

**NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL  
(TEMPORARY FORM)**

CONTROL NO: **9296**

FILE: INCIDENT REPORT FILE

5-4

FROM: Iowa Electric Light&Pwr Cedar Rapids, Ia G G Hunt		DATE OF DOC 8-22-75	DATE REC'D 9-2-75	LTR XXX	TWX	RPT	OTHER
TO: Mr Keppler		ORIG none signed	CC	OTHER	SENT AEC PDR <u>XX</u>		SENT LOCAL PDR <u>XX</u>
CLASS	UNCLASS XXXXXXXXXX	PROP INFO	INPUT	NO CYS REC'D 1	DOCKET NO: 50-331		

DESCRIPTION:

Ltr trans the following:

ENCLOSURES:

Abnormal Occurrence # 75-45 on 8-14-75 concern  
ing failure of 2 control rods to fully insert  
on automatic scram.....

PLANT NAME: Duane Arnold

FOR ACTION/INFORMATION

9-2-75

ehf

BUTLER (L) W/ Copies	SCHWENCER (L) W/ Copies	ZIEMANN (L) W/ Copies	REGAN (E) W/ Copies
CLARK (L) W/ Copies	STOLZ (L) W/ Copies	DICKER (E) W/ Copies	LEAR (L) W/ Copies
PARR (L) W/ Copies	VASSALLO (L) W/ Copies	KNIGHTON (E) W/ Copies	SPELS W/ Copies
KNIEL (L) W/ Copies	PURPLE (L) W/ Copies	YOUNGBLOOD (E) W/ Copies	

**DO NOT REMOVE**

**ACKNOWLEDGED**

INTERNAL DISTRIBUTION

<del>REG FILE</del> NRC PDR OGC, ROOM P-506A GOSSICK/STAFF CASE GIAMBUSO BOYD MOORE (L) DEYOUNG (L) SKOVHOLT (L) GOLLER (L) (Ltr) P. COLLINS DENISE REG OPR FILE & REGION (2) MIPC/PE (3) STEELE	TECH REVIEW <del>SCHROEDER</del> MACCARY KNIGHT PAWLICKI SHAO **STELLO **HOUSTON **NOVAK ROSS IPPOLITO TEDESCO J. COLLINS LAINAS VOLLMER	DENTON **GRIMES GAMMILL KASTNER BALLARD SPANGLER  ENVIRO MULLER DICKER KNIGHTON YOUNGBLOOD REGAN PROJECT LDR HARLESS	LIC ASST R. DIGGS (L) H. GEARIN (L) E. GOULBOURNE (L) P. KREUTZER (E) J. LEE (L) M. RUSHBROOK (L) S. REED (E) M. SERVICE (L) S. SHEPPARD (L) M. SLATER (E) H. SMITH (L) S. TEETS (L) G. WILLIAMS (E) V. WILSON (L) R. INGRAM (L) M. DUNCAN (E)	A/T IND. BRAITMAN SALTZMAN MELTZ  PLANS MCDONALD CHAPMAN DUBE (Ltr) E. COUPE PETERSON HARTFIELD (2) KLECKER EISENHUT WIGGINTON F. WILLIAMS HANAUER
--	--	--	--	--

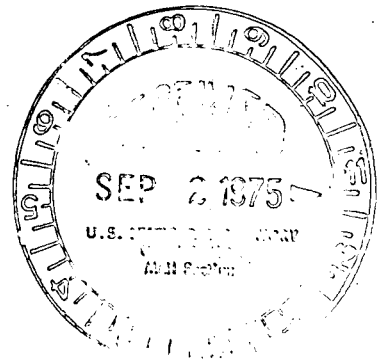
EXTERNAL DISTRIBUTION

1 - LOCAL PDR <i>Cedar Rapids, Ia</i>	1 - NATIONAL LABS	1 - PDR-SAN/LA/NY
1 - TIC (ABERNATHY) (1)(2)(10)	1 - W. PENNINGTON, Rm E-201 GT	1 - BROOKHAVEN NAT LAB
1 - NSIC (BUCHANAN)	1 - CONSULTANTS	1 - G. ULRIKSON, ORNL
1 - ASLB	NEWMARK/BLUME/AGBABIAN	1 - AGMED (RUTH GUSSMAN) Rm B-127 GT
1 - Newton Anderson		1 - J. D. RUNKLES, Rm E-201 GT
1 - ACRS SENT TO LIC ASST <i>Teets</i>		
** SEND ONLY TEN DAY REPORTS		

*Old*

## IOWA ELECTRIC LIGHT AND POWER COMPANY

General Office

CEDAR RAPIDS, IOWA  
DUANE ARNOLD ENERGY CENTER  
PALO, IOWAAUGUST 22, 1975  
DAEC - 75 - 334

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: Abnormal Occurrence No. AO 50-331/75-45

File: A-110, 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 final written report on the subject abnormal occurrence.

