

FILE:

FROM: Iowa Electric & Power Company Cedar Rapids, Iowa 52406 G. G. Hunt		DATE OF DOC 7-22-74	DATE REC'D 7-26-74	LTR X	TWX	RPT	OTHER
TO: J. G. Keppler		ORIG NONE	CC	OTHER	SENT AEC PDR X SENT LOCAL PDR X		
CLASS	UNCLASS XXX	PROP INFO	INPUT	NO CYS REC'D 1	DOCKET NO: 50-331		

DESCRIPTION:  
Ltr trans the following:

**DO NOT REMOVE  
ACKNOWLEDGED**

PLANT NAME: Duane Arnold Unit

ENCLOSURES:  
A0 50-331/74-21: Reporting abnormal occurrence on 7-22-74, regarding the HPCI didnot inject in to the vessel while performing Startup Test #15 & on 7-23-74 the HPCI injection didnot occur within the required minimum time.

( 1 cy rec'd )

FOR ACTION/INFORMATION

7-26-74 GC

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
DAVE (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

<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"/> COLLER (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	<input checked="" type="checkbox"/> 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
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, Iowa	(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) Rm B-127 GT
1 - P. R. DAVIS	1-CONSULTANTS	1-RD..MUELLER, Rm F-509 GT
<input checked="" type="checkbox"/> 16 - ACRS SENT TO LIC ASST TEETS 7-26-74	NEWARK/BLUME/AGBABIAN	

IOWA ELECTRIC LIGHT AND POWER COMPANY

General Office

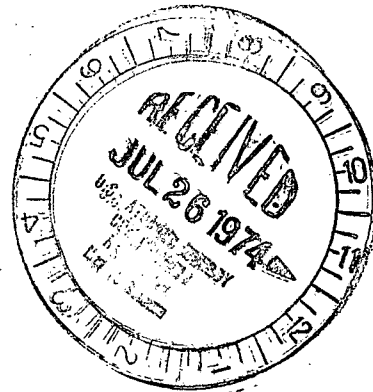
CEDAR RAPIDS, IOWA

DUANE ARNOLD ENERGY CENTER

PALO, IOWA

JULY 22, 1974

DAEC - 74 - 258



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. 50-331/74-21  
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 18, 1974.

It was originally intended to make this report in accordance with Specification 6.11.2A.2. However, while in the process of preparing the report, a reevaluation of available data indicated that the occurrence should be reported under Specification 1.0.4.d.

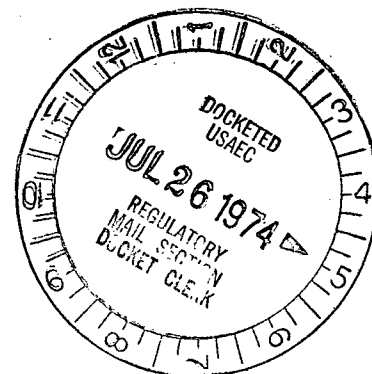
Very truly yours,



G. G. Hunt  
Chief Engineer  
Duane Arnold Energy Center

OCS/GGH/bh  
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



# IOWA ELECTRIC LIGHT AND POWER COMPANY

*General Office*  
CEDAR RAPIDS, IOWA

Subject: Abnormal Occurrence  
Report Number: AO 50-331/74-21  
Report Date: July 22, 1974  
Occurrence Date: June 22, 1974 and June 23, 1974  
Facility: Duane Arnold Energy Center, Unit No. 1, Palo, Iowa

## Identification of Occurrence

On June 22, 1974, HPCI did not inject into the vessel while performing Startup Test Instruction No. 15 (HPCI Injection) (Event 1). On June 23, 1974, HPCI injection did not occur within the required minimum time specified by STI-15 (Event 2). These events were identified as an abnormal occurrence in accordance with Appendix A, Operating License DPR-49, Specification 1.0.4.d.

## Conditions Prior to Occurrences

June 22 - Reactor and plant at steady state conditions, 725 MWt; preparing to commence STI-15 (Event 1).  
June 23 - Reactor and plant at steady state conditions, 857 MWt; preparing to commence STI-15 (Event 2).

## Description of Occurrence

June 22, 1974 (Event 1)

0858 - Commenced reducing power from 268 MWe to 220 MWe in preparation for performing STI-15.  
1030 - HPCI did not inject into the vessel; HPCI stop valve failed to open.  
1340 - Initiated surveillance required by Specification 4.5.D.2.  
1405 - Adjusted HPCI oil relief valve to 90 psi.  
1515 - HPCI tested satisfactorily.

The Office of the Directorate of Regulatory Operations for Region III was notified by telephone on June 22, 1974.

June 23, 1974 (Event 2)

2029 - Plant at 285 MWe - Completed HPCI automatic start test - failed to inject within required time.

2130 - Initiated surveillance required by Specification 4.5.D.2.

June 24, 1974

1400 - RCIC Subsystem and ADS Subsystem logic demonstrated to be operable.

June 25, 1974

1400 - RCIC Subsystem and ADS Subsystem logic demonstrated to be operable.

June 26, 1974

- Mechanical overspeed trip device repaired.

1910 - HPCI operable

The Office of the Directorate of Regulatory Operations for Region III was notified by telephone on July 18, 1974, followed by written notification by telecopier on the same day stating that both events had been classified as an abnormal occurrence.

#### Designation of Apparent Cause of Occurrence

The cause of Event 1 on June 22 was thought to be a low relief valve (PSV-2288) setting on the HPCI oil control system. It was thought to be relieving before the turbine stop valve could open.

After Event 2 on June 23 it was determined that a faulty mechanical overspeed trip device was the actual cause of both events. The piston in the trip device was undersized which allowed oil to port through it and momentarily actuate the trip device.

#### Analysis of Occurrence

The cause of the reportable occurrence is specified above. Operability tests verified that the RCIC System, the LPCI Subsystem, both Core Spray Subsystems, and the ADS Subsystem were capable of performing their intended functions.

Corrective Action

After the event on June 22, 1974, the relief valve setting was adjusted to the correct setting and the HPCI System was operated satisfactorily.

After the event on June 23, 1974, the vendor was notified of the problem with the trip device; the piston in the device was replaced and the HPCI System was operated satisfactorily.

Conclusion

The contents of this report were reviewed and approved by the DAEC Operations Committee on July 22, 1974. 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

MLS:OCS:GGH:bh