

50-315

## NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER  
INCIDENT REPORT

TO: J. G. Keppler

FROM: Indiana & Mich Power Co  
Bridgman, Mich 49106  
R.W. JurgensenDATE OF DOCUMENT  
3-25-77DATE RECEIVED  
4-12-77☒ LETTER  
☒ ORIGINAL  
☐ COPY☐ NOTORIZED  
☒ UNCLASSIFIED

PROP

INPUT FORM

NUMBER OF COPIES RECEIVED  
1 signed

DESCRIPTION Ltr trans the following: 1P

PLANT NAME: Cook Unit 1

DHL

ENCLOSURE Lic Event Report 77-13 occurring on  
2-24-77 involving 7.5 gallons of boric acid  
being injected into the RCS & this resulted  
in tavg decreasing 2.5 degrees F.... 2P

(1 cy encl rec'd)

ACKNOWLEDGED

DO NOT REMOVE

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

## FOR ACTION/INFORMATION

BRANCH CHIEF:	Ziemann
W/3 CYS FOR ACTION	
LIC. ASST.:	Diggs
W/1 CYS	
ACRS 16 CYS HOLDING/SENT	AS CATB

## INTERNAL DISTRIBUTION

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

## EXTERNAL DISTRIBUTION

LPDR: <del>St Joseph, Mi</del>				
TIC:				
NSIC:				

## CONTROL NUMBER

771050228

60





**INDIANA & MICHIGAN POWER COMPANY**

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

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



Regulatory

File

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.b, the following report is submitted:

RO 50-315/77-13.

Sincerely,

  
R.W. Jurgensen  
Plant Manager

/bab

cc: R.S. Hunter  
J.E. Dolan  
G.E. Lien  
R. Kilburn  
R.J. Vollen BPI  
K.R. Baker RO:III  
R.C. Callen MPSC  
P.W. Steketee, Esq.  
R. Walsh, Esq.  
G. Charnoff, Esq.  
G. Olson  
J.M. Hennigan  
PNSRC  
R.S. Keith  
Dir., IE (30 copies)  
Dir., MIPC (3 copies)

MAR 28 1977

771058228

100-100000

100-100000

# LICENSEE EVENT REPORT

CONTROL BLOCK: 1 6

[PLEASE PRINT ALL REQUIRED INFORMATION]

LICENSEE NAME <div style="border: 1px solid black; padding: 2px;">01 M I D C C 1</div>	LICENSE NUMBER <div style="border: 1px solid black; padding: 2px;">0 0 - 0 0 0 0 0 - 0 0</div>	LICENSE TYPE <div style="border: 1px solid black; padding: 2px;">4 1 1 1 1</div>	EVENT TYPE <div style="border: 1px solid black; padding: 2px;">0 3</div>
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CATEGORY <div style="border: 1px solid black; padding: 2px;">01 CONT</div>	REPORT TYPE <div style="border: 1px solid black; padding: 2px;">L</div>	REPORT SOURCE <div style="border: 1px solid black; padding: 2px;">L</div>	DOCKET NUMBER <div style="border: 1px solid black; padding: 2px;">0 5 0 - 0 3 1 7</div>	EVENT DATE <div style="border: 1px solid black; padding: 2px;">0 2 2 4 7 7</div>	REPORT DATE <div style="border: 1px solid black; padding: 2px;">0 3 2 5 7 7</div>
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**EVENT DESCRIPTION**

02 WHILE IN MODE 1 AT 28% POWER, DURING MODERATOR TEMPERATURE COEFFICIENT MEASUREMENT  
 03 TESTING. (THIS TEST CONSISTS OF INJECTING A KNOWN AMOUNT OF BORIC ACID INTO THE PRIMARY  
 04 SYSTEM AND OBSERVING THE CHANGE IN Tavg), Tavg DECREASED TO 535°F. THE TEST WAS TER-  
 05 MINATED AND Tavg WAS RESTORED TO 541°F WITHIN THE TIME LIMIT SPECIFIED BY THE ACTION  
 06 ITEM FOR TECHNICAL SPECIFICATION 3.1.1.5. (R0-50-315/77-13)