Very truly yours,

G. G. Hunt  
Chief Engineer  
Duane Arnold Energy Center

Docket 50-331

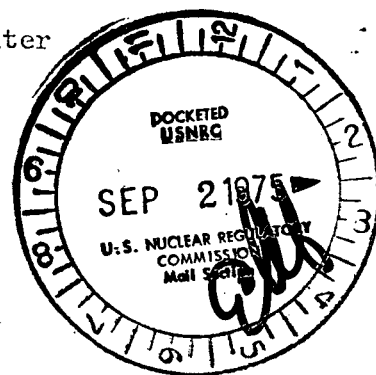
attachment

GGH/mg

cc: Director, Office of Nuclear Reactor Regulation (1)  
U. S. Nuclear Regulatory Commission  
1717 H Street N.W.  
Washington, D.C. 20545

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

Director, Management Information and Program Control (1)  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555



# IOWA ELECTRIC LIGHT AND POWER COMPANY

*General Office*

CEDAR RAPIDS, IOWA

Subject: Abnormal Occurrence

Report Number: 50-331/75-45

Report Date: August 22, 1975

Occurrence Date: August 14, 1975

Facility: Duane Arnold Energy Center, Unit No. 1, Palo, Iowa

## Identification of Occurrence

Failure of two control rods to fully insert on automatic scram, reportable in accordance with Appendix A to Operating License DPR-49, Specification 1.0.4.d.

## Conditions Prior to Occurrence

Reactor at steady-state power  
988 MWth  
337 MWe

## Description of Occurrence

While performing a control rod verification following an automatic reactor scram, it was determined that control rods 22-23 and 30-27 had not fully inserted. The indicated post scram position for both rods was 02 (one notch out).

## Designation of Apparent Cause of Occurrence

The cause of the occurrence is suspected to be worn or leaking piston seal rings in the drive mechanisms of the control rods.

## Analysis of Occurrence

The failure of the control rods to insert fully did not present an unsafe plant condition. The suspected worn or leaking piston seal rings in the drive mechanisms will not prevent the control rods from performing their design shutdown function. Both control rods successfully passed scram time testing at 200 lbs. and met the requirements for operable control rods as specified in the Technical Specifications.

August 22, 1975

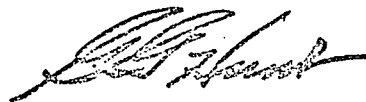
Corrective Action

Following the automatic reactor scram and when the reactor pressure was 200 lbs., control rods 22-23 and 30-27 were successfully scram time tested.

Control rods 22-23 and 30-27 will also be scram time tested at rated reactor pressure just prior to the next scheduled reactor shutdown. The nuclear steam supply vendor has advised that such testing should indicate whether or not the control rods have worn or leaking piston seal rings in the drive mechanisms.

Conclusion

This report was reviewed and approved by the DAEC Operations Committee on August 22, 1975. The Committee concluded that the occurrence did not present a hazard to the health and safety of the public.



G. G. Hunt  
Chief Engineer  
Duane Arnold Energy Center

DLW/GGH/mg

# IOWA ELECTRIC LIGHT AND POWER COMPANY

*General Office*

CEDAR RAPIDS, IOWA  
DUANE ARNOLD ENERGY CENTER  
PALO, IOWA  
AUGUST 15, 1975  
DAEC - 75 - 319

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

75-45

SUBJECT: Abnormal Occurrence

FILE: A-110, A-118a

Dear Mr. Keppler:

In accordance with DAEC Technical Specifications, Specification 6.11.2.A.1, this letter is a notification of an abnormal occurrence at the Duane Arnold Energy Center on August 14, 1975. This letter, telecopied to your office, is intended to satisfy the requirements for notification by telegram within 24 hours of an abnormal occurrence.

## Identification of Occurrence

Failure of two control rods to fully insert on automatic scram, reportable in accordance with Appendix A to Operating License DPR-49, Specification 1.0.4.d.

## Description of Occurrence

While performing a verification that all control rods were fully inserted following an automatic reactor scram, it was determined that control rods 22-23 and 30-27 had not fully inserted. The indicated position of both rods was 02. (one notch out).

During a subsequent scram test, the subject control rods fully inserted as required.

Investigation is continuing.

A formal written report will be submitted to the Office of Inspection and Enforcement within 10 days of the subject abnormal occurrence.

Very truly yours,



G. G. Hunt  
Chief Engineer  
Duane Arnold Energy Center

DLW/GGH/mg

AUG 21 1975