

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9205130192 DOC.DATE: 92/05/07 NOTARIZED: NO DOCKET #  
 FACIL:50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana M 05000315  
 AUTH.NAME AUTHOR AFFILIATION  
 SAMPSON,J.R. Indiana Michigan Power Co. (formerly Indiana & Michigan Ele  
 BLIND,A.A. Indiana Michigan Power Co. (formerly Indiana & Michigan Ele  
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 91-011-00:on 901217,EDG received incomplete start  
 signal.Caused by faulty Agastat time delay relay.On 920610,  
 EDG AB not placed on increased surveillance frequency.EDG  
 incident rept will be developed.W/920507 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 5  
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

### NOTES:

	RECIPIENT ID CODE/NAME	COPIES		RECIPIENT ID CODE/NAME	COPIES	
		LTTR	ENCL		LTTR	ENCL
	PD3-1 LA	1	1	PD3-1 PD	1	1
	STANG,J	1	1			
INTERNAL:	ACNW	2	2	AEOD/DOA	1	1
	AEOD/DSP/TPAB	1	1	AEOD/ROAB/DSP	2	2
	NRR/DET/EMEB 7E	1	1	NRR/DLPQ/LHFB10	1	1
	NRR/DLPQ/LPEB10	1	1	NRR/DOEA/OEAB	1	1
	NRR/DREP/PRPB11	2	2	NRR/DST/SELB 8D	1	1
	NRR/DST/SICB8H3	1	1	NRR/DST/SPLB8D1	1	1
	NRR/DST/SRXB 8E	1	1	REG FILE 02	1	1
	RES/DSIR/EIB	1	1	RGN3 FILE 01	1	1
EXTERNAL:	EG&G BRYCE,J.H	3	3	L ST LOBBY WARD	1	1
	NRC PDR	1	1	NSIC MURPHY,G.A	1	1
	NSIC POORE,W.	1	1	NUDOCS FULL TXT	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 30 ENCL 30

40-4  
 dbp

Indiana Michigan  
Power Company  
Cook Nuclear Plant  
One Cook Place  
Bridgman, MI 49106  
616 465 5901



May 7, 1992

United States Nuclear Regulatory Commission  
Document Control Desk  
Rockville, Maryland 20852

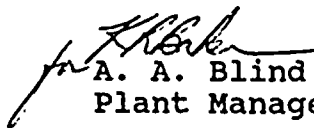
Operating Licenses DPR-58  
Docket No. 50-315

Document Control Manager:

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

91-011-00

Sincerely,

  
A. A. Blind  
Plant Manager

/sb

Attachment

c: D. H. Williams, Jr.  
A. B. Davis, Region III  
E. E. Fitzpatrick  
P. A. Barrett  
B. F. Henderson  
R. F. Kroeger  
B. Walters - Ft. Wayne  
NRC Resident Inspector  
J. F. Stang - NRC  
J. G. Keppler  
M. R. Padgett  
G. Charnoff, Esq.  
D. Hahn  
INPO  
S. J. Brewer/B. P. Lauzau  
B. A. Svensson

9205130192 920507  
PDR ADOCK 05000315  
S PDR

JE22

## LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) D. C. Cook Nuclear Plant - Unit 1										DOCKET NUMBER (2) 0   5   0   0   0   3   1   5				PAGE (3) 1 OF 0   4									
TITLE (4) Emergency Diesel Generator Not Placed On Increased Surveillance Frequency When Required 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 NAMES				DOCKET NUMBER(S)										
0	6	1	0	9	1	9	1	0	1	1	0	0	0	5	0	7	9	2	0	5	0	0	0
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																					
1		20.402(b)				20.405(c)				50.73(a)(2)(iv)				73.71(b)									
POWER LEVEL (10)		20.406(a)(1)(i)				50.38(c)(1)				50.73(a)(2)(v)				73.71(c)									
1   0   0		20.406(a)(1)(ii)				50.38(c)(2)				50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)									
		20.406(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(vii)(A)													
		20.406(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(vii)(B)													
		20.406(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)													
LICENSEE CONTACT FOR THIS LER (12)																							
NAME J. R. Sampson, 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 NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS													
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 June 10, 1991, unit one AB emergency diesel generator (EDG) was not placed on increased surveillance frequency as required by Technical Specification (TS) 3.8.1.1 (Electrical Power Systems, A.C. Sources), Table 4.8-1, which requires the EDG to be placed on increased surveillance frequency if the number of start failures are two or more in the last 20 start attempts. Unit one AB EDG failed to start during a normal surveillance run on June 3, 1991. Due to inadequate documentation of a valid start failure in December 1990, the June 1991 failure was not recognized as the second failure within the last twenty starts. The December 1990 failure was identified by the Diesel System Engineer as a valid failure; however, Operations Department records did not reflect this.

Operations staff have added a review by the cognizant Production Supervisor of all EDG start failures to ensure all Technical Specification requirements have been met. In addition, the Diesel System Engineer is currently logging and tracking all EDG start attempts independent of Operations Department records.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  D. C. Cook Nuclear Plant - Unit 1	DOCKET NUMBER (2)  0   5   0   0   0   3   1   5	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9   1	—   0   1   1	—   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 one (U-1) in mode one at 100% power.

Unit two (U-2) in mode one at 95% power.