SYSTEM CODE <div style="border: 1px solid black; padding: 2px;">07 R B</div>	CAUSE CODE <div style="border: 1px solid black; padding: 2px;">B</div>	COMPONENT CODE <div style="border: 1px solid black; padding: 2px;">Z Z Z Z Z Z</div>	PRIME COMPONENT SUPPLIER <div style="border: 1px solid black; padding: 2px;">Z</div>	COMPONENT MANUFACTURER <div style="border: 1px solid black; padding: 2px;">Z 9 9 9</div>	VIOLATION <div style="border: 1px solid black; padding: 2px;">N</div>
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**CAUSE DESCRIPTION**

08 DURING THE FIRST TEST, 7.5 GALLONS OF BORIC ACID WERE INJECTED INTO THE RCS. THIS  
 09 RESULTED IN Tavg DECREASING 2.5°F. TEST PERSONNEL ASKED FOR A RETEST USING 20 GALLONS  
 10 OF BORIC ACID, EXPECTING A DECREASE IN Tavg OF 6.7°F. INSTEAD, (SEE SUPPLEMENT)

FACILITY STATUS <div style="border: 1px solid black; padding: 2px;">11 I</div>	% POWER <div style="border: 1px solid black; padding: 2px;">0 2 8</div>	OTHER STATUS <div style="border: 1px solid black; padding: 2px;">DESCRIBED ABOVE</div>	METHOD OF DISCOVERY <div style="border: 1px solid black; padding: 2px;">C</div>	DISCOVERY DESCRIPTION <div style="border: 1px solid black; padding: 2px;">DESCRIBED ABOVE</div>
FORM OF ACTIVITY RELEASED <div style="border: 1px solid black; padding: 2px;">12 Z</div>	CONTENT OF RELEASE <div style="border: 1px solid black; padding: 2px;">Z</div>	AMOUNT OF ACTIVITY <div style="border: 1px solid black; padding: 2px;">NA</div>	LOCATION OF RELEASE <div style="border: 1px solid black; padding: 2px;">NA</div>	

**PERSONNEL EXPOSURES**

NUMBER <div style="border: 1px solid black; padding: 2px;">13 0 0 0</div>	TYPE <div style="border: 1px solid black; padding: 2px;">Z</div>	DESCRIPTION <div style="border: 1px solid black; padding: 2px;">NA</div>
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**PERSONNEL INJURIES**

NUMBER <div style="border: 1px solid black; padding: 2px;">14 0 0 0</div>	DESCRIPTION <div style="border: 1px solid black; padding: 2px;">NA</div>
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**PROBABEE CONSEQUENCES**

15 NA

**LOSS OR DAMAGE TO FACILITY**

TYPE <div style="border: 1px solid black; padding: 2px;">16 Z</div>	DESCRIPTION <div style="border: 1px solid black; padding: 2px;">NA</div>
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**PUBLICITY**

17 NA

**ADDITIONAL FACTORS**

18 NA

19 NA

NAME: J.L.RISCHLING

PHONE: (616)465-5901(368)



SUPPLEMENT TO REPORTABLE OCCURRENCE RO 50-315/77-13

SUPPLEMENT TO CAUSE DESCRIPTION

A DECREASE OF 20°F RESULTED. WHEN IT APPEARED THAT Tavg WOULD GO BELOW 541°F, THE OPERATORS AND TEST PERSONNEL TERMINATED THE TEST.

INVESTIGATION REVEALED THAT THE BORIC ACID INTEGRATOR'S ACCURACY IS QUESTIONABLE FOR SMALL VOLUMES. IN THE FUTURE, THIS TYPE OF TESTING WILL NOT BE USED FOR SMALL REACTIVITY INSERTIONS. WE HAVE RECENTLY ACQUIRED A REACTIVITY COMPUTER. THIS WILL ALLOW US TO ACCOMPLISH THIS TYPE OF TESTING WITH THE USE OF THE CONTROL RODS.

