

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9901130007 DOC.DATE: 99/01/06 NOTARIZED: NO DOCKET #
 FACIL:50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana M 05000315
 AUTH.NAME AUTHOR AFFILIATION
 BRASSART,G:A. Indiana Michigan Power Co.
 SAMPSON,J.R. Indiana Michigan Power Co.
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 98-056-00:on 981211,hot leg nozzle gaps resulted in plant in being in unanalyzed condition.Analyses are being performed by W to resolve problem.Updated LER will be submitted by 990211.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 2
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
PD3-3 PD	1 1	STANG,J	1 1
INTERNAL: AEOD/SPD/RAB	2 2	AEOD/SPD/RRAB	1 1
FILE CENTER	1 1	NRR/DE/ECGB	1 1
NRR/DE/EELB	1 1	NRR/DE/EMEB	1 1
NRR/DRCH/HICB	1 1	NRR/DRCH/HOHB	1 1
NRR/DRCH/HQMB	1 1	NRR/DRPM/PECB	1 1
NRR/DSSA/SPLB	1 1	RES/DET/EIB	1 1
RGN3 FILE 01	1 1		
EXTERNAL: L ST LOBBY WARD	1 1	LITCO BRYCE,J H	1 1
NOAC POORE,W.	1 1	NOAC QUEENER,DS	1 1
NRC PDR	1 1	NUDOCS FULL TXT	1 1

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL DESK (DCD) ON EXTENSION 415-2083

FULL TEXT CONVERSION REQUIRED

TOTAL NUMBER OF COPIES REQUIRED: LTTR 22 ENCL 22

C
A
T
E
G
O
R
Y

1

D
O
C
U
M
E
N
T

Indiana Michigan
Power Company
Cook Nuclear Plant
One Cook Plant
Bridgman, MI 49106
616 465 5901



January 6, 1999

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 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 Report System, the following interim report is being submitted:

LER 315/98-056-00, "Interim LER - Hot Leg Nozzle Gaps".

No commitments were identified in this submittal.

Sincerely,


J. R. Sampson
Site Vice President

/mbd
Attachment

c: J. L. Caldwell (Acting), Region III
R. P. Powers
P. A. Barrett
D. F. Kunsemiller
R. Whale
D. Hahn
Records Center, INPO
NRC Resident Inspector

9901130007 990106
PDR ADOCK 05000315
S PDR

LICENSEE EVENT REPORT (LER)

(See reverse for required number of
digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY
INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE
INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY.
FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND
RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY
COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION
PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC
20503

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Cook Nuclear Plant Unit 1	05000-315	1 of 1

TITLE (4)
Interim LER - Hot Leg Nozzle Gaps

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
12	11	1998	1998	-- 056 --	00	01	06	1999	DC Cook - Unit 2	05000-316
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
5			20.2201 (b)		20.2203(a)(2)(v)		50.73(a)(2)(i)		50.73(a)(2)(viii)	
POWER LEVEL (10)			20.2203(a)(1)		20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)	
00			20.2203(a)(2)(i)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71	
			20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER	
			20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or on NRC Form 368A	
			20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)			

LICENSEE CONTACT FOR THIS LER (12)	
NAME	TELEPHONE NUMBER (Include Area Code)
Mr. Gary A. Brassart - Nuclear Safety and Analysis Acting Supervisor	616-697-5631

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)									
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
X	YES	(If Yes, complete EXPECTED SUBMISSION DATE).		NO		02	11	1999

Abstract (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On October 23, 1998, the Westinghouse Owners Group (WOG) withdrew from consideration by the Staff WCAP-14486, "ECCS Hot Leg Recirculation Elimination for Westinghouse 3 and 4 Loop Design NSSS". The WCAP included analyses which showed that criticality would not occur on switchover to hot leg recirculation if credit was taken for the flow path of boric acid liquid through the reactor vessel hot leg nozzle gap. Recriticality resulting from switchover to hot recirculation was identified by Westinghouse during a review of the hot leg switchover methodology in the 1993 time frame, therefore analysis of recriticality on hot leg switchover was not part of the original Cook Plant license basis. During the fall of 1997 it was identified that issues regarding the Cook sump design would impact the existing hot leg switchover criticality calculation. The loss of margin that resulted from the partitioning of fluid between the active and inactive sump volumes was offset by taking credit for the WOG hot leg nozzle gap analysis. After the withdrawal of WCAP-14486, Westinghouse undertook studies to assess whether subcriticality on switchover to hot leg recirculation could be assured without taking credit for the hot leg nozzle gap. A successful result has been obtained for Unit 1 for the current fuel cycle by taking credit for existing burnup. However, an acceptable analysis for Unit 2 (or Unit 1 with a fresh core) is not available. As such, this condition was reported on December 11, 1998 under 10CFR50.72(b)(2)(i), a condition which was found while the reactor was shutdown, which had it been found while the reactor was operating, would have resulted in the nuclear power plant being in an unanalyzed condition. This LER is therefore submitted in accordance with 10 CFR 50.73(a)(2)(ii)(A) for an unanalyzed condition.

Analyses are currently being performed by Westinghouse to resolve this problem. A root cause investigation is underway, and is expected to be complete by January 28, 1999. An update to this interim LER will be submitted by February 11, 1999.