Description of Event

On December 17, 1990 (unit 1 in mode 5) at 0027, unit 1 AB emergency diesel generator (IEEE/EK-ENG) (EDG) received an incomplete start signal during the monthly operability surveillance run \*\*1-OHP-4030.STP.027AB (AB Diesel Generator Operability Test). The EDG was declared inoperable retroactive to the start of the surveillance test at 2315 on December 16, 1990. This EDG start failure was improperly documented in that a sequential start number was not assigned for this run. On June 3, 1991 at 2304, unit 1 AB EDG did not start due to an incomplete start signal during the performance of STP.027AB after maintenance activities to repair various oil leaks and valve repair on the starting air system. Due to the December 17, 1990 start failure not being properly documented, unit 1 AB EDG was not placed on increased surveillance frequency after the June 3, 1991 failure, as required by Technical Specification (TS) 3.8.1.1 (Electrical Power Systems, A.C. Sources), Table 4.8-1.

TS surveillance 4.8.1.1.2 states that each diesel generator shall be demonstrated operable in accordance with the frequency specified in Table 4.8-1. Table 4.8-1 specifies that with greater than or equal to two failures in the last 20 valid tests, the test frequency is at least once per seven days. Testing frequency of unit 1 AB EDG remained on a monthly basis after the June 3, 1991 failure.

The December 17, 1990 failure was attributed to a faulty Agastat time delay relay (IEEE/EK-48) on the incomplete start circuit. This relay was replaced by Maintenance personnel and 1 AB EDG surveillance was successfully completed on December 17, 1990. Copies of STP.027AB were filled out for both EDG runs by the operating shifts, but only one run number was assigned for both surveillance runs.

This discrepancy in run number assignment was not noted in the review of the STP.027AB data sheets by Operations Department personnel. The Diesel System Engineer issued a letter on December 18, 1990 which identified the cause of

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
D. C. Cook Nuclear Plant - Unit 1	0   5   0   0   0   3   1   5	9   1	—   0   1   1	—   0   0	0   3	OF 0   4

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

Description of Event (Continued)

the incomplete start and that the incomplete start was to be counted as a valid start/test failure. Copies of this letter were sent to appropriate Operations Department personnel; however, the diesel start failure was not documented in the diesel run log as a test failure.

On June 3, 1991 (unit 1 in mode 1) during a surveillance run after maintenance, unit 1 AB EDG received an incomplete start during the performance of STP.027AB. This incomplete start was attributed to a failure of the throttle control cylinder pilot-operated control valve, POV-4 (IEEE/EK/SCV), and was considered a valid start/test failure. Because the December 17, 1990 1AB EDG failure was not properly documented, the fact that the TS Table 4.8-1 requirements were exceeded was not recognized and the unit 1 AB EDG was not placed on increased surveillance frequency as required. The June 3rd failure was the second in the last 12 starts, which exceeded the TS requirement of less than two failures in the last 20 starts. TS Table 4.8-1 required that the unit 1 AB EDG surveillance to be performed within seven days, June 10, 1991.

This event was discovered on April 7, 1992, by the Diesel System Engineer while conducting routine reviews of EDG records to become familiar with the history of each emergency diesel generator. When reviewing the condition report written due to the December 1990 failure, the former Diesel System Engineer's letter declaring that this failure was a valid test failure, and comparing this information to the unit 1 AB diesel run log and control room log, the fact that the December 1990 start/failure was not properly documented was discovered.

This event is considered reportable to the NRC under 10 CFR 50.73 (a)(2)(i)(B) as an operation or condition prohibited by the Plant's Technical Specifications. Unit 1 AB EDG surveillance frequency was not increased as required by Technical Specification 3.8.1.1, Table 4.8-1, after the second valid start/failure in the last twenty attempts.

Cause of Event

Not properly documenting the December 17, 1990 start failure was the cause of missing the increased EDG surveillance frequency requirement. Due to the elapsed time from the December 1990 unit 1 AB EDG run and the present, the exact cause of not properly documenting the diesel start failure cannot be determined. It must be assumed that the Operations staff personnel responsible for identifying the diesel start/failure failed to take the proper actions to ensure that the failure was properly documented.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  D. C. Cook Nuclear Plant - Unit 1	DOCKET NUMBER (2)  0 5 0 0 0 3 1 5	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 1	— 0 1 1	— 0 0	0 4	OF	0 4

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

Analysis of Event

Technical Specification (TS) 3.8.1.1 (Electrical Power Systems, A.C. Sources), Table 4.8-1, requires that emergency diesel generators' surveillance frequency be increased to at least once per seven days if the number of failures in the last 20 valid tests is greater than or equal to two. The failure to increase the surveillance frequency is a violation of Technical Specification 3.8.1.1 and reportable under 10 CFR 50.73 (a)(2)(i)(B).

Unit 1 AB EDG records were reviewed following discovery of the missed surveillance frequency requirement. The January 15, 1992 surveillance run was the 22nd since the December 1990 failure with no failures other than the June 1991 failure. Sufficient successful start attempts were completed to remove the EDG from the requirement for increased surveillance frequency. Acceptable reliability for the unit 1 AB EDG was demonstrated by these successful starts.

Based on the above analysis, the failure to increase the frequency of 1 AB EDG surveillance is not considered to have created a significant safety concern, nor did the missed increased surveillance frequency create a significant hazard to the health and safety of the general public.

Corrective Action

The Operations Department will develop an emergency diesel generator incident report which will require an evaluation of each diesel start failure to determine if increased surveillance frequency is required. This report will require a review by an Operations Department Production Supervisor to verify that all requirements have been met.

The informal review presently conducted by the Diesel System Engineer will be formalized in the EDG Reliability Program developed in accordance with the Nuclear Management and Resources Council (NUMARC) 87-00 guidelines as a backup to Operations Department staff reviews.

Failure Component Identified

None

Previous Similar Events

A review of the License Event Reports from 1988 through the present did not identify a similar event where the emergency diesel generator was not placed on increased surveillance frequency when required by Technical Specifications.