# () DUANE ARNOLD ENERGY CENTER

UNIT #1 PALO, IOWA

Commercial Service Date: February 1, 1975

DINSERVICE INSPECTION SUMMARY REPORT

September 11,1990 through April 27.1992

Dated: July 8,1992

OWNER:

IOWA ELECTRIC LIGHT and POWER COMPANY P.O. Box 351 Cedar Rapids, Iowa 52406

Prepared by:

ASME/NDE Specialist

Reviewed by:

Codes & Materials, GL

Concurred by:

Binnin

Supervising Engineer, Mech. Eng.

Approved by:

Manager, Engineering

Date: 7/8/92

Date: 7/14/92

Date: 7/14-92

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### FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

# As required by the Provisions of the ASME Code Rules

· 1 Owner Iow	a Electric Light & Power	Company, P.O.	Box 351, Ceda	r Rapids, IA	52406
1. Owner	(Name and Ac	idress of Owner)		(	Note 2
2. PlantDua	ne Arnold Energy Center,	3277 DAEC Roa	d, Palo, IA 5	2324	
z. Hant	(Name and A	ddress of Plant)			
3. Plant Unit	1 4. Owner Certif	icate of Authorizati	ion (if required) <u>N</u>	/A	
5. Commercial Se	ervice Date $02-01-75$ 6. National	Board Number for	Unit N/A		
	nspected This report includ B (PP1-8), Part C(P1), Pa				-2) <b>,</b>
Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.	
Reactor Press Vessel (RPV)	Chicago Bridge & Iron	3-4833	N/A	3663	1
Refer to Part	B, Pages 1-6, of this re	port for cont	nuation of		
					}
	·				
					]
					1

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

<sup>\*</sup> Part F (PP1-4), Part G (PP1-91), Part H (P1), Part I (PP1-46), Part J (PP1-7), Part K (P1)

This form (E00029) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

# FORM NIS-1 (back)

8. Examination Dates $9/11/90$ to $4/27/92$ 9. Inspection Interval from $11/01/85$ to $11/01/95$
<ol> <li>Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval.</li> </ol>
Refer to Part C, Part D, and Part J
11. Abstract of Conditions Noted  Refer to Part H
12. Abstract of Corrective Measures Recommended and Taken
Refer to Part H
We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI. (See Note 1 Below)  Da:  19 92 Signed Lowa Electric Light By Army Many Report Appendix By Army Many Report Rep
Ct ate of Authorization No. (if applicable) N/A Expiration Date N/A
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Iowa and employed by Hartford Boiler Co. of Hartford, Ct. have inspected the components described in this Owners' Data Report during the period to 09/11/90 to 04/27/92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied,
concerning the examinations and corrective measures described in this Owners' Data Report, Furthermore,
neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
1 2 1055 of any kind arising from or connected with this inspection.
Date
Cillian Mulla Commissions NB 2542 I'N" Is 1046
Inspector's Signature National Board, State, Province and No.
Note 1: As per letter NG-89-3390, the ASME Section XI "Vessels", RHR Heat Exchangers IE-201A and IE-201B and the Reactor

Vessel are excluded from the Summary Report to the State.

Note 2: Other owners are Central Iowa Power Cooperative and Corn Belt Power

Cooperative.

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

CERTIFICATE OF INSERVICE INSPECTION

#### COMPONENTS EXAMINED:

### Reactor Pressure Vessel:

Manufacturer: Chicago Bridge and Iron

Post Office Box 13308 Memphis, TN 38113

National Board Number 3663, Mfr. Serial Number 3-4833

Refer to Part A, Page 1, form NIS-1, Owners Data Report for Inservice Inspections.

# Piping:

Manufacturers, sizes, part numbers and locations are noted and traceable through the piping isometric and piping instrumentation drawings (P&ID). Installation contractor, fabricator, systems P&ID's and isometric drawings are listed below.

Constructor - Bechtel Power Co. P.O. Box 3865 San Francisco, CA 94119

Fabricator - Southwest Fabricating and Welding Co. P.O. Box 9449
Houston, TX 77011

# INSERVICE INSPECTION REPORT

September 11,1990 through April 27,1992

PART B pages 2 of 8

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

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GROSS GENERATING CAPACITY: 565 MWE

CERTIFICATE OF INSERVICE INSPECTION

#### COMPONENTS EXAMINED:

### Class 1 Components:

Reactor Pressure Vessel	Figure 1.1-5 and 1.1-6
Control Rod Drive	Figure 1.1-8A and 1.1-8B
Main Steam Loops A, B, C, and D	P&ID M-103, GE Drawing 731E615, ISO Nos. 1.2-1, 1.2-2, 1.2-3, and 1.2-4
Feedwater A and B	P&ID M-114, Bechtel ISO DLA-2-4, ISO No. 1.2-5
Feedwater C and D	P&ID M-114, Bechtel Drawing DLA-2-4, ISO No. 1.2-6
Core Spray B	P&ID M-121, Bechtel Drawings DLA-8-1, ISO No. 1.2-8
High Pressure Coolant Injection - Steam	P&ID M-122, Bechtel Drawing DBA-3-1, ISO No. 1.2-9

PART B pages 3 of 8

# INSERVICE INSPECTION REPORT September 11,1990 through April 27,1992

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GROSS GENERATING CAPACITY: 565 MWE

CERTIFICATE OF INSERVICE INSPECTION

#### COMPONENTS EXAMINED:

High Pressure Coolant Injection - Water	P&ID M-123, Bechtel Drawing DLA-1-1, ISO No. 1.2-10
Reactor Water Cleanup - Suction	P&ID M-127, Bechtel Drawing DCA-6-1, ISO No. 1.2-11A
Reactor Water Cleanup - Discharge	P&ID M-127, Bechtel Drawing DCA-14-1, ISO No. 1.2-11B
Control Rod Drive Return	P&ID M-117, Bechtel Drawing DBA-6-1, ISO No. 1.2-12A
Residual Heat Removal - 20A	P&ID M-120, Bechtel Drawing DLA-5-1, ISO No. 1.2-15
Residual Heat Removal - 20B	P&ID M-120, Bechtel Drawing DLA-6-1, ISO No. 1.2-16
Reactor Core Isolation Cooling - Steam	P&ID M-124, Bechtel Drawing DBA-4-1, ISO No. 1.2-17

PART B pages 4 of 8

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

> Central Iowa Power Cooperative Corn Belt Power Cooperative Marion, IA. Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
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GROSS GENERATING CAPACITY: 565 MWE

CERTIFICATE OF INSERVICE INSPECTION

#### COMPONENTS EXAMINED:

Reactor Core Isolation Cooling - Water P&ID M-125, Bechtel Drawing DBA-7-1, ISO

No. 1.2-18

Recirculation Pump B and Bypass P&ID M-116,

Drawing 731E781, APED B31-9, ISO No.

1.2-21A

Recirculation B Drain Line P&ID M-116,

Drawing 731E781, APED B31-9, ISO No.

1.2-21B

Recirculation Manifold B and Risers B,

and C

P&ID M-116, GE

Drawing 731E781,

APED B31-9, ISO No.

1.2-22

Head Vent

P&ID M-114, APED B11-2655-104-3, ISO

No. 1.2-24

Standby Liquid Control

P&ID M-126, Bechtel Drawings FSK-03734 and 03992, ISO No.

1.2-27

PART B pages 5 of 8

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GROSS GENERATING CAPACITY: 565 MWE

CERTIFICATE OF INSERVICE INSPECTION

#### COMPONENTS EXAMINED:

Vessel Instrumentation N-11A P&ID M-115, Bechtel Drawing FSK-5560, ISO No. 1.2-28

Bottom Head Drain

P&ID's M-116 and
M-127, Bechtel
Drawing FSK-03352B,
ISO No. 1.2-32

Vessel Instrumentation N-16B P&ID M-115, Bechtel Drawing FSK-5556, ISO No. 1.2-34

Main Steam Drain Common P&ID M-114, Bechtel Drawing FSK-04220B, ISO No. 1.2-35

PART B pages 6 of 8

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GROSS GENERATING CAPACITY: 565 MWE

CERTIFICATE OF INSERVICE INSPECTION

#### COMPONENTS EXAMINED:

# Class 2 Components:

RHR Heat Exchanger A P&ID M-120, PERFEX Drawings C-7212-S-119 and D-7212-S-100, 108, 109, ISO

No. 2.1.1

RHR Heat Exchanger Steam Supply

P&ID's M-119, M-120, M-122, Bechtel Drawing M-723, ISO

No.  $2.\overline{2}-35$ 

RHR Pump Discharge (SE)

P&ID M-120, Bechtel Drawing M-714, ISO

No.  $2.\bar{2}-36$ 

RHR Pump Discharge (NW)

P&ID M-119, Bechtel Drawing M-715, ISO

No. 2.2-39

RHR Heat Exchanger Discharge (NW)

P&ID M-119, Bechtel Drawing M-721, ISO

No. 2.2-40

RHR Fuel Pool Cooling

P&ID's M-119 and M-134, Bechtel Drawings HBB-25-1, 2, 3, 4, and 5, ISO No. 2.2-43

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- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date:  $\frac{2/1/75}{}$
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

CERTIFICATE OF INSERVICE INSPECTION

### COMPONENTS EXAMINED:

HPCI Pump Suction

P&ID M-123, Bechtel

Drawing M-700, ISO

No. 2.2-44

HPCI Pump Discharge P&ID M-123, Bechtel Drawing M-701, ISO No. 2.2-45

Core Spray Discharge (SE)

P&ID's M-119 and M121, Bechtel Drawing
M-710, ISO No. 2.249

Core Spray Suction (NW)

P&ID M121, Bechtel

Drawing M-709, ISO

No. 2.2-51

Core Spray Discharge (NW)

P&ID M-121, Bechtel
Drawing M-711, ISO
Nos. 2.2-52A and B

Main Steam Loop B P&ID M-103, Bechtel Drawing M-716, ISO No. 2.2-54

Main Steam Loop C

P&ID M-103, Bechtel

Drawing M-716, ISO

No. 2.2-55

PART B pages 8 of 8

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GROSS GENERATING CAPACITY: 565 MWE

CERTIFICATE OF INSERVICE INSPECTION

# COMPONENTS EXAMINED:

Main Steam Loop D

P&ID M-103, Bechtel Drawing M-716, ISO No. 2.2-56

Scram Discharge Header (N)

P&ID M-118, FCN-1323, ISO No. 2.2-61

# PART C pages 1 of 1

# INSERVICE INSPECTION REPORT September 11,1990 through April 27,1992

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

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GROSS GENERATING CAPACITY: 565 MWE

CERTIFICATE OF INSERVICE INSPECTION

### COMPONENTS EXAMINED:

### ABSTRACT:

The Inservice Inspection addressed in this report was performed in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI 1980 Edition through Winter 1981 Addenda, and the Duane Arnold Energy Center updated Final Safety Analysis Report. The inspections were performed utilizing Non-Destructive Examination Techniques (i.e., UT, PT, MT, etc.). The examinations were conducted during the period of September 11, 1990 through April 27, 1992. The specific details and associated records of the examinations are on file at Iowa Electric Light and Power Company.

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 1 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Corn Belt Power Coop. Humboldt, IA. Central Iowa Power Coop. Marion, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324
Plant Unit: #1
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Commercial Service Date: 2/1/75
National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT CATEGORY RESULTS COMPONENT DESCRIPTION REACTOR VESSEL 1.1-05 B-H ACCEPTED 91-123 MT **COMMENTS: RPV** RV HEAD B-H ACCEPTED LÚG (112AZ) 91-124 MT **COMMENTS: RPV** B-HACCEPTED RV HEAD LÙG (202AZ) 91-125 MT **COMMENTS: RPV** MSB-D001 1.1-06 B-DNRI **COMMENTS: RPV** MSB-D001-INNER RAD B-DNRI 91-133 UT70

44

**RPV** VIC-D001-INNER RAD

91-137

UT70

B-D

B-D

NRI

NRI

**COMMENTS:** 

**RPV** 

VIF-D001

**COMMENTS:** 

PART D pages 3 of 52

ACCEPTED

B-G-2

**COMMENTS:** 

1R215(38-27)

CRD

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 6 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT COMPONENT DESCRIPTION **CATEGORY** RESULTS CRD 1R215(14-B-G-2 ACCEPTED **COMMENTS:** CRD 1R215(22-39) B-G-2ACCEPTED **COMMENTS:** CRD 1R215(26-03) B-G-2ACCEPTED **COMMENTS:** CRD 1R215(26-B-G-2 ACCEPTED 91-426 92-020 **COMMENTS:** CRD B-G-2 ACCEPTED

**COMMENTS:** 

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INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 8 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324
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Commercial Service Date: 2/1/75
National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT COMPONENT DESCRIPTION CATEGORY RESULTS **MSA** MSA-K040 F-CACCEPTED 91-002 **COMMENTS:** MSA PSV-4400 B-M-2 **ACCEPTED** 92-034 VT-3 COMMENTS:S/N 189 MSA PSV-4400-A-BOLTING 92-035 VT-1 B-G-2 **ACCEPTED COMMENTS:** LINEAR INDICATION ON BOLT IN POSITION 6, BOLT REPLACED - ACCEPTED BY REPLACEMENT MSA PSV-4401-A-BOLTING B-G-2 ACCEPTED 92-037 VT-1

COMMENTS: ALL BOLTS/NUTS REPLACED(REF NIS2 11-92-22)

B-M-2

ACCEPTED

PSV-4401

**VT-3** 

**COMMENTS:** 

MSA

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992  PART D pages 9 of 5										
1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406										
Central Iowa Power Coop.  Marion, IA.  Corn Belt Power Coop.  Humboldt, IA.										
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	NERATING CAPAC				CAMTON DEC	ODDG				
C	OMPONENT AND W			ISI	CATION REC	OKDS				
COMPONEN	T DESCRIPTI	ON REF	ORT	ÎSÔ NUM.	CATEGORY	RESULTS				
MSA	CV-4413	92-067	<b>VT</b> -3		B-M-2	ACCEPTED				
	COMMENTS: REPA	IR OF LIN	EAR INDI	CATION.	RESULTANT	CAVITY 1/4'	•			
MAIN STE	EAM B PSV-4402		VT-3 1.		B-M-2	ACCEPTED				
MSB	COMMENTS:S/N		D-M-2	ACCEPTED						
	PSV-4403	92-048	<b>VT</b> -3		B-M-2	ACCEPTED				
wan	COMMENTS: CAST	ING FLAWS	GUIDE							
MSB	MSB-J024	91-148 91-149	МТ		B-J	NRI				
		91-149	ŪT45							
	COMMENTS:									
MSB	MSB-J026	91_150	MT		B-J	NRI				
		91-150 91-151	ΰ <b>†</b> 45							
	COMMENTS:									
MSB	MSB-J029			B-J		NRI				
		91-152 91-153	MT UT45		<del>-</del> -					

PART D pages 9 of 52

COMMENTS:

**MSB** 

MSB-K012B

91-005 VT-3

F-C ACCEPTED

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 1) Owners: Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS **CATEGORY** RESULTS DESCRIPTION COMPONENT MSB ACCEPTED PSV-4402-A-BOLTING B-G-2 92-039 VT-1 **COMMENTS:** MSB B-G-2 . ACCEPTED PSV-4403-A-BOLTING 92-046 VT-1 **COMMENTS:** (REF. NIS2 11-92-41) MAIN STEAM C **ACCEPTED** CV-4419-BOLTING 1.2-03 B-G-2 92-059 **VT-1 COMMENTS:** MSC **ACCEPTED** F-C MSC-K038 91-006 **COMMENTS:** MSC B-M-2ACCEPTED PSV-4404 92-051 VT-3 **COMMENTS:** MSC ACCEPTED B-G-2PSV-4404-A-BOLTING 92-049 VT-1

PART D pages 11 of 52

ACCEPTED

Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 1) Owners:

Central Iowa Power Coop. Marion, IA.

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Plant: Duane Arnold Energy Center, Palo, IA. 52324
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Commercial Service Date: 2/1/75
National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT DESCRIPTION **CATEGORY RESULTS** (REF. NIS2 11-92-34) MSC PSV-4404-B-BOLTING B-G-2 ACCEPTED 92-050

**COMMENTS:** 

MSC

PSV-4405 B-M-2ACCEPTED 92-040 VT-3

COMMENTS:S/N 141 MSC

PSV-4405-A-BOLTING B-G-2 92-041 VT-1

**COMMENTS:** 

BOLT IN POSITION 7 HAD THREE DAMAGED THREADS - REPLACED (REF. NIS2 11-92-26) MSC CV-4419 B-M-2**ACCEPTED** 92-058 VT-3

COMMENTS: REPAIRED (REF. NIS2 11-92-19) MAIN STEAM D

PSV-4406 1.2 - 04B-M-2 ACCEPTED 92-042 VT-3

**COMMENTS:** 

MSD PSV-4407 B-M-2**ACCEPTED** 92-044 VT-3

COMMENTS:S/N 202

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Corn Belt Power Coop. Humboldt, IA. Central Iowa Power Coop. Marion, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324
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Commercial Service Date: 2/1/75
National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS **CATEGORY** DESCRIPTION RESULTS COMPONENT MSD **ACCEPTED** B-M-2 CV-4420 92-071 VT-3COMMENTS: TWO GROUND AREAS UNCHANGED SINCE LAST EXAM MSD CV-4420-BOLTING B-G-2 ACCEPTED 92-072 VT-1 **COMMENTS:** MSD **ACCEPTED** F-C MSD-K034 91-007 **COMMENTS:** MSD PSV-4406-A-BOLTING 92-043 VT-1 **ACCEPTED** B-G-2 COMMENTS: REPLACED (REF. NIS2 11-92-27) MSD ACCEPTED B-G-2 92-045 VT-1 COMMENTS: REPLACED (REF. NIS2 11-92-28) FEEDWATER A & 1.2-05 B-J NRI FWA-J014 91-159 91-160 MT UT45

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**COMMENTS:** 

ID GEO <50% DAC

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

		_	• • • • • • • • • • • • • • • • • • • •			122.1111	CITTON NEC	ONDS
COM	POI	NEN	T DESCRIPTIO	N REF	ORT	ISI ISO NUM.	CATEGORY	RESULTS
FWA	&	В	FWB-J018	91-161 91-162	MT UT45		B−J	NRI
EWA	c.	12	COMMENTS: ID GE	O <50% D	AC			
FWA & B	b	FWB1041	91-163 91-164	MT UT45		B-J	RI	
		_	COMMENTS:	ER-BORE	AND CRO	WN		
FWA	&	В	FWB-K007	91-010	VT-3 VT-4		F-C	ACCEPTED
			COMMENTS:					
FWA	&	В	FWB-K017	91-009	VT-3 VT-4	·	F-C	ACCEPTED

**COMMENTS:** 

FWA & B FWB-K036 F-C ACCEPTED 91-008

COMMENTS: REF. EVAL 92-E-018

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

Plant: Duane Arnold Energy Center, Palo, IA. 52324
Plant Unit: #1
Owners Certificate of Authorization (if required): N/A
Commercial Service Date: 2/1/75
National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	T DESCRIPTION	IS N REP	I ORT	ISI ISO NUM.	CATEGORY	RESULTS
FWA & B	V14-0003	92-006	VT-3		B-M-2	ACCEPTED
FWA & B	COMMENTS: V14-0003	92-004	<b>VT-</b> 1		B-G-2	ACCEPTED
FEEDWATER D	COMMENTS: C & V14-0001	92-005	<b>V</b> T-3	1.2-06	B-M-2	ACCEPTED
FWC & D	COMMENTS: V14-0001	92-003	<b>VT</b> -1		B-G-2	ACCEPTED
CORE SPRA	COMMENTS: AY B CSB-F004	91-168 91-169	PT UT45	1.2-08	в-г	NRI
CSB	COMMENTS: CROWN CSB-J020	360 DEG 91-171 91-172	<50% MT UT45	DAC	в-Ј	NRI

COMMENTS: ID GEO <50% DAC

INSERVICE September	INSPECTION R	EPORT ough Api	cil 27,	. <b>19</b> 92		pages 16 of 52			
1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406									
	Central Iow Marion, IA.	a Power	Coop.		Corn Belt Humboldt,	Power Coop.			
2) Plant: 3) Plant U 4) Owners 5) Commerc 6) Nationa	Duane Arnold Jnit: #1 Certificate Lial Service LI Board Numb	Energy of Autho Date: 2/	Center	on (if red	A. 52324 quired): N	/A			
GROSS GENE	RATING CAPAC	ITY: 565	MWE	••					
	PONENT AND W			N IDENTIF	CATION REG	CORDS			
COMPONENT	DESCRIPTION	I	SI PORT	ISI ISO NUM.	CATEGORY	RESULTS			
CSB	CSB-J021	91-173 91-174	MT UT45		в-Ј	NRI			
CSB	OMMENTS: ID GE CSB-K017	CO <50% 1	DAC						
	002 NO17	91-011	VT-3 VT-4		F-C	ACCEPTED			
	OMMENTS:	TED PER	FVAI.	92-E-035					
HPCI STEAM	PSA-J010			1.2-09	B-J	NRI			
		31-175	MT UT45	- ••	_ 0				
	MMENTS:								
HPCI ST.	PSA-K015	91-012	VT-3 VT-4		F-C	ACCEPTED			
	MMENTS:	ER S/N 1	516						
HPCI ST.	PSA-K016		310		F-C	ACCEPTED			
		91-013	VT-3 VT-4		- 0	cell IIIb			
	MMENTS:								
HPCI ST.	PSA-K019	91-014	VT-3 VT-4		F-B	ACCEPTED			

COMMENTS: SPRING CAN RESET (REF. NIS2 11-92-02)

CUA-KOOSA 91-016 VT-3

F-C ACCEPTED

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INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 18 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324
Plant Unit: #1
Owners Certificate of Authorization (if required): N/A
Commercial Service Date: 2/1/75
National Board Number of Unit N/A GROSS GENERATING CAPACITY: 565 COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT COMPONENT DESCRIPTION CATEGORY RESULTS RWCU-SUCT CUA-K016 F-C**ACCEPTED** 91-017 COMMENTS: RWCU-DISCH. CUB-K009A 91-018 F-C **ACCEPTED** COMMENTS: CEILING OBSTRUCTION, REPAIRED (REF. NIS2 11-92-11) CRD-RETURN CRA-F004 1.2-12A B-F NRI ប៉ាំំំំំំំង5 COMMENTS: RHR-20A RHC-J001-1.2-15 B-J NRI 92-081 PT 92-080 UT45 **COMMENTS:** 

RHR-20B

RHD-J022 1.2-16 B-JRI 91-207 MT 91-208 UT45

COMMENTS: ID GEO 105% DAC

Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 1) Owners:

Corn Belt Power Coop. Humboldt, IA. Central Iowa Power Coop. Marion, IA.

Plant: Duane Arnold Energy Center, Palo, IA. 52324
Plant Unit: #1
Owners Certificate of Authorization (if required): N/A
Commercial Service Date: 2/1/75
National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

**CATEGORY** RESULTS COMPONENT DESCRIPTION RHR-20B F-C ACCEPTED RHD-K005 91-022

**COMMENTS:** 

RHR-20B RHD-K007A 91-021 ACCEPTED F-C

COMMENTS: (REF. NIS2 11-92-33)

RCIC-STEAM 1.2-17 B-JNRI RSA-J029 91-209 91-210 MT UT45

**COMMENTS:** 

RCIC-ST. NRI B-JRSA-J031 91-211 MT 91-212 UT45

**COMMENTS:** 

RCIC-ST. ACCEPTED F-C RSA-K019 91-023

**COMMENTS:** 

RCIC ST. ACCEPTED F-C RSA-K024A

91-024

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
3) Plant Unit: #1
4) Owners Certificate of Authorization (if required): N/A
5) Commercial Service Date: 2/1/75
6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	N REP	I ORT	ISI ISO NUM.	CATEGORY	RESULTS
RCIC ST.	RSA-K024A B	91-025	VT-3 VT-4		F-C	ACCEPTED
	COMMENTS:					
RCIC ST.	RSA-K027	91-026	VT-3 VT-4	·	F-C	ACCEPTED
	COMMENTS:					
RCIC-WATE	R RSB-J011	91-213 91-214	MT UT45	1.2-18	в-Ј	NRI
	COMMENTS:					
RCIC-WTR	RSB-K009A	91-027	VT-3 VT-4		F-C	ACCEPTED
DEGING DI	COMMENTS:					

91-236 PT 91-237 UT45

1.2-21A

B-J

NRI

**COMMENTS:** 

RBB-J003

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

ISI REPORT DESCRIPTION **CATEGORY** RESULTS COMPONENT **RCB** RBB-K005A F-C **ACCEPTED** 91-028A VT-3 VT-4

**COMMENTS:** 

**RCB** RBB-K005B 91-028B VT-3 VT-4 ACCEPTED F-C

**COMMENTS:** 

**RCB** B-J NRI RCB-J015 91-245 PT 91-246 UT45

COMMENTS: ID GEO <50% DAC

**RCB** RCB-J015-NRI B-J

91-247 PT 91-248 UT45

**COMMENTS:** 

12" FROM RCB-J015 **RCB** NRI

B-J RCB-J015-OA

91-249 PT UT 45

**COMMENTS:** 

12" FROM RCB-J015

RCB-K034

91-033 VT-3

91-261

F-C ACCEPTED

**COMMENTS:** 

RECIRÇ DRAIN LINE 'B'

**RCB** 

RDB-J018

1.2-21B

B-J

NRI

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

ISI REPORT COMPONENT DESCRIPTION **CATEGORY RESULTS** RC DRAIN NRI B-J**RDB-J019** 91-262 PT

**COMMENTS:** 

RC DRAIN RDB-K008 F-C ACCEPTED 91-034

**COMMENTS:** 

RECIRC MANIFOLD 'B' 1.2-22 B-JNRI RMB-J001

91-263 PT UT45

**COMMENTS:** 

ID GEO <50% DAC RC MAN. 'B' RMB-J001-NRI B-J

PT UT45 91-265 91-266

**COMMENTS:** 

RC MAN. 'B' **ACCEPTED** F-C RMB-K010 91-036

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 24 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324
Plant Unit: #1
Owners Certificate of Authorization (if required): N/A
Commercial Service Date: 2/1/75
National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS COMPONENT DESCRIPTION **CATEGORY** RESULTS ŖĘÇIRC RISER B-JRRB-J007 NRI **COMMENTS:** OD GEO 85% DAC ŖĘÇIRC RISER B-F RRC-F002 NRI 91-276 PT 91-277A UT45 COMMENTS: ROOT GEO, COUNTERBORE RC RISER 'C' RRC-J004A B-J ACCEPTED 91-280 PT COMMENTS: UT EXAM PERFORMED IN RF008 RC RISER RRC-J005 B-JNRI

91-282 PT 91-283 UT45

COMMENTS:

RC RISER 'C'

RRC-J005-

B-J NRI

91-284 PT 91-285 UT45

B-J

ACCEPTED

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

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Plant: Duane Arnold Energy Center, Palo, IA. 52324
Plant Unit: #1
Owners Certificate of Authorization (if required): N/A
Commercial Service Date: 2/1/75
National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONEN	T	DESCRIPTIO	N REP	N REPORT		CATEGORY	RESULTS
HEAD VENT		HVA-FLG- BOLTING	91-289	<b>VT-</b> 1	1.2-24	B-G-2	ACCEPTED
	COMI	MENTS:					
STANDBY LIQUID CONTROL		LCA-J024	91-292	PT	1.2-27	В-Ј	ACCEPTED
	COM	MENTS:			·		
LIQUID CONTROL		LCA-J025	91-293	PT		B-J	ACCEPTED
	COM	MENTS:					
LIQUID CONTROL		LCA-J026	91-2 <b>94</b>	PΤ		B-J	ACCEPTED
	COM	MENTS:					

