#### DISTRIBUTION DEMONSTRATION ACCELERATED SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

R

·I

D

S

D

D

S

D

DOCKET # DOC.DATE: 88/09/02 NOTARIZED: NO ACCESSION NBR:8809080369 FACIL: 50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana & 05000315 · AUTHOR AFFILIATION AUTH.NAME Indiana Michigan Power Co. (formerly Indiana & Michigan Ele HODGE, W.M. Midwest Electric Cooperative SMITH, W.G. RECIPIENT AFFILIATION RECIP.NAME SUBJECT: LER 88-006-00:on 880803, isolation of CO2 fire protection sys, w/o compensatory action due to personnel error. ltr. 8\W DISTRIBUTION CODE: IE22D COPIES RECEIVED:LTR ( ENCL SIZE: TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc. NOTES: COPIES COPIES RECIPIENT RECIPIENT LTTR ENCL ID CODE/NAME LTTR ENCL ID CODE/NAME PD3-1 LA 1 1 PD3-1 PD STANG, J 1 INTERNAL: ACRS MICHELSON 1 ACRS MOELLER AEOD/DOA ACRS WYLIE 1 1 1 AEOD/DSP/ROAB 2 2 AEOD/DSP/NAS 1 1 ARM/DCTS/DAB 1 AEOD/DSP/TPAB NRR/DEST/ADS 7E 0 1 1 **DEDRO** NRR/DEST/ESB 8D NRR/DEST/MEB 9H 1 NRR/DEST/CEB 8H 1 1 NRR/DEST/ICSB 7 1 NRR/DEST/PSB 8D NRR/DEST/MTB 9H 1 NRR/DEST/SGB 8D NRR/DEST/RSB 8E 1 1 NRR/DLPQ/HFB 10 1 1 1 NRR/DLPQ/QAB 10 1 1 NRR/DREP/RAB 10 1 NRR/DOEA/EAB 11 NRR/DRIS/SIB 9A 1 NRR/DREP/RPB 10 2 2 REG FILE RES DEPY 1 NUDOCS-ABSTRACT 1 02 1 RES TELFORD,J 1 1 1 1 1 RGN3 FILE 01 RES/DSIR/EIB 1 1 FORD BLDG HOY, A 4 EXTERNAL: EG&G WILLIAMS.S 1 1 H ST LOBBY WARD 1 LPDR 1 1 1 1 NSIC HARRIS,J NRC PDR NSIC MAYS,G

#### LICENSEE EVENT REPORT (LER)

FACILITY		-														DOC	CKET	NUN	MER	(2)			_	PA	G€ (3)	
									Unit							0	5	0	10	0	13	11 6	5	1 OF	0 14	
TITLE (4)									otect	ion S	yster	n, Wit	hout	Comp	ens	ator	rÿ ,	Ac	tio	n						
	Due	: to	P	ers	onne	.1 E	Error	•																		
EVE	NT DATE	(5)	丁		L.F	ER NU	JMBER (6	5)		REI	PORT DAT	E (7)			OTI	IER FA	CILIT	IE\$ I	NVOI	LVED (8)						
MONTH	DAY	YEA	R	YEAI	В 员	SEQU	PENTIAL		REVISION	MONTH	DAY	YEAR		FA	CILITY	NAMES				DOC	KET	NUM	BERG	S)		
			$\dashv$		-	1,00	- DEN	****				-							-	0	15	101	0	0 1	1 1	
	,	l	- (		-														$\neg \neg$	_					<del>'</del>	
0  8	0 3	8	8 8	8	8	0	0 6	-	00	0 9	0 2	8 8								0	15	101	0 1	01	1 1	
	OPERATING THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																									
	OE (9)	1	1	$\neg \top$	20.402(b)	,	*			20.406(	e)			60.73	(4)(2)(	(v)		_			73	.71(b)				
POWE			十	按.	20,406(a)	)(1)(1)	i			50.35(e)	)(1)			50,73	(a){2}{	v)	73.71(e)									
LEVEL 0 1 91 0 20.405(a)(1)(ii)				<del>  </del>	50,38(c)(2) 50,73(a)(2)(vii)					viil	1				OTHER (Specify in Abstr											
					60.73(a)	60,73(a)(2)(i) 60,73(a)(2)(viii)(A)						below and in Text, NRC Form 366A)														
20,405(a)(1)(iv)				<u>                                   </u>	50,73(a)(2)(ii) 50,73(a)(2)(viii)					в)																
H			—₁	20,406(a)(1)(v)				50.73(a)(2)(iii) 50.73(a)(2																		
	LICENSEE CONTACT FOR THIS LER (12)																									
NAME																	Τ_	_		TELI	ЕРНО	NE N	UMB!	ER		
		I. M															ARE	A C	ODE							
	S	ecu	ri	ty	Mana	ger	•										6	1	ا 6	4,	6	,5 ,	-1	5 ,9	0,1	
						COF	MPLETE	ONE	LINE FOR	EACH CO	MPONEN	T FAILURE	DESCRIBE	D IN T	HIS RI	EPORT (	13)	_	لـــــــــــــــــــــــــــــــــــــ		نــــا				<del></del>	
	1	Γ	—		T			الم	ORTABLE	*******		<u> </u>								Τ			188			
CAUSE	SYSTEM	co	MPOI	NENT		TURE			NPROS			CAUSE	SYSTEM COMPONENT MANUFAC						REPORTABLE TO NPROS							
<del> </del>		┢			$\overline{}$			_	w			<u> </u>	1			$\neg \vdash$		_		+			1	*****		
		١,	1			1					1 , 1	1	1	, 1	1		1	. 1		·						
		_										<u> </u>	1			<u> </u>				十					*****	
		١,	1	1	1 1	1 1	1					<b>&amp;</b>	1 1	1	1	1	1	1	1	1						
						SU	IPPLEME	NTAL	. REPORT	EXPECTE	ED (14)	<del></del>					-	* = v =				MON	ITH	DAY	YEAR	
																		SÚBI	MISSI	ON			$\neg$			
YES	ill yes, c	omplet	e EX	PECT	ED SUBN	AISSIC	ON DATE	,		X	NO I					1		UA	TE (1	5)		1	]	1		

