

50-315(316)

## NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

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Environmental

TO:  
NRCFROM:  
Indiana & Michigan Power Co.  
Bridgman, Michigan  
R.W. Jurgensen

DATE OF DOCUMENT

2-17-76

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## DESCRIPTION

Ltr. trans the following .....

## ENCLOSURE

Monthly operating Report for November 1975.  
on the impingment 66 fish.....

(1 Cy. Received)

PLANT NAME: Cook # 1 &amp; 2

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ACKNOWLEDGED

## SAFETY

## FOR ACTION/INFORMATION

## ENVIRO

SAB 2-26-76

ASSIGNED AD :		ASSIGNED AD :	
✓ BRANCH CHIEF :	Ziemann MXXX	✓ BRANCH CHIEF :	Knighton W/2
PROJECT MANAGER:		PROJECT MANAGER :	
✓ LIC. ASST. :	Diggs	LIC. ASST. :	

## INTERNAL DISTRIBUTION

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OELD		LAINAS	SPANGLER
GOSSICK & STAFF	ENGINEERING	IPPOLITO	
✓ MIPC	MACCARY		SITE TECH
CASE	KNIGHT	OPERATING REACTORS	GAMILL
✓ HANAUER	SIHWEIL	STELLO	STEPP
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		OPERATING TECH	
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P. COLLINS	NOVAK	BAER	BUNCH
HOUSTON	ROSZTOCZY	SCHWENCER	✓ J. COLLINS
PETERSON	CHECK	✓ GRIMES	✓ KREGER
MELTZ			
HELTEMES	AT & I	SITE SAFETY & ENVIRO	
SKOVHOLT	SALTZMAN	ANALYSIS	
	RUTBERG	✓ DENTON & MULLER	

## EXTERNAL DISTRIBUTION

## CONTROL NUMBER

✓ IPDR: St. Joseph, Michigan	NATL LAB ANL	BROOKHAVEN NATL LAB	1743
✓ TIC	REG. V-IE	ULRIKSON(ORNL)	
✓ NSIC	LA PDR		
ASLB	CONSULTANTS		
ACRS HOLDING/SENT			



**INDIANA & MICHIGAN POWER COMPANY**

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

Regulatory

File Cy

February 17, 1976

Directorate of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20545

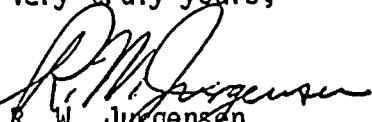
Docket No. 50-315  
50-316

Gentlemen:

Pursuant to the requirements of Section 4.12 of the  
Appendix B Environmental Technical Specifications for the  
Donald C. Cook Nuclear Plant, the attached monthly report  
on impingement of fish is submitted.

This report covers the month of November, 1975.

Very truly yours,

  
R. W. Jurgensen  
Plant Manager

/g

Attachments

cc: R. S. Hunter  
J. E. Dolan  
G. E. Lien  
R. J. Vollen  
K. R. Baker  
R. C. Callen  
Richard Walsh, Esq.  
Peter Steketee, Esq.  
PNSRC File



1743

MONTH: NOVEMBER, 1975

WEIGHT IN KILOGRAMS  
TEMPERATURE IN DEGREES CENTIGRADE  
PERCENTAGES ARE OF MONTH TOTALS

SPECIES	DAILY AVG NUMBER	STD DEV NUMBER	DAILY AVG WEIGHT	STD DEV WEIGHT	PERCENT NUMBER	TOTAL NUMBER	PERCENT WEIGHT	TOTAL WEIGHT
SP	64.30	150.51	0.50	1.20	18.88	1929	7.96	14.92
AL	33.50	46.76	0.77	1.62	9.84	1005	12.39	23.23
SM	6.60	8.18	0.05	0.08	1.94	198	0.75	1.41
YP	58.13	190.31	1.63	6.07	17.07	1744	26.15	49.04
TP	164.03	415.96	2.11	5.21	48.16	4921	33.75	63.28
JD	0.33	0.99	0.00	0.00	0.10	10	0.01	0.03
LS	0.13	0.35	0.20	0.52	0.04	4	3.17	5.95
LT	0.57	0.94	0.83	1.58	0.17	17	13.35	25.04
LD	0.13	0.35	0.00	0.00	0.04	4	0.02	0.03
SS	9.67	8.05	0.08	0.07	2.84	290	1.23	2.31
QL	0.03	0.18	0.03	0.18	0.01	1	0.53	1.00
SB	0.03	0.18	0.00	0.00	0.01	1	0.00	0.00
GN	0.03	0.18	0.00	0.00	0.01	1	0.00	0.00
GS	2.13	3.30	0.01	0.02	0.63	64	0.21	0.39
XC	0.17	0.46	0.00	0.01	0.05	5	0.03	0.05
PS	0.13	0.43	0.00	0.01	0.04	4	0.04	0.08
HM	0.03	0.18	0.00	0.00	0.01	1	0.01	0.01
BC	0.07	0.25	0.00	0.00	0.02	2	0.00	0.01
EG	0.39	0.53	0.00	0.00	0.09	9	0.03	0.05
ER	0.07	0.25	0.02	0.09	0.02	2	0.36	0.67
LB	0.03	0.18	0.00	0.00	0.01	1	0.00	0.00
RB	0.03	0.18	0.00	0.00	0.01	1	0.00	0.00
GL	0.03	0.18	0.00	0.00	0.01	1	0.00	0.00
YB	0.10	0.31	0.00	0.00	0.03	3	0.00	0.01
TOTALS FOR MONTH	340.60	795.97	6.25	14.54	100.00	10218	100.00	187.52

THERE WERE 30 DAYS ON WHICH FISH WERE IMPINGED.