PT

**COMMENTS:** 

LCA-J026A 91-295

LIQUID CONTROL

ACCEPTED

91-297 PT UT45

**COMMENTS:** 

BOTTOM HEAD DRAIN

1.2 - 32HDA-J035 91-299 PT

B-JACCEPTED

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPON	ENT AND WE	LD EXAMI	NATION	IDENTIFIC	CATION REC	JRDS
00111 011-111	DESCRIPTION	N REPORT		ISI ISO NUM.	CATEGORY	RESULTS
BOTT. HEAD	HDA-K014	91-039	VT-3 VT-4		F-B	ACCEPTED
COMM	ENTS:					
VESSEL INSTR.	VIF-F002			1.2-34	B- <b>F</b>	NRI
	VII 1002	91-301 91-302	PT UT45			
COMM	ENTS:					
WATEL COTTAN	OD GE	0				
MAIN STEAM DRAIN COMMON	MDR-K004	91-040	VT-3 VT-4	1.2-35	F-B	ACCEPTED
COMMENTS:						
RHR HEAT EXCHANGER 'A'	HEA-CA-5	91-305	UT45	2.1-01	C-A	NRI

COMMENTS: ID GEO

RHR EXCH. 'A'

HEA-CB-6

91-306 91-307

RI

C-B

COMMENTS: 2 LINEAR INDICATIONS ACCEPTABLE PER IWC

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 28 of 52 Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 1) Owners: Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT COMPONENT DESCRIPTION **CATEGORY** RESULTS RHR EXCH. 'A' HEA-CC-8 (01) C-CACCEPTED 91 - 308MT **COMMENTS:** RHR EXCH. 'A' HEA-CC-8 (02) C-C ACCEPTED 91-309 MT **COMMENTS:** RHR EXCH. 'A' HEA-CC-8 (03) C-C**ACCEPTED** 91 - 310MT **COMMENTS:** 'A' RHR EXCH. HEA-CC-8 C-CRI 91 - 311MT COMMENTS: 2 LINEAR INDICATIONS ACCEPTABLE PER IWC HEAT H. STEAM PLY 2.2 - 35F-A RHD-CE008 ACCEPTED

91-045

RHR ST.
SUPPLY C-F
RHD-CF022 ACCEPTED

RHR PUMP DISCH. (SE) C-F RHE-CF048 ACCEPTED 91-316 MT

RHR PUMP DISCH. (NW) C-C ACCEPTED RHI-CE030 91-049 MT

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 32 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
3) Plant Unit: #1
4) Owners Certificate of Authorization (if required): N/A
5) Commercial Service Date: 2/1/75
6) National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT COMPONENT DESCRIPTION CATEGORY **RESULTS** RHR PUMP DISCH. (NW) F-C RHI-CE045 ACCEPTED 91-051 **COMMENTS:** RHR PUMP DISCH. (NW) C-F RHI-CF041 ACCEPTED 91-318 **COMMENTS:** RHR PUMP DISCH. (NW) C-F RHI-CF076 ACCEPTED 91 - 319**COMMENTS:** 

RHR HEAT EXCH. DISCH. (NW) 2.2 - 40F-C

RHJ-CE008 ACCEPTED 91-057

**COMMENTS:** 

RHR EXCH. DISCH. (NW) C-CRHJ-CE008 ACCEPTED 91-056 MT

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

ISI REPORT COMPONENT DESCRIPTION CATEGORY RESULTS RHR EXCH. DISCH. (NW) F-C RHJ-CE033 ACCEPTED 91-058

**COMMENTS:** 

REF. EVAL 92-E-001

RHR EXCH. DISCH. (NW) F-C RHJ-CE035 ACCEPTED 91-059

**COMMENTS:** 

REF. EVAL 92-E-002

RHR EXCH. DISCH. (NW) F-C RHJ-CE040 ACCEPTED 91-060

**COMMENTS:** 

RHR EXCH. DISCH. (NW) F-C RHJ-CE045 ACCEPTED 91-061

**COMMENTS:** 

RHR EXCH. DISCH. (NW) F-C RHJ-CE054 ACCEPTED 91-063

**COMMENTS:** 

**REF. EVAL 92-E-003** 

RHR EXCH. DISCH. (NW) RHJ-CF081

91-322 92-021

C-F

ACCEPTED

HPCI PUMP DISCH

HPB-CE018

91-071 VT-

COMMENTS:

HPCI PUMP DISCH

HPB-CE02

F-C

F-C

F-C ACCEPTED

ACCEPTED

HPB-CE025 91-072 VT-3

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992

Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

Plant: Duane Arnold Energy Center, Palo, IA. 52324
Plant Unit: #1
Owners Certificate of Authorization (if required): N/A
Commercial Service Date: 2/1/75
National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

ISI ISO NUM. ISI REPORT RESULTS **CATEGORY** DESCRIPTION COMPONENT HPCI PUMP DISCH F-A **ACCEPTED** HPB-CE052 91-073

**COMMENTS:** 

HPCI PUMP DISCH F-A **ACCEPTED** HPB-CE053 91-074

**COMMENTS:** 

HPCI PUMP DISCH F-A ACCEPTED HPB-CE055 91-075

**COMMENTS:** 

HPCI PUMP DISCH F-C ACCEPTED HPB-CE059 91-076

**COMMENTS:** 

HPCI PUMP C-CACCEPTED HPB-CE063 91-077

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 38 of 52 Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 1) Owners: Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT DESCRIPTION COMPONENT **CATEGORY** RESULTS HPCI PUMP F-C HPB-CE063 **ACCEPTED** 91-078 **COMMENTS:** HPCI PUMP DISCH C-C HPB-CE069 91-079 MT COMMENTS: REF. RELIEF REQUEST NDE-005 HPCI PUMP DISCH F-C HPB-CE069 91-080 **COMMENTS:** REF. RELIEF REQUEST NDE-005 HPCI PUMP DISCH C-F HPB-CF048 RI 91-326 MT 91-327 UT45 **COMMENTS:** LAMINAR INDICATION ACCEPTABLE PER IWC CORE SPRAY DISCHARGE (SE) 2.2 - 49F-C

ACCEPTED

CSB-CE020

**COMMENTS:** 

91-081

CORE SPRAY SUCTION (NW) 2.2-51 F-C CSD-CE007 91-088 VT-3

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 40 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT COMPONENT **DESCRIPTION** CATEGORY RESULTS CS SUCT (NW) CSD-CE012 F-C **ACCEPTED** 91-089 **COMMENTS:** CS SUCT (NW) CSD-CE015 F-B ACCEPTED 91-090 COMMENTS: REF. EVAL 92-E-005 CS SUCT (NW) CSD-CE018 F-A ACCEPTED 91-091 **COMMENTS:** CS SUCT (NW) CSD-CE026 F-C ACCEPTED 91-092 **COMMENTS:** 2.2-52A F-A

ACCEPTED

CSE-CE012

**COMMENTS:** 

91-093

CS DISCH (NW)
CSE-CE031
91-099 VT-3

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
3) Plant Unit: #1
4) Owners Certificate of Authorization (if required): N/A
5) Commercial Service Date: 2/1/75
6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 NWE

## COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

	C	OMPON	ENT AND	MELD	EXAMI	NATIO	N IDENTIF.	ICATION REC	ORDS
	MPONEN		DESCRIPT	TION	IS REP	I ORT	ISI ISO NUM.	CATEGORY	RESULTS
cs	DISCH	(WW)	CSE-CE(	9	1-100	VT-3 VT-4		F-C	ACCEPTED
		COMM	ENTS:						
CS	DISCH	(WW)	CSE-CE	91	1-10 <b>1</b>	VT-3 VT-4	2.2-52B	F-C	ACCEPTED
		COMM	ENTS:						
cs	DISCH	(NW)	CSE-CE0	42 91	1-103	VT-3 VT-4		F-C	ACCEPTED
CS	DISCH	COMMI	ENTS: REF	. EVA	AL 92-	E-007			
CS	DISCH	(1447)	CSE-CEO	42 91	l-102	MT		C-C	ACCEPTED
		ÇOMMI	ENTS:						
CS	DISCH	(WW)	CSE-CE0	46 91	1-104	VT-3 VT-4		F-C	ACCEPTED

**COMMENTS:** 

CS DISCH (NW) CSE-CF052 91-328 C-FACCEPTED

MSC

MSC-CE022 91-109 VT-3 VT-4 F-C ACCEPTED

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 44 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT COMPONENT DESCRIPTION **CATEGORY** RESULTS MSC MSC-CF008 C-F ACCEPTED 91-331 91-332 COMMENTS: ID ROOT 100% - 150% DAC MAIN STEAM LOOP D' MSD-CE013 91-110 2.2-56 F-CACCEPTED **COMMENTS:** MSD MSD-CE016 F-C ACCEPTED 91-111 **COMMENTS:** MSD MSD-CE018 F-B ACCEPTED 91-112

**COMMENTS:** 

MSD

MSD-CE022 91-113 VT-3 VT-4

F-C ACCEPTED

RPV INTERNALS

CLAD PATCH-306

91 - 303VT-3

**COMMENTS:** 

RPV INTERNALS

B-N-1 ACCEPTED CLAD PATCH-342 DEG

ACCEPTED

B-N-1

91-303 **VT-3** 

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 46 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324
Plant Unit: #1
Owners Certificate of Authorization (if required): N/A
Commercial Service Date: 2/1/75
National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT COMPONENT DESCRIPTION CATEGORY RESULTS RPV INTERNALS CORE B-N-1 ACCEPTED PLATE (180 - 360) 91-303 VT-3 COMMENTS: EXAMINED 180 - 360 DEG. RPV INTERNALS CSB WELDS-150 DEG B-N-2 ACCEPTED 91-303 VT-1 **COMMENTS:** RPV INTERNALS DSB - 28 DEG B-N-2 ACCEPTED 91-303 VT-3**COMMENTS:** RPV INTERNALS DSB - 152 B-N-2 ACCEPTED 91-303 VT-3 **COMMENTS:** RPV INTERNALS

91-303 VT-3

B-N-2

ACCEPTED

COMMENTS:

DSB - 208 DEG INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

Plant: Duane Arnold Energy Center, Palo, IA. 52324
Plant Unit: #1
Owners Certificate of Authorization (if required): N/A
Commercial Service Date: 2/1/75
National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

ISI REPORT **CATEGORY** RESULTS DESCRIPTION COMPONENT RPV INTERNALS ACCEPTED DSB - 332 DEG B-N-2 91-303 VT-3

**COMMENTS:** 

RPV INTERNALS ACCEPTED B-N-2 **FWB** 

WELDS-NW 225DEG 91-303 VT-3

**COMMENTS:** 

RPV INTERNALS ACCEPTED B-N-2

GRB WELDS-0 DEG AZ 91-303 **VT-3** 

**COMMENTS:** 

RPV INTERNALS B-N-2ACCEPTED **DHB-31** 

DEG 91-303 VT-3

**COMMENTS:** 

RPV INTERNALS B-N-2 ACCEPTED DHB-149 DEG

91-303 **VT-3** 

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 48 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT DESCRIPTION COMPONENT CATEGORY RESULTS RPV INTERNALS DHB-211 DEG B-N-2 ACCEPTED 91-303 VT-3**COMMENTS:** RPV INTERNALS DHB-329 B-N-2ACCEPTED DEG 91-303 VT-3 **COMMENTS:** RPV INTERNALS SAMPLE HLDR-288 B-N-1 ACCEPTED DEG 91-303 VT-3 **COMMENTS:** RPV INTERNALS B-N-2 ACCEPTED

SH WELDS-288 DEG-LW

91-303 VT-3

COMMENTS:

RPV INTERNALS

WELDS-288 DEG-UP

91-303 VT-3 B-N-2

ACCEPTED

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992 PART D pages 49 of 52 1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406 Central Iowa Power Coop. Marion, IA. Corn Belt Power Coop. Humboldt, IA. Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A GROSS GENERATING CAPACITY: 565 MWE COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS ISI REPORT DESCRIPTION CATEGORY COMPONENT RESULTS RPV INTERNALS SHRD LEDG/VES WLD B-N-2 **ACCEPTED** 91-303 **VT-3** COMMENTS: RPV INTERNALS SHROUD LEDGE ACCEPTED B-N-191 - 303VT-3COMMENTS: EXAMINED 0 - 180 DEGS (ACCESSIBLE AREAS) RPV INTERNALS TOP GUIDE B-N-1 ACCEPTED 91-303 VT-3 **COMMENTS:** 

RPV INTERNALS

VESSEL HĒĀD

**ACCEPTED** B-N-1

91-303 VT-3

**COMMENTS:** 

CLASS 1 PRESSURE TEST

N/A B-E

**ACCEPTED** 

NOZZLES 91-304 VT-2

CLASS 1 PRESS. TEST RPV 91-304 VT-2 B-P ACCEPTED

**COMMENTS:** 

CLASS 1 PRESS. TEST B-P ACCEPTED

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992

PART D pages 51 of 52

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

Plant: Duane Arnold Energy Center, Palo, IA. 52324 Plant Unit: #1 Owners Certificate of Authorization (if required): N/A Commercial Service Date: 2/1/75 National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

ISI REPORT DESCRIPTION CATEGORY RESULTS COMPONENT CORE SPRAY PRESS. TEST

CORE SPRAY

91 - 333VT-2

**COMMENTS:** 

SCRAM DISCH. PRESS. TEST

CRD SCRAM DISCHARGE

C-H

C-H

ACCEPTED

ACCEPTED

91 - 334**VT-2** 

**COMMENTS:** 

REF. NCR 92-072

2 INST.

CS INSTRU. LINES

91 - 304

**COMMENTS:** 

PERFORMED DURING THE CLASS 1 PRESSURE TEST CLASS 2 INST. LINES

C-H

ACCEPTED

**ACCEPTED** 

91 - 304VT-2

**COMMENTS:** 

PERFORMED DURING THE CLASS 1 PRESSURE TEST

2 INST.

C-H

**ACCEPTED** 

MS INSTRU. LINES

91-304 VT-2

**COMMENTS:** 

PERFORMED DURING THE CLASS 1 PRESSURE TEST

INSERVICE INSPECTION REPORT September 11, 1990 through April 27, 1992

PART D pages 52 of 52

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Coop. Marion, IA.

Corn Belt Power Coop. Humboldt, IA.

Plant: Duane Arnold Energy Center, Palo, IA. 52324
Plant Unit: #1
Owners Certificate of Authorization (if required): N/A
Commercial Service Date: 2/1/75
National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT DESCRIPTION CATEGORY RESULTS

2 INST.

RC INSTRU. LINES

C-H

ACCEPTED

91 - 304

**COMMENTS:** 

PERFORMED DURING THE CLASS 1 PRESSURE TEST 2 INST.

C-H **ACCEPTED** 

91 - 304VT-2

**COMMENTS:** 

PERFORMED DURING THE CLASS 1 PRESSURE TEST 2 INST.

RPV ĮŅSTRU.

C-H

ACCEPTED

LINES 91-304 VT-2

**COMMENTS:** 

PERFORMED DURING THE CLASS 1 PRESSURE TEST

RHR PRESSURE

C-H

PUMP SUCTION-D ISC

ACCEPTED

91-335 VT-2

INSERVICE INSPECTION REPORT September 11,1990 through April 27,1992 ABSTRACT OF ASME SECTION XI ADDITIONAL AND SUCCESSIVE EXAMINATIONS The following is a list of the additional examinations due to ASME Section XI corrective measures. Also included are successive examinations required due to corrective measures during previous outages.

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

> Corn Belt Power Cooperative Central Iowa Power Cooperative Marion, IA. Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

#### ADDITIONAL EXAMINATIONS

Corrective Measured Component	Class	Additional Inspected Component	Report #	ISI ISO
EBB-5-SR-7 (HPB-CE062) (91-381)	2	EBB-5-H-10 (HPB-CE059)	91-402	2.2-45
(31 301)	2	EBB-5-H-9 (HPB-CE056)	91-403	2.2-45
	2	EBB-5-H-8 (HPB-CE055)	91-404	2.2-45
	2	EBB-5-H-7 (HPB-CE053)	91-405	2.2-45
	2	EBB-5-H-6 (HPB-CE052)	91-406	2.2-45
	2	EBB-5-SA-5 (HPB-CE047)	91-407	2.2-45
	2	EBB-5-H-12 (HPB-CE071)	91-408	2.2-45
	2	EBB-5-SR-8 (HPB-CE072)	91-409	2.2-45
GBB-3-H-32 (RHJ-CE033) (91-058)	2	GBB-3-H-31 (RHJ-CE031)	92-107	2.2-40

## INSERVICE INSPECTION REPORT

September 11,1990 through April 27,1992

ABSTRACT OF ASME SECTION XI ADDITIONAL AND SUCCESSIVE EXAMINATIONS The following is a list of the additional examinations due to ASME Section XI corrective measures. Also included are successive examinations required due to corrective measures during previous outages.

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

#### ADDITIONAL EXAMINATIONS

Corrective Measured Component	Class	Additional Inspected Component	Report #	ISI ISO
EBD-2-SS-114 (MSD-CE026)	2	EBD-2-SS-113 (MSC-CE029)	92-073	2.2-55
(91-114)	2	(MSC-CE029) EBD-2-SS-115 (MSA-CE029A)	92-073	2.2-53
	2	EBD-2-SS-116 (MSA-CE029B)	92-073	2.2-53
	2	EBD-2-SS-117 (MSB-CE027A)	92-073	2.2-54
	2	EBD-2-SS-118 (MSB-CE027B)	92-073	2.2-54
	2	EBD-6-SS-151 (MSE-CE037)	92-073	2.2-57
	2	EBD-6-SS-153 (MSF-CE007)	92-073	2.2-58
	2	EBD-6-SS-154 (MSF-CE009)	92-073	2.2-58
DLA-8-H-5 (CSB-K017) (91-011)	1	DLA-8-H-4 (CSB-K026)	91-011	1.2-08
(Setting only examined)	1	DLA-8-H-6 (CSB-K010)	91-011	1.2-08

PART E pages 3 of 4

INSERVICE INSPECTION REPORT September 11,1990 through April 27,1992 ABSTRACT OF ASME SECTION XI ADDITIONAL AND SUCCESSIVE EXAMINATIONS The following is a list of the additional examinations due to ASME Section XI corrective measures. Also included are successive examinations required due to corrective measures during previous outages.

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

> Corn Belt Power Cooperative Central Iowa Power Cooperative Humboldt, IA. Marion, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

#### ADDITIONAL EXAMINATIONS

Corrective Measured Component	Class	Additional Inspected Component	Report	ISI # ISO
DLA-2-H-18 (FWB-K036)	1	DLA-2-H-19	92-105	1.2-05
(91-008)	NC	(FWB-K032) DBD-4-H-57A	92-106	Outside

September 11,1990 through April 27,1992

ABSTRACT OF ASME SECTION XI ADDITIONAL AND SUCCESSIVE EXAMINATIONS The following is a list of the additional examinations due to ASME Section XI corrective measures. Also included are successive examinations required due to corrective measures during previous outages.

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

ADDITIONAL EXAMINATIONS

### Successive Examinations

Component Examined	<u>Class</u>	Previous Exam Rpt	Exam Re <b>p</b> ort #	ISI ISO	Results
CUB-K012A	1	88-185/ 494	91-019	1.2 1B	Accepted
CUB-K009	1	88-470	91-020	1.2-11B	Accepted
RHD-CE027	2	87-715	91-041	2.2-35	Accepted
RHE-CE049	2	88-371	91-048	2.2-36	Accepted
RHM-CE003	2	90-212	91-323	2.2-43	Accepted

## INSERVICE INSPECTION REPORT September 11,1990 through April 27,1992

ABSTRACT OF ASME SECTION XI REPAIRS AND REPLACEMENTS
The following is a list of Repairs and Replacements completed with a brief description of work performed.

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

2) Plant: Duane Arnold Energy Center, Palo, IA. 52324

3) Plant Unit: #1

4) Owners Certificate of Authorization (if required): N/A

5) Commercial Service Date: 2/1/75

6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

NIS-2 NO. C	LASS	COMPONENTS	DESCRIPTION
11-90-01	1	Main Steam Relief	Repaired pilot disc and replaced second stage disc.
11-90-02	1	MSRV Pilot Valve	Repaired second stage disc bushing
11-90-03	2	RHR Elbow	Removed 7 linear indications
11-91-04	1	PSV-4401	Replaced 4 bolts and 12 nuts
11-91-05	2	V18-207 CRD Drain Valve	Seal welded quick disconnect fitting
11-91-07	1	CV-4418	Replaced Disc/Piston and Stem/StemDisc
11-91-08	1	V14-0003	assys Replaced Indicator Stuffing Box
11-91-09	2	EBB-5-H-11	Replaced one bolt/nut
11-92-02	1	CUB-K007	Replaced 2 bolts/nuts
11-92-03	2	MO-2007	Repair of disc skirt/disc nut
11-92-04	1	CRD-04556	Replaced capscrews and CRD Assy.
11-92-05	2	PSV-1952	Replaced inlet bolting

INSERVICE INSPECTION REPORT
September 11,1990 through April 27,1992

ABSTRACT OF ASME SECTION XI REPAIRS AND REPLACEMENTS
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1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Marion, IA. Humboldt, IA.

2) Plant: Duane Arnold Energy Center, Palo, IA. 52324

3) Plant Unit: #1

4) Owners Certificate of Authorization (if required): N/A

5) Commercial Service Date: 2/1/75

6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

NIS-2 NO.	CLASS	COMPONENTS	DESCRIPTION
11-92-06	2	GBB-3-SS-238	Replaced snubber and calibrated valve
11-92-07	2	GBB-4-SS-217A	Replaced Main Cylinder Tube
11-92-08	2	GBB-3-SS-237	Replaced Main Cylinder Tube
11-92-09	1	CONTROL ROD DRIVES	Replaced all bolting and one drive
11-92-11	1	DCA-14-SS-73	Replaced pipe clamp and bolting
11-92-14	1	DBA-6-SS-29	Replaced end attachment
11-92-15	1	DLA-2-SS-9	Replaced end
11-92-16	1	CV-4413	Repaired bonnet and stud
11-92-17	1	CV-4412	Repaired bonnet and stud
11-92-18	1	CV-4418	Repaired bonnet and body
11-92-19	1	CV-4419	Repaired bonnet and stud
11-92-20	1	CV-4420	Repaired bonnet and stud
11-92-21	1	PSV-4400	Replaced 2 bolts/nuts

# INSERVICE INSPECTION REPORT September 11,1990 through April 27,1992

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1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

2) Plant: Duane Arnold Energy Center, Palo, IA. 52324

3) Plant Unit: #1

4) Owners Certificate of Authorization (if required): N/A

5) Commercial Service Date: 2/1/75

6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

NIS-2 NO.	LASS	COMPONENTS	DESCRIPTION
11-92-22	1	PSV-4401	Replaced 12 bolts/nuts and plug
11-92-23	1	PSV-4401 (MAIN VALVE)	Repair main valve body
11-92-24	1	PSV-4402	Replaced filter plug
11-92-25	1	Spare Disc/Piston Assy	Repair disc/piston assy
11-92-26	1	PSV-4405	Replaced bolts/nuts
11-92-27	1	PSV-4406	Replaced bolts/nuts
11-92-28	1 1	PSV-4407	Replaced bolts/nuts
11-92-29	1	Spare Disc/Piston Assy	Repair disc/piston assy
11-92-30	2	HBB-23-SS-220	Replaced main cylinder tube & piston rod
11-92-31	2	HBB-24-SS-221	Replaced main cylinder & calibrated valve
11-92-32	2	HBB-23-SS-229	Replaced main cylinder tube
11-92-33	1	DLA-6-SS-13	Replaced end attachment

ABSTRACT OF ASME SECTION XI REPAIRS AND REPLACEMENTS
The following is a list of Repairs and Replacements completed with a brief description of work performed.

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Icaa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

NIS-2 NO.	CLASS	COMPONENTS	DESCRIPTION
11-92-34	1	PSV-4404	Replaced inlet studs
11-92-41	1	PSV-4403	Replaced inlet studs
11-92-42	2	PSV-2223	Rehydro of piping
11-92-45	2	HPCI Supports	Replaced 2 supports
11-92-46	1	V14-0001	Replaced actuator with blind flanges
11-92-47	1	V14-0003	Replaced actuator with blind flanges
11-92-50	2	PSV-2129	Replaced inlet bolting

NOTE: Those Form NIS-2s that are missing are either for Class 3 or spare components.

