

D 04/12/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)  
DISTRIBUTION FOR INCOMING MATERIAL 50-315

REC: KEPPLER J G  
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IN & MI PWR

DOCDATE: 04/04/78  
DATE RCVD: 04/11/78

DOCTYPE: LETTER NOTARIZED: NO  
SUBJECT:

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LTR 1 ENCL 1

LICENSEE EVENT REPT (RO 50-315/00-000) ON 03/07/78 CONCERNING UNIT 1 REACTOR  
TRIPPED FROM 100% PWR AND DOSE EQUIVALENT IODINE-131 ACTIVITY IN UNIT 1  
REACTOR COOLANT SYSTEM WAS FOUND OUT OF SPECIFICATION...W/ATT SUPPORTING  
INFO.

PLANT NAME: COOK - UNIT 1

REVIEWER INITIAL: XJM  
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\*\*\*\*\* DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS. \*\*\*\*\*

INCIDENT REPORTS  
(DISTRIBUTION CODE A002)

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REGULATORY GUIDE 10.1

DISTRIBUTION: LTR 45 ENCL 45  
SIZE: 2P+1P+5P

CONTROL NBR: 781020014

\*\*\*\*\* THE END \*\*\*\*\*




**INDIANA & MICHIGAN POWER COMPANY**

DONALD C. COOK NUCLEAR PLANT  
P.O. Box 458, Bridgman, Michigan 49106  
(616) 465-5901

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US NRC  
DISTRIBUTION SERVICES  
BRANCH

1978 APR 11 PM 12 58

RECEIVED DISTRIBUTION  
SERVICES UNIT

April 4, 1978

Operating License DPR-58  
Docket # 50-315

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

Dear Mr. Keppler:

This report is submitted pursuant to the requirement of Appendix A Technical Specification 3.4.8 and 6.9.1. On March 7, 1978, the dose equivalent iodine-131 activity in Unit 1 reactor coolant system was found out of specification.

At 1003 on March 7, 1978 Unit 1 reactor tripped from 100% power. Immediately following the trip, letdown purification flow was increased to its maximum. Analysis at 1130 on March 7, 1978, indicated dose equivalent iodine-131 at 1.025  $\mu\text{Ci/cc}$ . Maximum dose equivalent iodine-131 concentration was detected at 1345 to be 1.046  $\mu\text{Ci/cc}^*$ . Dose equivalent iodine-131 remained out of specification until 1440. All additional sample analysis indicated the reactor coolant dose equivalent iodine-131 remained in specification and was decreasing. No additional spiking was noted during the subsequent reactor startup. No degassing operations were associated with this event.

Iodine release at this time period is consistent with data reported in Westinghouse Electric Corporation WCAP-8637, "Iodine Behavior under Transient Conditions in the Pressurized Water Reactor". Dose equivalent iodine-131 values were in the "Acceptable Operation" portion of Technical

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April 4, 1978  
Mr. J. G. Keppler  
Page Two

Specification Figure 3.4.1 at all times during the transient. Fuel burnup by core region and all additional data is indicated in the attached table/graphs.

\* Coolant samples are brought to ambient conditions prior to counting, therefore, units of  $\mu\text{Ci/g}$  and  $\mu\text{Ci/cc}$  are considered interchangeable.

