program to track the required

surveillance tests is considered to be a contributing cause. A supplement to the report will be issued describing the results of the review of the programmatic controls.

J. Safety System Response

No safety system responses were actuated and none were expected.

K. Failed Component Information

Not applicable - no failures were involved.

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

No safety consequences or implications resulted from this event. The incore detector system and COLSS were administratively inoperable when the surveillance test was not completed by the end of the surveillance test interval. A review of the surveillance test results demonstrates that the incore detector system met applicable test criteria prior to and after the period of administrative inoperability. This was substantiated by data taken on March 16, 1988 which was analyzed and demonstrated that the incore detector system and COLSS were functioning properly.

III. CORRECTIVE ACTIONS:

A. Immediate:

Technical Specification Limiting Condition for Operation ACTION 3.3.3.2.2, 3.2.1, 3.2.2, 3.2.3 and 3.2.4 were entered upon event discovery and preparations to reduce power were commenced. Reactor power was decreased to approximately 91% to conform with the Limiting Conditions for Operation for DNB margin with COLSS out of service. The surveillance test for COLSS out of service was also initiated. The applicable surveillance test was satisfactorily completed.

B. ACTION TO PREVENT RECURRENCE

The responsible individual will receive appropriate counseling and/or disciplinary action. A supplement to this LER will be issued describing the review of the programmatic controls and any additional corrective action necessary to prevent recurrence.

IV. PREVIOUS SIMILAR EVENTS

Previous similar events have been reported in Licensee Event Reports 85-015, 85-034, 86-012 and 86-016 for Unit 1 and 86-029, 86-035 and 87-007 for Unit 2, which involved failing to initiate routinely scheduled

surveillance testing. In particular, Licensee Event Report 87-007 for Unit 2 involved an inadequate tracking program to schedule surveillance testing. The corrective actions taken in response to these items were designed to address the identified "root causes". The effectiveness of the corrective actions varied largely on the specific circumstances of the event and the department involved. Although similar in nature to these events, this event is the first identified discrepancy of this kind within the responsible department. Therefore the corrective actions taken previously would not necessarily have prevented this occurrence. However, as a prudent measure an independent review has evaluated the overall tracking/identification systems for the assignment and completion of S.T.s. This evaluation was designed to evaluate the effectiveness of previous corrective actions. As a result of this investigation and recommended corrective actions, Unit 1, 2, and 3 cross reference procedures for conditional S.T.s were developed and approved. This procedure is similar to the cross reference procedure for long term, periodic S.T. intervals but was specifically written to address S.T.s which are performed on a conditional basis. The procedure cross references the applicable S.T. requirement, S.T. procedure, and responsible group to perform the S.T. Additional corrective actions were recommended; however, these actions were developed by an independent review organization and these actions involve extensive changes in responsibility to initiate and monitor the performance of surveillance tests therefore the affected organizations are reviewing the actions for concurrence and implementation as appropriate. Review and disposition of the recommended corrective actions is expected to be completed by October 30, 1989. A supplement to this LER will be issued by November 30, 1989 describing the approved corrective action.