#### INSERVICE INSPECTION REPORT September 11,1990 through April 27,1992

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

FORM NIS-2's

### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

								<del> </del>
•	Owner Iowa Elec	tric Light and Pow Name	er		Date <u>Decemb</u>	er 14,19	90	<u></u>
	P.O.Box 351, Co	edar Rapids, IA 52	2406		Sheet <u>1 of</u>	2		
		Address						
	Plant Duane Arno	old Energy Center Name			Unit1			
	7077 0450 04				D O 054374 /DN	IAD 1047	. 993	
	Address	Palo, IA 52324	<del></del>	·	P.U. 330270 (FF	Repair C	rganization P.O.N	lo., Job No.
	Work Performed i	by Target Rock	· ·		Type Code Symbol	Stamp	None	
		Name			Authorization No.	·	None	··-
	1966E Broadholle	ow Rd. Farmingdale	e, N.Y. 11735-	0919	Expiration Date _		None	
		Address						
	Identification (	of System <u>Main</u>	Steam (Class	1)				
	Case	onst. Code <u>ASME</u> SE						N/A Cod
	(b)Applicable Ed * GE SPEC. 2	dition of Section 21A9206 Rev. 6 & 7	XI Utilized f	or Repairs o	r Replacements 19	80 W81	_	
	•	of Components Repa		ced and Reni	acement Component	s		
	- Tuente / Treatment	or conponents rep	The or Repres	The Rope				<del></del>
	Name of Component	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
/ Pi	ot Valve	Target Rock	S/N 200	N/A	SPARE	1975	Repaired	Yes
ond s	stage disc	Target Rock	S/N 629	N/A	N/A	1976	Replaced	No
				•				
·						<u> </u>		LJ
	Description of \	Work <u>Pilot Disc</u>	<u>and second sta</u>	ge disc mach	ined for proper t	it and r	eptaced second st	age disc
	Tests Conducted:	<u></u>	ш	matic	<b>-</b>		g Pressure	
		Other * 🛛	Pressure 113	30 +/- 1%	psi Test Ten	ю. <u>547</u>	<u>r</u> °F	
*Se	et pressure test	performed at WYLE	Labs					
			•				ided (1) size is	

sheet 2 of 2

and machined for proper fit. Pt was performed or	n the Pilot disc and the seco	nd stage disc by DAEC QA. VT-3
inspection of pilot assembly was performed unde	r ISI# 90-196.	
	RTIFICATE OF COMPLIANCE	
We certify that the statements made in the to the rules of the ASME Code, Section XI.	ne report are correct and this	repair and replacement co
Type Code Symbol Stamp N/A		
Certificate of Authorization No.	N/A	Expiration Date
Signed Connect Stranger Owner or Owner's Designee, Title	Codes & Materials, GL	Date
CERTIFIC	CATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission inspectors and the State or Province of Hartford, Connecticuthis Owner's Report during the period	Iowa and empt have	oyed by <u>Hartford Steam Boiler</u> inspected the components descri
, and state that to the best of my knowlodge and measures described in the Owner's Repert in ac	cordance with the requirement	med examinations and taken corr is of the ASME Code, Section XI
By signing this certificate neither the Instructions and corrective meatinspector nor his amployer shall be liable in any kind arising from or connected with this in	asures described in this Owner any manner for any personal inspection.	r's Report. Furthermore, neith njury or property damage or a l
Inspectors Signature	Commissions NB 88290	I)(N) 941-IA rd, State, Province, and Endors
		rd, State, Province, and Endors

5

## FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

	Owner <u>Iowa Elec</u>	tric Light and Po Name	wer		Date <u>Decemb</u>	er 18,19	90	
	P.O.Box 351, C	edar Rapids, IA 53 Address			Sheet <u>1 of</u>	2		
	Plant Duane Arn	old Energy Center			Unit 1			
		Name						
		Palo, IA 52324			P.O. S56276 (PM	IAR 1047	489)	in the Ma
	Address					kepair c	Organization P.O.	NO.,JOD NO.
	Work Performed	by Target Rock Name	· · · · ·	<del></del>	Type Code Symbol	Stamp	None	
		Hane			Authorization No.		None	
	1966E Broadholl	ow Rd. Farmingdale Address		0919	Expiration Date _		None	
	Identification	of System <u>Main</u>	Steam (Class	1)				
	(a)Applicable C	onst. Code_ASME_SE	ECT. III	19 <u>_68</u>	Edition,W68		_Addenda,A	<b>1/A</b> Co
	(b)Applicable E	dition of Section 21A <b>9</b> 20 <mark>6 Rev.</mark> 6 & 7		or Repairs o	r Replacements 19	80 <b>₩8</b> 1	_	
	Identification	of Components Rep	ai <b>red</b> or Repla	ced and Repl	acement Component	s		
	Name of Component	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repairod Replaced, or Replacement	ASME Code Stamped (Yes or No)
		·						
/ Pi	lot Valve	Target Rock	S/N - 207	N/A	SPARE	1974	Repaired	Yes
	·							
	<del></del>							
	<del></del>		<u>.L</u>		1		<u> </u>	
	Description of t	Work <u>Grind out li</u>	inear indicati	ons in secon	d stage disc bush	ing tack	weld	
	- · · · · ·						- P	_
	Tests Conducted	: Hydrostatic	Pneur	matic [	Nominal (	peratin	g Pressure	$\sqcup$
	•	: Hydrostatic	Pressure 113		Nominal C	•		
*S	Tests Conducted	·	Pressure 113			•		

1.21.71

FORM NIS-2 (Back) sheet 2 of 2

by removing linear indications found. Pt was pe		He second stage disc by DAEC
inspaction of pilot assembly was performed unde	er 151# 90-355.	
Œ	RTIFICATE OF COMPLIANCE	
certify that the statements made in th	he repert are correct and this	repair co
to the rules of the ASME Code, Section XI.	_	repair or replacement
Type Code Symbol Stamp N/A		
Type code Symbot StampN/A		
Certificate of Authorization No.	N/A	Expiration Date
Signed Summer's Designee, Title	Codes & Materials, GL	Date,
owner or owner's designee, little		
CEDITE	CATE OF THEERWARE THORESTON	
	CATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commissions inspectors and the State or Province of	IOWA and ampliov	ed by Hartford Steam Boiles:
of <u>Hartford, Connecticu</u> this Owner's Report during the period	have in	spected the components describ
, and state that to the best of my knowlodge an	M Dellet, the D⊎ner has performe	d examinations and taken corre
measures described in the Owner's Repert in ac		
By signing this certificate neither the Insconcerning the examinations and corrective mea	spector nor his amployer makes a	any warranty, expressed or imp
inspector nor his employer shall be liable in .	any manner for any personal init	s keport. Furthermore, heithe Ury or property damage or a lo
any kind arising from or connected with this i		
Inspectors Signature	Commissions NB 8829(1)	(N) 941-IA
Trispector's 31griature	National Board,	, State, Province, and Endorse
Date Jan. 2/ 19 9/		

#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

	Jan. C Ond _ C. C. C.	ric Light and Pou Name		<del></del>	Date <u>Decemb</u>	<u>er 26,19</u>	· · · · · · · · · · · · · · · · · · ·	· , <u> </u>
	P.O.Box 351, Ce	dar Rapids , IA 52 Address	2406		Sheet <u>1 of</u>	2		
	Plant <u>Duane Arno</u>	old Energy Center Name			Unit1		····	
	3277 DAEC Rd.	Palo, IA 52324				CMAR #A	00575 Organization P.O.N	le leb No
		y Iowa Electric			Type Code Symbol	•	-	
		Name			Authorization No.	•	None	
	3277 DAEC Road	Palo, IA 52324 Address			Expiration Date		None	
	Identification o	of System RHR	(class 2)					
ı	Case		•		Edition,71			N A Co
	Identification o	of Components Repo	aired or Repla	ced and Rep	acement Component	s		
				National			Donoined	ASME
)	Name of Component	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired Replaced, or Replacement	Code Stamped (Yes or No)
	Component	Manufacture	Serial No.	Board No.	Identification	Built	Replaced, or Replacement	Stamped (Yes or No)
HR E	Component			Board			Replaced,	Stamped (Yes
HR E	Component	Manufacture	Serial No.	Board No.	Identification	Built	Replaced, or Replacement	Stamped (Yes or No)
HR E	Component	Manufacture	Serial No.	Board No.	Identification	Built	Replaced, or Replacement	Stamped (Yes or No)
	Component	Manufacture  Bechtel	Serial No.	Board No.	Identification	Built	Replaced, or Replacement	Stamped (Yes or No)
HR E	Component	Manufacture  Bechtel  Ork Remeyal of 7	n/a No.	Board No.	ldentification  12" GBB-9	1990	Replaced, or Replacement	Stamped (Yes or No)

18. 1. 1. 2. 1. 2. 1. 7. 1. 1. 2. 1. 7. 1. 1. 1. 2. 1. 7. 1. 1. 1. 2. 1. 7. 1.

FORM NIS-2 (Back) sheet 2 of 2

|       |                      |   | <del>_</del>             |                          |                         |                         |                         |            |          | · · · · · ·                                  |           |
|-------|----------------------|---|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|------------|----------|--|-----------|
|       |                      |   |                          |                          |                         |                         |                         |            |          |  |           |
|       |                      |   |                          |                          |                         |                         |                         |            |          |  |           |
|       |                      |   |                          |                          | CERTIF                  | ICATE OF                | COMPLIAN                | Œ          |          |  |           |
| to ti | We cert<br>he rules  | ify that<br>of the                                | the statem<br>ASME Code, | ments made<br>Section X  | in the r                | epert are               | correct                 | and this   |          | or replacem                                  |           |
|       | Type Co              | xde Symbo   | l Stemp                  | None                     |                         |                         |                         |            |          |  |           |
|       | Certifi              | cate of   | Authorizati              | on No                    | None                    |                         |                         |            |          | _ Expiration                                 | ı Date    |
|       | Signed               | Owner o   | Owner's D                | esignee,                 | Fitle                   | Codes                   | & Mater                 | ials, GL   | _ Date _ | 1-12.  | ,         |
|       |                      |   |                          | Œ                        | RTIFICATE               | OF INSER                | VICE INS                | PECTION    |          |  |           |
| Inspe | ectors a<br>of _     | ind the \$1                                       | tate or Pro<br>Hart      | vince of _<br>ford, Conr | necticut                | <u>I owa</u>            | ··········· '           | and amploy | ed by H  | Boiler and I<br>artford Stea<br>the componen | m Boiler  |
| , and | Owner's<br>i state t | Report of the | during the               | period                   | ige and be              | <u> </u>                | <i>⊕</i><br>O⊌ner ha    | s perform  | o        | nations and t<br>ASME Code, S                | eken corr |
| Inspe | erning to            | he examır<br>r his <b>em</b> ç                    | nations and              | correcti<br>l be liabl   | ve measure<br>Le in anv | es describ<br>manner fo | bed in th               | is Owner'  | s Report | anty, expres<br>. Furthermo<br>roperty dama  | re neith  |
|       | Se                   | N   | ignature                 | 110                      |                         | _ Commissi              | ions <u>NB</u><br>Natio | 8829(I)(I  | N) 941-1 | A<br>Province, a                             | nd Endors |

#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

|                  | Owner Iowa Elect         | ric Light and Pow                     | er                         |                          | Date <u>Januar</u>  | 7, 199         | 1                                       |   |       |
|------------------|--------------------------|---------------------------------------|----------------------------|--------------------------|---|----------------|---|---|-------|
|                  | P.O.Box 351, Ce          | Name<br>edar Rapids, IA 52<br>Address | 406                        |                          | Sheet 1 of  | 2              |   |   |       |
| 2.               | Plant Duane Arno         | old Energy Center                     |                            |                          | Unit 1  |                |   |   |       |
|                  | 3277 DAEC Rd             | Palo, IA 52324                        |                            |                          | CMAR  | A 0536         | 1                                       |   |       |
|                  | Address                  |                                       |                            |                          |   | Repair (       | Organization P.O.N                      | lo.,job No                                | •     |
| 3.               | Work Performed b         | by Iowa Electric                      |                            |                          | Type Code Symbol  | Stamp          | None                                    |   |       |
|                  |                          | Name                                  |                            |                          | Authorization No.   |                | None                                    |   |       |
|                  | 3277 DAEC Rd.            | Palo, IA 52324<br>Address             |                            |                          | Expiration Date _   |                | None                                    |   |       |
| 4.               | Identification o         | of System <u>Main</u>                 | Steam (class               | 1)                       |   |                |   |   |       |
| 5 <b>.</b><br>6. | Case<br>(b)Applicable Ed | dition of Section                     | XI Utilized fo             | or Repairs o             | Edition, <u>W68</u><br>or Replacements 19<br>lacement Component | 80 W81         |   |   | _Code |
|                  | Name of<br>Component     | Name of<br>Manufacture                | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification   | Year<br>Built  | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |       |
| Hex Bol          | t (4 ea)                 | JED Mfg. Co.                          | HT# 184N844                | N/A                      | PSV-4401  | 1975           | Replacement                             | No  |       |
| lut-Fle          | xloc (12 ea)             | Target Rock                           | Part #<br>00FC1812         | N/A                      | PSV-4401  | 1975           | Replacement                             | No  |       |
|                  |                          |                                       |                            |                          |   |                |   |   |       |
|                  |                          |                                       |                            |                          |   |                |   |   |       |
|                  |                          |                                       |                            |                          |   |                |   |   |       |
| 7                | Description of L         | lank Bankasad A k                     | lov Polite and             | 12 Nuts on I             | PSV-4401 during in  | etallat:       | ion                                     |   |       |
| 7.               | Description of W         | iork <u>keptaced 4 i</u>              | EN BULLS BING              | IZ NULS ON I             | PSV-4401 during in  | <u>stattat</u> | 10114                                   |   |       |
| 8.               | Tests Conducted:         | : Hydrostatic                         | Pneur                      | matic                    |   | •              |   | ×   |       |
|                  |                          | Other                                 | Pressure                   | 1025                     | psi Test Tam  | ю              | °F                                      |   |       |

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in.,(2)information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

1-28-91

| FORM NIS-2 ( | Back) |
|--------------|-------|
|--------------|-------|

| bolting and a                |  |  | rvice VT-1 (Rpt# 90-369) of the re<br>preservice of S/N 226 performed un   |              |
|------------------------------|--|--|--|--------------|
| 90-191.                      |  |  |  | MC1          |
|                              |  |  |  |              |
|                              |  | CERTIFICATE OF COMPLI  | ANCE   |              |
| <b>We</b> cer<br>to the rule | tify that the statemants made<br>s of the ASME Code, Section X   | in the report are correctl.  | ct and this <u>replacement</u><br>repair or replacemen   |              |
| Type Co                      | ode Symbol Stamp <u>None</u>   |  |  |              |
| Certif                       | cate of Authorization No   | None   | Expiration 0   | ate <u>N</u> |
| Signed                       | Owner or Owner's Designee,   | Codes & Mat  | erials, GL Date 1-14-  |              |
|                              | Œ  | ERTIFICATE OF INSERVICE IN   | NSPECTION  |              |
| of _<br>this Owner's         | Hartford, Connection  Report during the period   | CUT  | National Board of Boiler and Promote and employed by <u>Hartford Steam B</u> have inspected the components to to | descri       |
| , and state                  | that to the bost of my knowled   | dge and belief, the Owner  | has porformed examinations and tak<br>requirements of the ASME Code, Sec   | 'OD -000     |
| Inspector no                 | ne examinations and corrective r his employer shall be liable sing from or connected with the state of the st | ve measures described in<br>le in any manner for any<br>this inspection. | loyer makes any warranty, expresse<br>this Owner's Report. Furthermore<br>personal injury or property damage     | naith        |
| - Se                         | ectors Signature   | Commissions NB   | 3 8829(I)(N) 941-IA<br>tional Board, State, Province, and  |              |
|                              |  |  |  |              |

## FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

| Owner Iowa Elect                     | ric Light and Pow                     | ver   |                        | Date Januar             | y 9, 199        | 1   |                 |
|--------------------------------------|---------------------------------------|---|------------------------|-------------------------|-----------------|---|-----------------|
|                                      | Name                                  |   | _                      |                         |                 |   |                 |
| P.O.Box 351, Ce                      | dar Rapids, IA 52                     | 2406  |                        | Sheet <u>1 of</u>       | 2               |   | ·               |
|                                      | Address                               |   |                        | ,                       |                 |   |                 |
| . Plant <u>Duane Arno</u>            | ld Energy Center<br>Name              |   |                        | Unit1                   |                 |   |                 |
|                                      |                                       |   |                        |                         | CMAD #A         | O/OFF CCD #A                              |                 |
| 3277 DAEC Rd. Address                | Palo, IA 52324                        |   |                        |                         | Repair (        | <u>04055 CSR #A</u><br>Organization P.O.M | No., Job No.    |
| . Work Performed b                   | v Ious Electric                       |   |                        | Type Code Symbol        | Stamo           | None                                      |                 |
| WOIR PERFORMED                       | Name                                  |   | *****                  |                         |                 |   |                 |
|                                      |                                       |   |                        | Authorization No        | •               | None                                      |                 |
| 3277 DAEC Road I                     | Palo 14 52324                         |   |                        | Expiration Date         |                 | None                                      |                 |
| JETT BRES ROUS                       | Address                               |   |                        |                         |                 |   |                 |
| Identification o                     | f System <u>CRD I</u>                 | drau <b>(</b> ic cla                            | <b>≱</b> s 2           |                         |                 |   |                 |
|                                      |                                       |   |                        |                         |                 |   |                 |
|                                      | nst. Cede <u>ANSI B</u>               | 31.7  | 19 <u>_67</u>          | Edition,                |                 | Addenda,/_                                | N A             |
| Case<br>(b)Applicable Ed             | ition of Section                      | XI Utilized f                                   | or Repairs             | or Replacements 19      | 2 <u>80 W81</u> |   |                 |
| •                                    |                                       |   |                        |                         |                 |   |                 |
| Identification o                     | f Components Rep                      | aired or Repla                                  | ced and Rep            | iacement Componen       | ts              |   |                 |
|                                      |                                       |   |                        |                         | T               |   |                 |
| <b>.</b>                             |                                       |   | National               | i ·                     |                 | Repaired                                  | ASME<br>Code    |
| Name of<br>Component                 | Name of<br>Manufacture                | Manufacturer<br>Serial No.                      | Board<br>No.           | Other<br>Identification | Year<br>Built   | Replaced,<br>or Replacement               | Stamped<br>(Yes |
| Component                            | Mariaractare                          | Ser rat No.                                     | жо.                    | raciic // raciic        | Juint           |   | or No)          |
|                                      |                                       | <u> </u>  |                        |                         | <u> </u>        |   |                 |
|                                      |                                       |   |                        |                         | 1               |   |                 |
| RD Hydraulic                         | Uk Maa                                | 5530w-1   | N /A                   | v-18-207(22-35)         | 1977            | Repaired                                  | No              |
| rain Valve                           | Hancock Mng.                          | xosh9   | N/A                    | V-18-207(22-33)         | 1977            | Repaired                                  |                 |
|                                      |                                       | ļ   |                        | <u> </u>                | <del> </del>    |   |                 |
|                                      |                                       |   |                        |                         |                 |   |                 |
|                                      |                                       |   |                        |                         |                 |   |                 |
|                                      |                                       |   |                        |                         |                 |   |                 |
|                                      | · · · · · · · · · · · · · · · · · · · |   |                        |                         | .1              | _ <del></del>                             | <del></del>     |
| . Description of W                   | ork Seal welded                       | quick disconn                                   | ect fitting            | on discharge por        | t (valve        | e size 1/2")                              |                 |
| <b>P</b>                             |                                       |   |                        |                         |                 |   |                 |
| Tests Conducted:                     | Hydrostatic                           | Pneu  | matic                  | ☐ Nominal               | Operatio        | n Pressure                                |                 |
|                                      | Other                                 | Pressure  | N/A                    | psi Test Te             | mp              | N/A°F                                     |                 |
|                                      |                                       |   |                        |                         | · \             |   |                 |
| NOTE: Supplement                     | al sheets in for                      | n of lists, sk                                  | etches, or o           | drawings may be us      | sed, prov       | vided (1) size is                         | 8½ in.x         |
| in.,(2)information the number of sho | on in items 1 the<br>eets is recorded | ro <b>ugh 6 on</b> thi<br>at th <b>e</b> top of | s repert is this form. | included on each        | sneet, a        | and (3) each sheet                        | t is numbe      |

1-28-91

FORM NIS-2 (Back) sheet 2 of 2

|                              | Applicable Manufacture  | the discharge port of valve b<br>r's Data Reports to be attach | ed  |
|------------------------------|---|--|---|
|                              |   |  |   |
|                              |   |  |   |
|                              |   |  |   |
|                              |   |  |   |
|                              |   |  |   |
|                              | CERT  | TIFICATE OF COMPLIANCE   |   |
| We cert                      | ify that the statements made in the   | report are correct and this                                    | <u>repair</u> conf  |
| to the rules                 | of the ASME Code, Section XI.   |  | repair or replacement   |
| Time Co                      | de Combal Chama Nama  |  |   |
| Type CC                      | de Symmbol Stamp <u>None</u>  |  |   |
| Certifi                      | cate of Authorization No. None  |  | Expiration Date   |
|                              |   |  |   |
| Signed                       | Sunder Shaugai<br>Owner or Owner's Designee, Title                          | Codes & Materials, GL  | Date, 19  |
|                              | Owner or Owner's Designee, Title  |  |   |
|                              |   |  |   |
|                              | CERTIFICA   | ATE OF INSERVICE INSPECTION                                    |   |
| I, the unde                  | rsigned, holding a valid commission   | on issued by the National B                                    | oard of Boiler and Pressure Ve  |
| inspectors a                 | nd the State or Province of   | <u>Iowa</u> and employ   | yed by <u>Hartford Steam Boiler I&amp;</u><br>napected the components describer |
| this Owner's                 | Report during the pariod  | 2.14-92  | to <u>/-28-7/</u>   |
| , and state                  | that to the best of my knowledge and cribed in the Owner's Repert in acc    | beliet. The Owner has bertorm                                  | ied exeminations and taken correct  |
| By signin                    | g this certificate neither the Insp   | ector nor his employer makes                                   | any Warranty, expressed or impl   |
| concerning t                 | he examinations and corrective meas   | ures described in this Owner'                                  | 's Report. Furthermore neither  |
| Inspector no<br>any kind ari | r his employer shall be liable in ar<br>sing from or connected with this in | ny manner for any personal in                                  | jury or property damage or a loss   |
|                              |   | •  |   |
| - our                        | 11 / minum  | Commissions NB 8829(I)(  | N) 941-IA   |
| insp                         | ectors Signature  | National Board   | d, State, Province, and Endorseme   |
| 4                            | 25- 21  |  |   |
|                              | n. 28 19 9/   |  |   |
| Date                         | <del></del>   |  |   |

|                  | Owner Iowa Elec   | tric Light and Po  | wer .                      |                               | Date July 5                        | , 1991        |   |   |
|------------------|---|--|----------------------------|-------------------------------|------------------------------------|---------------|---|---|
|                  | P.O.Box 351, Co   | edar Rapids, IA 5  | 2406                       |                               | Sheet 1 of                         | 2             |   |   |
|                  | Plant Duane Arno  | old Eneg Center<br>Name                                      |                            |                               | Unit 1                             |               |   |   |
|                  | 3277 DAEC Rd.   | Palo, IA 52324   |                            |                               | CMAR A                             |               | organization P.O.                       | No.,Job No.                               |
|                  | Work Performed 1  | oy <u>Iowa Electric</u><br>Name                              | Light and Powe             | r Co.                         | Type Code Symbol Authorization No. |               |   |   |
|                  |   | , Palo, IA. 52324<br>Address                                 |                            | _ <del></del>                 | Expiration Date                    |               | None                                    |   |
|                  | (a)Applicable Co<br>Case<br>(b)Applicable Eo<br>*Base Code - GE | onst. Code *ANSI :<br>dition of Section<br>Spec. 21A9230 Rev | XI Utilized f              | 19 <u>67</u>                  | Edition, N/ or Replacements 19     | 80 W81        |   | Co  |
|                  | Name of<br>Component  | Name of<br>Manufacture                                       | Manufacturer<br>Serial No. | National<br>Board<br>No.      | Other<br>Identification            | Year<br>Built | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
|                  | iston assembly  | General Elect.   | 215585-9                   | N/A                           | CV-4418                            | 1990          | Replaced                                | No  |
| sc-p:            | iston assembly  | General Elect.   | 214856-8                   | N/A                           | CV-4418                            | 1990          | Replacement                             | No  |
| _ <del>-</del> - | tem/Disc Assem.   | General Elect.   | 214856-23                  | N/A                           | CV-4418                            | 1990          | Replaced                                | No  |
| em-St            | cem/Disc Assem.   | General Elect.   | 6033641-203                | N/A                           | CV-4418                            | 1990          | Replacement                             | No  |
|                  |   |  | 1                          |                               |                                    |               |   |   |
|                  |   |  |                            |                               |                                    |               |   | <del></del>                               |
|                  | Description of V  | Work The Disc-pis  | ton and Stem-S             | tem/disc ass                  | semblies for CV-44                 | 18 were       | replaced                                |   |
|                  | Description of V  |  | _                          | tem/disc ass<br>matic<br>1025 | Nominal                            |               | g Pressure                              |   |

MP ECT

| Re | emarks MSIV, CV-4418 was disassembled under CMAR A07553 because it failed the LLRT. The Stem-Stem/Disc and Applicable Manufacturer's Data Reports to be attached    |
|----|---|
|    | Applicable Manufacturer's Data Reports to be attached   |
|    | Disc-piston Assemblies were replaced to reduce job duration. A VT-1 (91-414) and VT-3 (91-412) examinations   |
| _  |   |
|    | performed and accepted. A VT-2 (91-413) examination was also performed and accepted after reassembly.   |
| _  |   |
|    |   |
|    |   |
|    | CERTIFICATE OF COMPLIANCE   |
|    |   |
| İ  | We certify that the statements made in the report are correct and this <u>replacement</u> confused to the rules of the ASME Code, Section XI. repair or replacement |
| 1  | ,   |
|    | Type Code Symbol Stamp None   |
|    | Type code symbol scamp mone   |
|    | Contificate of Buthariantics Vo. No.  |
|    | Certificate of Authorization No. None Expiration Date None  |
|    | Signed Sumula Shaufodes & Materials, GL Date 7-22-, 19  |
|    | Signed  |
|    | Owner of Owner s besignee, little   |
|    |   |
|    | CERTIFICATE OF INSERVICE INSPECTION   |
|    | I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Ve   |
|    | Inspectors and the State or Province of IOWA and employed by <u>Hartford Steam Boiler I&amp;I</u>   |
|    | of Hartford, Connecticut have inspected the components describe this Owner's Report during the period 6-25-91 to 7-25-91  |
| Ì  | , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken correc  |
|    | measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  |
|    | By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or impl  |
| 1  | concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither  |
|    | Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los  |
|    | any kind arising from or connected with this inspection.  |
|    | any kind arising from or connected with this inspection.  Commissions  Commissions  Commissions   |
| İ  | Inspectors Signature National Board, State, Province, and Endorsem  |
|    |   |
|    | Date 7-23 19/   |
|    |   |
|    |   |

|       | Owner Iowa Elec   | tric Light and Pov            | ver                        |                          | Date July 9  | , 1991        |   |   |
|-------|---|-------------------------------|----------------------------|--------------------------|--|---------------|---|---|
|       | P.O.Box 351, C  | edar Rapids, IA 52<br>Address | 2406                       |                          | Sheet 1 of   | 2             |   |   |
|       | Plant Duane Arnold Energy Center  Name  3277 DAEC Rd. Palo, IA 52324  Address |                               |                            |                          | Unit 1   |               |   |   |
|       |   |                               |                            |                          | CMAR A07541 CSR'A' Repair Organization P.O.No.,Job No. |               |   |   |
|       | Work Performed by <u>Iowa Electric Light and Power Co.</u> Name               |                               |                            | r Co.                    | Type Code Symbol Authorization No.                     |               |   |   |
|       | 3277 DAEC Road, Palo, IA. 52324<br>Address                                    |                               |                            |                          | Expiration Date _                                      | · · · · · ·   | None                                    |   |
|       | Identification  | of System Feedw               | vater Cláss                | 1 )                      |  |               |   |   |
|       | Case (b)Applicable E  | onst. Code ASME Se            | XI Utilized f              | or Repairs               | or Replacements 19                                     | 80 W81        |   | cc  |
|       | Identification  | of Components Repa            | ired or Repla              | ced and Repl             | lacement Component                                     | 8             |   |   |
|       | Name of<br>Component  | Name of<br>Manufacture        | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification                                | Year<br>Built | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
|       | or Stuff. Box   | Anchor/Darling                | S/N-1                      | N/A                      | Ht#220872  | 1987          | Replacement                             | Yes                                       |
| dicat |   |                               | N/A                        | N/A                      | Item #64 of<br>DWG.M310-035<1>                         | ·1979         | Replaced                                | Yes                                       |
|       | or Stuff. Box   | Anchor/Darling                | 1775                       |                          |  |               | <u> </u>                                |   |
|       | or Stuff. Box   | Anchor/Darling                | 10/6                       |                          |  |               |   |   |
|       | or Stuff. Box   | Anchor/Darling                | 17.5                       |                          |  |               |   |   |

| FORM NIS-2 (Back | FORM | NIS-2 | (Back) |
|------------------|------|-------|--------|
|------------------|------|-------|--------|

. 9.