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

On August 3, 1988 during isolation/normalization of the Cardox CO2 Fire Protection System for the 4kv Switchgear Cable Vault, personnel error resulted in the isolation of the fire protection system, for a period of 50 minutes, without compensatory action as required by Technical Specification 3.7.9.3, action a.

It has been concluded that in the unlikely event of a fire, personnel would have been promptly aware of its presence and been able to control and extinguish the fire without significant propagation or equipment damage.

To prevent recurrence appropriate administrative actions were taken concerning the individuals involved.

8809080369 880902 PDR ADOCK 05000315 S PDC JE22

	Form	366A
10.83	1	

## 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)			
D. C. Cook Nuclear Plant - Unit 1		YEAR SEQUENTIAL REVISION NUMBER				
	0  5  0  0  0  3  1	5 8 8 - 0 0 6 - 0 10 6	0   2 OF 0   4			

TEXT (If more space is required, use additional NRC Form 365A's) (17)

## Conditions Prior To Occurrence

Unit 1 operating at 90 percent reactor thermal power.

# Description of Event

On August 3, 1988, during isolation/normalization of the cardox CO2 fire protection system (EIIS/KQ) for the 4kv switchgear cable vault, personnel error resulted in the isolation of the fire protection system, for a period of 50 minutes, without compensatory measures as required by Technical Specification 3.7.9.3 action a.

The sequence of events were as follows. At approximately 0745 hours a plant security officer was dispatched to isolate the Cardox CO2 system for the 4kv switchgear room area to facilitate routine maintenance activities. [NOTE - This isolation is normally accomplished by: 1) isolating the master "normal/isolation" switch (EIIS/KQ-HS) for the entire 4kv area; 2) initiating fire watch patrols at a frequency of once every 30 minutes; and 3) logging the isolation of involved switches on the "Cardox Activity Log"]. At 0747 hours, the security officer attempted to isolate the master switch but noted it was inoperable. This required the security officer to isolate 4 individual switches (EIIS/KQ-HS), three switches located adjacent to the master switch outside the 4kv entrance, and one switch inside the 4kv area, at the entrance to the cable vault. Following the isolation, the security officer logged "Unit 1 4kv - 4 switches", on the Cardox Switch Activity While the proper switches were isolated, and compensatory fire watch coverage initiated, the security officer violated Security Post Order SP0.016 (Cardox Switch Control) in that four entries should have been logged on the tracking sheet to correspond to the four switches that were repositioned for the isolation of the area.

At 0828 hours, following completion of Maintenance activities in the area, security was requested to normalize the Cardox Systems. Since Security post rotations had taken place a different security officer responded to the request. Upon arrival at the 4kv switchgear room the second officer referred to the Cardox switch tracking sheet to determine which switches had been isolated. The officer noted one entry ("Unit 1 4kv - 4 switches"), and normalized three switches located outside the 4kv area, adjacent to the master switch. The officer failed to enter the 4kv area to normalize the switchgear cable vault cardox switch, and failed to recognize he had only normalized three switches. Fire watch coverage was discontinued at this time (0828 Hrs).

