

# REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8709290091 DOC. DATE: 87/09/24 NOTARIZED: NO DOCKET #  
 FACIL: 50-316 Donald C. Cook Nuclear Power Plant, Unit 2, Indiana & 05000316  
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 BAKER, K. R. Indiana & Michigan Power Co.  
 SITH, W. G. Indiana & Michigan Power Co.  
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-009-00: on 870825, radiation monitor found inoperable due to excessive condensation build-up in sample line. Caused by personnel error-miscommunication between operators performing surveillances. Personnel counseled. W/870924 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 5  
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

## NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD3-3 LA	1 1	PD3-3 PD	1 1
	WIGGINGTON, D	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/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/DRIS/SIB	1 1
	NRR/PMAS/ILRB	1 1	REG FILE 02	1 1
	RES DEPY GI	1 1	RES TELFORD, J	1 1
	RES/DE/EIB	1 1	RGN3 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

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) D. C. Cook Nuclear Plant, Unit Two										DOCKET NUMBER (2) 0   5   0   0   0   3   1   6   1   OF   0   4										PAGE (3) 1 OF 0 4								
TITLE (4) Radiation Monitor Inoperable Without T.S. Required Compensatory Sample Due to Miscommunication (Personnel Error)																												
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	8	2	5	8	7	8	7	0	0	9	0	0	0	9	2	4	8	7	D. C. Cook, Unit One					0   5   0   0   0   3   1   5				
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) 0   8   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)(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)(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)(ix)																	
LICENSEE CONTACT FOR THIS LER (12)																												
NAME K. R. Baker, Operations Superintendent												TELEPHONE NUMBER AREA CODE 6   1   6   4   6   5   -   5   9   0   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																		
B	I	L	K	B	D	E	0	7	0	N																		
SUPPLEMENTAL REPORT EXPECTED (14)												EXPECTED SUBMISSION DATE (15)				MONTH	DAY	YEAR										
YES (If yes, complete EXPECTED SUBMISSION DATE)												X				NO												

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

On August 25, 1987, at 1225 hours, during performance of shift surveillances, the gland seal leakoff (GSLO) condenser effluent radiation monitor, SRA-2800, was found to be inoperable due to excessive condensation build-up in the sample line.

A review of SRA-2800 history file indicates that it failed at 0152 hours on August 25, 1987. An administratively required shift surveillance performed at approximately 0230 hours did not discover the inoperability due to miscommunication between the two licensed operators performing the surveillances (personnel error). This misunderstanding resulted in the eight hour grab sample, required by Technical Specification 3.3.3.10, not being obtained until 1306 hours. SRA-2800 was restored to operable status at 1317 hours.

Contributing to this event was an equipment failure on the Unit 2 Radiation Monitoring System (RMS) which required that RMS data be obtained in the Unit 1 Control Room. This failure prevented a periodic observation of RMS status in the Unit 2 Control Room and disrupted the normal surveillance routine.

A previously approved design change will improve the Control Room RMS indication capability. The involved personnel were counseled on the importance of clear and concise communications.

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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)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		OF	
D. C. Cook Nuclear Plant, Unit Two	0   5   0   0   0   3   1   6	8   7	-   0   0   9	-   0   0	0   2	OF	0   4

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

Conditions Prior to Occurrence

Unit 2 was operating at 80.5 percent reactor thermal power at the time of this event.

Description of Event

On August 25, 1987, at 1225 hours, during performance of shift surveillances, the gland seal leakoff (GSLO) (EIIS/TC) effluent radiation monitor (EIIS/TC-MON) SRA-2800 was found to be inoperable. A review of the monitor history file indicated that the inoperability began at 0152 hours on August 25, 1987.

The inoperability was initiated by a spurious isolation of turbine auxiliary cooling water (TACW) (EIIS/TJ) to the GSLO condensers (EIIS/TC-COND), which occurred at approximately 0100 hours when the TACW pumps (EIIS/TJ-P) were switched. The Control Room operators were unaware of the isolation because the associated alarm annunciated and cleared before it could be recognized. The isolation of cooling water led to excess steam being exhausted which caused a condensation buildup in the SRA-2800 sample line and prevented adequate sample flow.