| Applicable manufacture   | er's Data Reports to be attached  |
|--|---|
| VT-1 (91-416) and VT-3 (91-415) examinations w   | were performed and accepted. A VT-2 (91-413) examination was                                      |
| performed and accepted after reassembly.   |   |
|  |   |
|  |   |
|  |   |
| CER  | RTIFICATE OF COMPLIANCE   |
| We certify that the statements made in the   | e report are correct and this <u>replacement</u> confo  |
| to the rules of the ASME Code, Section XI.   | repair or replacement   |
|  | ,   |
| Type Code Symbol Stamp None  |   |
|  | 6.  |
| Certificate of Authorization No. None  | Expiration Date None  |
|  |   |
| signed Surudu Shaw   | Codes & Materials, GL Date 7-22-91, 19  |
| Owner or Owner's Designee, Title   | 3   |
|  |   |
| ריים אומים אין   | TATE OF INSERVICE INSPECTION  |
| <del></del>  |   |
|  | on issued by the National Board of Boiler and Pressure Ves  |
| of Hartford, Connecticut   | IOWA and employed by <u>Hartford Steam Boiler I&amp;I</u> have inspected the components described |
| this Owner's Report during the period  | to 7-22-9/  |
| , and state that to the best of my knowledge and   | belief, the Owner has performed examinations and taken correct                                    |
| measures described in the Owner's Report in acc  | cordance with the requirements of the ASME Code, Section XI.                                      |
| By signing this certificate neither the Inst   | pector nor his employer makes any warranty, expressed or impli                                    |
|  | sures described in this Owner's Report. Furthermore, neither                                      |
|  | any manner for any personal injury or property damage or a loss                                   |
| any kind arising from or connected with this in  | nspection.  |
| The state of the s | 12/A  |
|  | Commissions Louic 12/0 National Board, State, Province, and Endorseme                             |
| Inspectors Signature   | Macrimar poard, prace, trovince, and pudotseme  |
| Inspectors Signature   | •   |
| Inspectors Signature   | •   |
| Inspectors Signature  Date 7-22 19 9/  | •   |

# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES. As required by the Provision of the ASME Code Rules, Section III, Div. 1

|  |   |   |  | The same and the s |
|--|---|---|--|--|
| L. (a) Manufactured by A                     | nchor/Darling Valve (   | Co., 701 First  | St., Williamsport  | , PA 17701   |
| (b) Manufactured for I                       | owa Electric Light &  | Power Co., P.O  | . Box 351, Cedar   | Rapids, Iowa 52406   |
| • •  | (Name and a   | iddress of N Certificate Holds  | if for complesed nuclear compon  | enu  |
|  | Holder's Serial No. of Part   |   |  |  |
|  | ding to Drawing No. D1202   |   |  |  |
| (b) Description of Pan                       | Inspected Indicator   | Stuffing Box, H   | eat No. 220872   | SA350-LF1  |
| (c) Applicable ASME C                        | ode: Section III, Edition 1977  | Addenda dace W  | nt 177, Case No. N   | I/A Class 1  |
| . Remarks: 16"-90                            | 0#-Tilt Disc Check  | en of service for which o   | component was designed)  |  |
| A/DV S                                       | 5.0. P-5881-14  | del of service for witten   | sapaien, ver congres,  |  |
|  |   |   |  |  |
|  | •   |   |  |  |
|  |   |   |  |  |
|  |   |   |  |  |
|  | ments made in this report are   |   |  | a defined in the Code con-   |
| exte Holder for appurtenant in the component | eification and Stress Report are<br>ies is responsible for furnishing<br>Design Specification and Stres                             | a separate Design Spe<br>us Report.)                                    | cification and Stress Repo   | et if the appurtenance is no   |
| 6/10   | 1987 Signed Anchor/I  | Darling Valve C   | o. B. RS STO   | inneit   |
|  | (NPT  | Certificate Holders   |  | N1713  |
| ertificate of Authorizatio                   | a Expires 4/15/89   | 9 Certifi   | cate of Authorization No   | H1/15  |
| CE   | RTIFICATION OF DESIGN   | FOR APPURTEN  | ANCE (when applicable  | e)   |
| Parim information on f                       | ile st  | .*  |  |  |
| Design information on t                      |   |   |  |  |
| Stress analysis report of                    | na file se  |   |  |  |
| Design specifications of                     | ertified by   |   | Prof. Eng. State   | Reg. No  |
| Scress analysis report of                    | entified by   |   | Prof. Eng. Scace   | Reg. No  |
|  | CERTIFICA   | TE OF SHOP INSP   | ECTION   |  |
| I, the undersigned, I                        | holding a valid commission iss<br>Pennsylvania  | sued by the National I  | Sound of Boiler and Pressommercial Union 1                               | sure Vessel Inspectors<br>Insurance Company  |
| of Boston Mas                                | S   |   | e part of a pressure ve  |  |
| Partial Data Report on _                     | 4-27-87 the   | 6-10-87   | 19 and state that to t   | he best of my knowledge  |
| By signing this cen                          | ficate Holder has constructed thi<br>rificate, neither the Inspector<br>led in this Partial Data F<br>manner for any personal inju- | s part in accordance wi<br>nor his employer make<br>Report. Furthermore | th the ASME Code Section is any warranty, express in neither the inspect | III.<br>ed or implied, concern-<br>or nor his employer   |
| with this inspection.                        |   |   |  |  |
| Date   | 19 8  |   |  |  |
| (Mar les                                     | Strong  | _ Commissions   | Pennsylvania   | 2392   |
| Charles Yallno                               |   | _ Commissions   | National Board, State.   | Province and Ne.   |

<sup>&</sup>quot;Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8%" x 11", (2) information in items 1-2 on this Data Brown is included on each iterit, and (3) vect sort is necessary in the contract in items 2. "Remarks".

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

|                           | Owner <u>Iowa Elect</u>                                  | ric Light and Pow<br>Neme                                 | łer  |  | Date <u>July 1</u>                                    | 2, 1991                                     |   |   |
|---------------------------|--|---|--|--|---|---|---|---|
|                           | P.O.Box 351, Ce  | dar Rapids, IA 52<br>Address                              |  |  | Sheet 1 of  | 2   |   |   |
|                           | Plant <u>Duane Arno</u>                                  | ld Energy Center<br>Name                                  |  |  | Unit1   |   |   |   |
|                           | 3277 DAEC Rd.  | Palo, IA 52324  |  |  | CMAR #A 0614  | 6   |   |   |
|                           | Address  |   |  |  |   | Repair O                                    | rganization P.O.N   | lo.,Job No.                               |
|                           | Work Performed b   | y <u>Iowa Electric</u>                                    |  |  | Type Code Symbol                                      | Stamp                                       | None  |   |
|                           |  | Name  |  |  | Authorization No                                      | •   | None  |   |
|                           | 3277 DAEC Rd.  | Palo, IA 52324<br>Address                                 | · · · · · · · · · · · · · · · · · · ·                                    | <del></del>                            | Expiration Date                                       |   | None  |   |
|                           | Identification o   | f System <u>HPCI</u>                                      | PUMP Discharge   | e (class 2)                            | (ISI ISO 2.2-45)                                      |   | <u></u>   |   |
|                           | Case (b)Applicable Ed                                    | lition of Section   | XI Utilized fo   | or Repairs o                           | Edition, N/A  | 980 W81                                     | _Addenda,N/A  | C x                                       |
|                           | (c)Construction   Identification   c                     | Code of replacement Components Rep                        | ent <u>SECTION III</u>   | 19 <u>83</u> Edition<br>ced and Repl   | lacement Component                                    | class i<br>ts                               |   |   |
| i                         | (c)Construction didentification of Name of Component     | Code of replacement Components Repair Name of Manufacture | Manufacturer<br>Serial No.   | National<br>Board                      | Other Identification                                  | Year<br>Built                               | Repaired<br>Replaced,<br>or Replacement                             | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
|                           | Identification o   | Name of   | aired or Repla   | National<br>Board                      | Other   | Year<br>Built                               | Replaced,   | Code<br>Stamped<br>(Yes                   |
| x Bolt                    | Identification of Name of Component                      | Name of Manufacture                                       | Manufacturer<br>Serial No.   | National<br>Board<br>No.               | Other Identification                                  | Year<br>Built<br>unknown                    | Replaced,<br>or Replacement   | Code<br>Stamped<br>(Yes<br>or No)         |
| x Bolt                    | Name of<br>Component                                     | Name of Manufacture  Bergan-pat                           | Manufacturer<br>Serial No.  ASTM A307  ASTM A307                         | National<br>Board<br>No.               | Other Identification                                  | Year<br>Built<br>unknown                    | Replaced,<br>or Replacement<br>Replaced                             | Code<br>Stamped<br>(Yes<br>or No)         |
| x Bolt<br>x Nut           | Name of Component  (1 ea)                                | Name of Manufacture  Bergan-pat  Bergan-pat               | Manufacturer<br>Serial No.  ASTM A307                                    | National<br>Board<br>No.               | Other Identification  EBB-5-H11                       | Year<br>Built<br>unknown<br>unknown         | Replaced,<br>or Replacement<br>Replaced<br>Replaced                 | Code<br>Stamped<br>(Yes<br>or No)<br>No   |
| ex Bolt                   | Name of Component  (1 ea)  (1 ea)  olt (1 ea)            | Name of<br>Manufacture<br>Bergan-pat<br>Bergan-pat        | Manufacturer<br>Serial No.  ASTM A307  ASTM A307  Ht# C64683  Ht#        | National<br>Board<br>No.<br>N/A        | Other Identification  EBB-5-H11  EBB-5-H11            | Year<br>Built<br>unknown<br>unknown         | Replaced, or Replacement  Replaced  Replaced  Replaced              | Code Stamped (Yes or No) No No            |
| ex Bolt<br>ex Nut         | Name of Component  (1 ea)  (1 ea)  olt (1 ea)  ut (1 ea) | Name of Manufacture  Bergan-pat Bergan-pat Cardinal       | Manufacturer<br>Serial No.  ASTM A307  ASTM A307  Ht# C64683  Ht# KB5607 | National<br>Board<br>No.<br>N/A<br>N/A | Other Identification  EBB-5-H11  EBB-5-H11  EBB-5-H11 | Year<br>Built<br>unknown<br>unknown<br>1990 | Replaced, or Replacement  Replaced  Replaced  Replaced  Replacement | Code Stamped (Yes or No) No No            |
| x Bolt<br>x Nut<br>liti-B | Name of Component  (1 ea)  (1 ea)  olt (1 ea)  ut (1 ea) | Name of Manufacture  Bergan-pat Bergan-pat Cardinal       | Manufacturer<br>Serial No.  ASTM A307  ASTM A307  Ht# C64683  Ht# KB5607 | National<br>Board<br>No.<br>N/A<br>N/A | Other Identification  EBB-5-H11  EBB-5-H11            | Year<br>Built<br>unknown<br>unknown<br>1990 | Replaced, or Replacement  Replaced  Replaced  Replaced  Replacement | Code Stamped (Yes or No) No No            |

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in.,(2)information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

723.91

| CERT   | TIFICATE OF COMPLIANCE   |
|--|--|
| Us cortify that the statements made in the   | e report are correct and this <u>replacement</u> con   |
| to the rules of the ASME Code, Section XI.   | e report are correct and this <u>replacement</u> con<br>repair or replacement  |
|  |  |
| Type Code Symbol Stamp None  |  |
|  |  |
| Certificate of Authorization No. None  | Expiration Date <u>Non</u>   |
| signed In mouth and  | ,•   |
| Signed Lum Modul for Owner or Owner's Designee, Title                                  | Codes & Materials, GL Date 7-17, 1   |
| Owner of Owner a Designee, Titte   |  |
| CERTIE   | ATE OF INSERVICE INSPECTION  |
|  |  |
| I, the undersigned, holding a valid commission Inspectors and the State or Province of | on issued by the National Board of Boiler and Pressure V<br>IOWA and employed by <u>Hartford Steam Boiler I&amp;</u> |
| of Hartford, Connecticut this Owner's Report during the period 6-3                     | have inspected the components describ  |
| , and state that to the best of my knowledge and                                       | to 7-23-9/<br>belief, the Owner has performed examinations and taken corre   |
| measures described in the Owner's Report in acco                                       | cordance with the requirements of the ASME Code, Section XI.   |
| By signing this certificate neither the Inspe  | pector nor his amployer makes any warranty, expressed or imp   |
| concerning the examinations and corrective measu                                       | sures described in this Owner's Report. Furthermore neithe   |
| any kind arising from or connected with this ins                                       | any manner for any personal injury or property damage or a lonspection.  |
| Mid Duston   | Commissions In 1210  |
| Inspectors Signature   | Commissions <u>Four 1210</u> National Board, State, Province, and Endorses   |
|  |  |
| Date 7-23 19 9/  |  |

|               | Owner Iowa Elect                       | ric Light and Pow<br>Name                                       | er  |   | Date Apr                                      | il 4, 19                         | 92  | <u> </u>                                  |
|---------------|--|---|---|---|---|----------------------------------|---|---|
|               | P.O.Box 351, Ce                        | edar Rapids, IA 52<br>Address                                   | 406   |   | Sheet 1 of                                    | 2                                |   |   |
|               | Plant Duane Arno                       | old Energy Center<br>Name                                       |   |   | Unit 1  |                                  |   |   |
|               | 3277 DAEC Rd. Palo, IA 52324 Address   |   |   |   |   | Repair C                         | Organization P.O.N  | No.,Job No.                               |
|               | Work Performed b                       | y <u>Iowa Electric L</u><br>Name                                | ight and Powe   | r   | Type Code Symbol Authorization No.            |                                  |   |   |
|               | 3277 DAEC Road,                        | Palo, IA. 52324<br>Address                                      |   | <del> </del>                                  | Expiration Date                               |                                  | None  |   |
|               | Identification o                       | of System <u>React</u>  | or Water Clea   | n-up (RWCU)                                   | Class 1                                       |                                  |   |   |
|               | Cago                                   | onst. Code B31.7  |   |   |   |                                  |   | c   |
|               |  |   |   |   |   |                                  |   |   |
|               | Identification o                       | of Components Repa  | ired or Repla   | ced and Repl                                  | lacement Component                            | 8                                |   |   |
| )             | Identification of Name of Component    | T   | ired or Repla  Manufacturer  Serial No.                           | National                                      | Other   | year<br>Built                    | Repaired<br>Replaced,<br>or Replacement                   | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| lts           | Name of                                | Name of   | Manufacturer  | National<br>Board                             | Other<br>Identification<br>DCA-6-H-1          | Year                             | Replaced,   | Code<br>Stamped<br>(Yes                   |
|               | Name of<br>Component                   | Name of<br>Manufacture  | Manufacturer<br>Serial No.  | National<br>Board<br>No.                      | Other<br>Identification                       | Year<br>Built                    | Replaced,<br>or Replacement                               | Code<br>Stamped<br>(Yes<br>or No)         |
| olts          | Name of<br>Component<br>(2ea)          | Name of<br>Manufacture<br>BergenPatterson                       | Manufacturer<br>Serial No.<br>A307Gr.B                            | National<br>Board<br>No.                      | Other Identification  DCA-6-H-1 (CUB-K007)    | Year<br>Built<br>Inknown         | Replaced,<br>or Replacement                               | Code<br>Stamped<br>(Yes<br>or No)         |
| olts<br>uts ( | Name of<br>Component<br>(2ea)<br>(2ea) | Name of<br>Manufacture<br>BergenPatterson<br>Cardinal           | Manufacturer<br>Serial No.<br>A307Gr.B<br>Bt.A2113                | National<br>Board<br>No.<br>N/A               | Other Identification  DCA-6-H-1 (CUB-K007)    | Year<br>Built<br>Inknown         | Replaced, or Replacement  Replaced  Replacement           | Code Stamped (Yes or No) No               |
|               | Name of<br>Component<br>(2ea)<br>(2ea) | Name of Manufacture  BergenPatterson  Cardinal  BergenPatterson | Manufacturer<br>Serial Nc.<br>A307Gr.B<br>Bt.A2113                | National<br>Board<br>No.<br>N/A<br>N/A        | Other Identification  DCA-6-H-1 (CUB-K007) "  | Year<br>Built<br>Inknown<br>1988 | Replaced, or Replacement  Replaced  Replacement  Replaced | Code Stamped (Yes or No) No No            |
| olts<br>uts ( | Name of Component  (2ea)  (2ea)  2ea)  | Name of Manufacture  BergenPatterson  Cardinal  BergenPatterson | Manufacturer Serial Nc.  A307Gr.B  Ht.A2113  A307Gr.B  Ht.Y592608 | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A | Other Identification  DCA-6-H-1 (CUB-K007) "" | Year<br>Built<br>Inknown<br>1988 | Replaced, or Replacement  Replaced  Replacement  Replaced | Code Stamped (Yes or No) No No            |

| FORM | NIS-2 | /Backs |
|------|-------|--------|
| FORM | NIS-2 | (Back) |

|  |   | -                            |                             |
|--|---|------------------------------|-----------------------------|
| CUB-J006. During disa  | assembly one bolt was damaged ar                                    | d required replacement. Both | bolts and nuts were replace |
| during reassembly. A   | preservice VT-3/4 (92-082) was                                      | performed and accepted.      |                             |
|  |   | •                            |                             |
|  |   |                              |                             |
|  |   |                              |                             |
|  | CODETATO  | ATE OF COMPLIANCE            |                             |
| •  | CARIFIC   | ALE OF COMPLIANCE            |                             |
|  | the statements made in the rep                                      |                              |                             |
| to the rules of the  | ASME Code, Section XI.  | ·                            | pair or replacement         |
|  |   |                              |                             |
| Type Code Symbo  | 1 Stamp None  |                              |                             |
| Certificate of .   | Authorization No. None  |                              | Expiration Date None        |
|  |   |                              |                             |
| signed Sux   | welle Shauge  | Codes & Materials, GL Da     | 5- 2- 4 L<br>te , 19        |
| Owner o  | r Owner's Designee, Title   |                              |                             |
|  |   |                              |                             |
|  |   |                              |                             |
|  | CERTIFICATE O   | P INSERVICE INSPECTION       |                             |
| I the undersigned.   | holding a valid commission is                                       | usued by the National Board  | of Boiler and Pressure Ve   |
| Inspectors and the St  | tate or Province of IC  | WA and employed b            | y Hartford Steam Boiler I&I |
| of   | Hartford, Connecticut during the period                             | have inspec                  | ted the components describe |
|  | during the period<br>he best of my knowledge and beli               |                              |                             |
|  | n the Owner's Report in accordan                                    | · •                          |                             |
| •  |   |                              |                             |
| measures described in  | ertificate neither the inspector                                    | r nor his employer makes any |                             |
| measures described in  | nations and corrective measures                                     | described in this Owner's Re | port. Furthermore, neither  |
| By signing this concerning the examination of the e | nations and corrective measures<br>ployer shall be liable in any ma | nner for any personal injury |                             |
| By signing this concerning the examination of the e |   | nner for any personal injury |                             |
| By signing this concerning the examination of the e | ployer shall be liable in any man or connected with this inspect    | nner for any personal injury | or property damage or a los |
| By signing this concerning the examination of the e | ployer shall be liable in any man or connected with this inspect    | nner for any personal injury | or property damage or a los |
| By signing this concerning the examination in the examination of the e | ployer shall be liable in any man or connected with this inspect    | nner for any personal injury | or property damage or a los |
| By signing this concerning the examination in the examination of the e | ployer shall be liable in any man or connected with this inspect    | nner for any personal injury | or property damage or a los |

|                        | Iowa Elect   | ric Light and Pow<br>Name    | ver                        |                          | Date Apr                | 11 7, 19      | 92                                      |  |      |
|------------------------|--------------|------------------------------|----------------------------|--------------------------|-------------------------|---------------|---|--|------|
| P.O.                   | Box 351, Ce  | dar Rapids, IA 52<br>Address | 2406                       |                          | Sheet 1 of              | 2             |   |  |      |
| Plant                  | Duane Arno   | old Energy Center<br>Name    |                            |                          | Unit 1                  |               |   |  |      |
| 3277                   | DAEC Rd.     | Palo, IA 52324               |                            |                          | CMA                     | R A07307      |   |  | -    |
|                        | Address      |                              |                            |                          |                         | Repair (      | organization P.O.                       | No.,Job No.                                      |      |
| Work                   | Performed b  | y Iowa Electric I            | ight and Powe              | r                        | Type Code Symbol        | Stamp         | None                                    |  |      |
| Ŷ                      |              | маше                         |                            |                          | Authorization No.       | ·             | None                                    |  |      |
| 3277                   | DAEC Road,   | Palo, IA. 52324<br>Address   |                            |                          | Expiration Date         |               | None                                    |  |      |
| Ident                  | ification o  | f System Resid               | lual Heat Remo             | val (RHR)                | Class 2                 |               |   | <del></del>                                      |      |
| Case                   |              |                              |                            |                          | Edition,                |               |   |  | Code |
| Ident                  | ification o  | f Components Repa            | ired or Repla              | ced and Rep              | lacement Component      | s             | 1                                       | <del></del> 1                                    |      |
| Name                   |              | Name of<br>Manufacture       | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification | Year<br>Built | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No)        |      |
| Compon                 |              |                              |                            |                          |                         |               |   | <del>                                     </del> |      |
|                        |              | Anchor Darling               | 0434-12                    | N/A                      | MO-2007                 | 1972          | Repaired                                | Yes  |      |
| Skirt                  |              | Anchor Darling               | 0434-12<br>N/A             | N/A<br>N/A               | MO-2007<br>MO-2007      | 1972          | Repaired Repaired                       | Yes  |      |
| Skirt                  |              |                              |                            |                          |                         |               | † · · · · · · · · · · · · · · · · · · · |  |      |
| Skirt                  |              |                              |                            |                          |                         |               | † · · · · · · · · · · · · · · · · · · · |  |      |
| : Skirt                |              |                              |                            |                          |                         |               | † · · · · · · · · · · · · · · · · · · · |  |      |
| Skirt                  |              |                              |                            |                          |                         |               | † · · · · · · · · · · · · · · · · · · · |  |      |
| Skirt                  | iption of We | Anchor Darling               | N/A                        | N/A                      |                         | 1972          | † · · · · · · · · · · · · · · · · · · · |  |      |
| Skirt<br>Nut<br>Descr: |              | Anchor Darling               | N/A                        | N/A                      | MO-2007                 | 1972          | Repaired                                |  |      |

FORM NIS-2 (Back) sheet 2 of 2

| weld build-up. Valve was reassembled as  | nd stroke tested acceptable. A Vt-2 (92-075) was completed and four   |
|--|---|
|  |   |
| acceptable. NCR 92-031 was written on t  | the tack welds for the disc nut and dispositioned and closed.   |
|  |   |
|  |   |
|  |   |
|  | CERTIFICATE OF COMPLIANCE   |
| We cortify that the statements ma  | ade in the report are correct and this <u>repair</u> co   |
| to the rules of the ASME Code, Section   |   |
|  |   |
| Type Code Symbol StampNone   | ·   |
| Cartificate of Nutberies No.   | None Expiration Date No.  |
|  |   |
| Silvan den Sh  | Codes & Materials, GL Date,   |
| Signed   | Codes & Materials, GL Date,   |
| Owner or Owner's Designed  | mitle 0   |
| Owner or Owner's Designee  | a, Title <sup>0</sup>   |
| Owner or Owner's Designee  | e, Title <sup>0</sup>   |
|  |   |
|  | CERTIFICATE OF INSERVICE INSPECTION   |
| I, the undersigned, holding a valid  | CERTIFICATE OF INSERVICE INSPECTION  commission issued by the National Board of Boiler and Pressure   |
| I, the undersigned, holding a valid Inspectors and the State or Province o   | CERTIFICATE OF INSERVICE INSPECTION  commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I   |
| I, the undersigned, holding a valid Inspectors and the State or Province o   | commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I have inspected the components descri   |
| I, the undersigned, holding a valid Inspectors and the State or Province o   | commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I tricut have inspected the components descri  |
| I, the undersigned, holding a valid Inspectors and the State or Province o   | commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I have inspected the components descri   |
| I, the undersigned, holding a valid Inspectors and the State or Province o   | commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I have inspected the components described and belief, the Owner has performed examinations and taken correct in accordance with the requirements of the ASME Code, Section XI  |
| I, the undersigned, holding a valid Inspectors and the State or Province o   | commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I have inspected the components described and belief, the Owner has performed examinations and taken correct in accordance with the requirements of the ASME Code, Section XI the Inspector nor his employer makes any warranty, expressed or impactive measures described in this Owner's Report. Furthermore, neither  |
| I, the undersigned, holding a valid Inspectors and the State or Province o   | commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I tricut have inspected the components described and belief, the Owner has performed examinations and taken correct in accordance with the requirements of the ASME Code, Section XI to the Inspector nor his employer makes any warranty, expressed or impute the measures described in this Owner's Report. Furthermore, neither able in any manner for any personal injury or property damage or a 1        |
| I, the undersigned, holding a valid Inspectors and the State or Province o   | commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I tricut have inspected the components described and belief, the Owner has performed examinations and taken correct in accordance with the requirements of the ASME Code, Section XI to the Inspector nor his employer makes any warranty, expressed or impute the measures described in this Owner's Report. Furthermore, neither able in any manner for any personal injury or property damage or a 1        |
| I, the undersigned, holding a valid Inspectors and the State or Province of Hartford, Connect this Owner's Report during the period, and state that to the best of my know measures described in the Owner's Report By signing this certificate neither concerning the examinations and correct Inspector nor his employer shall be like any kind arising from or connected with | commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I have inspected the components described and belief, the Owner has performed examinations and taken correct in accordance with the requirements of the ASME Code, Section XI.  The Inspector nor his employer makes any warranty, expressed or imprise measures described in this Owner's Report. Furthermore, neitheable in any manner for any personal injury or property damage or a 1-th this inspection. |
| I, the undersigned, holding a valid Inspectors and the State or Province of Hartford, Connect this Owner's Report during the period, and state that to the best of my know measures described in the Owner's Report By signing this certificate neither concerning the examinations and correct Inspector nor his employer shall be like any kind arising from or connected with | commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I tricut have inspected the components described and belief, the Owner has performed examinations and taken correct in accordance with the requirements of the ASME Code, Section XI to the Inspector nor his employer makes any warranty, expressed or impute the measures described in this Owner's Report. Furthermore, neither able in any manner for any personal injury or property damage or a 1        |
| I, the undersigned, holding a valid Inspectors and the State or Province of Hartford, Connect this Owner's Report during the period, and state that to the best of my know measures described in the Owner's Report By signing this certificate neither concerning the examinations and correct Inspector nor his employer shall be like any kind arising from or connected with | commission issued by the National Board of Boiler and Pressure of IOWA and employed by Hartford Steam Boiler I have inspected the components described and belief, the Owner has performed examinations and taken correct in accordance with the requirements of the ASME Code, Section XI.  The Inspector nor his employer makes any warranty, expressed or imprise measures described in this Owner's Report. Furthermore, neitheable in any manner for any personal injury or property damage or a 1-th this inspection. |

