

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 6733

FILE:

FROM: Iowa Electric Light & Power Co. Cedar Rapids, IO G. G. Hunt			DATE OF DOC 7-16-74	DATE REC'D 7-23-74	LTR X	TWX	RPT	OTHER
TO: James G. Keppler			ORIG 1 signed	CC	OTHER	SENT AEC PDR XXX SENT LOCAL PDR XXX		
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)	SCHWENCER (L)	ZIEMANN (L)	REGAN (E)
W/ CYS	W/ CYS	W/ CYS	W/ CYS
CLARK (L)	STOLZ (L)	DICKER (E)	LEAR
W/ CYS	W/ CYS	W/ CYS	W/7 CYS
W/ CYS	W/ CYS	W/ CYS	W/ CYS
KNIEL (L)	PURPLE (L)	YOUNGBLOOD (E)	
W/ CYS	W/ CYS	W/ CYS	

INTERNAL DISTRIBUTION

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

EXTERNAL DISTRIBUTION

<input checked="" type="checkbox"/> 1 - LOCAL PDR CEDAR RAPIDS, IO	(1)(2)(10)-NATIONAL LABS	1-PDR-SAN/LA/NY
<input checked="" type="checkbox"/> 1 - TIC (ABERNATHY)	1-ASLBP(E/W Bldg, Rm 529)	1-BROOKHAVEN NAT LAB
<input checked="" type="checkbox"/> 1 - NSIC (BUCHANAN)	1-W. PENNINGTON, Rm E-201 GT	1-G. ULRIKSON, ORNL
1 - ASLB	1-B&M SWINEBROAD, Rm E-201 GT	1-AGMED (RUTH GUSSMAN)
1 - P. R. DAVIS	1-CONSULTANTS	Rm B-127 GT
<input checked="" type="checkbox"/> 16 - ACRS SENT TO LIC ASST TEETS 7-24-74	NEWARK/BLUME/AGBABIAN	1-RD..MUELLER, Rm F-309

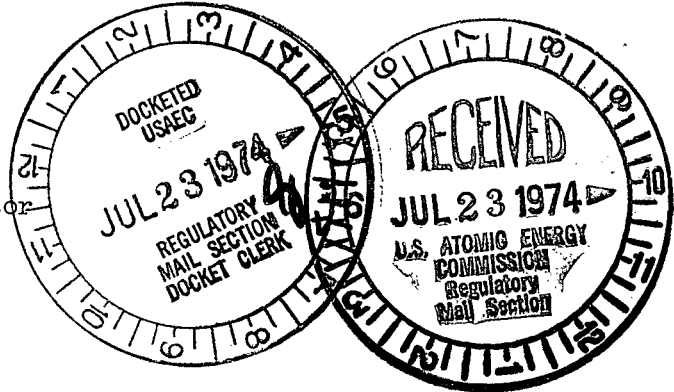
GT

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

REGULATORY DOCKET FILE COPY

6733

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