Very truly yours,



for D. V. Shaller  
Plant Manager

ms

attachments

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MARCH 7, 1978

UNIT NO. 1

CYCLE NO. 2

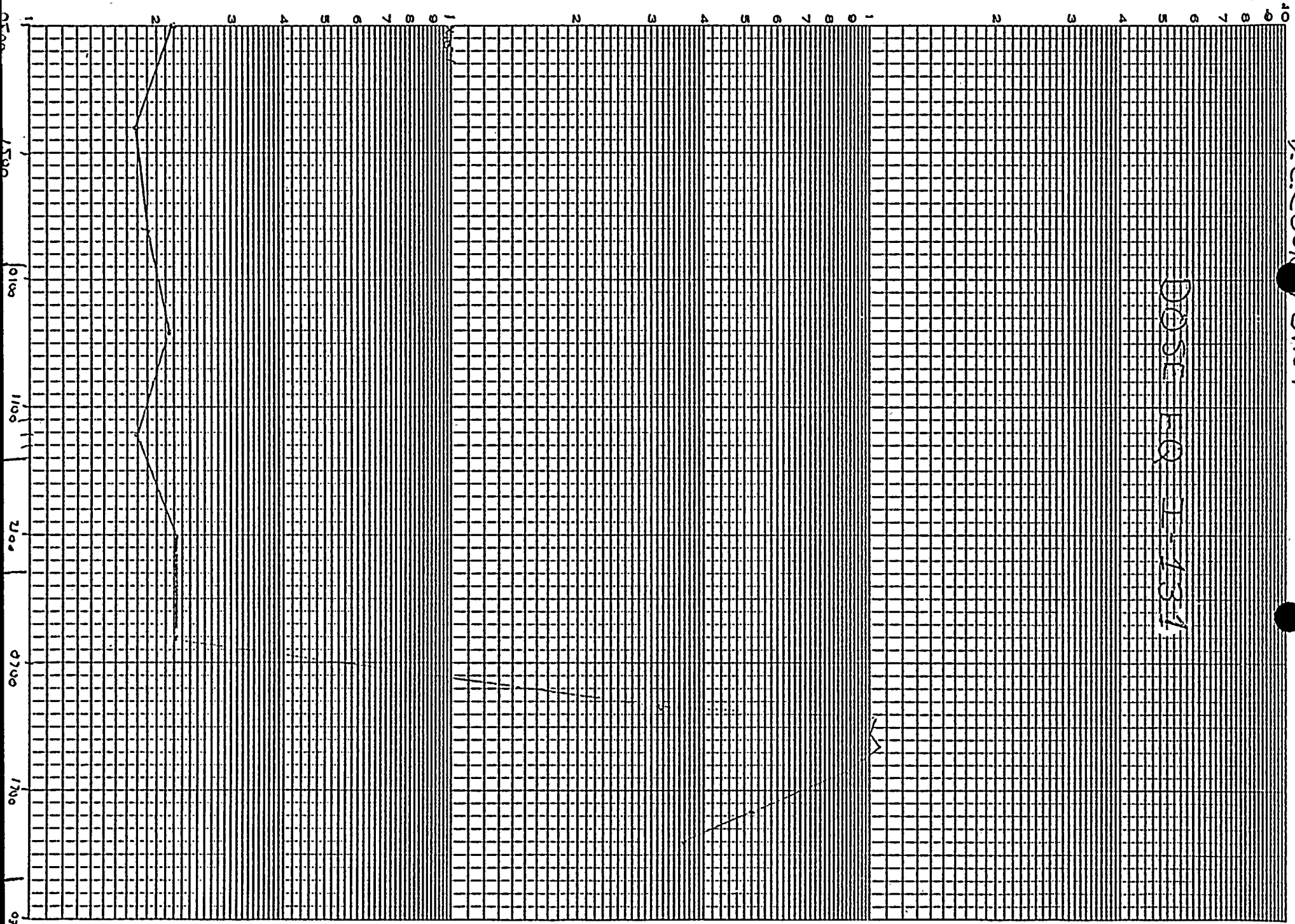
Fuel Burnup by Core Region

| REGION NO. | BURNUP<br>FOR PERIOD<br>(MWD/MTU) | CUMULATIVE<br>BURNUP<br>(MWD/MTU) | ENERGY<br>FOR PERIOD<br>(BTU) | CUMULATIVE<br>ENERGY<br>(BTU) |
|------------|-----------------------------------|-----------------------------------|-------------------------------|-------------------------------|
| 1          | 0.1871E+04                        | 0.9543E+04                        | 0.4267E+13                    | 0.2176E+14                    |
| 2          | 0.1799E+04                        | 0.2802E+05                        | 0.4290E+13                    | 0.6681E+14                    |
| 3          | 0.2053E+04                        | 0.2397E+05                        | 0.4867E+13                    | 0.5685E+14                    |
| CORE TOTAL | 0.1908E+04                        | 0.2067E+05                        | 0.1342E+14                    | 0.1454E+15                    |

