AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 6733

FILE:

FROM:	DATE OF DOC	DATE REC'D	LTR	TWX	RPT	OTHER
Iowa Electric Light & Power Co. Cedar Rapids, IO G. G. Hunt	7-16-74	7-23-74	X			

TO:	ORIG	CC	OTHER	SENT AEC PDR XXX SENT LOCAL PDR XXX
James G. Keppler	1 signed			

CLASS	UNCLASS	PROP INFO	INPUT	NO CYS REC'D	DOCKET NO:
	XXX			1	50-331

DESCRIPTION:

Ltr trans the following.....

ENCLOSURES:

Abnormal occurrence #50-331/74-16 of 7-6-74 re outboard injection valve did not close upon signal from control room.....

DO NOT REMOVE

PLANT NAME: DUANE ARNOLD

ACKNOWLEDGED
(1 cy encl rec'd)

FOR ACTION/INFORMATION 7 -24-74 GMC

BUTLER (L) W/ CYS	SCHWENCER (L) W/ CYS	ZIEMANN (L) W/ CYS	REGAN (E) W/ CYS
CLARK (L) W/ CYS	STOLZ (L) W/ CYS	DICKER (E) W/ CYS	✓LEAR W/7 CYS
[illegible] (L) W/ CYS	VASSALLO (L) W/ CYS	KNIGHTON (E) W/ CYS	W/ CYS
KNIEL (L) W/ CYS	PURPLE (L) W/ CYS	YOUNGBLOOD (E) W/ CYS	W/ CYS

INTERNAL DISTRIBUTION

✓REG FILE	TECH REVIEW	DENTON	LIC ASST	A/T IND
✓AEC PDR	✓HENDRIE	GRIMES	DIGGS (L)	BRAITMAN
✓OGC	✓SCHROEDER	GAMMILL	GEARIN (L)	SALTZMAN
✓MUNTZING/STAFF	✓MACCARY	KASTNER	GOULBOURNE (L)	B. HURT
✓CASE	✓KNIGHT	BALLARD	KREUTZER (E)	
GIAMBUSSO	✓PAWLICKI	SPANGLER	LEE (L)	PLANS
BOYD	✓SHAO		MAIGRET (L)	MCDONALD
MOORE (L)(LWR-2)	✓STELLO	ENVIRO	REED (E)	CHAPMAN
DEYOUNG (L)(LWR-1)	✓HOUSTON	MULLER	SERVICE (L)	DUBE w/input
SKOVHOLT (L)	✓NOVAK	DICKER	SHEPPARD (L)	E. COUPE
✓GOLLER (L)	✓ROSS	KNIGHTON	SLATER (E)	
P. COLLINS	✓IPPOLITO	YOUNGBLOOD	SMITH (L)	✓D. THOMPSON (2)
DENISE	✓TEDESCO	REGAN	✓TEETS (L)	✓KLECKER
✓REG OPR	✓LONG	PROJECT MGR	WILLIAMS (E)	✓EISENHUT
FILE & REGION (3)	✓LAINAS		WILSON (L)	
✓MORRIS	✓BENAROYA	HARLESS		
✓STEELE	✓VOLLMER			

EXTERNAL DISTRIBUTION

LB

✓1 - LOCAL PDR CEDAR RAPIDS, IO
✓1 - TIC (ABERNATHY)
✓1 - NSIC (BUCHANAN)
1 - ASLB
✓1 - P. R. DAVIS
✓16 - ACRS SENT TO LIC ASST TEETS 7-24-74

(1)(2)(10)-NATIONAL LABS
1-ASLBP(E/W Bldg, Rm 529)
1-W. PENNINGTON, Rm E-201 GT
1-B&M SWINEBROAD, Rm E-201 GT
1-CONSULTANTS
NEWMARK/BLUME/AGBABIAN

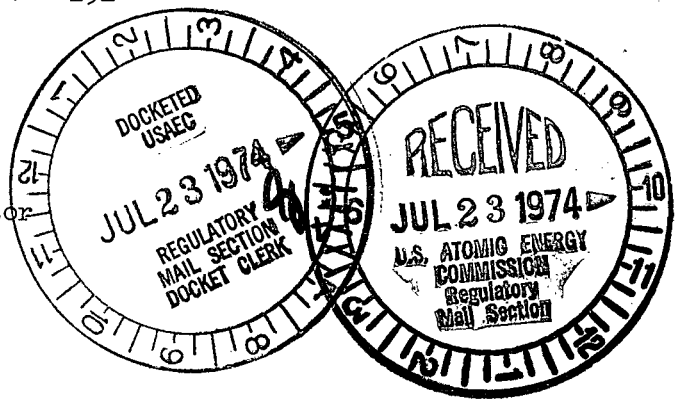
1-PDR-SAN/LA/NY
1-BROOKHAVEN NAT LAB
1-G. ULRIKSON, ORNL
1-AGMED (RUTH GUSSMAN) Rm B-127 GT
1-RD..MUELLER, Rm F-309 GT