MONTH: NOVEMBER, 1975

WEIGHT IN KILOGRAMS  
TEMPERATURE IN DEGREES CENTIGRADE  
PERCENTAGES ARE OF MONTH TOTALS

	1		2		3		4		5		6		7		8	
TEMP C	10.4		10.5		10.6		10.8		10.8		11.0		11.6		11.7	
SPECIES	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT
SP	17	0.18	21	0.19	12	0.13	11	0.12	16	0.23	6	0.06	12	0.17	2	0.04
AL	13	0.06	31	0.12	1	0.00	2	0.03	2	0.06	0	0.0	0	0.0	0	0.0
SM	1	0.01	4	0.06	0	0.0	0	0.0	0	0.0	0	0.0	2	0.01	0	0.0
YP	27	0.58	12	0.23	1	0.02	4	0.20	5	0.19	3	0.12	6	0.13	0	0.0
TP	18	0.17	14	0.13	2	0.01	4	0.05	16	0.21	21	0.28	25	0.26	2	0.02
JD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LS	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LT	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SS	3	0.02	0	0.0	1	0.00	3	0.01	1	0.01	5	0.02	6	0.03	1	0.01
QL	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GN	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GS	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
XC	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
PS	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
MY	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
BC	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
EG	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
BR	0	0.0	0	0.0	0	0.0	1	0.29	0	0.0	0	0.0	0	0.0	0	0.0
LB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
RB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GL	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
YB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	79	1.01	82	0.73	17	0.17	25	0.71	40	0.71	35	0.47	51	0.62	5	0.06
PERCENT	0.77	0.54	0.80	0.39	0.17	0.09	0.24	0.38	0.39	0.38	0.34	0.25	0.50	0.33	0.05	0.00

MONTH: NOVEMBER, 1975

WEIGHT IN KILOGRAMS  
TEMPERATURE IN DEGREES CENTIGRADE  
PERCENTAGES ARE OF MONTH TOTALS

	9		10		11		12		13		14		15		16	
TEMP C	11.5		11.8		10.6		10.2		9.0		9.9		10.0		10.0	
SPECIES	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT
SP	8	0.09	10	0.10	8	0.12	3	0.04	814	6.58	201	1.57	37	0.30	15	0.12
AL	0	0.0	1	0.04	1	0.07	0	0.0	161	5.65	156	7.24	39	1.67	47	0.94
SM	2	0.02	0	0.0	0	0.0	0	0.0	29	0.38	6	0.09	6	0.02	33	0.18
YP	5	0.10	43	0.98	15	0.43	2	0.10	1053	33.33	151	5.46	52	1.13	57	0.82
TP	27	0.29	36	0.38	33	0.35	25	0.31	2242	27.72	533	7.99	88	1.25	75	1.00
JD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00	1	0.00	0	0.0
LS	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.31
LT	0	0.0	0	0.0	0	0.0	0	0.0	1	3.17	1	0.02	1	0.02	0	0.0
LD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.01	1	0.01	1	0.01
SS	6	0.02	4	0.03	5	0.04	3	0.02	25	0.18	25	0.21	28	0.29	23	0.14
OL	0	0.0	0	0.0	0	0.0	0	0.0	1	1.00	0	0.0	0	0.0	0	0.0
SB	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00	0	0.0	0	0.0	0	0.0
GN	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GS	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00	3	0.01	2	0.01	0	0.0
XC	0	0.0	0	0.0	0	0.0	0	0.0	1	0.03	0	0.0	0	0.0	0	0.0
PS	0	0.0	0	0.0	0	0.0	0	0.0	2	0.07	0	0.0	0	0.0	0	0.0
KH	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
EC	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
BG	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00	1	0.01	0	0.0	0	0.0
BR	0	0.0	0	0.0	0	0.0	0	0.0	1	0.38	0	0.0	0	0.0	0	0.0
LB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
RB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GL	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00	0	0.0	0	0.0	0	0.0
YB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00	0	0.0	0	0.0
TOTALS	48	0.51	94	1.53	62	1.02	33	0.47	4334	78.49	1080	22.63	255	4.70	252	4.51
PERCENT	0.47	0.27	0.92	0.82	0.61	0.54	0.32	0.25	42.42	41.86	10.57	12.07	2.50	2.51	2.47	2.41

