

50-331

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER

INCIDENT REPORT

TO:

Mr. James G. Keppler

FROM:
Iowa Elec. Light & Pwr. Co.
Cedar Rapids, Iowa
Ellery L. Hammond

DATE OF DOCUMENT

8/24/77

DATE RECEIVED

9/6/77

LETTER
 ORIGINAL
 COPY

NOTORIZED
 UNCLASSIFIED

PROP

INPUT FORM

NUMBER OF COPIES RECEIVED

1 signed

DESCRIPTION

PLANT NAME: Duane Arnold
RJL 9/7/77 (1-P)

ENCLOSURE

Licensee Event Report (R0 50-331/76-66) on 10/15/76 (update report) concerning MSIV-LC subsystems A, B, and D being found inoperable....

**DO NOT REMOVE
ACKNOWLEDGED**

NOTE: IF PERSONNEL EXPOSURE IS INVOLVED
SEND DIRECTLY TO KREGER/J. COLLINS

1 CY ENCL Rec'd

FOR ACTION/INFORMATION

BRANCH CHIEF:	LEAR
W/ 3 CYS FOR ACTION	
LIC ASST.:	Parrish

INTERNAL DISTRIBUTION

REG FILE			
NRC PDR			
I & E (2)			
MIPC			
SCHROEDER/IPPOLITO			
HOUSTON			
NOVAK/CHECK			
GRIMES			
KNIGHT			
BUTLER			
HANAUER			
TEDESCO			
EISENHUT			
BAER			
SHAO			
VOLLMER/BUNCH			
KREGER/ J. COLLINS			
ROSA			

EXTERNAL DISTRIBUTION

LPDR: Cedar Rapids, IA.	
TIC:	
NSIC:	
ACRS (16) SENT AS CAT. B	

CONTROL NUMBER

772500134
R4
GD

D. Larson

IOWA ELECTRIC LIGHT AND POWER COMPANY

DUANE ARNOLD ENERGY CENTER
P. O. Box 351
Cedar Rapids, Iowa 52406

August 24, 1977
DAEC -77 - 435



Regulatory

File Cy.

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. UPDATE REPORT Previous
(14 day) Report Date 102976

File: A-118a

RO 76-66

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,

Ellery L. Hammond

Ellery L. Hammond
Chief Engineer
Duane Arnold Energy Center

Docket 50-331

attachment

ELH/DLW/mg

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

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

AUG 29 1977

772500134

LICENSEE EVENT REPORT

UPDATE REPORT
Previous report date
102976

CONTROL BLOCK:

--	--	--	--	--	--

(PLEASE PRINT ALL REQUIRED INFORMATION)

LICENSEE NAME						LICENSE NUMBER										LICENSE TYPE				EVENT TYPE									
01	I	A	D	A	C	1	0	0	-	0	0	0	0	0	-	0	0	4	1	1	1	1	0	1					
7	8	9	14	15	25	26	30	31	32																				
01		CON'T		CATEGORY		REPORT TYPE		REPORT SOURCE		DOCKET NUMBER						EVENT DATE				REPORT DATE									
01										0	5	0	-	0	3	3	1	1	0	1	5	7	6	0	8	2	2	7	7
7	8	57	58	59	60	61	66	69	74	75																			

EVENT DESCRIPTION

02 | During testing, MSIV-LC subsystems A, B, and D were found inoperable. Subs
7 8 9
03 | ystems B and D were exercised and made operable. The plant was shutdown
7 8 9
04 | on Oct. 23 and subsystem A was made operable. A nonconformance review
7 8 9
05 | was performed. Review determined LCS valves capable of performing desig
7 8 9
06 | n function. LCS also meets design objectives. All LCS MOV's disassembl
7 8 9

SYSTEM CODE		CAUSE CODE		COMPONENT CODE				PRIME COMPONENT SUPPLIER		COMPONENT MANUFACTURER			VIOLATION		
07	C	D	D	V	A	L	V	O	P	N	L	2	0	0	Y
7	6	9	10	11	12	17	43	44	47	48					

CAUSE DESCRIPTION

08 | Motor operated valves were not adequately adjusted following initial
7 8 9
09 | installation of system. No previous experience available on valve oper
7 8 9
10 | ators to determine o timum settings.
7 8 9

FACILITY STATUS		% POWER			OTHER STATUS			METHOD OF DISCOVERY		DISCOVERY DESCRIPTION					
11	E	0	9	3	NA			B	Surveillance Test						
7	8	9	10	12	13	44	45	46							

FORM OF ACTIVITY RELEASED		CONTENT OF RELEASE		AMOUNT OF ACTIVITY				LOCATION OF RELEASE					
12	E	Z	NA				NA						
7	8	9	10	11	44	45							

PERSONNEL EXPOSURES

NUMBER		TYPE		DESCRIPTION							
13	0	0	0	Z	NA						
7	8	9	11	12	13						

PERSONNEL INJURIES

NUMBER		DESCRIPTION								
14	0	0	0	NA						
7	8	9	11	12						

OFFSITE CONSEQUENCES

15		NA						
7	8	9						

LOSS OR DAMAGE TO FACILITY

TYPE		DESCRIPTION							
16	Z	NA							
7	8	9	10						

PUBLICITY

17		NA						
7	8	9						

ADDITIONAL FACTORS

18 | Event Desc. Cont. - ed, inspected and reworked as needed during 1977
7 8 9
19 | refuel. Rework and adjustments followed by testing. (RO 76-66)
7 8 9

NAME: D. Wilson PHONE: 319-851-5611

DUANE ARNOLD ENERGY CENTER

Iowa Electric Light and Power Company

LICENSEE EVENT REPORT-Supplemental Data

Licensee Event Report Date: 082277

Reportable Occurrence No: 76-66

Corrective Action

During its first year of operation, repetitive problems were experienced with the MSIV Leakage Control System involving inoperable and leaking motor operated valves. As a result of the problems, a comprehensive design function and the overall capability of the leakage control system to perform its intended function.

The design review determined that all MOV's in the leakage control system are capable of fulfilling the requirements specified by initial system design. The problems experienced with the MOV's during the first year of operation apparently were the result of inadequate adjustments during initial system testing. The "SB" type operators installed on the MOV's in the leakage control systems were the first ones used at this facility and no operating experience was available to determine optimum operator adjustments.

In addition to verifying adequacy of the motor operators, the design review verified that the overall MSIV-leakage control system as designed and installed is capable of performing its intended function.

Although the design adequacy of the leakage control system was verified during the design review, several recommendations resulted which are possible sources of improvement in system reliability. The recommendations are now being evaluated and will be implemented as deemed appropriate. One of the recommendations under evaluation is provision for a method of draining prior to system startup or initiation. Plant personnel are also evaluating the possibility of including the safety related valve operators in the plant preventive maintenance program.

During the 1977 refuel outage, all of the MSIV leakage control system motor operated valves were disassembled, inspected and reworked as appropriate. No significant problems have been experienced with the valves since completion of the rework.

RECEIVED DOCUMENT
PROCESSING UNIT

1977 SEP 6 PM 1 51