For the duration of this event, indication for the majority of the Unit 2 Radiation Monitoring System (RMS) (EIIS/IL), including SRA-2800, was unavailable in the Unit 2 Control Room due to a hardware problem with the control terminal (EIIS/IL-KBD). Indication for the Unit 2 monitors, however, was available in the Unit 1 Control Room and was being used for Technical Specification (T.S.) requirements.

An administratively required shift surveillance, performed at approximately 0230 hours, did not discover the inoperability due to miscommunication between the two utility licensed operators performing the surveillance (personnel error).

The Unit 2 dayshift operators noted the TACW isolated to the GSLO condensers during panel walkdowns for shift turnover; however, the potential effect on SRA-2800 was not recognized. TACW was restored at approximately 0700 hours.

At 1306 hours, after the inoperability of SRA-2800 was discovered (1225 hours), the compensatory grab sample required every eight hours by T.S. 3.3.3.10 was obtained. This was approximately ten hours after the SRA-2800 inoperability should have been identified. SRA-2800 was restored to operable status at 1317 hours on August 25, 1987, by draining the condensate buildup from the sample line.

## 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)

With the exception of the SRA-2800 and Unit 2 RMS control terminal inoperability, there were no inoperative structures, components or systems that contributed to this event.

Cause of Event

The cause of this event was the failure to perform an adequate review of the RMS monitor status during the administratively imposed shift surveillances, which occurred due to the miscommunication (personnel error) between the operators performing the surveillances.

The spurious isolation of TACW to the GSLO condenser initiated the SRA-2800 inoperability. The lack of RMS indication in the Unit 2 Control Room, which prevented periodic observation of RMS status in the affected Unit and disrupted the normal surveillance routine, contributed to this event.

Analysis of Event

This event was determined to be reportable per 10 CFR 50.73(a)(2)(i), since the grab sample required by T.S. 3.3.3.10 every eight hours during SRA-2800 inoperability was not obtained until approximately 10 hours after the inoperability should have been discovered.

The purpose of the GSLO effluent radiation monitor is to give indication of a primary to secondary leak. The main condenser off gas effluent also has a radiation monitor for the same purpose. This monitor was operable during this event and there was no indication of a primary to secondary leak.

The grab sample of the GSLO effluent also indicated no primary to secondary leak.

Based on the above it is concluded that this event did not constitute a significant safety problem as defined in 10 CFR 50.59.

Corrective Actions

- 1) A grab sample as required by T.S. 3.3.3.10 was taken at 1306 hours on August 25, 1987.
- 2) The SRA-2800 monitor was restored to operable status at 1317 hours on August 25, 1987.
- 3) A previously approved design change will provide an alternate method for obtaining RMS indication in the Control Room. This design change is tentatively scheduled to be completed by April 1, 1988.

## 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 365A's) (17)

- 4) The involved personnel have been counseled on the importance of clear, concise communications.

Failed Component Identification

Plant Designation: Radiation Monitoring System Control Terminal  
Manufacturer: Eberline Instrument Corporation  
Model: CT-1B  
EIIS Code: IL-KBD

Previous Similar Events

Three previous events were identified which involved failure to initiate compensatory sampling due to miscommunications.

LER 315/84-005  
LER 315/84-026  
LER 316/85-043

Indiana Michigan  
Power Company  
Cook Nuclear Plant  
P.O. Box 458  
Bridgman, MI 49106  
616 465 5901



September 24, 1987

United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555


Operating License DPR-74  
Docket No. 50-316

Document Control Manager:

In accordance with the criteria established by 10 CFR 50.73  
entitled Licensee Event Reporting System, the following  
report is being submitted:

87-009-00

Sincerely,

  
W. G. Smith, Jr.  
Plant Manager

WGS/afh

Attachment

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