MONTH: - NOVEMBER, 1975

WEIGHT IN KILOGRAMS  
TEMPERATURE IN DEGREES CENTIGRADE  
PERCENTAGES ARE OF MONTH TOTALS

	17		18		19		20		21		22		23		24	
TEMP C	10.0		9.8		9.8		9.8		9.1		9.5		8.3		8.7	
SPECIES	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT
SP	10	0.05	9	0.09	9	0.10	7	0.08	92	0.67	97	0.65	17	0.13	9	0.08
AL	39	0.77	11	0.18	27	0.44	21	0.06	22	0.50	29	0.34	42	0.43	37	0.18
SM	7	0.03	0	0.0	4	0.01	3	0.01	16	0.06	10	0.11	12	0.02	6	0.09
YP	15	0.16	3	0.15	4	0.13	9	0.10	52	1.09	45	1.03	11	0.05	10	0.20
TP	51	0.63	36	0.47	41	0.53	113	1.44	338	4.24	301	4.10	40	0.55	14	0.17
JD	0	0.0	0	0.0	0	0.0	0	0.0	5	0.02	2	0.01	0	0.0	1	0.00
LS	0	0.0	0	0.0	0	0.0	1	1.90	1	1.34	0	0.0	0	0.0	0	0.00
LT	1	3.10	0	0.0	0	0.0	0	0.0	2	4.56	4	4.76	1	0.01	0	0.00
LD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.01	0	0.0	0	0.00
SS	15	0.12	8	0.10	2	0.01	11	0.09	11	0.09	7	0.07	11	0.13	5	0.03
CL	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.00
SB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.00
GN	0	0.0	0	0.0	0	0.0	1	0.00	0	0.0	0	0.0	0	0.0	0	0.00
GS	1	0.00	0	0.0	1	0.00	0	0.0	4	0.02	4	0.02	4	0.03	3	0.01
XC	0	0.0	0	0.0	0	0.0	1	0.01	0	0.0	0	0.0	0	0.0	0	0.00
FS	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.00
KJ	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.01
BC	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00	0	0.00
BG	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00	1	0.02	0	0.0	1	0.00
ER	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.00
LB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.00
RB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.00
GL	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.00
YB	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00	0	0.0	0	0.0	0	0.00
TOTALS	139	4.86	67	0.99	88	1.23	167	3.70	545	12.59	501	11.10	139	1.35	87	0.77
PERCENT	1.36	2.59	0.66	0.53	0.86	0.66	1.63	1.97	5.33	6.72	4.90	5.92	1.36	0.72	0.85	0.41

MONTH: NOVEMBER, 1975

WEIGHT IN KILOGRAMS  
TEMPERATURE IN DEGREES CENTIGRADE  
PERCENTAGES ARE OF MONTH TOTALS

	25		26		27		28		29		30		31			
TEMP C	8.0		7.8		7.7		7.1		6.8		6.7		-1.0		TOT. NO.	TOT. WT.
SPECIES	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT	NUMBER	WEIGHT		
SP	156	1.00	77	0.43	32	0.23	63	0.44	14	0.12	144	0.82	0	0.0	1929	14.92
AL	167	1.48	66	0.56	29	0.66	34	0.97	8	0.07	19	0.70	0	0.0	1005	23.23
SM	7	0.02	12	0.10	15	0.08	6	0.05	6	0.05	11	0.03	0	0.0	198	1.47
YP	40	1.10	23	0.57	10	0.04	43	0.37	1	0.00	42	0.21	0	0.0	1744	49.04
TP	494	6.55	87	1.17	68	0.78	64	0.83	15	0.18	98	1.16	0	0.0	4921	63.28
JD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	0.05
LS	1	1.40	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.95
LT	2	0.02	1	3.63	0	0.0	2	2.38	0	0.0	1	3.38	0	0.0	17	25.04
LD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.05
SS	19	0.15	17	0.11	13	0.11	16	0.14	5	0.03	11	0.09	0	0.0	290	2.31
CL	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.00
SB	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00
GN	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00
GS	15	0.08	7	0.03	2	0.02	7	0.04	4	0.05	6	0.06	0	0.0	64	0.39
XC	1	0.00	0	0.0	0	0.0	0	0.0	0	0.0	2	0.01	0	0.0	5	0.05
PS	1	0.00	1	0.01	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.08
NH	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.01
EC	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00	0	0.0	0	0.0	2	0.01
EG	1	0.00	0	0.0	2	0.00	0	0.0	0	0.0	1	0.01	0	0.0	9	0.05
BR	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.67
LB	1	0.00	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00
RB	0	0.0	0	0.0	1	0.00	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00
GL	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.00
YB	1	0.00	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.01
TOTALS	906	11.86	291	6.60	172	1.93	235	5.22	54	0.51	335	6.46	0	0.0	10218	127.52
PERCENT	8.87	6.32	2.85	3.52	1.68	1.03	2.30	2.79	0.53	0.27	3.28	3.45	0.0	0.0	100.00	100.00