

50-315

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER
INCIDENT REPORT

TO:

Mr. J. G. Keppler

FROM:

Indiana & Michigan Power Company
Bridgman, Michigan
R. W. Jurgensen

DATE OF DOCUMENT

3/25/77

DATE RECEIVED

4/12/77

☒ LETTER☐ NOTORIZED

PROP

INPUT FORM

NUMBER OF COPIES RECEIVED

☒ ORIGINAL
☐ COPY☒ UNCLASSIFIED

1 SIGNED

DESCRIPTION

Ltr. trans the following:

PLANT NAME:

Cook Unit No. 1

RJL

(1-P)

ACKNOWLEDGED
DO NOT REMOVE

ENCLOSURE

Licensee Event Report (RO 50-315/77-14) on
3/10/77 concerning a water hammer occurring
which resulted in the failure of two seismic
snubbers...(RO 50-315/77-15) on 3/10/77 concerning a
water hammer occurring which caused a crack
in a weld between the auxiliary feedwater
pipe to #2 steam generator & a pipe support..

(4-P)

NOTE: IF PERSONNEL EXPOSURE IS INVOLVED
SEND DIRECTLY TO KREGER/J. COLLINS

FOR ACTION/INFORMATION

BRANCH CHIEF:	Zickman		
W/3 CYS FOR ACTION			
LIC. ASST.:	Diggs		
W/1 CYS			
ACRS 16 CYS HOLDING/SENT	AS CAT D		

INTERNAL DISTRIBUTION

REG FILE			
NRC PDR			
I & E (2)			
MIPC			
SCHROEDER/IPPOLITO			
HOUSTON			
NOVAK/CHECK			
GRIMES			
CASE			
BUTLER			
HANAUER			
TEDESCO/MACCARY			
EISENHUT			
BAER			
SHAO			
VOLLMER/BUNCH			
KREGER/J. COLLINS			

EXTERNAL DISTRIBUTION

LPDR: St Joseph, MI			
TIC:			
NSIC:			

CONTROL NUMBER

771050146

60

RECEIVED
JAN 10 1964
U.S. AIR FORCE



INDIANA & MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT
P.O. Box 458, Bridgman, Michigan 49106

Regulatory

File Cy.



March 25, 1977

Mr. J.G. Keppler, Regional Director
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

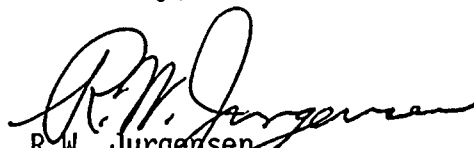
Operating License DPR-58
Docket No. 50-315

Dear Mr. Keppler:

Pursuant to the requirements of Appendix A Technical Specifications and the United States Nuclear Regulatory Commission Regulatory Guide 1.16, Revision 4, Section 2.a, the following reports are submitted:

RO 50-315/77-14
RO 50-315/77-15.

Sincerely,


R.W. Jurgensen
Plant Manager

/bab

cc: R.S. Hunter
J.E. Dolan
G.E. Lien
R. Kilburn
R.J. Vollen BPI
R.C. Callen MPSC
K.R. Baker RO:III
P.W. Steketee, Esq.
R. Walsh, Esq.
G. Charnoff, Esq.
G. Olson
J.M. Hennigan
PNSRC
R.S. Keith
Dir., IE (40 copies)
Dir., MIPC (4 copies)

771050146

MAR 28 1977

LICENSEE EVENT REPORT

CONTROL BLOCK:

1	2	3	4	5	6
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(PLEASE PRINT ALL REQUIRED INFORMATION)

LICENSEE NAME						LICENSE NUMBER										LICENSE TYPE					EVENT TYPE		
01	M	I	D	C	1	0	0	-	0	0	0	0	0	-	0	0	4	1	1	1	1	0	1
7	8	9			14	15										25	26				30	31	32

CATEGORY		REPORT TYPE	REPORT SOURCE	DOCKET NUMBER						EVENT DATE				REPORT DATE									
01	CON'T	T	L	0	5	0	-	0	3	1	5	0	3	1	0	7	7	0	3	2	5	7	7
7	8	57	58	59	60	61					68	69			74			75				80	

EVENT DESCRIPTION

02	See attached pages																					
7	8	9																				80
03																						
7	8	9																				80
04																						
7	8	9																				80
05																						
7	8	9																				80
06	(R0 50-315/77-14)																					
7	8	9																				80

SYSTEM CODE	CAUSE CODE	COMPONENT CODE					PRIME COMPONENT SUPPLIER	COMPONENT MANUFACTURER				VIOLATION	
CH	A	H	A	N	G	E	R	A	I	2	0	7	N
7	8	9	10	11	12		17	43	44			47	48

CAUSE DESCRIPTION

08	See attached pages																					
7	8	9																				80
09																						
7	8	9																				80
10																						
7	8	9																				80

FACILITY STATUS	% POWER	OTHER STATUS				METHOD OF DISCOVERY	DISCOVERY DESCRIPTION					
C	0	0	0	Rx trip recovery		a	Inspection after water-hammer					
7	8	9	10	11	12	13	44	45	46	80		

FORM OF ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY				LOCATION OF RELEASE					
Z	Z	NA				NA					
7	8	9	10	11	12	13	44	45	80		

PERSONNEL EXPOSURES

NUMBER	TYPE	DESCRIPTION				
0	Z	NA				
7	8	9	11	12	13	80

PERSONNEL INJURIES

NUMBER	DESCRIPTION				
0	NA				
7	8	9	11	12	80

OFFSITE CONSEQUENCES

15	NA																					
7	8	9																				80

LOSS OR DAMAGE TO FACILITY

TYPE	DESCRIPTION			
Z	NA			
7	8	9	10	80

PUBLICITY

17	NA																					
7	8	9																				80

ADDITIONAL FACTORS

18	See attached pages																					
7	8	9																				80

19																						
7	8	9																				80

NAME: David G. Wizner

PHONE: (616)465-5901

SUPPLEMENT TO REPORTABLE OCCURRENCE RO 50-315/77-14

EVENT DESCRIPTION

WITH THE REACTOR IN MODE 3 DURING TRIP RECOVERY, A WATER HAMMER OCCURRED WHICH RESULTED IN THE FAILURE OF TWO SEISMIC SNUBBERS. (SNUBBER NUMBERS 2-FWS-10 AND 1-FWS-1 LOCATED ON 14" FEEDWATER PIPING TO STEAM GENERATORS #4 AND #1 RESPECTIVELY.)