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS & VALVES

As Required by the Provisions of the ASME Pump & Valve Code Rules

| 1.     | Manufactured by <u>ANCHOR VALVE CO</u> (Name & Address)   | OMPANY LHAY  | WARD, CALIF Or               | der No. 0434-12                            |
|--------|---|--|------------------------------|--|
| •      | (Name & Address   | of Manufact  | urer)                        | 7884-M-151A                                |
| 2.     | Hanufactured for BECHTEL CORP.,   | SAN FRANC  | ISCO, CALIF Or               | der No. ITEM 3.1                           |
|        | (Name and A   | ddress)  |                              | •  |
| 3.     | Owner IOWA LIGHT AND POWER COL  | MPANY, CED   | AR RAPIDS, IOW               | <u>1</u>                                   |
| 4.     | Location DUANE ARNOLD ENERGY  |  |                              |  |
| 5.     | Pump or Valve Identification SE   |  | •                            |  |
|        | (a) Shop Drawing No. <u>1481-3</u>  | Prepar   | ed by M.A. SOL               | YAN ANCHOR VALVE                           |
| 6.     | Design Conditions 478 (Pres   | sure) psi (  | 788°F . S<br>Temperature)    | pecified by MA SDLYAN (Name of Co. & Rep.) |
| 7.     | The Design Complies with  |  | Class I (II) I               |  |
|        | · · · · · · · · · · · · · · · · · · ·   |  | (circle o                    | ne)  |
| ٠      | (a) Design Information on file a  |  |                              | · · · · · · · · · · · · · · · · · · ·      |
|        | (b) Design Specification certifi  | ed by JOH  | IN GENTLES CAR               | ALIF 2371 2-11-71 tate Reg. No. Dat        |
|        |   |  |                              |  |
|        | (c) Design Report on fi   | The state of the s |                              |  |
|        | (d) Design Report certi   | fied by N/A  | ( F ())                      | State Reg. No. Dat                         |
|        |   | **   | rof. Engr.(1)                | State Reg. Ho. De-                         |
| 8.     | The Materials comply with Class I   | , (II,) III (  | circle one)                  |  |
|        | Mark No.  |  | Manufacturer                 | Material Manufacturer                      |
|        | (a) Castings  |  | THE TABLE                    | SKAGIT CORP                                |
| •      | 1BODY 0434-12-1-4<br>2BONNET 0434-12-2-4  | A216WCB<br>A216WCB   | ANCHOR VALVE<br>ANCHOR VALVE | SKAGIT CORP                                |
|        | 3DISC 0434-12-4-3   | A216WCB  | ANCHOR VALVE                 | SKAGIT CORP                                |
|        | 4.  |  |                              |  |
|        | (b) Forgings  | A 1 82 CPE6  | ANCHOR VALVE                 | CARPENTER STEEL                            |
| ·      | 1GLAND 825765-  | ATOZORIO   | , and a second               |  |
| •      | 3.  |  |                              |  |
|        | 4.  |  |                              |  |
| ·      | (c) Bolting 1BONNET STUDS CODE 1-0  | A193 B7  | FLANGE SPEC.                 | COPPERWELD                                 |
| •      | 1BONNET STUDS CODE 1-0<br>2BONNET NUTS CODE DX  | A194 2H  | COAST INDUST.                | MODULUS                                    |
|        | (d) Other Component   |  |                              |  |
|        | 1STEM 826311  | A276TY41   | ANCHOR VALVE                 | CARPENTER                                  |
| .· . • | 2 SEAT RING 74251-8-2   | A516GR70<br>A193 B7  | ANCHOR VALVE<br>KORTICK      | E.M. JORGENSEN                             |
|        | 3 GLAND BOLT CODE FA<br>4 GLAND NUT CODE DS   | A194 2H  | COAST INDUST.                |  |
|        | E OVER  |  |                              | Trop =                                     |
| 9.     | 4 GLAND NUT CODE DS  5. OVER  The Manufacture and Examination of (Shop Hydrostatic) Pneumatic Test (circle one)  Certificate of Authorization expires | omplies wit  | h Class I, (II,) II          | I. (circle one), de 10/12                  |
|        | (circle one)  | МАРС   | н о 1974                     | 9-   |
| •      | Certificate of Authorization expi   | res MARC   | 11 7, 1714                   | · · · · · · · · · · · · · · · · · · ·      |

| We certify the statements | of items number 8 and 9 in | this data report to be correc |
|---------------------------|----------------------------|-------------------------------|
| Date APRIL 20 1972        | ANCHOR VALVE CO.           | By MDust                      |
|                           | (Manufacturer)             | (Manufacturer's Represen      |

(Manufacturer)

#### CERTIFICATE OF SHOP INSPECTION

mmission issued by the National Board of Boiler and Pressure Vessellaspectors and/or the State of PRESSURE VESSEL SEC. of DIV. OF INDUSTRIAL SAFETY have inspected the described in this number to described in this number to described in the number to described in the number to describe the described in the number to the first to the less of my knowledge and belief, the manufacturer has constructed this form equipment and ASME Code for Pumps & Valves for Nuclear Power as seguing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the mean discretified in an annual or time report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or properly damage or a loss of any kind seesing from or connected with this inspection.

| Date APRIL 20 12            | • •           |
|-----------------------------|---------------|
| 1//                         |               |
| Long lifton Commissions DID |               |
| Introttor                   | State and So. |
|                             |               |

|   |           | the season of the best to          |                                |
|---|-----------|------------------------------------|--------------------------------|
| MARK NUMBER   | ASTM      | MANUFACTURER                       | MATERIAL MANUFACTUR            |
| 5. CROSSPIN CODE EQ .6. GLAND FLANGE 68A741-6-S 7. GLAND RET RING |           | FLANGE SPECIALTIES<br>ANCHOR VALVE | COPPERWELD<br>U.S. STEEL CORP. |
| 68A741-6-S  8. DRAIN CONNECTION                                   | A516 GR70 | ANCHOR VALVE                       | U.S. STEEL CORP.               |
| CODE FH   | Al06 GRB  | KEY PIPE & SUPPLY                  | U.S. STEEL CORP.               |
|   |           |                                    |                                |

|       | Owner Iowa Elect                                       | ric Light and Po  | wer   |  | Date Apr  | il 9, 19                     | 992  |   |
|-------|--|---|---|--|---|------------------------------|--|---|
|       | P.O.Box 351, Ce  | dar Rapids, IA 5  |   |  | Sheet 1 of  | 2                            |  |   |
|       | Plant Duane Arno                                       | ld Energy Center<br>Name  | · · · · · · · · · · · · · · · · · · ·                     | <del></del>                            | Unit 1  |                              |  |   |
|       | 3277 DAEC Rd.  | Palo, IA 52324  |   |  | PMA   |                              | 2 / 1062384<br>Organization P.O.1                            | No.,Job No.                               |
|       | Work Performed b                                       |   | Light and Powe  | er                                     | Type Code Symbol  | Stamp                        | None   |   |
|       |  | Name  |   |  | Authorization No  | •                            | None   |   |
|       | 3277 DAEC Road,  | Palo, IA. 52324<br>Address  |   |  | Expiration Date   |                              | None   |   |
|       | Identification o                                       | f SystemCont  | rol Rod Drive   | (CRD) Class                            | 1   | <del> </del>                 |  |   |
|       | Case (b)Applicable Ed                                  |   | XI Utilized f   | or Repairs                             | Edition, W75  |                              |  | -2 Co                                     |
|       | (C)Capaciewa com                                       |   |   |  |   |                              |  |   |
|       |  |   |   |  | lacement Component  | .s                           |  |   |
| •     |  |   |   | National                               |   | Year<br>Built                | Repaired<br>Replaced,<br>or Replacement                      | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
|       | Identification o                                       | f Components Repa   | aired or Repla  | National<br>Board                      | lacement Component  Other   | Year                         | Replaced,  | Code<br>Stamped<br>(Yes                   |
| ylind | Identification o                                       | f Components Repa   | Manufacturer<br>Serial No.                                | National<br>Board                      | • Other   | Year<br>Built                | Replaced,<br>or Replacement                                  | Code<br>Stamped<br>(Yes<br>or No)         |
| ylind | Identification o  Name of Component  Her Tube & Flange | Name of Manufacture   | Manufacturer<br>Serial No.                                | National Board No.                     | • Other Identification  | Year<br>Built<br>1990        | Replaced, or Replacement Replacement                         | Code Stamped (Yes or No)                  |
| ylind | Identification o  Name of Component  Her Tube & Flange | Name of Manufacture  General Elect.                                 | Manufacturer<br>Serial No.<br>S/N A8840<br>A/N 4556       | National<br>Board<br>No.<br>N/A        | • Other Identification  1R215(10-27)  1R215(10-27)                  | Year<br>Built<br>1990<br>N/A | Replaced, or Replacement Replacement                         | Code Stamped (Yes or No) Yes              |
| ylind | Identification o  Name of Component  Her Tube & Flange | Name of Manufacture  General Elect.                                 | Manufacturer<br>Serial No.<br>S/N A8840<br>A/N 4556       | National<br>Board<br>No.<br>N/A        | • Other Identification  1R215(10-27)  1R215(10-27)                  | Year<br>Built<br>1990<br>N/A | Replaced, or Replacement Replacement                         | Code Stamped (Yes or No) Yes              |
| ylind | Name of Component  Her Tube & Flange Her Tube & Flange | Name of Manufacture  General Elect.  General Elect.  General Elect. | Manufacturer Serial No.  S/N A8840  A/N 4556  HT Code KOG | National<br>Board<br>No.<br>N/A<br>N/A | • Other Identification  1R215(10-27)  1R215(10-27)  PN 117C4515P002 | Year Built  1990 N/A  1990   | Replaced, or Replacement  Replacement  Replaced  Replacement | Code Stamped (Yes or No) Yes              |

sheet 2 of 2

| Remarks During rebuilding of spare CRD it was necessary to replace the cylinder tube and flange assembly.  |
|--|
| Applicable Manufacturer's Data Reports to be attached  |
|  |
| S/N 4556 was replaced with S/N A8840 and installed under PMAR 1062384. All 8 capscrews were replaced during  |
| installation, A VT-1 (91-426) was completed on the replacement capscrews and accepted. A VT-2 (91-304) was   |
| was comproved on the represent capacities and accepted. A VI-2 (31-304) was  |
| performed and accepted. The CRD was installed in location 1R215(10-27).  |
|  |
|  |
|  |
|  |
| CERTIFICATE OF COMPLIANCE  |
|  |
| We certify that the statements made in the report are correct and this <u>replacement</u> conforms   |
| to the rules of the ASME Code, Section XI. repair or replacement   |
|  |
| Type Code Symbol Stamp None  |
| 1750 0000 072001 00000   |
| Certificate of Authorization No. None Expiration Date None   |
| 0-5  |
| Signed Codes & Materials, GL Date 4 25 , 19 92  Owner or Owner's Designee, Title   |
| Signed Codes & Materials, GL Date, 19 92   |
| Owner or Owner's Designee, Title   |
|  |
|  |
|  |
| CERTIFICATE OF INSERVICE INSPECTION  |
|  |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel  |
| Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler I&I Co.   |
| of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3-28-9) to 5-79-93   |
| , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective   |
| measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.   |
| The state of the s |
| By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied,   |
| concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the   |
| Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of   |
| any kind arising from or connected with this inspection.   |
| 1 (2 - 2) (2 - 2) = 2 - 2  |
| Commissions NB 7543 (IN) Inspectors Signature  Commissions NB 7543 (IN) Inspectors Signature  National Board, State, Province, and Endorsements  |
| National Board, State, Province, and Endorsements  |
|  |
| Date_ 5-19-92 19 &   |
|  |
|  |
|  |
|  |

9. .

|           | Owner <u>Iowa Elect</u>  | ric Light and Pow<br>Name                         | er                           |                            | DateApr  | 11 21, 19                          | 992   |   |
|-----------|--------------------------|---|------------------------------|----------------------------|--|------------------------------------|---|---|
|           | P.O.Box 351, Ce          | edar Rapids, IA 52<br>Address                     | 406                          |                            | Sheet 1 of   | 2                                  |   |   |
|           | Plant Duane Arno         | Plant Duane Arnold Energy Center Name             |                              |                            |  |                                    |   |   |
|           | 3277 DAEC Rd.<br>Address | cı  | MAR A1207<br>Repair O        | 9<br>rganization P.O.N     | No.,Job N  |                                    |   |   |
|           | Work Performed b         | Type Code Symbol Authorization No                 |                              |                            |  |                                    |   |   |
|           | 3277 DAEC Road,          | Palo, IA. 52324<br>Address                        |                              | <del> </del>               | Expiration Date  |                                    | None  | ,   |
|           | Identification o         | of System Resid                                   | iual Heat Remo               | val (RHR) Cl               | ass 2  |                                    |   |   |
|           | Cago                     | onst. Code <u>ASME I</u>                          |                              |                            |  |                                    |   | -2  |
|           | Identification o         | of Components Repa                                | ired or Repla                | ced and Repl               | acement Component  | s                                  |   |   |
|           |                          |   |                              |                            |  |                                    |   |   |
| )         | Name of<br>Component     | Name of<br>Manufacture                            | Manufacturer<br>Serial No.   | National<br>Board<br>No.   | Other<br>Identification                                    | Year<br>Built                      | Repaired<br>Replaced,<br>or Replacement                             | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| ts        |                          | 1   |                              | Board                      |  | Built                              | Replaced,   | Code<br>Stamped<br>(Yes                   |
|           | Component                | Manufacture                                       | Serial No.                   | Board<br>No.               | Identification   | Built<br>Unknown                   | Replaced,<br>or Replacement   | Code<br>Stamped<br>(Yes<br>or No)         |
| s (       | Component (8ea)          | Manufacture<br>Unknown                            | Serial No.                   | Board<br>No.<br>N/A        | Identification  Inlet Bolts                                | Built<br>Unknown                   | Replaced,<br>or Replacement<br>Replaced                             | Code<br>Stamped<br>(Yes<br>or No)<br>No   |
| s (<br>ts | Component                | Manufacture<br>Unknown<br>Unknown                 | Serial No. N/A N/A           | Board<br>No.<br>N/A<br>N/A | Inlet Bolts Inlet Nuts                                     | Built Unknown Unknown              | Replaced, or Replacement Replaced                                   | Code<br>Stamped<br>(Yes<br>or No)<br>No   |
| s (       | (8ea) (8ea)              | Manufacture Unknown Unknown Cardinal              | N/A N/A Ht#C66935            | NO.  N/A  N/A  N/A         | Inlet Bolts Inlet Nuts Inlet Bolts                         | Built Unknown Unknown              | Replaced, or Replacement  Replaced  Replaced  Replaced              | Code Stamped (Yes or No) No               |
| s (       | (8ea) (8ea) (8ea)        | Manufacture  Unknown  Unknown  Cardinal  Cardinal | N/A N/A Ht#C66935 Ht#4LC0913 | NO.  N/A  N/A  N/A  N/A    | Inlet Bolts Inlet Nuts Inlet Bolts Inlet Nuts              | Built Unknown Unknown              | Replaced, or Replacement  Replaced  Replaced  Replaced              | Code Stamped (Yes or No) No               |
| s (       | (8ea) (8ea) (8ea)        | Manufacture  Unknown  Unknown  Cardinal  Cardinal | N/A N/A Ht#C66935 Ht#4LC0913 | NO.  N/A  N/A  N/A  N/A    | Inlet Bolts Inlet Nuts Inlet Bolts Inlet Nuts On PSV-1952. | Unknown<br>Unknown<br>1988<br>1986 | Replaced, or Replacement  Replaced  Replaced  Replaced  Replacement | Code Stamped (Yes or No) No               |

| to faciltate acceptable assembly. The bolting wa   | as installed and a VT-2 (92-095) was performed and found ac                      |
|--|--|
|  | is installed and a vi z (32 033) was performed and found ac-                     |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| CKRT   | TIFICATE OF COMPLIANCE   |
|  |  |
|  | report are correct and this repair/replacement cor                               |
| to the rules of the ASME Code, Section XI.         | repair or replacement  |
|  |  |
| Type Code Symbol Stamp None                        |  |
| Certificate of Authorization NoNone                | Expiration Date Non  |
| _  |  |
| 11200 100 800 00                                   | codes & Materials, GL Date 425/92, 1   |
| Signed Owner or Owner's Designee, Title            | Codes & Materials, GL Date, 1  |
| Owner of Owner's Designee, Title                   | <b>'</b>   |
|  |  |
| •  |  |
| CKRTIFICAT   | TE OF INSERVICE INSPECTION   |
| T the undersigned helding a unlid commission       | n issued by the National Board of Boiler and Pressure V                          |
| Inspectors and the State or Province of            |  |
| of Hartford, Connecticut                           | have inspected the components describ  |
| this Owner's Report during the period              | 4-8-92 to 5-19-92  |
| , and state that to the best of my knowledge and h | belief, the Owner has performed examinations and taken corre                     |
| measures described in the Owner's Report in acco   | ordance with the requirements of the ASME Code, Section XI.                      |
| By signing this certificate neither the Inspe      | ector nor his employer makes any warranty, expressed or imp                      |
|  | ares described in this Owner's Report. Furthermore, neithe                       |
|  | y manner for any personal injury or property damage or a lo                      |
| any kind arising from or connected with this ins   | spection.  |
| 62.10 m. Cl.                                       | Commissions NR754) (TN) To 1441  |
| Inspectors Signature                               | Commissions NA 7543 (I, N) Is 1846  National Board, State, Province, and Endorse |
|  | ,,,,   |
|  |  |
| Date 5-/9-91 19 <sup>9</sup> 2                     |  |

|     | Owner Iowa Elec                   | tric Light and Pow                                    | /er  |  | Date <u>Apr</u>                               | il 21, 1                    | .992                                    | <del></del>                               |
|-----|-----------------------------------|---|--|--|---|-----------------------------|---|---|
|     | . ==                              | Name  |  |  |   |                             |   |   |
|     | P.O.Box 351, C                    | edar Rapids, IA 52<br>Address                         | 2406   |  | Sheet 1 of                                    | 2                           | <u> </u>                                |   |
|     | Plant <u>Duane Arn</u>            | old Energy Center<br>Name                             |  |  | Unit 1  |                             |   |   |
|     | 3277 DAEC Rd.<br>Address          | Palo, IA 52324  |  | ····                                   | PMA   | Repair (                    | 7<br>Organization P.O.!                 | No.,Job No.                               |
|     | Work Performed                    | by Iowa Electric I                                    | ight and Powe  | or                                     |   |                             |   |   |
|     |                                   |   |  |  | Authorization No                              | •                           | None                                    |   |
|     | 3277 DAEC Road                    | Address   |  |  | Expiration Date                               | _                           | None                                    |   |
|     | Identification                    | of System Resid                                       | iual Heat Remo   | ovel (RHR) Cl                          | ass 2   |                             |   |   |
|     | Case                              | Const. Code ASME I                                    |  |  |   |                             |   | 71,N225                                   |
|     |                                   |   |  |  |   |                             |   |   |
|     | Identification                    | of Components Repa                                    | ired or Repla  | ced and Repl                           | acement Component                             | s                           |   |   |
| }   | Identification  Name of Component | of Components Repa<br>Name of<br>Manufacture          | ired or Repla<br>Manufacturer<br>Serial No.              | National                               | Other   | s<br>Year<br>Built          | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| B-3 | Name of                           | Name of   | Manufacturer   | National<br>Board                      | Other   | Year                        | Replaced,                               | Code<br>Stamped<br>(Yes                   |
|     | Name of<br>Component              | Name of<br>Manufacture                                | Manufacturer<br>Serial No.                               | National<br>Board<br>No.               | Other<br>Identification                       | Year<br>Built               | Replaced,<br>or Replacement             | Code<br>Stamped<br>(Yes<br>or No)         |
|     | Name of<br>Component<br>-SS-238   | Name of<br>Manufacture<br>BergenPatterson             | Manufacturer<br>Serial No.<br>2500-20-423                | National<br>Board<br>No.               | Other<br>Identification                       | Year<br>Built<br>N/A        | Replaced, or Replacement Replaced       | Code<br>Stamped<br>(Yes<br>or No)         |
|     | Name of<br>Component<br>-SS-238   | Name of<br>Manufacture<br>BergenPatterson             | Manufacturer<br>Serial No.<br>2500-20-423                | National<br>Board<br>No.               | Other<br>Identification                       | Year<br>Built<br>N/A        | Replaced, or Replacement Replaced       | Code<br>Stamped<br>(Yes<br>or No)         |
|     | Name of<br>Component<br>-SS-238   | Name of<br>Manufacture<br>BergenPatterson             | Manufacturer<br>Serial No.<br>2500-20-423                | National<br>Board<br>No.               | Other<br>Identification                       | Year<br>Built<br>N/A        | Replaced, or Replacement Replaced       | Code<br>Stamped<br>(Yes<br>or No)         |
|     | Name of<br>Component<br>-SS-238   | Name of<br>Manufacture<br>BergenPatterson             | Manufacturer<br>Serial No.<br>2500-20-423                | National<br>Board<br>No.               | Other<br>Identification                       | Year<br>Built<br>N/A        | Replaced, or Replacement Replaced       | Code<br>Stamped<br>(Yes<br>or No)         |
| _   | Name of<br>Component<br>-SS-238   | Name of<br>Manufacture<br>BergenPatterson             | Manufacturer<br>Serial No.<br>2500-20-423<br>2500-20-406 | National<br>Board<br>No.<br>N/A<br>N/A | Other<br>Identification<br>HSSA-20<br>HSSA-20 | Year<br>Built<br>N/A        | Replaced, or Replacement Replaced       | Code<br>Stamped<br>(Yes<br>or No)         |
| -   | Name of<br>Component<br>-SS-238   | Name of Manufacture  BergenPatterson  BergenPatterson | Manufacturer<br>Serial No.<br>2500-20-423<br>2500-20-406 | National<br>Board<br>No.<br>N/A<br>N/A | Other Identification  HSSA-20  HSSA-20        | Year<br>Built<br>N/A<br>N/A | Replaced, or Replacement Replaced       | Code<br>Stamped<br>(Yes<br>or No)         |

sheet 2 of 2

| rebuilding the calibrated valve was replaced.   | S/N 2500-20-406 was tested and accepted. A VT-3/4 (92-           |
|---|--|
| completed after installation and accepted.  |  |
|   |  |
|   |  |
|   |  |
|   |  |
| CR  | RTIFICATE OF COMPLIANCE  |
| We certify that the statements made in th to the rules of the ASME Code, Section XI.  | he report are correct and this replacement repair or replacement |
| to the fules of the ASME code, Section AI.  | repair or replacement  |
| Type Code Symbol Stamp None   |  |
|   |  |
|   | e Expiration Date  |
| Surviva Claro   | co Codes & Materials, GL Date 5/1/92                             |
| Owner or Owner's Designee, Title  | Codes & Materials, GL Date                                       |
| ·   |  |
|   |  |
| CKRTIFIC  | CATE OF INSERVICE INSPECTION                                     |
| I. the undersigned, holding a valid commissi  | ion issued by the National Board of Boiler and Press             |
| Inspectors and the State or Province of   | IOWA and employed by Hartford Steam Boi                          |
| of Hartford, Connecticut this Owner's Report during the period  |  |
|   | d belief, the Owner has performed examinations and taken         |
| measures described in the Owner's Report in acc   | coordance with the requirements of the ASME Code, Section        |
| By signing this certificate neither the Ins   | spector nor his employer makes any warranty, expressed o         |
|   | asures described in this Owner's Report. Furthermore,            |
| concerning the examinations and corrective mean   |  |
|   |  |
| concerning the examinations and corrective mean Inspector nor his employer shall be liable in a any kind arising from or connected with this in   | Inspection.  |
| concerning the examinations and corrective mean Inspector nor his employer shall be liable in a any kind arising from or connected with this in   | Inspection.  Commissions NB 7543 (I N) In 1046                   |
| concerning the examinations and corrective measure inspector nor his employer shall be liable in a any kind arising from or connected with this in which will be the state of |  |

14

| ,   | Owner <u>lowa Elect</u>  | ric Light and Po<br>Name    | wer                        | <del></del>              | Date <u>Apr</u>                   | 11 21, 1              | 992                                     |   |
|-----|--------------------------|-----------------------------|----------------------------|--------------------------|-----------------------------------|-----------------------|---|---|
|     | P.O.Box 351, Ce          | dar Rapids, IA 5<br>Address |                            |                          | Sheet <u>1 of</u>                 | 2                     |   |   |
|     | Plant Duane Arno         | ld Eneg Center<br>Name      |                            | <del></del>              | Unit 1                            |                       |   | , ,                                       |
|     | 3277 DAEC Rd.<br>Address | Palo, IA 52324_             |                            |                          | PMA                               | R 1058488<br>Repair O | ganization P.O.I                        | No.,Job No.                               |
|     | Work Performed b         | y Iowa Electric :<br>Name   | Light and Powe             | or                       | Type Code Symbol Authorization No |                       | None                                    |   |
|     | 3277 DAEC Road,          | Palo, IA. 52324<br>Address  |                            | <del></del>              | Expiration Date                   |                       | None                                    |   |
|     | Identification o         | f System Resi               | dual Heat Remo             | ovel (RHR) C             | lass 2                            |                       | <u> </u>                                |   |
|     | Case                     |                             |                            |                          | Edition, 71                       |                       |   | Cod                                       |
|     | Identification of        | f Components Rep            | eired or Repla             | ced and Rep              | lacement Component                | :s                    |   |   |
|     | Name of<br>Component     | Name of<br>Manufacture      | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification           | Year<br>Built         | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| ı C | ylinder Tube             | Anchor Darling              | 107-001                    | N/A                      | GBB-4-SS-217A                     | Unknown               | Replacement                             | No  |
|     |                          |                             |                            |                          |                                   |                       |   |   |
|     |                          |                             |                            |                          |                                   |                       |   |   |
|     |                          |                             |                            |                          |                                   |                       |   |   |
|     | Description of We        | ork <u>Replaced Ma</u>      | in Cylinder Tu             | be on rebui              | lt snubber S/N DA-                | -10.                  |   |   |
|     |                          | Hydrostatic                 | Pneu                       | matic                    | Nominal Nominal                   | Operating             | g Pressur <b>e</b>                      |   |
|     | Tests Conducted:         |                             |                            |                          |                                   |                       | r/A °F                                  |   |

| replace th | e main cylinder tube due to damage. DA-10 was tested and found acceptable. A VT-3/4 (92-030)  |
|------------|---|
| completed  | after installation and accepted.  |
|            |   |
|            |   |
|            |   |
|            | CERTIFICATE OF COMPLIANCE   |
| lile.      |   |
|            | certify that the statements made in the report are correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and this <u>replacement</u> correct and the property correct and the prope |
|            |   |
| Type       | Code Symbol Stamp None  |
|            |   |
| Cert       | ificate of Authorization No. None Expiration Date No.   |
|            | ed Sumler Shaufar codes & Materials, GL Date 5-1-   |
| Sign       | Owner or Owner's Designee, Title  |
|            | Owner of Owner 3 Designes, IIII   |
|            |   |
|            | CERTIFICATE OF INSERVICE INSPECTION   |
| T 45       | ndansianad balddan a waldd namiandan danwad bar Abr Wasinal Bound of Brillia and Barrana  |
|            | ndersigned, holding a valid commission issued by the National Board of Boiler and Pressure<br>s and the State or Province of IOWA and employed by <u>Hartford Steam Boiler I</u>  |
| 0          | f Hartford, Connecticut have inspected the components descri  |
|            | te that to the best of my knowledge and belief, the Owner has performed examinations and taken corr   |
|            | described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI  |
| By sig     | ning this certificate neither the Inspector nor his employer makes any warranty, expressed or im  |
|            | g the examinations and corrective measures described in this Owner's Report. Furthermore, neith   |
|            | nor his employer shall be liable in any manner for any personal injury or property damage or a l arising from or connected with this inspection.  |
| any Kind   |   |
| <u>u/1</u> | Klean Mkallo Commissions NB7540 (IN) Is 1046  |
| I          | Inspectors Signature National Board, State, Province, and Endors  |
|            |   |