NRC	Form	366A

# 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)				
D. C. Cook Nuclear Plant - Unit l		YEAR SEQUENTIAL REVISION NUMBER					
	0  5  0  0  0  3  1	5 8 8 - 0 0 1 0 1 6 - 0 1 0 1	0 3 OF 0 4				

TEXT (If more space is required, use additional NRC Form 306A's) (17)

At 0918 hours, the same second security officer responded to an unrelated request to reisolate the 4kv area. When the officer reported the isolation to the control room, he was reminded to isolate the switch inside the 4kv area by control room personnel. At this time the security officer discovered the deficiency and firewatch coverage was immediately reestablished. The switchgear cable vault area Cardox System had been isolated from 0828 hours to 0918 hours (50 minutes), without compensatory fire watch coverage.

## Cause Of The Event

This event was the result of 2 personnel errors involving the failure to properly comply with the approved procedure: 1) The security officer initially isolating the Cardox System for entry into the 4kv area failed to properly log the isolation of each individual area switch turned (Security Post Order SP0.016 requires each switch turned to be logged separately on the switch activity log, the security officer made one entry and noted that four switches had been turned); and, 2) the security officer normalizing the Cardox Systems referenced the switch activity log and properly read the entry as four switches, however only repositioned (normalizing) three switches. The security officer normalizing the Cardox Systems erroneously counted the switches he had repositioned.

#### Analysis Of The Event

The isolation of the switchgear cable vault Cardox System without compensatory fire watch coverage, was in violation of Technical Specification 3.7.9.3 action a, and is reportable under 10 CFR 50.73 (a) (2) (i) (B).

It has been concluded that in the unlikely event of a fire, personnel would have been promptly aware of its presence and been able to control and extinguish the fire without significant propagation or equipment damage. This conclusion is based on the following: 1) the relatively low fixed combustible load within the area involved (33,552 BTU's per square foot for a fire duration of less than 30 minutes); 2) the physical and administrative limits on the introduction of transient combustibles (only a negligible amount of combustibles were present in the involved area for the duration of the event); 3) operable early warning fire detection systems (consisting of both ionization and infrared detectors), and 4) the existence of a trained on-shift fire brigade.

Based on the above, this event is not considered to have created any significant safety concern and did not constitute an unreviewed safety question as defined in 10 CFR 50.59, nor did it create a significant hazard to the health and safety of the general public.

Form	3664

## LICENSEE LVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NU			LΕ	R NUM	П	PAGE (3)										
D. C. Cook Nuclear Plant - Unit 1						YEA	R	<b>***</b>	SEQUE	NTIAL BER	***	REVISI NUMB	ON ER				
	0  5   0	0	0	3	1   5	81	8		010	6	_	01	0	0 4	OF	0	4

TEXT (If more space is required, use additional NRC Form 300A's) (17)

## Corrective Action

To prevent recurrence, appropriate administrative actions were taken concerning the individuals involved. Although the first security officer failed to follow procedural guidance in logging of the repositioned switches, the officer did provide sufficient information that the second security officer should have recognized the condition of the affected switches. The second officer simply failed to count the number of switches he repositioned/normalized. It has been concluded that adequate procedural instruction currently exists.

In consideration of former LER 315/88-005-00 there has been individual identification numbers and isolation zone descriptions placed on each cardox control switch. These numbers may be used as an operational aid to assure the proper switch or switches are manipulated. Installation of the numbers and isolation zone information was completed on September 1, 1988.

# Failed Component Identification

Not applicable - No components failed during the course of this event.

# Previous Similar Events

```
50-315/88-005

50-315/85-008,-020

50-316/84-009,-022,-027

50-316/83-048,-060

50-315/83-022,-028,-034,-094,-114 50-316/82-054,-058,-062,-076,-084

50-315/82-037,-044,-045,-049,-068,-081,-082,-108
```

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



September 2, 1988

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

Operating License DPR-58 Docket No. 50-315

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:

88-006-00

Sincerely,

W. G. Smith, Jr. Plant Manager

WGS:clw

#### Attachment

cc: D. H. Williams, Jr.

A. B. Davis, Region III

M. P. Alexich

P. A. Barrett

J. E. Borggren

R. F. Kroeger

NRC Resident Inspector

J. F. Stang, NRC

R. C. Callen

G. Charnoff, Esq.

Dottie Sherman, ANI Library

D. Hahn

INPO

PNSRC

A. A. Blind

S. J. Brewer/B. P. Lauzau

JE22