CAUSE DESCRIPTION

FORCES GENERATED BY THE WATER HAMMER IN THE FEEDWATER PIPING WAS THE CAUSE OF THESE FAILURES. THE WATER HAMMER OCCURRED WHEN FEEDWATER FLOW TO THE STEAM GENERATORS WAS INCREASED TO GREATER THAN 100,000 LB/HR.

ADDITIONAL FACTORS

TO PREVENT RECURRENCE THE OPERATING PROCEDURES WERE REVIEWED WITH ALL LICENSED OPERATORS TO REMIND THEM OF THE PRECAUTIONS IN THE PROCEDURE OF NOT EXCEEDING FEEDWATER FLOW OF 75,000 LB/HR. ADDITIONALLY, SPECIAL MARKINGS HAVE BEEN ADDED TO THE FEED FLOW GAGES TO VISIBLY REMIND THE OPERATORS OF THIS REQUIREMENT.

LICENSEE EVENT REPORT

CONTROL BLOCK:

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[PLEASE PRINT ALL REQUIRED INFORMATION]

LICENSEE NAME														LICENSE NUMBER														LICENSE TYPE										EVENT TYPE																					
01 M I D C C 1														0 0 - 0 0 0 0 0 - 0 0														4 1 1 1 1										0 1																					
7 8 9														15														25										31 32																					
01 CON'T														CATEGORY		REPORT TYPE		REPORT SOURCE		DOCKET NUMBER										EVENT DATE										REPORT DATE																			
7 8														57 58		59		60		81										69										75										80									
01																T		L		0 5 0 - 0 3 1 5										0 3 1 0 7 7										0 3 2 5 7 7																			
7 8														57 58		59		60		81										69										75										80									

EVENT DESCRIPTION

02 See attached pages														80																			
03														80																			
04														80																			
05														80																			
06														(R0 50-315/77-15)										80									
7 8 9														80																			

SYSTEM CODE				CAUSE CODE		COMPONENT CODE						PRIME COMPONENT SUPPLIER		COMPONENT MANUFACTURER				VIOLATION			
07 C H				A		P I P E X X						A		Z 9 9 9				N			
7 8 9 10				11		12						43		44				47		48	

CAUSE DESCRIPTION

08 See attached pages														80									
09														80									
10														80									
7 8 9														80									

FACILITY STATUS				% POWER				OTHER STATUS						METHOD OF DISCOVERY				DISCOVERY DESCRIPTION																			
11 C				0 0 0				Rx trip recovery						a				Inspection after water-hammer																			
7 8 9				10				12 13						44 45				46										80									
FORM OF ACTIVITY RELEASED				CONTENT OF RELEASE				AMOUNT OF ACTIVITY										LOCATION OF RELEASE																			
12 Z				Z				NA										NA																			
7 8 9				10				11						44				45						80													

PERSONNEL EXPOSURES

NUMBER				TYPE		DESCRIPTION															
13 0 0 0				Z		NA															
7 8 9				11		12 13						80									

PERSONNEL INJURIES

NUMBER				DESCRIPTION															
14 0 0 0				NA															
7 8 9				11 12						80									

OFFSITE CONSEQUENCES

15 NA														80									
7 8 9														80									

LOSS OR DAMAGE TO FACILITY

TYPE				DESCRIPTION																			
16 Z				NA																			
7 8 9				10										80									

PUBLICITY

17 NA														80									
7 8 9														80									

ADDITIONAL FACTORS

18 See attached pages														80									
7 8 9														80									

19														80									
7 8 9														80									

NAME: David G. Wizner

PHONE: (616) 465-5901

SUPPLEMENT TO REPORTABLE OCCURRENCE RO 50-315/77-15

EVENT DESCRIPTION

WITH THE REACTOR IN MODE 3 DURING TRIP RECOVERY, A WATER HAMMER OCCURRED WHICH CAUSED A CRACK IN A WELD BETWEEN THE AUXILIARY FEEDWATER PIPE TO #2 STEAM GENERATOR AND A PIPE SUPPORT.

CAUSE DESCRIPTION

FORCES GENERATED BY THE WATER HAMMER IN THE FEEDWATER PIPING WAS THE CAUSE OF THIS FAILURE. THE WATER HAMMER OCCURRED WHEN FEEDWATER FLOW TO THE STEAM GENERATORS WAS INCREASED TO GREATER THAN 100,000 LB/HR.

ADDITIONAL FACTORS

TO PREVENT RECURRENCE THE OPERATING PROCEDURES WERE REVIEWED WITH ALL LICENSED OPERATORS TO REMIND THEM OF THE PRECAUTIONS IN THE PROCEDURE OF NOT EXCEEDING FEEDWATER FLOW OF 75,000 LB/HR. ADDITIONALLY, SPECIAL MARKINGS HAVE BEEN ADDED TO THE FEED FLOW GAGES TO VISIBLY REMIND THE OPERATORS OF THIS REQUIREMENT.