IOWA ELECTRIC LIGHT AND POWER COMPANY

General Office

CEDAR RAPIDS, IOWA

DUANE ARNOLD ENERGY CENTER
PALO, IOWA
JULY 16, 1974
DAEC - 74 - 251



Mr. James G. Keppler, Regional Director
Directorate of Regulatory Operations
U. S. Atomic Energy Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

SUBJECT: Abnormal Occurrence No. 50-331/74-16
FILE: A-118a

Dear Mr. Keppler:

In accordance with Appendix A, Operating License DPR-49, Technical Specifications and Bases for Duane Arnold Energy Center, please find enclosed a written report on the subject abnormal occurrence. Mr. C. Feierabend, of your office, was notified of the occurrence on July 6, 1974.

Very truly yours,

G. G. Hunt
Chief Engineer
Duane Arnold Energy Center

DLW/GGH/mek
Enclosure

CC: John O'Leary
C. W. Sandford
J. A. Wallace
E. L. Hammond
B. R. York
D. L. Wilson
H. W. Rehrauer-Chairman, Safety Committee
L. D. Root
J. R. Newman
B. L. Hopkins

JUL 18 1974

6733

REGULATORY DOCKET FILE COPY

IOWA ELECTRIC LIGHT AND POWER COMPANY

General Office

CEDAR RAPIDS, IOWA

Subject:	Abnormal Occurrence
Report Number:	AO 50-331/74-16
Report Date:	July 16, 1974
Occurrence Date:	July 6, 1974
Facility:	Duane Arnold Energy Center, Unit #1, Plao, Iowa

Identification of Occurrence

Outboard Core Spray Injection Valve (MOV 2115) Condition, reportable per Appendix A, Operating License DPR-49, Specification 1.0.4.d.

Conditions Prior to Occurrence

1. Reactor in Hot Shutdown condition.
2. HPCI System inoperable.

Description of Occurrence

At approximately 0030 hours, during the performance of Core Spray System operability surveillance testing, normally open outboard injection valve (MOV-2115, Loop "A") did not close upon signal from the Control Room. Investigation revealed that the valve motor operator casing was fractured and that the motor had seperated from the clutch housing. The motor was subsequently removed and the valve manually operated to complete operability testing. After completion of the testing, the valve was physically locked in the open position.

Designation of Apparent Cause of Occurrence

The apparent cause of the occurrence was a mechanical fault in the housing between the motor and valve operator on MOV 2115. The fault allowed the motor to rotate and fall away from the valve operator when MOV 2115 was energized for surveillance testing. Investigation into the cause of the fault in the housing is continuing. The housing has been sent to the valve manufacturer for analysis and results of that analysis will be submitted in a supplementary report.

Analysis of Occurrence

Core Spray Loop "A" would have been capable of performing its' intended design function since MOV 2115 was in the open position when it was found to be inoperable. If MOV 2115 would have been in the closed position when the malfunction occurred, Core Spray Loop "A" would not have performed its' intended design function. However, it should be noted that even if Core Spray Loop "A" would have been non-operative, Core Spray Loop "B" would have provided redundant capabilities.

There was no apparent damage to the valve portion of MOV 2115 as a result of the occurrence.

Corrective Action

Following completion of the Core Spray operability tests, MOV 2115 was manually opened and locked in the open position. The valve will remain locked open, except for manual cycling during operability testing, until replacement parts are obtained and the valve motor is repaired, reinstalled, and tested.

Further corrective action to prevent repetition of the occurrence may be initiated after review of the manufacturers report on the examination of the fractured portions of the housing.

Failure Data

There have been no other occurrences of this type to date at this facility.

Following is equipment identification data for the valve motor operator:

Manufacturer: Limitorque Corporation
Identification No: Y 249 590 A2 LW

G. G. Hunt
Chief Engineer
Duane Arnold Energy Center

DLW/GGH/pd