|     | Owner <u>Iowa Elect</u>                                     | ric Light and Pow<br>Name          | er                         |                          | Date Apr  | il 21, 1              | 992                                     |   |             |
|-----|---|------------------------------------|----------------------------|--------------------------|---|-----------------------|---|---|-------------|
|     | P.O.Box 351, Ce   | edar Rapids, IA 52<br>Address      | 406                        |                          | Sheet 1 of  | 2                     |   |   | <del></del> |
|     | Plant Duane Arno  | old Energy Center<br>Name          |                            |                          | Unit 1  |                       |   |   |             |
|     | 3277 DAEC Rd.<br>Address                                    | Palo, IA 52324                     |                            |                          |   | R 1045086<br>Repair O | rganization P.O.                        | No.,Job No                                | -<br>).     |
|     | Work Performed by <u>Iowa Electric Light and Power</u> Name |                                    |                            |                          | Type Code Symbol Stamp None  Authorization No. None |                       |   |   |             |
|     | 3277 DAEC Road, Palo, IA. 52324 Address                     |                                    |                            |                          | Expiration Date None                                |                       |   |   |             |
|     | Id <b>entification</b> o                                    | f System <u>Resid</u>              | ual Heat Remo              | vel (RHR) C              | lass 2  |                       |   |   |             |
|     | Case  | nst. Code B31.7                    |                            |                          |   |                       |   |   | _cod        |
|     | Identification o  | f Components Repa                  | ired or Repla              | ced and Repl             | lacement Component                                  | .s                    |   |   |             |
|     | Name of<br>Component  | Name of<br>Manufacture             | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification                             | Year<br>Built         | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |             |
|     | ······  |                                    |                            |                          | GBB-1-SS-237  | Unknown               | Replacement                             | No  |             |
| ı C | ylinder Tube  | Anchor Darling                     | 107-002                    | N/A                      |   |                       |   | +   |             |
|     | ylinder Tube<br>ylinder Tube                                | Anchor Darling<br>Bergen Patterson |                            | N/A<br>N/A               | 3<br>GBB-1-SS-237                                   |                       | Replaced                                | No  |             |
|     |   |                                    |                            |                          | 3   |                       |   | No  |             |
|     |   |                                    |                            |                          | 3   |                       |   | No  |             |
|     | ylinder Tube  |                                    | 107-002                    | N/A                      | 3<br>GBB- <b>\-</b> SS-237                          | Unknown               |   | No  |             |
|     | ylinder Tube  | Bergen Patterson                   | n Cylinder Tu              | N/A                      | GBB-N-SS-237  It snubber S/N DA-                    | Unknown               | Replaced  Pressure                      |   |             |

| FORM NIS-2 (Back) sheet 2 of 2  |
|---|
| المراجي المراجي المراجي المراجي المراجي المراجي المراجي المراجي المراجي المراجي المراجي المراجي المراجي المراجي   |
| 3 \$/19/925   |
| Remarks Snubber DA-23 was rebuilt and installed at GBB-1-SS-237. During rebuilding it was necessary to  Applicable Manufacturer's Data Reports to be attached |
| Applicable Manufacturer's Data Reports to be attached   |
| replace the main cylinder tube due to damage. DA-23 was tested and found acceptable. A VT-3/4 (92-027) was  |
|   |
| completed after installation and accepted.  |
|   |
|   |
|   |
|   |
|   |
| CERTIFICATE OF COMPLIANCE   |
|   |
| We certify that the statements made in the report are correct and this <u>replacement</u> conforms  |
| to the rules of the ASME Code, Section XI. repair or replacement  |
|   |
| Type Code Symbol Stamp None   |
| Type code dymbol beamp  |
| Certificate of Authorization No. None Expiration Date None  |
| Signed Surudu Shaufan Codes & Materials, GL Date 430/72 , 19 92 Owner or Owner's Designee, Title (  |
| 4/20/77   |
| Signed Codes & Materials, GL Date 70, 19 92   |
| Owner or Owner's Designee, Title 0  |
|   |
|   |
| CERTIFICATE OF INSERVICE INSPECTION   |
|   |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel   |
| Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler I&I Co.  |
| of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2-26-93 to 5-/9-92                                  |
| this Owner's Report during the period   |
| measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  |
| measures described in the owner's Report in accordance with the requirements of the last occup, occurs, in  |
| By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied,  |
| concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the  |
| Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of  |
| any kind arising from or connected with this inspection.  |
| (1/2/V) 711. (1/2 Commissions NB7582(TAI) I3/046  |
| Inspectors Signature Commissions NB7542(IN) Is 1046  National Board, State, Province, and Endorsements  |
|   |
|   |
| Date 5-19 1992  |
|   |

| NIS2 | NO. | 11-92-09 |
|------|-----|----------|
|      |     |          |

|  | tric Light and Power   | er  |  | Date April   | 24, 1992                                   |  |   |
|--|--|---|--|--|--|--|---|
| P.O.Box 351, Ce                              | edar Rapids, IA 52<br>Address  | 106   |  | Sheet 1 of   | 3  |  |   |
| Plant Duane Arno                             | old Energy Center<br>Name  |   | <del> </del>   | Unit1  | <u></u>                                    |  |   |
| 3277 DAEC Rd.                                | Palo, IA 52324   |   |  | see tab  | le CRD-1                                   | 1/12                                       |   |
| Address                                      |  |   |  |  | Repair C                                   | Organization P.O.                          | No.,Job No                                |
| Work Performed h                             | by Iowa Electric   |   |  | Type Code Symbol   | Stamp                                      | None                                       |   |
|  | Name   |   |  | Authorization No   |  | None                                       |   |
| 3277 DAEC Rd.                                | Palo, IA 52324<br>Address  |   |  | Expiration Date  |  |  |   |
| Case   | onst. Code ASME Sec  | tion III  | 19 <u>74</u>   | Edition, <u>w75</u>  |  | _Addenda,1361-2                            | 2   |
| (c) Original (d) Capscrews                   | dition of Section ?<br>Construction Code<br>Constructed to AS<br>of Components Repai | ASME III 1969<br>ME III 1977  | or Repairs of Edtion W68   | or Replacements 19<br>Addenda per GE C<br>Addenda                                  | 80 W81<br>onstruct                         |  |   |
| (c) Original (d) Capscrews                   | Construction Code<br>Constructed to AS<br>of Components Repair                       | ASME III 1969<br>ME III 1977  | or Repairs of Edtion W68   | or Replacements 19<br>Addenda per GE C<br>Addenda                                  | 80 W81<br>onstruct                         |  |   |
| (c) Original (d) Capscrews Identification o  | Construction Code Constructed to AS of Components Repair                             | ASME III 196 ME III 1977 .red or Repla Manufacturer Serial No.              | or Repairs of Edition W68 Edition, S77 ced and Repl                    | or Replacements 19 Addenda per GE C Addenda acement Component Other                | 980 W81<br>onstruct                        | ion Quality Requi<br>Repaired<br>Replaced, | ASME<br>Code<br>Stamped<br>(Yes           |
| (c) Original (d) Capscrews Identification of | Construction Code Constructed to AS of Components Repair Name of Manufacture         | ASME III 196 ME III 1977 red or Repla  Manufacturer Serial No.  HT Code KOG | or Repairs of B Edtion W68 Edition, S77 ced and Repl<br>National Board | Or Replacements 19 Addenda per GE C Addenda acement Component Other Identification | 980 W81<br>onstruct<br>ss<br>Year<br>Built | Repaired Replaced, or Replacement          | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is  $8\frac{1}{2}$  in. x 11 in.,(2)information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Pneumatic

Pressure\_

1004

Nominal Operating Pressure

Test Temp.\_



Tests Conducted: Hydrostatic

Other

| FORM | NIS-2 | (Back) |
|------|-------|--------|
|------|-------|--------|

| accepted. A | VT-1 was completed prior to installation see CRD Table 11/12 for individual CRDs. (Note that  | tŀ  |
|-------------|---|-----|
| that are re | installed were removed from previous locations) except for 1R215 (38-27) where a new CRD Cylin  | nde |
| and Flange  | Assy. was installed. (Ref. NCR 92-074)  |     |
|             |   |     |
|             |   |     |
|             |   |     |
|             | CERTIFICATE OF COMPLIANCE   |     |
| We ce       | ertify that the statements made in the report are correct and this replacement  | co  |
| to the rul  | es of the ASME Code, Section XI. repair or replacement  |     |
| Time        | Godo Combol Champ None  |     |
| Type        | Code Symbol Stamp None  |     |
| Certi       | ficate of Authorization No. None Expiration Date  | No  |
| <u></u>     | · ·   |     |
| Signe       |   | .,  |
|             | Owner or Owner's Designee, Title  |     |
|             | CERTIFICATE OF INSERVICE INSPECTION   | =   |
|             |   |     |
|             | dersigned, holding a valid commission issued by the National Board of Boiler and Pressure<br>and the State or Province of   |     |
| of          | Hartford, Connecticut have inspected the components desc  |     |
|             | 's Report during the period 2-13-95 to 5-36-93 e that to the best of my knowledge and belief, the Owner has performed examinations and taken co.  | rr  |
| measures de | escribed in the Owner's Report in accordance with the requirements of the ASME Code, Section 2  | XI. |
| By sign:    | ing this certificate neither the Inspector nor his employer makes any warranty, expressed or  | im  |
| concerning  | the examinations and corrective measures described in this Owner's Report. Furthermore, neimor his employer shall be liable in any manner for any personal injury or property damage or a   | th  |
|             | nor his employer shall be flable in any manner for any personal injury or property damage or a rising from or connected with this inspection.   | Τ,  |
| Will        | $\mathcal{M}_{i}$ $\mathcal{M}_{i}$ $\mathcal{M}_{i}$ Commissions $\mathcal{M}_{i}$ |     |
|             | spectors Signature Commissions NB 7583 (N.I) In 1046  National Board, State, Province   | e,  |
| Endorsement | .s  |     |



| 1. | Owner Iowa Electric Light & Power    | Date April 24, 1992                   |      |
|----|--------------------------------------|---------------------------------------|------|
|    | Name                                 |                                       | _    |
|    | P.O. Box 351, Cedar Rapids, IA 52406 | Sheet3 of3                            | _    |
|    | Address                              |                                       |      |
|    | Plant Duane Arnold Energy Center     | Unit 1                                |      |
|    | Name                                 | · · · · · · · · · · · · · · · · · · · | _    |
|    | 3277 DAEC Road, Palo, IA 52324       | See below, P.O. S57418                |      |
|    | Address                              | Repair Organ. P.O. No., Job No.       | etc. |
| 3. | Work performed by Iowa Electric      | Type Code Symbol Stamp N/A            |      |
|    | Name                                 | Authorization No. N/A                 | _    |
|    | 3277 DAEC Road, Palo, IA 52324       | Expiration Date N/A                   |      |
|    | Address                              |                                       | _    |

- 4. 5.
- Idenfication of System see below
  (a) Applicable Const. Code ASME III 1974 Edition, W75 Addenda 1361-2 Code Case
  - (b) Applicable Edition of Section XI Utilized for Repairs or Replacement 19<u>80</u> W/81
  - (c) Original Construction Code ASME III 1968 Edition W68 Addenda per GE Construction Quality Requirements 22A2534
  - (d) Capscrews constructed to ASME III 1977 Edition S77 Addenda see attached reconciliation.
- 6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Comp.  | Name of<br>Manufac. | Board<br>No. | Other<br>Identif. | Year<br>Built<br>(Rep.) | ASME Code Repaired Replaced or Replacement | Stamped<br>(Yes or<br>No) |
|----------------|---------------------|--------------|-------------------|-------------------------|--|---------------------------|
| CRD<br>Bolting | General<br>Electric | None         | See Below         | 1990                    | Replacement                                | No                        |

## Table CRD-11/12 (Class 1)

|                              |                                     | ,                                     |                         | , |
|------------------------------|-------------------------------------|---------------------------------------|-------------------------|---|
| Installation<br>Organization | Manufac.<br>Serial No.<br>(Removed) | Manufac.<br>Serial No.<br>(Installed) | Other<br>Identification | Preservice<br>VT-1<br>Bolting           |
| PMAR 1056715                 | S/N A3920                           | S/N A4777                             | IR215 (02-27)           | ISI #91-426                             |
| PMAR 1056716                 | S/N A4387                           | S/N A4442                             | IR215 (06-19)           | ISI #91-426                             |
| PMAR 1056717                 | S/N A3979                           | s/n A4516                             | IR215 (06-23)           | ISI #91-426                             |
| PMAR 1056719                 | S/N A4556                           | S/N A3975                             | IR215 (06-35)           | ISI #91-426                             |
| PMAR 1056720                 | S/N A2519                           | s/N A4589                             | IR215 (14-27)           | ISI #91-426                             |
| PMAR 1056721                 | S/N A4034                           | S/N A4985                             | IR215 (14-35)           | ISI #91-426                             |
| PMAR 1056722                 | S/N A3768                           | S/N A3267                             | IR215 (14-39)           | ISI #91-426                             |
| PMAR 1056723                 | S/N A4780                           | S/N A3818                             | IR215 (18-23)           | ISI #91-426                             |
| PMAR 1056724                 | S/N A4466                           | S/N A4539                             | IR215 (18-27)           | ISI #91-426                             |
| PMAR 1056725                 | S/N A3696                           | S/N A4494                             | IR215 (18-43)           | ISI #91-426                             |
| PMAR 1056726                 | S/N A4380                           | S/N A4549                             | IR215 (22-27)           | ISI #91-426                             |
| PMAR 1056727                 | S/N A3552                           | s/N A3945                             | IR215 (22-39)           | ISI #91-426                             |
| PMAR 1056728                 | S/N A4351                           | S/N A4016                             | IR215 (26-03)           | ISI #91-426                             |
| PMAR 1056729                 | S/N A4596                           | S/N A4022                             | IR215 (26-07)           | ISI #91-426                             |
| PMAR 1056730                 | S/N A4531                           | S/N A4789                             | IR215 (26-15)           | ISI #91-426                             |
| PMAR 1056731                 | S/N A4467                           | S/N A4796                             | IR215 (26-23)           | ISI #91-426                             |
| PMAR 1056732                 | S/N A4390                           | S/N A4562                             | IR215 (26-35)           | ISI #91-426                             |
| PMAR 1056733                 | S/N A3996                           | S/N A3976                             | IR215 (30-27)           | ISI #91-426                             |
| PMAR 1056734                 | S/N A3965                           | S/N A5273(New)                        | IR215 (38-27)           | ISI #91-426                             |



|            | <u>.                                    </u> |  | y the Provi                |                          |                            | ode Sec              |   |   |               |
|------------|--|--|----------------------------|--------------------------|----------------------------|----------------------|---|---|---------------|
|            | Owner Iowa Elec                              | ctric Light and Pow<br>Name                | er                         |                          | Date <u>Apr</u>            | <u>il 27, 1</u>      | 992                                     |   |               |
|            | P.O.Box 351, 0                               | Cedar Rapids, IA 52<br>Address             | 406                        |                          | Sheet 1 of                 | 2                    |   |   |               |
| ? <b>.</b> | Plant Duane Arr                              | nold Energy Center<br>Name                 |                            |                          | Unit 1                     |                      |   |   |               |
|            | 3277 DAEC Rd.                                | Palo, IA 52324                             |                            |                          | CMAI                       | R A12199<br>Repair O | rganization P.O.                        | No.,Job No                                | _             |
| J.         |  | by <u>Iowa Electric L</u>                  | ight and Powe              | or                       | Type Code Symbol           | •                    | -                                       | ·   |               |
|            |  | Name                                       |                            |                          | Authorization No.          |                      |   |   |               |
|            | 3277 DAEC ROAC                               | Address                                    | <del></del> -              | <del></del>              | Expiration Date            |                      | None                                    |   |               |
| •          | Identification                               | of System React                            | or Water Clea              | nup (RWCU) (             | Class 1                    |                      |   |   |               |
| ·.         | (a)Applicable (                              | Const. Code ANSI B                         | 31.7                       | 19 69                    | Edition,71                 |                      | _Addenda,                               |   | _Code         |
|            | (b)Applicable E                              | dition of Section                          | XI Utilized f              | or Repairs o             | or R <b>eplacements</b> 19 | 80 W81               | <u> </u>                                |   |               |
|            | Identification                               | of Components Repa                         | ired or Repla              | ced and Rep              | lacement Component         | .s                   |   |   |               |
|            | Name of<br>Component                         | Name of<br>Manufacture                     | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification    | Year<br>Built        | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |               |
| Pipe C     | lamp/Bolting                                 | BergenPatterson                            | N/A                        | N/A                      | Dca-14-SS-073              | Unknown              | Replaced                                | No  |               |
| 3-Bolt     | Clamp  | BergenPatterson                            | Pt# 304                    | N/A                      | EBB-15-H-13                | Unknown              | Replacement                             | No  |               |
| Multi-     | Bolt (2ea)                                   | Cardinal                                   | Ht#D66732                  | N/A                      | N/A                        | 1992                 | Replacement                             | No  |               |
| Multi-     | Nut (2ea)                                    | Cardinal                                   | Ht#Y592608                 | N/A                      | N/A                        | 1986                 | Replacement                             | No  |               |
| Load P     | in   | BergenPatterson                            | Ht#N85132                  | N/A                      | N/A                        | 1990                 | Replacement                             | No  | ı             |
|            |  |  |                            |                          |                            | <u></u>              | <u> </u>                                |   |               |
| ·•         | Description of                               | Work Replaced Pip                          | e Clamp and E              | olting on DO             | CA-14-SS-073 with          | pipe cla             | mp from EBB-15-H-                       | -13 and ne                                | w Bolts       |
| ١.         | Tests Conducted                              | l: Hydrostatic                             | Pneu                       | matic                    | Nominal                    | Operating            | g Pressure                              |   |               |
|            |  | Other                                      | Pressure                   | N/A                      | psi Test Ter               | mpN                  | *F                                      |   |               |
|            | NOTE: Supplemen                              | ntal sheets in form<br>tion in items 1 thr | of lists, sk               | etches, or o             | drawings may be us         | sed, prov            | ided (1) size is                        | 8 in. x                                   | 11<br>ered an |

| 9. | Remarks <u>During the ISI exam (91-018) of DCA-14-SS-73 (CUB-K</u> 009A) it was revealed that the pipe clamp was  |
|----|---|
|    | Applicable Manufacturer's Data Reports to be attached   |
|    | rotated approx. 15°. This was due to the configuration of the clamp and ceiling. CMAR A12199 was written to remove  |
|    | the snubber for DCP1533 evaluation. While the snubber was removed the pipe clamp/bolting was replaced with a 3-bolt   |
|    | clamp from EBB-15-H-13, load pin, and bolts/nuts. The replacement clamp was weld repaired and drilled to accommodate the new load pin. A RT was performed on the weld repair and accepted. A preservice VT-3/4 (92-102) was performed and |
|    | and accepted after re-installation.   |
|    | CERTIFICATE OF COMPLIANCE   |
|    | We certify that the statements made in the report are correct and this replacement/repair conforms to the rules of the ASME Code, Section XI.   |
|    | Type Code Symbol Stamp None   |
|    | Certificate of Authorization No. None Expiration Date None  |
|    | Signed Surudu Sharefan Codes & Materials, GL Date 5-2-, 1992 Owner or Owner's Designee, Title   |
|    |   |
|    | CERTIFICATE OF INSERVICE INSPECTION   |
|    | I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel   |
|    | Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler I&I Co.  |
|    | of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-20-52 to 5-/2-92  |
| •  | , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective  |
|    | measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  |
|    | By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied,  |
|    | concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the  |
|    | Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.   |
|    | Commissions NA 7543 (I,N) In 1046  Inspectors Signature  Commissions NA 7543 (I,N) In 1046  National Board, State, Province, and Endorsements   |
|    | Inspectors Signature National Board, State, Province, and Endorsements  |

|      | Owner Iowa Elec                 | tric Light and Pow<br>Name                                   | er                                   |                   | Date Apr  | il 28, 1                 | 992                   | <del></del>             |
|------|---------------------------------|--|--------------------------------------|-------------------|---|--------------------------|-----------------------|-------------------------|
|      | P.O.Box 351, Co                 | edar Rapids, IA 52<br>Address                                | 406                                  | <del></del>       | Sheet 1 of  | 2                        |                       | •                       |
|      | Plant <u>Duane Arno</u>         | old Energy Center<br>Name                                    |                                      |                   | Unit 1  |                          |                       |                         |
|      | 3277 DAEC Rd.<br>Address        | Palo, IA 52324   |                                      |                   | РМА   |                          | rganization P.O.I     | No.,Job No.             |
|      | Work Performed !                | by <u>Iowa Electric L</u><br>Name                            | ight and Powe                        | r                 | Type Code Symbol Authorization No                     |                          |                       |                         |
|      | 3277 DAEC Road                  | , Palo , IA. 52324<br>Address                                |                                      | <del></del>       | Expiration Date                                       | . ,, -7 -1-              | None                  |                         |
|      | Identification of               | of System <u>CRD H</u>                                       | draulic Retu                         | rnpLine gla       | ass 1   |                          |                       |                         |
|      | Case (b)Applicable Ed           | onst. Code ANSI B<br>dition of Section<br>Code for End Attac | XI Utilized f                        | or Repairs        | or Replacements 19                                    |                          |                       | Cc                      |
|      | Identification o                | of Components Repa   | ired or Repla                        | ced and Rep       | lacement Component                                    | s                        |                       |                         |
|      |                                 |  |                                      | National<br>Board | Other   | Year                     | Repaired<br>Replaced, | ASME<br>Code<br>Stamped |
|      | Name of<br>Component            | Name of<br>Manufacture                                       | Manufacturer<br>Serial No.           | No.               | Identification  | Built                    | or Replacement        | (Yes                    |
| nd A |                                 | Manufacture  |                                      | No.               | •   | Built                    |                       | (Yes                    |
|      | Component                       | Manufacture BergenPatterson                                  | Serial No.                           | No.               | Identification  | Built<br>Unknown         | or Replacement        | (Yes<br>or No)          |
|      | Component<br>ttachment          | Manufacture<br>BergenPatterson                               | Serial No.                           | No.               | Identification  DBA-6-SS-29                           | Built<br>Unknown         | or Replacement        | (Yes<br>or No)<br>No    |
|      | Component<br>ttachment          | Manufacture<br>BergenPatterson                               | Serial No.                           | No.               | Identification  DBA-6-SS-29                           | Built<br>Unknown         | or Replacement        | (Yes<br>or No)<br>No    |
|      | Component  ttachment  ttachment | Manufacture<br>BergenPatterson                               | Serial No. P/N1001/1.5K P/N1001/1.5K | N/A<br>N/A        | Identification  DBA-6-SS-29  DBA-6-SS-29              | Built<br>Unknown         | or Replacement        | (Yes<br>or No)<br>No    |
|      | Component  ttachment  ttachment | Manufacture  BergenPatterson  BergenPatterson                | P/N1001/1.5K P/N1001/1.5K            | N/A<br>N/A        | Identification  DBA-6-SS-29  DBA-6-SS-29  DBA-6-SS-29 | Built<br>Unknown<br>1992 | or Replacement        | (Yes<br>or No)<br>No    |

FORM NIS-2 (Back) sheet 2 of 2

| Remarks In 1977, DCR684 replaced all hydraulic/mechanical snubbers in the drywell with new Pacific Scientific Applicable Manufacturer's Data Reports to be attached  |
|--|
| mechanical snubbers. The existing end attachments had larger diameter holes than required for the load pins.   |
| Bushin s were installed to facilitate snubber installation. PMAR 1057994 was used to re lace the end atpachment  |
| which would eliminate the use of the bushings. A VT-3/4 (92-085A) was performed and accepted after replacement.  |
| CERTIFICATE OF COMPLIANCE  |
| We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.   |
| Type Code Symbol Stamp None  |
| Certificate of Authorization No. None Expiration Date None   |
| Signed Survey Shout Codes & Materials, GL Date 5-11-, 19 92 Owner or Owner's Designee, Title   |
| CERTIFICATE OF INSERVICE INSPECTION  |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler I&I Co. of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3-25-92 to 5-21-57, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.  Commissions NB7-5-42 (IN) |
| Inspectors Signature National Board, State, Province, and Endorsements   |
| Date5.3/. 1992   |

|               | A                    |                              | OWNER'S RE<br>y the Provi  | PORT FOR                 |   | REPLACEME<br>ode Sec | tion XI                                 |   |             |
|---------------|----------------------|------------------------------|----------------------------|--------------------------|---|----------------------|---|---|-------------|
|               | Owner Iowa Elect     | ric Light and Pov            | ver                        |                          | Date Apr                                | il 28, 1             | 992                                     |   |             |
|               | P.O.Box 351, Ce      | dar Rapids, IA 52<br>Address | 2406                       |                          | Sheet 1 of                              | 2                    |   |   | <del></del> |
|               | Plant Duane Arno     | ld Energy Center<br>Name     |                            |                          | Unit1                                   | <del></del>          |   |   |             |
|               |                      | Palo, IA 52324               |                            |                          | РМА                                     | R 1058001            | rganization P.O.                        | Vo. Tob No.                               |             |
|               | Address              | . Taur Blootsis I            | ight and Rowe              |                          | Type Code Symbol                        | •                    | •                                       | ,002 110                                  | •           |
|               | work Periormed b     | Name                         | Atque and Fowe             |                          | Authorization No                        |                      |   |   |             |
|               | 3277 DAEC Road,      | Palo, IA. 52324<br>Address   |                            |                          | Expiration Date                         | , 4 *                | None                                    |   |             |
|               | Identification o     | f System <u>Feedw</u>        | ater (Class 1              | )                        |   | •                    |   |   |             |
|               | Case                 | ition of Section             | XI Utilized f              | or Repairs               | Edition, 71 or Replacements 19 ase N-71 |                      | Addenda,                                |   | _Code       |
|               | Identification o     | f Components Repa            | ired or Repla              | ced and Rep              | lacement Component                      | :9                   |   |   |             |
| )             | Name of<br>Component | Name of<br>Manufacture       | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification                 | Year<br>Built        | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |             |
| d At          | tachment             | BergenPatterson              | N/A                        | N/A                      | DLA-2-SS-9                              | Unknown              | Replaced                                | No  |             |
| d At          | tachment             | BergenPatterson              | P/N1001-6                  | N/A                      | DLA-2-SS-9                              | 1992                 | Replacement                             | No  |             |
| e C           | Clamp                | BergenPatterson              | P/N EA-3                   | N/A                      | DLA-2-SS-9                              | Unknown              | Replaced                                | No  |             |
| lts/          | Nuts                 | BergenPatterson              | N/A                        | N/A                      | DLA-2-SS-9                              | Unknown              | Replaced                                | No  |             |
| pe C          | Clamp                | BergenPatterson              | SPEA-3/3"                  | N/A                      | DLA-2-SS-9                              | 1992                 | Replacement                             | No  |             |
|               | /Nuts                | BergenPatterson              | N/A                        | N/A                      | DLA-2-SS-9                              | 1992                 | Replacement                             | "No                                       |             |
| l <b>t</b> s/ | Nucs                 |                              |                            |                          |   |                      |   |   |             |
| lts/          |                      | ork <u>Replaced Enc</u>      | l Attachment a             | nd Clamp wi              | th associated Boli                      | ing on D             | LA-2-SS-9 (FWC-K                        | 014).                                     |             |
| olts/         |                      |                              |                            | and Clamp wi             |   | -                    | LA-2-SS-9 (FWC-KO                       | D14).                                     |             |

the number of sheets is recorded at the top of this form.

