REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS) DISTRIBUTION FOR INCOMING MATERIAL 50-331

REC: KEPPLER J G

ORG: HAMMOND E L

NRC

IA ELEC LIGHT & PWR

DOCDATE: 01/17/78

DATE RCVD: 01/24/78

DOCTYPE: LETTER

NOTARIZED: NO

COPIES RECEIVED LTR 0 ENCL 1

SUBJECT:

LICENSEE EVENT REPT (RO 50-331/78-002) ON 01/03/78 CONCERNING DURING SPECIAL

TESTING THE HPCI SYSTEM ISOLATED DUE TO TURBINE EXHAUST LINE DIAPHRAM

INDICATED HIGH PRESSURE DUE TO PSE 2213 DEVEOLPING PINHOLE LEAK.

PLANT NAME: DUANE ARNOLD

REVIEWER INITIAL: XJM

DISTRIBUTOR INITIAL:

******** DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS ************

INCIDENT REPORTS

(DISTRIBUTION CODE A002)

FOR ACTION:

BRANCH CHIEF LEAR**W/4 ENCL

INTERNAL:

REG FILE**W/ENCL

I & EFFW/2 ENCL

SCHROEDER/IPPOLITO**W/ENCL NOVAK/CHECK**W/FNCL

KNIGHT**W/ENCL

HANAUER**W/ENCL EISENHUT**W/ENCL

SHAO**W/ENCL

KREGER/J. COLLINS**W/ENCL

L. CROCKER**W/ENCL

NRC PDR**W/ENCL

MIPC**W/3 ENCL

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TEDESCO**W/ENCL

BAER**W/ENCL

VOLLMER/BUNCH**W/ENCL

ROSA**W/FNCL

EXTERNAL:

LPDR1S

CEDAR RAPIDS, IA**W/ENCL

TIC**W/ENCL NSIC**W/ENCL

ACRS CAT B**W/16 ENCL

DISTRIBUTION:

LTR 45

ENCL 45

CONTROL NBR:

780240048

SIZE: 1P+1P+1P

THE END

IOWA ELECTRIC LIGHT AND POWER COMPANY

P. O. Box 351
Cedar Rapids, Iowa 52406
January 17, 1978
DAEC-78-32

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



Subject: Licensee Event Report No. 78-002

(14 day)

File: A-118a

Dear Mr. Keppler:

In accordance with Appendix A to Operating License DPR-49, Technical Specifications and Bases for Duane Arnold Energy Center and Regulatory Guide 10.1, please find attached a copy of the subject Licensee Event Report. (Total of 3 copies transmitted)

Very truly yours,

Clery L. Hammond

Chief Engineer
Duane Arnold Energy Center

Docket 50-331 attachment

ELH/JVS/nf

Director, Office of Inspection and Enforcement (40)
 U. S. Nuclear Regulatory Commission
 Washington, D.C. 20555

780240048

Director, Management Information and Program Control (3) U. S. Nuclear Regulatory Commission Washington, D.C. 20555

LICENSEE EVENT REPORT

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ية ي	CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)
0 1	1 A D A C 1 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 1 5 5 CAT 58 5
CON'T	SOURCE 1 6 0 5 0 0 0 3 3 1 7 0 1 0 3 7 8 8 0 1 1 7 7 8 9 EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)
0 2	During special testing the HPCI system isolated due to turbine exhaust 1
0 3	ine diaphram high pressure. The exhaust diaphram is designed to prevent
0 4	excessive pressure build up in the HPCI turbine exhaust line and consist
0 5	s of two rupture disks, PSE 2213 and PSE 2214 in series, with pressure s
0 6	ensing instrumentation between. The HPCI system was declared inoperable
0 7	as a result of this event and an investigation begun. HPCI system operab
08	Lility requirements listed in Technical Specification 3.5.D.1.
0 9	SYSTEM CAUSE CAUSE CODE SUBCODE COMPONENT CODE SUBCODE SUBCODE SUBCODE S F 10 11 E 12 X 13 X X X X X X X X X X X X X X X X X
	LER/RO EVENT YEAR REPORT NO. 17 REPORT NUMBER 21 22 23 24 26 27 28 29 30 31 32
	ACTION FUTURE EFFECT SHUTDOWN HOURS (22) ATTACHMENT NPRD-4 PRIME COMP. COMPONENT MANUFACTURER SUBMITTED FORM SUB. PRIME COMP. SUPPLIER MANUFACTURER SUBMITTED FORM SUB. PRIME COMP. SUPPLIER MANUFACTURER X 19 9 9 9 (26) (27) (27) (27) (27) (27) (27) (27) (27
	Led sufficient pressure between the rupture disks to cause a HPCI syste
1 2	m isolation. Cause of leak unknown, PSE 2213 is a Continental Disk Corpo
	ration 16 inch rupture disk. The disk was replaced with a like-for-like
1 4	spare and the HPCI system tested and returned to service.
	FACILITY S POWER OTHER STATUS 30 METHOD OF DISCOVERY DESCRIPTION 32 E 28 0 9 7 29 NA C 31 Special Test
	10 10 10 10 10 10 10 10 10 10 10 10 10 1
1 7 8	PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION 39 NA NA
1 8	PERSONNEL INJURIES NUMBER DESCRIPTION 41 0 0 0 40 NA
7 8	9 11 12 LOSS OF OR DAMAGE TO FACILITY 43 TYPE DESCRIPTION NA
7 8	PUBLICITY ISSUED DESCRIPTION 45 NAC USE ONLY NA
7 8	9 10 68 69 80.5
	NAME OF PREPARER 0; Vali STERCI PHONE: 317-631-3611

DUANE ARNOLD ENERGY CENTER

Iowa Electric Light and Power Company

LICENSEE EVENT REPORT-Supplemental Data

Docket No. 050-0331

January 17, 1978

Licensee Event Report Date:

1-17-78

Reportable Occurrence No:

78-002

EVENT DESCRIPTION

During special testing the HPCI system isolated due to turbine exhaust line diaphram high pressure. The exhaust diaphram is designed to prevent excessive pressure build up in the HPCI turbine exhaust line and consists of two rupture disks, PSE 2213 and PSE 2214 in series, with pressure sensing instrumentation between. The HPCI system was declared inoperable as a result of this event and an investigation begun. HPCI system operability requirements listed in Technical Specification 3.5.D.l. Redundant ECCS's tested operable.

CAUSE DESCRIPTION

Investigation revealed PSE 2213 had developed a pinhole leak which created sufficient pressure between the rupture disks to cause a HPCI system isolation. The cause of the leak was not determined. PSE 2213 is a Continental Disk Corporation 16 inch rupture disk.

CORRECTIVE ACTION

The disk was replaced with a like-for-like spare and the HPCI system tested and returned to service. No further corrective action planned.

RECEIVED DOCUMENT

1718 JAN 21 AM 8 03

DISTRIBUTION SERVICES BRANCH