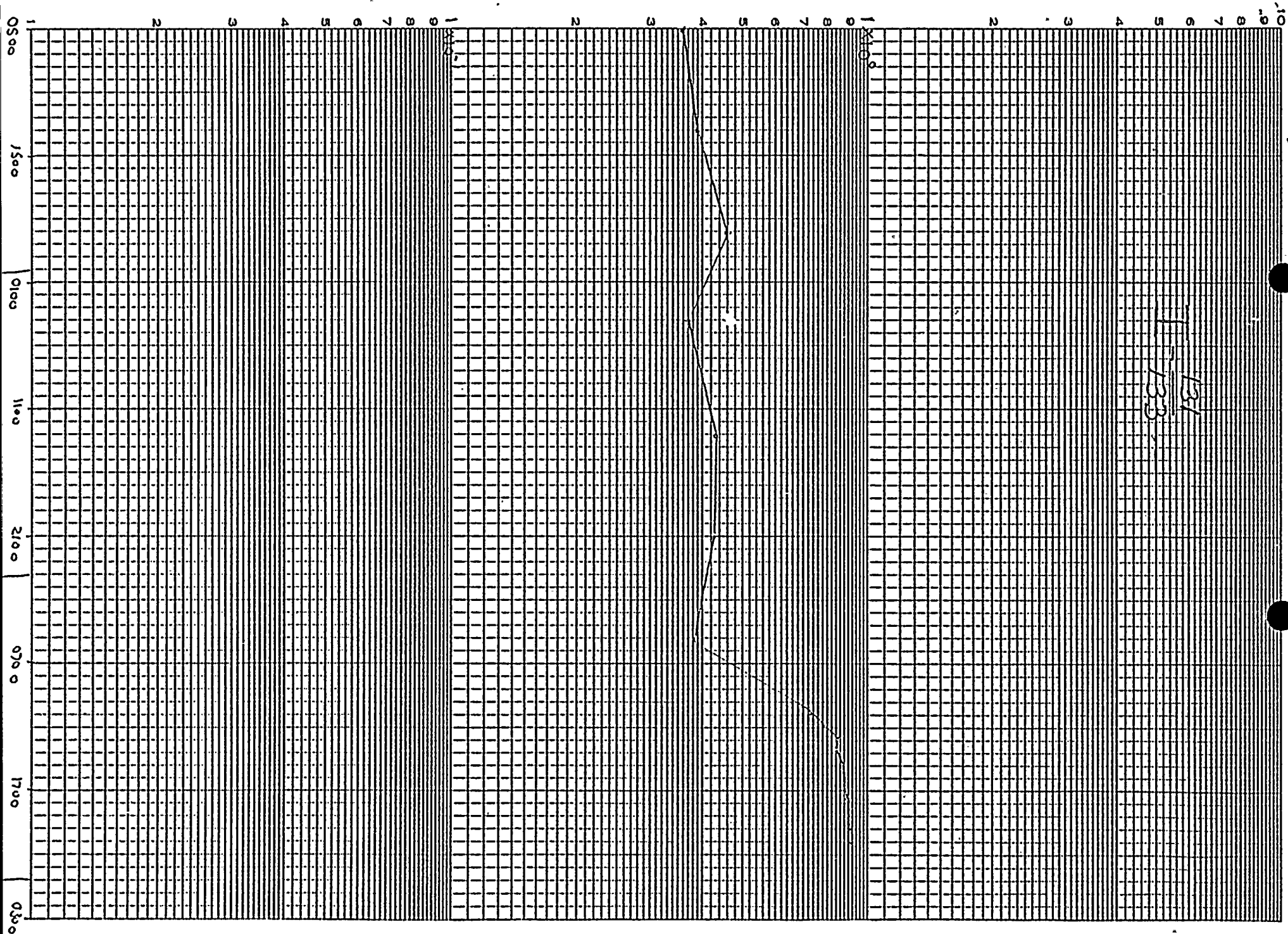


D.C. Cook Plant

DOSC EQ 11-13-1







D.C. Cook AWT





D. C. Cooe Nuclear Plant 1 1/2 MW Power Company  
1-131 COCONUT RATIOS

D.C. Code Plant 1 + M Power Company  
R x Power & Hydro Power Group

of Power

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