sheet 2 of 2

| Remarks In 1977, DCR684 replaced all hydraulic/mechanical snubbers in the drywell with new Pacific Scientific  Applicable Manufacturer's Data Reports to be attached  |
|---|
|   |
| mechanical snubbers. The new snubbers did not match with the existing end attachments to the building structure.  |
| Bushings were installed to facilitate snubber installation. PMAR 1058001 was used to replace the end attachment/pipe  |
|   |
| clamp with associated bolting. A VT-3/4 (92-089) was performed and accepted after replacement.  |
|   |
| CERTIFICATE OF COMPLIANCE   |
| We certify that the statements made in the report are correct and this replacement conforms   |
| to the rules of the ASME Code, Section XI. repair or replacement  |
|   |
| Type Code Symbol Stamp None   |
| Certificate of Authorization No. None Expiration Date None  |
| Signed Survuler Sharige Codes & Materials, GL Date 5-2-, 19 92  Owner or Owner's Designee, Title  |
| Owner or Owner's Designee, Title  |
|   |
| CERTIFICATE OF INSERVICE INSPECTION   |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel  Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler I&I Co.  of Hartford, Connecticut have inspected the components described in  |
| this Owner's Report during the period $3-3/-92$ to $5-/9.92$ , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective   |
| measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  |
| By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. |
| La Commissions NB7542(TN) Ta 1046   |
| Inspectors Signature  Commissions NB7542(IN) I 3 1046  National Board, State, Province, and Endorsements  |
| Date 5-/9 19 92   |

ý.

| on P.O.No., Job No.                           |
|---|
| on P.O.No.,Job No.                            |
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| ASME red Code ced, Stamped cement (Yes or No) |
|   |
| No I  |
| No  |
| No<br>No                                      |
| No<br>No<br>No                                |
| No<br>No                                      |
| No<br>No<br>No                                |
| No<br>No<br>No<br>nt No                       |
| ced,  |

sheet 2 of 2

Remarks CV-4413 failed as found LLRT. CMAR A08847 was written to initiate repairs. The bonnet bore, guide, and Applicable Manufacturer's Data Reports to be attached studs were machined to improve valve clearances. The bonnet guide was welded prior to machining. The bore, ribs and pads were also machined. The Disc/Piston and Stem/Stem Disc Assys. were replaced to ensure proper reassembly. A PT Exam of the guide revealed a 1/4" linear indication (ref. NCR92-044) which was removed. A VT-3(92-067) and VT-1(92-068) was completed and accepted. A VT-2(91-304) was completed and accepted after reassembly. Valve passed LLRT CERTIFICATE OF COMPLIANCE We certify that the statements made in the report are correct and this repair/replacement to the rules of the ASME Code, Section XI. repair or replacement Type Code Symbol Stamp None Certificate of Authorization No. None Expiration Date None Codes & Materials, GL Date 4-29- , 19 92 CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler I&I Co.

of Hartford, Connecticut have inspected the components described in have inspected the components described in this Owner's Report during the period 3-4.92 to \_\_\_\_\_\_5-19-92 , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Commissions NB 75 YD (I,N) Icuca 1046

Inspectors Signature Commissions NB 75 YD (I,N) Icuca 1046

National Board, State, Province, and Endorsements

5-19 1992

| •  | Owner <u>lowa Ele</u>           | ctric Light and Po<br>Name  | wer   |   | Date Apr   | il 28, 1                               | 992  |   |
|--|---------------------------------|---|---|---|--|--|--|---|
|  | P.O.Box 351,                    | Cedar Rapids, IA 5<br>Address   |   |   | Sheet 1 of   | 2                                      |  |   |
|  | Plant Duane Ar                  | nold Energy Center<br>Name  |   |   | Unit 1   |  |  |   |
|  | 3277 DAEC Rd.<br>Addres         | Palo, IA 52324  |   | CMAR A08846  Repair Organization P.O.No., Job No. |  |  |  |   |
|  | Work Performed                  | by Iowa Electric  | r   | Type Code Symbol                                  | Stamp  | None                                   |  |   |
|  |                                 | Меше  |   |   | Authorization No.  | •                                      | None   | <del></del>                               |
|  | 3277 DAEC Road                  | d, Palo, IA. 52324<br>Address   |   |   | Expiration Date  |  | None   | <del></del>                               |
|  | Identification                  | of System <u>Main</u>   | Steam A (Clas                                   | s 1)  |  |  |  |   |
|  | Case (b)Applicable H            | Const. Code *ANSI is<br>Edition of Section<br>DE Spec 21A9230 Rev                         | XI Utilized fo                                  |   |  |  |  | Cod                                       |
|  | Identification                  | of Components Repa  | sired or Replac                                 | ced and Repi                                      | lacement Component   | s                                      |  |   |
|  | Name of<br>Component            | Name of<br>Manufacture  | Manufacturer<br>Serial No.                      | National<br>Board<br>No.                          | Other<br>Identification  | Year<br>Built                          | Repaired<br>Replaced,<br>or Replacement          | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| nnet   |                                 | General Elect.  | Ht# T8116-1                                     | N/A   | CV-4412  | 1992                                   | Replacement                                      | No  |
|  |                                 | General Elect.  | 214856-17                                       | N/A   | CV-4412  | 1990                                   | Replaced   | No  |
|  |                                 | N/A   | RI-VB23   | N/A   | CV-4412  | Unknown                                | Repaired   | No  |
| nnet   |                                 | General Elect.  | N/A   | N/A   | CV-4412  | 1990                                   | Repaired   | No  |
| nnet<br>nnet   | bs/Pads                         |   |   |   | T  | 1 2002                                 | Repaired   | No  |
| nnet<br>nnet<br>re/Ri                                  |                                 | General Elect.  | Ht# T8116-1                                     | N/A   | CV-4412  | 1992                                   |  |   |
| nnet<br>nnet<br>re/Ri<br>nnet                          | Guide                           |   | Ht# T8116-1<br>215585-12                        | N/A<br>N/A  | CV-4412<br>CV-4412(from4413  | 1990                                   | Replacement                                      | No  |
| nnet<br>nnet<br>re/Ri<br>nnet<br>sc/Pi                 | Guide<br>ston                   | General Elect.  |   |   |  |  | Replacement<br>Replaced                          | No No                                     |
| onnet<br>ore/Ri<br>onnet<br>sc/Pi                      | Guide<br>ston                   | General Elect.<br>General Elect.  | 215585-12                                       | N/A   | CV-4412(from4413   | 1990<br>1990                           |  | <del></del>                               |
| onnet<br>ore/Ri<br>onnet<br>ore/Pi<br>sc/Pi<br>sc/Pi   | Guide<br>ston<br>ston           | General Elect. General Elect. General Elect.  | 215585-12<br>215585-6                           | N/A<br>N/A  | CV-4412(from4413<br>CV-4412  | 1990<br>1990                           | Replaced   | No  |
| onnet<br>ore/Ri<br>onnet<br>ore/Pi<br>sc/Pi<br>sc/Pi   | Guide ston ston em Disc em Disc | General Elect. General Elect. General Elect. General Elect.                               | 215585-12<br>215585-6<br>214856-20<br>214856-21 | N/A<br>N/A<br>N/A                                 | CV-4412(from4413<br>CV-4412<br>CV-4412(from4413<br>CV-4412                       | 1990<br>1990<br>1990                   | Replaced<br>Replacement<br>Replaced              | NO<br>NO<br>NO                            |
| onnet<br>ore/Ri<br>onnet<br>isc/Pi<br>isc/Pi<br>tem/St | Guide ston ston em Disc em Disc | General Elect. General Elect. General Elect. General Elect. Work Replaced Borwere repaire | 215585-12<br>215585-6<br>214856-20<br>214856-21 | N/A N/A N/A N/A ton, and Ste                      | CV-4412(from4413<br>CV-4412<br>CV-4412(from4413<br>CV-4412<br>em/Stem Disc Assys | 1990<br>1990<br>1990<br>1990<br>Bonnet | Replaced Replacement Replaced Studs and replaced | NO<br>NO<br>NO                            |

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FORM NIS-2 (Back) sheet 2 of 2

|  | improve valve clearances. The   | bonnet, disc/piston and stem/stem di   | sc assys. were replaced. Bo  |
|--|---|--|--|
| bore, ribs and p   | pads were machined. The disc/pis  | ston and stem/stem disc assys. were f  | From CV4413. A VT-3 (92-069  |
|  |   |  |  |
| VT-1 (92-070) we   | re performed and accepted. A VI   | C-2 (91-304) was completed and accept  | ed after reassembly.   |
|  |   |  |  |
|  |   |  |  |
|  | C   | ERTIFICATE OF COMPLIANCE   |  |
|  |   | the report are correct and this <u>re</u>  |  |
| to the rules of  | of the ASME Code, Section XI.   | re   | epair or replacement   |
| <b>7</b> god-  | - 2-2   |  |  |
| Type Code  | e Symbol Stamp <u>None</u>  |  |  |
| Certifica  | ate of Authorization No. Nor  | ne   | Expiration Date None   |
|  | CO) .   |  | 4 2 9  |
| Signed   | Solandar  | Codes & Materials, GL Da   | te <u>7-27</u> , 19  |
| 0  | Owner or Owner's Designed, Title  | · ·  |  |
|  |   |  |  |
|  |   |  |  |
| 1  | CREATE  | ICATE OF INSERVICE INSPECTION  |  |
|  |   | sion issued by the National Board  |  |
|  |   |  |  |
| Inspectors and   | the State or Province of  | IOWA and employed b  | y <u>Hartford Steam Boiler I&amp;I</u><br>ted the components describe  |
| Inspectors and of this Owner's Re  | the State or Province of  | 3-5-92 have inspec   | ted the components describe<br><i>&amp; - ひし- テン</i>   |
| Inspectors and of this Owner's Re, and state tha   | the State or Province of  Hartford, Connecticut Report during the period at to the best of my knowledge an  | have inspec  3-5-92 to  nd belief, the Owner has performed ex  | ted the components describe<br><u> </u>  |
| Inspectors and of this Owner's Re, and state tha   | the State or Province of  Hartford, Connecticut Report during the period at to the best of my knowledge an  | 3-5-92 have inspec   | ted the components describe<br><u> </u>  |
| Inspectors and  of this Owner's R , and state the measures describe  By signing to                                 | the State or Province of  Hartford, Connecticut Report during the period at to the best of my knowledge aribed in the Owner's Report in a   | have inspector nor his employer makes any to   | ted the components describe <u>(2 - J(2 - P)</u> caminations and taken correct  the ASME Code, Section XI.  warranty, expressed or impl  |
| Inspectors and  of this Owner's R , and state the measures describe  By signing to                                 | Hartford, Connecticut Report during the period at to the best of my knowledge are ided in the Owner's Report in a this certificate neither the Interest examinations and corrective me  | have inspector nor his employer makes any reasures described in this Owner's Rej                                   | ted the components describe  & - J & - F J  caminations and taken correct the ASME Code, Section XI.  warranty, expressed or impl port. Furthermore, neither                         |
| Inspectors and  of this Owner's Re, and state the measures described concerning the Inspector nor 1                | Hartford, Connecticut Report during the period at to the best of my knowledge are ided in the Owner's Report in a this certificate neither the Interest examinations and corrective me  | have inspector nor his employer makes any measures described in this Owner's Rejany manner for any personal injury | ted the components describe  & - J & - F J  caminations and taken correct the ASME Code, Section XI.  warranty, expressed or impl port. Furthermore, neither                         |
| Inspectors and  of this Owner's Re, and state the measures described concerning the Inspector nor lany kind arisin | the State or Province of  Hartford, Connecticut  Report during the period  at to the best of my knowledge and the connecticut  this certificate neither the Interest examinations and corrective methics employer shall be liable intending from or connected with this | have inspection.  have inspective to to to to to to to to to to to to to   | ted the components describe & - JU-FJ  caminations and taken correct the ASME Code, Section XI.  warranty, expressed or imple port. Furthermore, neither or property damage or a los |
| Inspectors and  of this Owner's Re, and state the measures described concerning the Inspector nor lany kind arisin | the State or Province of  Hartford, Connecticut  Report during the period  at to the best of my knowledge and the connecticut  this certificate neither the Interest examinations and corrective methics employer shall be liable intending from or connected with this | have inspection.  have inspective to to to to to to to to to to to to to   | ted the components describe  &-JU-FJ  caminations and taken correct the ASME Code, Section XI.  warranty, expressed or impl port. Furthermore, neither or property damage or a los   |
| Inspectors and  of this Owner's Re, and state the measures described concerning the Inspector nor lany kind arisin | the State or Province of  Hartford, Connecticut  Report during the period  at to the best of my knowledge and the connecticut  this certificate neither the Interest examinations and corrective methics employer shall be liable intending from or connected with this | have inspector nor his employer makes any measures described in this Owner's Rejany manner for any personal injury | ted the components describe  &-JU-FJ  caminations and taken correct the ASME Code, Section XI.  warranty, expressed or impl port. Furthermore, neither or property damage or a los   |

| •  | Owner <u>Iowa Elect</u>  | tric Light and Po<br>Name   | wer   |  | Date Apr   | 11 28, 1  | 992   |  |        |
|--|--|---|---|--|--|---|---|--|--------|
|  | P.O.Box 351, Ce  | edar Rapids, IA 5<br>Address  |   |  | Sheet 1 of   | 2   | ·   |  |        |
|  | Plant Duane Arno   |   | Unit 1  |  |  |   |   |  |        |
|  | 3277 DAEC Rd.  | Palo, IA 52324  |   |  | CMAI   | R A075532   | A Singanization P.O.1   | No. Job No   | _      |
|  |  | er  | Type Code Symbol  | •  | -  |   |   |  |        |
|  |  | Name  |   | Authorization No.                          | •  | None  |   |  |        |
|  | 3277 DAEC Road,  | . Palo, IA. 52324<br>Address  |   | <del>,</del>                               | Expiration Date  |   | None  |  |        |
|  | Identification o   | of System <u>Main</u>   | Steam C (Clas   | s 1)                                       |  |   |   |  |        |
|  | (a)Applicable Co   | onst. Code *ANSI I  | 31.1  | 19_67                                      | Edition,   | -   | _Addenda,   |  | _Code  |
|  | (b)Applicable Ed   | lition of Section<br>Spec 21A9230 Rev   |   | or Repairs o                               | or Replacements 19   | 80 W81  | <del></del> .   |  |        |
|  | Identification o   | of Components Repa  | aired or Repla  | ced and Repi                               | lacement Component   | s   |   |  |        |
|  |  |   |   |  |  |   |   |  |        |
|  | Name of<br>Component   | Name of<br>Manufacture  | Manufacturer<br>Serial No.  | National<br>Board<br>No.                   | Other<br>Identification  | Year<br>Built   | Repaired<br>Replaced,<br>or Replacement   | ASME<br>Code<br>Stamped<br>(Yes<br>or No)                        |        |
| onnet  | Component  |   |   | Board                                      |  | Built<br>1990   | Replaced,<br>or Replacement<br>Repaired   | Code<br>Stamped<br>(Yes<br>or No)                                |        |
|  | Component  | Manufacture   | Serial No.<br>214856-16<br>214856-16  | Board<br>No.<br>N/A<br>N/A                 | Identification  CV-4418  CV-4418   | Built<br>1990<br>1990                                     | Replaced, or Replacement  Repaired  Repaired  | Code<br>Stamped<br>(Yes<br>or No)<br>No                          |        |
| nnet<br>nnet   | Bore Guide Studs (2ea)   | Manufacture  Ceneral Elect.  Ceneral Elect. N/A   | 214856-16<br>214856-16<br>RI-VB23   | Board<br>No.<br>N/A<br>N/A<br>N/A          | Identification  CV-4418  CV-4418  CV-4418  | Built<br>1990<br>1990<br>Unknown                          | Replaced, or Replacement  Repaired  Repaired  Repaired  | Code Stamped (Yes or No) No No                                   |        |
| nnet<br>nnet<br>re/Ri                                  | Bore Guide Studs (2ea)   | Manufacture  Seneral Elect.  Seneral Elect.  N/A  General Elect.  | 214856-16<br>214856-16<br>RI-VB23<br>N/A  | NO.  N/A  N/A  N/A  N/A                    | CV-4418<br>CV-4418<br>CV-4418<br>CV-4418   | 1990<br>1990<br>Unknown                                   | Replaced, or Replacement  Repaired Repaired Repaired Repaired Repaired  | Code Stamped (Yes or No)  No No No                               |        |
| onnet<br>onnet<br>ore/Ri<br>onnet                      | Bore Guide Studs (2ea) bs/Pads Rabbit                          | Manufacture  Ceneral Elect.  Seneral Elect.  N/A  Seneral Elect.  Seneral Elect.  | 214856-16<br>214856-16<br>RI-VB23<br>N/A<br>214856-16   | NO.  N/A  N/A  N/A  N/A  N/A               | CV-4418<br>CV-4418<br>CV-4418<br>CV-4418<br>CV-4418                                  | 1990<br>1990<br>Unknown<br>1990                           | Replaced, or Replacement  Repaired Repaired Repaired Repaired Repaired  | Code Stamped (Yes or No) No No                                   |        |
| onnet<br>onnet<br>ore/Ri<br>onnet<br>.sc/Pi            | Bore Guide Studs (2ea) [bs/Pads Rabbit                         | Manufacture  Seneral Elect.  Seneral Elect.  N/A  General Elect.  | 214856-16<br>214856-16<br>RI-VB23<br>N/A  | NO.  N/A  N/A  N/A  N/A                    | CV-4418<br>CV-4418<br>CV-4418<br>CV-4418   | 1990<br>1990<br>Unknown                                   | Replaced, or Replacement  Repaired Repaired Repaired Repaired Repaired  | Code Stamped (Yes or No)  No No No No No                         |        |
| onnet<br>ore/Ri<br>onnet<br>lsc/Pi                     | Bore Guide Studs (2ea) [bs/Pads Rabbit                         | Ceneral Elect. Ceneral Elect. N/A Ceneral Elect. Seneral Elect. Ceneral Elect.  | 214856-16<br>214856-16<br>RI-VB23<br>N/A<br>214856-16<br>215585-9   | NO.  N/A  N/A  N/A  N/A  N/A  N/A          | CV-4418<br>CV-4418<br>CV-4418<br>CV-4418<br>CV-4418<br>CV-4418                       | 1990<br>1990<br>Unknown<br>1990<br>1990<br>1990           | Replaced, or Replacement  Repaired Repaired Repaired Repaired Repaired Repaired Repaired                                    | Code Stamped (Yes or No)  No No No No No No                      |        |
| onnet<br>ore/Ri<br>onnet<br>isc/Pi<br>isc/Pi<br>tem/St | Bore Guide Studs (2ea) Lbs/Pads Rabbit iston                   | Manufacture  Seneral Elect.  Seneral Elect.  N/A  Seneral Elect.  Seneral Elect.  General Elect.  General Elect.  | 214856-16<br>214856-16<br>RI-VB23<br>N/A<br>214856-16<br>215585-9<br>215585-8                             | NO.  N/A  N/A  N/A  N/A  N/A  N/A  N/A     | CV-4418<br>CV-4418<br>CV-4418<br>CV-4418<br>CV-4418<br>CV-4418<br>CV-4418            | 1990<br>1990<br>Unknown<br>1990<br>1990<br>1990           | Replaced, or Replacement  Repaired Repaired Repaired Repaired Repaired Repaired Replacement                                 | Code Stamped (Yes or No)  No No No No No No No                   |        |
| onnet<br>ore/Ri<br>onnet<br>isc/Pi<br>isc/Pi<br>cem/St | Bore Guide Studs (2ea) Lbs/Pads Rabbit iston Lem Disc Lem Disc | Manufacture  Ceneral Elect.  Ceneral Elect.  N/A  Ceneral Elect.  General Elect.  General Elect.  General Elect.  General Elect.  General Elect.  | 214856-16<br>214856-16<br>RI-VB23<br>N/A<br>214856-16<br>215585-9<br>215585-8<br>214856-21<br>6033641-203 | NO.  N/A  N/A  N/A  N/A  N/A  N/A  N/A  N/ | CV-4418<br>CV-4418<br>CV-4418<br>CV-4418<br>CV-4418<br>CV-4418<br>CV-4418<br>CV-4418 | 1990<br>1990<br>Unknown<br>1990<br>1990<br>1990<br>1990   | Replaced, or Replacement  Repaired Repaired Repaired Repaired Repaired Replacement Replacement Replaced                     | Code Stamped (Yes or No)  No No No No No No No No No No No       | con ar |
| onnet<br>ore/Ri<br>onnet<br>isc/Pi<br>isc/Pi<br>cem/St | Bore Guide Studs (2ea) Lbs/Pads Rabbit iston Lem Disc Lem Disc | Ceneral Elect.  Ceneral Elect.  N/A  Ceneral Elect.  Cork Repaired Bort  Stem/Stem Di | 214856-16<br>214856-16<br>RI-VB23<br>N/A<br>214856-16<br>215585-9<br>215585-8<br>214856-21<br>6033641-203 | NO.  N/A  N/A  N/A  N/A  N/A  N/A  N/A  N/ | CV-4418 CV-4418 CV-4418 CV-4418 CV-4418 CV-4418 CV-4418 CV-4418 CV-4418 CV-4418      | 1990 1990 Unknown 1990 1990 1990 1990 1990 1990 Operating | Replaced, or Replacement  Repaired Repaired Repaired Repaired Repaired Replacement Replacement Replaced  Replaced  Replaced | Code Stamped (Yes or No)  No No No No No No No No No No No No No | con a  |



| FORM | NIS-2 | (Back) |
|------|-------|--------|
| rum  | NIS-2 | (Back) |

|  | ances. The valve body, r   | lbs and pads were   | also machined. The Dis   |
|--|--|---|--|
| /Piston and Stem/Stem Disc Assys. were replaced  | 1. Stem/Stem Disc coming   | from CV4412 whil  | e the Disc/Piston was a  |
| (ref. NIS-2 11-92-25 for Disc/Piston_repairs).   |  |   | · · · · · · · · · · · · · · · · · · ·  |
| VT-1 (92-057) and VT-3 (92-056) were completed   | and accepted. A VT-2 (9)   | -304) was comple  | ted and accepted after   |
| reassembly.  |  |   |  |
|  | ERTIFICATE OF COMPLIANCE   | · · · · · · · · · · · · · · · · · · ·                                   | ····   |
|  |  |   |  |
| We certify that the statements made in t<br>to the rules of the ASME Code, Section XI.   | the report are correct as  |   | replacement confo  |
| Type Code Symbol Stamp None  |  |   | ·-   |
| Certificate of Authorization No. Nor   |  | •   | Expiration Date None   |
| Signed Suruder Shoul Owner or Owner's Designee, Title  | Codes & Materia  | ls, GL Date _   | 5/5/9~, 19   |
| CERTIFI  | ICATE OF INSERVICE INSPE   | CTION   |  |
| I, the undersigned, holding a valid commiss  | sion issued by the Nat   | ional Board of B  | oiler and Pressure Ves   |
|  |  | d employed by Har   | tford Steam Boiler I&I   |
| Inspectors and the State or Province of  | an   |   | badiment danger  |
| Inspectors and the State or Province of Of Hartford, Connecticut   | · ·  | have inspected t  | ine components described   |
| Inspectors and the State or Province of  | $\mathcal{Q}$ - $\mathcal{Q}$ - $\mathcal{G}$ - $\mathcal{G}$  | performed examina   | <u> 仮-X-YJ</u><br>ations and taken correct:  |
| Inspectors and the State or Province of  of Hartford, Connecticut  this Owner's Report during the period , and state that to the best of my knowledge and  | 2-28-93  nd belief, the Owner has accordance with the requires properties of the control of the  | performed examin. Irements of the A r makes any warra s Owner's Report. | <u>6-X-Y3</u> ations and taken correct: SME Code, Section XI. anty, expressed or implie Furthermore, neither to          |
| Inspectors and the State or Province of  of Hartford, Connecticut  this Owner's Report during the period , and state that to the best of my knowledge as measures described in the Owner's Report in a  By signing this certificate neither the Inconcerning the examinations and corrective me Inspector nor his employer shall be liable in any kind arising from or connected with this | 2-28-7)  nd belief, the Owner has accordance with the requirements of the control | performed examination of the A makes any warras Owner's Report.         | ations and taken correct: SME Code, Section XI.  Inty, expressed or implie Furthermore, neither toperty damage or a loss |
| Inspectors and the State or Province of  of Hartford, Connecticut  this Owner's Report during the period , and state that to the best of my knowledge as measures described in the Owner's Report in a  By signing this certificate neither the Inconcerning the examinations and corrective me Inspector nor his employer shall be liable in  | 2-28-7)  nd belief, the Owner has accordance with the requirements of the control | performed examination of the A makes any warras Owner's Report.         | ations and taken correct: SME Code, Section XI.  Inty, expressed or implie Furthermore, neither toperty damage or a loss |
| Inspectors and the State or Province of  of Hartford, Connecticut  this Owner's Report during the period , and state that to the best of my knowledge as measures described in the Owner's Report in a  By signing this certificate neither the Inconcerning the examinations and corrective me Inspector nor his employer shall be liable in any kind arising from or connected with this | 2-28-7)  nd belief, the Owner has accordance with the requirements of the control | performed examination of the A makes any warras Owner's Report.         | ations and taken correct: SME Code, Section XI.  Inty, expressed or implie Furthermore, neither toperty damage or a loss |



|                                       | Owner Iowa Elec  | tric Light and Pov  | ver  |  | Date Apr  | 11 29, 19                                | 992   |   |
|---------------------------------------|--|---|--|--|---|--|---|---|
|                                       |  | Name  |  |  |   |  |   |   |
|                                       | P.O.Box 351, C   | edar Rapids, IA 52<br>Address   | 2406   |  | Sheet 1 of  | 2  |   |   |
|                                       | Plant Duane Arn  | old Energy Center   |  |  | Unit 1  |  |   | <u> </u>                                  |
|                                       |  | Name  |  |  |   |  |   |   |
|                                       | 3277 DAEC Rd.  | Palo, IA 52324  |  |  |   | A06716B<br>Repair O                      | rganization P.O.N   | No.,Job No.                               |
|                                       |  |   |  | _  |   |  |   |   |
|                                       | Work Performed   | by <u>Iowa Electric I</u>   | light and Powe   | <u>)r                                     </u> |   |  |   |   |
|                                       |  |   |  |  | Authorization No.   |  | None  |   |
|                                       | 2277 DAEC Book   | I, Palo, IA. 52324  |  |  | Expiration Date _   |  | None  |   |
|                                       | 3211 DAEC ROAD   | Address   |  |  | _   |  |   | -   |
|                                       | Identification   | of System Main  | Steam C (Clas  | s 1)   |   |  |   |   |
|                                       |  |   |  |  |   |  |   |   |
|                                       | (a)Applicable C  | Const. Code *ANSI I   | 331.1  | 19 <u>67</u>                                   | Edition,  |  | _Addenda,   | Cc  |
|                                       | Case (b)Applicable E * Base Code - G   | dition of Section<br>E Spec 21A9230 Rev   | XI Utilized f  | or Repairs                                     | or Replacements 19  | 80 W81                                   | <del></del>   |   |
|                                       | Identification of Components Repaired or Replaced and Replacement Components |   |  |  |   |  |   |   |
|                                       | Identification   | or Components Repa  | aired or Repla   | ced and Repl                                   | racement component  | 8  |   |   |
|                                       | Name of<br>Component   | Name of Manufacture   | Manufacturer   | National ·                                     | Other Identification  | Year<br>Built                            | Repaired<br>Replaced,<br>or Replacement                   | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
|                                       | Name of<br>Component   | Name of   | Manufacturer   | National ·<br>Board                            | Other<br>Identification   | Year<br>Built                            | Replaced,   | Code<br>Stamped<br>(Yes                   |
| connet                                | Name of<br>Component<br>Bore   | Name of<br>Manufacture<br>General Elect.  | Manufacturer<br>Serial No.   | National<br>Board<br>No.                       | Other<br>Identification   | Year<br>Built                            | Replaced,<br>or Replacement                               | Code<br>Stamped<br>(Yes<br>or No)         |
| Sonnet Sonnet                         | Name of<br>Component<br>Bore   | Name of Manufacture General Elect. N/A  | Manufacturer<br>Serial No.<br>214856-13<br>N/A                           | National Board No. N/A                         | Other Identification  CV-4419  CV-4419                            | Year<br>Built<br>1990<br>Unknown         | Replaced,<br>or Replacement<br>Repaired                   | Code<br>Stamped<br>(Yes<br>or No)         |
| Connet Connet Stem/St                 | Name of<br>Component<br>Bore<br>Stud   | Name of Manufacture  General Elect.  N/A  General Elect.                                    | Manufacturer<br>Serial No.<br>214856-13<br>N/A<br>214856-23              | National Board No. N/A N/A N/A                 | Other Identification  CV-4419  CV-4419  CV-4419(from4418          | Year<br>Built<br>1990<br>Unknown         | Replaced, or Replacement  Repaired  Repaired  Replacement | Code Stamped (Yes or No) No               |
| Bonnet Bonnet Stem/S                  | Name of<br>Component<br>Bore   | Name of Manufacture General Elect. N/A  | Manufacturer<br>Serial No.<br>214856-13<br>N/A                           | National Board No. N/A                         | Other Identification  CV-4419  CV-4419                            | Year<br>Built<br>1990<br>Unknown         | Replaced, or Replacement Repaired Repaired                | Code Stamped (Yes or No)  No No           |
| Bonnet Bonnet Stem/S                  | Name of<br>Component<br>Bore<br>Stud   | Name of Manufacture  General Elect.  N/A  General Elect.                                    | Manufacturer<br>Serial No.<br>214856-13<br>N/A<br>214856-23              | National Board No. N/A N/A N/A                 | Other Identification  CV-4419  CV-4419  CV-4419(from4418          | Year<br>Built<br>1990<br>Unknown         | Replaced, or Replacement  Repaired  Repaired  Replacement | Code Stamped (Yes or No)  No No           |
|                                       | Name of<br>Component<br>Bore<br>Stud   | Name of Manufacture  General Elect.  N/A  General Elect.                                    | Manufacturer<br>Serial No.<br>214856-13<br>N/A<br>214856-23              | National Board No. N/A N/A N/A                 | Other Identification  CV-4419  CV-4419  CV-4419(from4418          | Year<br>Built<br>1990<br>Unknown         | Replaced, or Replacement  Repaired  Repaired  Replacement | Code Stamped (Yes or No)  No No           |
| Sonnet<br>Sonnet<br>Stem/Ss           | Name of Component  Bore Stud tem Disc  | Name of Manufacture  General Elect.  N/A  General Elect.  General Elect.                    | Manufacturer<br>Serial No.<br>214856-13<br>N/A<br>214856-23<br>214856-18 | National Board No.  N/A N/A N/A                | Other Identification  CV-4419  CV-4419  CV-4419(from4418  CV-4419 | Year<br>Built<br>1990<br>Unknown<br>1990 | Replaced, or Replacement Repaired Repaired Replacement    | Code Stamped (Yes or No)  No No           |
| connet<br>connet<br>connet<br>ctem/Sc | Name of Component  Bore Stud tem Disc  | Name of Manufacture  General Elect.  N/A  General Elect.                                    | Manufacturer<br>Serial No.<br>214856-13<br>N/A<br>214856-23<br>214856-18 | National Board No.  N/A N/A N/A                | Other Identification  CV-4419  CV-4419  CV-4419(from4418  CV-4419 | Year<br>Built<br>1990<br>Unknown<br>1990 | Replaced, or Replacement Repaired Repaired Replacement    | Code Stamped (Yes or No)  No No           |
| Sonnet<br>Sonnet<br>Stem/Ss           | Name of Component  Bore Stud tem Disc  | Name of Manufacture  General Elect.  N/A  General Elect.  General Elect.  Work Repaired Box | Manufacturer<br>Serial No.<br>214856-13<br>N/A<br>214856-23<br>214856-18 | National Board No.  N/A N/A N/A                | Other Identification  CV-4419  CV-4419  CV-4419(from4418  CV-4419 | Year Built  1990 Unknown 1990 1990       | Replaced, or Replacement Repaired Repaired Replacement    | Code Stamped (Yes or No)  No No           |

sheet 2 of 2

| Remarks CV-4419 was disassembled to inspect the galled stem. CMAR A06716B was written to initiate the repair Applicable Manufacturer's Data Reports to be attached  |
|---|
| The bonnet bore and one bonnet stud were machined. The Stem/Stem Disc was replaced with the removed from CV-4418.   |
| A VT-1 (92-059) and a VT-3 (92-058) were completed and accepted. A VT-2 (91-304) was completed after reassembly a   |
| accepted.   |
| CERTIFICATE OF COMPLIANCE   |
| We certify that the statements made in the report are correct and this repair/replacement conforms to the rules of the ASME Code, Section XI.   |
| Type Code Symbol Stamp <u>None</u>  |
| Certificate of Authorization No. None Expiration Date None  |
| Signed Survive Shaufancodes & Materials, GL Date 4 29 , 19 92  Owner or Owner's Designee, Title   |
| CERTIFICATE OF INSERVICE INSPECTION   |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler I&I Co.  of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2-28-72 to 5-18-22  , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI. |
| By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.   |
| Commissions NB7543 (IN) Icus 1046 Inspectors Signature  Commissions NB7543 (IN) Icus 1046 National Board, State, Province, and Endorsements   |
| Date  |
|   |

14

| 1.      | Owner Iowa Ele       | ectric Light and Po                       | wer                        |                          | Date Apr                | 11 29, 1      | 992                                     |   |       |
|---------|----------------------|---|----------------------------|--------------------------|-------------------------|---------------|---|---|-------|
|         |                      | Name                                      |                            |                          |                         |               |   |   |       |
|         | P.O.Box 351,         | Cedar Rapids, IA 5<br>Address             |                            |                          | Sheet 1 of              | 2             |   |   |       |
| •       | Plant Duane Ar       | nold Energy Center                        |                            |                          | Unit 1                  |               |   |   |       |
|         | 3277 DAEC Rd.        | Palo, IA 52324                            |                            |                          | CMAI                    | R A10826      |   |   | _     |
|         | Addres               | 33  |                            | •                        |                         | Repair C      | rganization P.O.                        | No.,Job No                                | ٠.    |
|         | Work Performed       | by <u>Iowa Electric</u>                   | Light and Powe             | er                       | Type Code Symbol        | Stamp         | None                                    |   |       |
|         |                      | name                                      |                            |                          | Authorization No.       |               | None                                    |   |       |
|         | 2077 PARG R          | .d Dolo TB 50304                          |                            |                          | Expiration Date _       |               | None                                    |   |       |
|         | 3277 DAEC ROA        | d, Palo, IA. 52324<br>Address             |                            | <del></del>              | Expiration base _       |               |   |   |       |
|         | Identification       | of System <u>Main</u>                     | Steam D (Clas              | s 1)                     |                         |               | •                                       |   |       |
|         |                      |   |                            |                          |                         |               |   |   |       |
| •       | (a)Applicable        | Const. Code *ANSI 1                       | 331.1                      | 19_67                    | Edition,                |               | _Addenda,                               | <del></del>                               | _Code |
|         | (b)Applicable        | Edition of Section<br>GE Spec 21A9230 Rev |                            | or Repairs o             | or Replacements 19      | 80 W81        | _                                       |   |       |
|         | Identification       | of Components Repa                        | aired or Repla             | ced and Repl             | lacement Component      | 8             |   |   |       |
|         | Name of<br>Component | Name of<br>Manufacture                    | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification | Year<br>Built | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |       |
| onnet   | Bore                 | General Elect.                            | 214856-15                  | N/A                      | CV-4420                 | 1990          | Repaired                                | No  |       |
| onnet   | Stud                 | N/A                                       | N/A                        | N/A                      | CV-4420                 | Unknown       | Repaired                                | No  |       |
|         | em Disc              | General Elect.                            | 6033641-203                | N/A                      | CV-4420(from4418        | 1990          | Replacement                             | No  |       |
| tem/St  | em Disc              | General Elect.                            | 214856-24                  | N/A                      | CV-4420                 | 1990          | Replaced                                | No  |       |
|         |                      |   |                            | n/A                      | CV-4420(from4418        | 1990          | Replacement                             | No  |       |
| tem/St  | ston                 | General Elect.                            | 214856-8                   | N/A                      |                         |               |   | 1 1                                       |       |
| Stem/St |                      |   |                            |                          |                         | 1990          | Replaced                                | No  |       |
| Stem/St | ston                 | General Elect.  Work Repaired Bor A07553) | 215585-7                   | N/A                      | CV-4420                 |               |   |   | f CM  |



| FORM  | NIS-2  | (Back) |
|-------|--------|--------|
| LOIGI | 1110-2 | (Dack) |

| to improve varve creatances. One bonner stud   | d was also machined. The Stem/Stem Disc and Disc/Piston Ass  |
|--|--|
| replaced using the assys removed from CV4418   | under CMAR A07553. A VT-1 (92-072) and a VT-3 (92-071) were  |
|  |  |
| and accepted. A VT-2 (91-304) was performed  | after reassembly and accepted  |
| The state of the s | wares are and accepted.  |
|  |  |
|  | CERTIFICATE OF COMPLIANCE  |
| We certify that the statements made in   | n the report are correct and this <u>repair/replacement</u>  |
| to the rules of the ASME Code, Section XI.   | repair or replacement  |
|  |  |
| Type Code Symbol Stamp None  |  |
|  |  |
| Certificate of Authorization No. N   | None Expiration Date   |
| 0  | Codes & Materials, GL Date 5-21-   |
| signed Surveyer Stages   | DO . Godos & Materials St. Date 5-21-  |
| Organica Commission Co | A. Codes & Materials, GL Date  |
| Owner or Owner's Designee, Tit   | THE  |
|  | 4  |
|  | 4  |
|  |  |
|  |  |
|  |  |
| CERTI  | IFICATE OF INSERVICE INSPECTION  |
|  | IFICATE OF INSERVICE INSPECTION  |
| I, the undersigned, holding a valid commi<br>Inspectors and the State or Province of   | IFICATE OF INSERVICE INSPECTION  dission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile   |
| I, the undersigned, holding a valid commi<br>Inspectors and the State or Province of   | IFICATE OF INSERVICE INSPECTION  dission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile   |
| I, the undersigned, holding a valid commi<br>Inspectors and the State or Province of   | IFICATE OF INSERVICE INSPECTION  dission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile   |
| I, the undersigned, holding a valid commi Inspectors and the State or Province of of Hartford, Connecticut this Owner's Report during the period   | IFICATE OF INSERVICE INSPECTION  |
| I, the undersigned, holding a valid commi Inspectors and the State or Province of of Hartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge  | IFICATE OF INSERVICE INSPECTION  Insign issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile  thave inspected the components des  To 48-50  and belief, the Owner has performed examinations and taken components.  |
| I, the undersigned, holding a valid commi Inspectors and the State or Province of of Hartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge  | IFICATE OF INSERVICE INSPECTION  Ission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile  have inspected the components des   |
| I, the undersigned, holding a valid commi Inspectors and the State or Province of  of  Hartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge measures described in the Owner's Report in  | rission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile thave inspected the components des  To 48-50 e and belief, the Owner has performed examinations and taken on accordance with the requirements of the ASME Code, Section  |
| I, the undersigned, holding a valid commi Inspectors and the State or Province of Of Hartford, Connecticut this Owner's Report during the period, and state that to the best of my knowledge measures described in the Owner's Report in  By signing this certificate neither the  | IFICATE OF INSERVICE INSPECTION  Dission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile  thave inspected the components des  to 6 - 5 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7   |
| I, the undersigned, holding a valid commit Inspectors and the State or Province of   | ission issued by the National Board of Boiler and Pressur IOWA and employed by Hartford Steam Boile to have inspected the components desemble to to to to to to to to to to to to to   |
| I, the undersigned, holding a valid commit Inspectors and the State or Province of   | ission issued by the National Board of Boiler and Pressur IOWA and employed by Hartford Steam Boile to have inspected the components desemble and belief, the Owner has performed examinations and taken on accordance with the requirements of the ASME Code, Section Inspector nor his employer makes any warranty, expressed or measures described in this Owner's Report. Furthermore, ne in any manner for any personal injury or property damage or                  |
| I, the undersigned, holding a valid commit Inspectors and the State or Province of   | rission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile  have inspected the components des  to 6 and belief, the Owner has performed examinations and taken on accordance with the requirements of the ASME Code, Section  Inspector nor his employer makes any warranty, expressed or measures described in this Owner's Report. Furthermore, ne in any manner for any personal injury or property damage or is inspection. |
| I, the undersigned, holding a valid commit Inspectors and the State or Province of   | rission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile  have inspected the components des  to 6 and belief, the Owner has performed examinations and taken on accordance with the requirements of the ASME Code, Section  Inspector nor his employer makes any warranty, expressed or measures described in this Owner's Report. Furthermore, ne in any manner for any personal injury or property damage or is inspection. |
| I, the undersigned, holding a valid commit Inspectors and the State or Province of   | rission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile  have inspected the components des  to 6 and belief, the Owner has performed examinations and taken on accordance with the requirements of the ASME Code, Section  Inspector nor his employer makes any warranty, expressed or measures described in this Owner's Report. Furthermore, ne in any manner for any personal injury or property damage or is inspection. |
| I, the undersigned, holding a valid commit Inspectors and the State or Province of   | ission issued by the National Board of Boiler and Pressur IOWA and employed by Hartford Steam Boile to have inspected the components desemble and belief, the Owner has performed examinations and taken on accordance with the requirements of the ASME Code, Section Inspector nor his employer makes any warranty, expressed or measures described in this Owner's Report. Furthermore, ne in any manner for any personal injury or property damage or                  |
| I, the undersigned, holding a valid commit Inspectors and the State or Province of   | rission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile  have inspected the components des  to 6 and belief, the Owner has performed examinations and taken on accordance with the requirements of the ASME Code, Section  Inspector nor his employer makes any warranty, expressed or measures described in this Owner's Report. Furthermore, ne in any manner for any personal injury or property damage or is inspection. |
| I, the undersigned, holding a valid commit Inspectors and the State or Province of   | rission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile  have inspected the components des  to 6 and belief, the Owner has performed examinations and taken on accordance with the requirements of the ASME Code, Section  Inspector nor his employer makes any warranty, expressed or measures described in this Owner's Report. Furthermore, ne in any manner for any personal injury or property damage or is inspection. |
| I, the undersigned, holding a valid commit Inspectors and the State or Province of   | rission issued by the National Board of Boiler and Pressur  IOWA and employed by Hartford Steam Boile  have inspected the components des  to 6 and belief, the Owner has performed examinations and taken on accordance with the requirements of the ASME Code, Section  Inspector nor his employer makes any warranty, expressed or measures described in this Owner's Report. Furthermore, ne in any manner for any personal injury or property damage or is inspection. |

|  | Owner Towa Ele   | ctric Light and Po  | wer   |  | Date Apr   | il 30, 1  | 992   |   |
|--|--|---|---|--|--|---|---|---|
|  | 04.101 <u>10.10</u>  | Name  | <del> </del>  |  | <del></del>  |   |   |   |
|  | P.O.Box 351,   | Cedar Rapids, IA 5<br>Address   |   |  | Sheet 1 of   | 2   |   |   |
|  | Dient Duene Ar   |   |   |  | Unit 1   |   | ·   |   |
|  | Plant Duane All  | nold Energy Center<br>Name  |   |  |  |   |   | -   |
|  |  | Palo, IA 52324  |   |  | PMA  | R 1052006   |   |   |
|  | Addres   | 8   |   |  |  | Repair C  | rganization P.O.1   |   |
|  | Work Performed   | Type Code Symbol  | Stamp   | None   |  |   |   |   |
|  |  | Name  |   |  | Authorization No   | •   | None  |   |
|  | 3277 DAEC Road   | d, Palo, IA. 52324<br>Address   |   | · .  | Expiration Date  |   | None  |   |
|  |  |   |   |  |  |   |   |   |
|  | Identification   | of System <u>Main</u>   | Steam A (Clas   | B 1)   |  |   |   |   |
|  | (a)Applicable (  | Const. Code ASME  | III   | 19 <u>_68</u>  | Edition, W68   |   | _Addenda,   | Coc   |
|  | (b)Applicable H  | Edition of Section  | XI Utilized f   | or Repairs   | or Replacements 19   | 80 W81  |   |   |
|  |  |   |   |  |  |   |   |   |
|  | Identification   | of Components Rep   | aired or Repla  | ced and Rep  | lacement Component   | S   |   |   |
| <del></del>                                      | Identification   | of Components Repo  | aired of Repla  | ced and Rep  | lacement Component   | :s  | •   | ASME  |
|  | <u></u> :  |   |   | National   |  |   | Repaired  | Code  |
|  | Name of  | Name of   | Manufacturer  | National<br>Board                                    | Other  | Year  | Repaired<br>Replaced,   |   |
| )  | <u></u> :  |   |   | National   |  |   | Repaired  | Code<br>Stamped                                     |
| )  | Name of<br>Component   | Name of<br>Manufacture  | Manufacturer<br>Serial No.  | National<br>Board<br>No.                             | Other<br>Identification  | Year<br>Built   | Repaired<br>Replaced,<br>or Replacement   | Code<br>Stamped<br>(Yes<br>or No)                   |
|  | Name of<br>Component   | Name of<br>Manufacture<br>Target Rock   | Manufacturer<br>Serial No.<br>S/N 207   | National<br>Board<br>No.                             | Other<br>Identification<br>PSV-4400  | Year<br>Built   | Repaired<br>Replaced,   | Code<br>Stamped<br>(Yes                             |
| ot \   | Name of<br>Component<br>Valve  | Name of<br>Manufacture<br>Target Rock<br>Target Rock  | Manufacturer<br>Serial No.  | National<br>Board<br>No.                             | Other<br>Identification  | Year<br>Built<br>1975   | Repaired<br>Replaced,<br>or Replacement<br>Replacement  | Code Stamped (Yes or No)                            |
| ot V   | Name of Component Valve Valve  | Name of<br>Manufacture<br>Target Rock   | Manufacturer<br>Serial No.<br>S/N 207<br>S/N 189  | National<br>Board<br>No.<br>N/A<br>N/A               | Other<br>Identification<br>PSV-4400<br>PSV-4400  | Year<br>Built<br>1975<br>1975<br>1975                                       | Repaired Replaced, or Replacement Replacement Replacement   | Code Stamped (Yes or No)  Yes Yes No                |
| ot V<br>ot E                                     | Name of<br>Component<br>Valve  | Name of Manufacture  Target Rock Target Rock  JED Mfg. Co.  | Manufacturer<br>Serial No.<br>S/N 207<br>S/N 189<br>Item#107  | National<br>Board<br>No.<br>N/A<br>N/A               | Other Identification  PSV-4400 PSV-4400 PSV-4400   | Year<br>Built<br>1975<br>1975<br>1975<br>1975<br>Unknown<br>1991            | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced  | Code Stamped (Yes or No)  Yes Yes No No             |
| ot V<br>ot E<br>ot N                             | Name of Component Valve Valve Solts (2ea)                              | Name of Manufacture  Target Rock Farget Rock JED Mfg. Co. N/A   | Manufacturer<br>Serial No.<br>S/N 207<br>S/N 189<br>Item#107<br>Item#107                                    | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A        | Other Identification  PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400                   | Year<br>Built<br>1975<br>1975<br>1975<br>Unknown<br>1991                    | Repaired Replaced, or Replacement Replacement Replaced Replacement Replaced Replaced Replaced Replaced                                  | Code Stamped (Yes or No)  Yes Yes No No No          |
| ot V<br>ot E<br>ot N<br>ot N                     | Name of Component  Valve Valve Bolts (2ea) Bolts (2ea)                 | Name of Manufacture  Farget Rock Farget Rock JED Mfg. Co. N/A Farget Rock   | Manufacturer<br>Serial No.<br>S/N 207<br>S/N 189<br>Item#107<br>Item#107<br>Item#150                        | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A | Other Identification  PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400                            | Year<br>Built<br>1975<br>1975<br>1975<br>Unknown<br>1991                    | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced  | Code Stamped (Yes or No)  Yes Yes No No             |
| ot Not Bot Not Not Not Not Not Not Not Not Not N | Name of Component Valve Valve Solts (2ea) Suts (2ea) Suts (2ea)        | Name of Manufacture  Target Rock Farget Rock JED Mfg. Co. N/A Target Rock   | Manufacturer<br>Serial No.<br>S/N 207<br>S/N 189<br>Item#107<br>Item#107<br>Item#150<br>Item#150            | National Board No.  N/A N/A N/A N/A N/A              | Other Identification  PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400                   | Year<br>Built<br>1975<br>1975<br>1975<br>Unknown<br>1991                    | Repaired Replaced, or Replacement Replacement Replaced Replacement Replaced Replaced Replaced Replaced                                  | Code Stamped (Yes or No)  Yes Yes No No No          |
| ot Not Not Not Not Not Not Not Not Not N         | Name of Component Valve Valve Solts (2ea) Suts (2ea) Suts (2ea)        | Name of Manufacture  Farget Rock Farget Rock JED Mfg. Co. N/A Farget Rock N/A Target Rock   | Manufacturer<br>Serial No.<br>S/N 207<br>S/N 189<br>Item#107<br>Item#150<br>Item#150<br>*Item#24            | National Board No.  N/A N/A N/A N/A N/A N/A N/A      | Other Identification  PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400          | Year<br>Built<br>1975<br>1975<br>1975<br>Unknown<br>1991<br>Unknown         | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced Replaced                                     | Code Stamped (Yes or No)  Yes Yes No No No No       |
| ot Not Not Not Not Not Not Not Not Not N         | Name of Component  Valve Valve Solts (2ea) Solts (2ea) Suts (2ea) Flug | Name of Manufacture  Target Rock Target Rock JED Mfg. Co. N/A Target Rock N/A Target Rock Target Rock                             | Manufacturer<br>Serial No.<br>S/N 207<br>S/N 189<br>Item#107<br>Item#150<br>Item#150<br>*Item#24<br>Item#43 | National Board No.  N/A N/A N/A N/A N/A N/A N/A N/A  | Other Identification  PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 | Year<br>Built<br>1975<br>1975<br>1975<br>Unknown<br>1991<br>Unknown<br>1991 | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced Replaced Replaced Replaced Replaced Replaced | Code Stamped (Yes or No)  Yes Yes No No No No No No |
| ot Vot B   | Name of Component  Valve Valve Solts (2ea) Solts (2ea) Suts (2ea) Flug | Name of Manufacture  Farget Rock Farget Rock JED Mfg. Co. N/A Farget Rock N/A Target Rock   | Manufacturer<br>Serial No.<br>S/N 207<br>S/N 189<br>Item#107<br>Item#150<br>Item#150<br>*Item#24<br>Item#43 | National Board No.  N/A N/A N/A N/A N/A N/A N/A N/A  | Other Identification  PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 | Year<br>Built<br>1975<br>1975<br>1975<br>Unknown<br>1991<br>Unknown<br>1991 | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced Replaced Replaced Replaced Replaced Replaced | Code Stamped (Yes or No)  Yes Yes No No No No No No |
| ot V<br>ot P<br>ot N<br>ot N                     | Name of Component  Valve Valve Solts (2ea) Solts (2ea) Suts (2ea) Flug | Name of Manufacture  Farget Rock Farget Rock JED Mfg. Co. N/A Farget Rock N/A Farget Rock Target Rock V/A Farget Rock Farget Rock | Manufacturer<br>Serial No.<br>S/N 207<br>S/N 189<br>Item#107<br>Item#150<br>Item#150<br>*Item#24<br>Item#43 | National Board No.  N/A N/A N/A N/A N/A N/A N/A N/A  | Other Identification  PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400 PSV-4400          | Year Built  1975 1975 1975 Unknown 1991 Unknown 1991                        | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced Replaced Replaced Replaced Replaced          | Code Stamped (Yes or No)  Yes Yes No No No No No No |

the number of sheets is recorded at the top of this form.

\*See Note 10 on Dwg. APED B21-3379-001

sheet 2 of 2

| Remarks Pilot Valve S/N 189 was replaced with S/N 207 (Ref. NIS-2 11-90-02). In addition, 2 Bolts and Nuts Applicable Manufacturer's Data Reports to be attached  |
|---|
| were replaced due to damage (One bolt had a linear indicationed revealed on the VT-1 exam). The plug was replaced as  |
| per Note 10 on Dwg. B21-3379-001. A VT-1 (92-035) was completed and accepted. A VT-3 (90-188/90-355) was performed  |
| on S/N 207 and accepted. A VT-2 (91-304) was performed after installation and accepted.   |
| CERTIFICATE OF COMPLIANCE   |
| We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.  |
| Type Code Symbol Stamp None   |
| Certificate of Authorization No. None Expiration Date None  |
| Signed Survelu Shaufar Codes & Materials, GL Date 55-, 19 92 Owner or Owner's Designee, Title   |
| CERTIFICATE OF INSERVICE INSPECTION   |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of and employed by Hartford Steam Boiler I&I Co have inspected the components described in this Owner's Report during the period   |
| By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. |
| Inspectors Signature  Commissions NA75Y) (IN) Is 1046  National Board, State, Province, and Endorsements  |
| Inspectors Signature National Board, State, Province, and Endorsements  |
| Date  |

|     |                             |                               | y the Provi                |                          | of the ASME Co                    | =====                | etion XI                                | <del></del>                               |
|-----|-----------------------------|-------------------------------|----------------------------|--------------------------|-----------------------------------|----------------------|---|---|
|     | Owner Iowa Elec             | ctric Light and Po<br>Name    | wer                        |                          | Date <u>Apr</u>                   | il 30, 1             | .992                                    |   |
|     | P.O.Box 351, 0              | Cedar Rapids, IA 5<br>Address |                            |                          | Sheet 1 of                        | 2                    |   |   |
|     | Plant <u>Duane Arr</u>      | nold Energy Center<br>Name    |                            |                          | Unit 1                            |                      |   |   |
|     | 3277 DAEC Rd.               | Palo, IA 52324                |                            |                          | PMA                               | R 105200<br>Repair ( | 7<br>Organization P.O.                  | No.,Job No.                               |
|     | Work Performed              | by Iowa Electric :<br>Name    | Light and Powe             | er                       | Type Code Symbol Authorization No |                      | None<br>None                            |   |
|     | 3277 DAEC ROAC              | i, Palo, IA. 52324<br>Address |                            | <del></del>              | Expiration Date                   |                      | None                                    |   |
|     | Identification              | of System Main                | Steam A (Clas              | s 1)                     |                                   |                      |   |   |
|     | Case                        | Const. Code ASME              |                            |                          |                                   |                      |   | Co.                                       |
|     | Identification              | of Components Repa            | aired or Repla             | ced and Rep              | lacement Component                | :s                   |   |   |
| )   | Name of<br>Component        | Name of<br>Manufacture        | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification           | Year<br>Built        | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| .ot | Valv <b>e</b>               | Target Rock                   | S/N 201                    | N/A                      | PSV-4401                          | 1975                 | Replacement                             | Yes                                       |
|     | Valve                       | Target Rock                   | S/N 226                    | N/A                      | PSV-4401                          | 1975<br>1975         | Replaced<br>Replacement                 | Yes                                       |
|     | Bolts (12ea)                | JED Mfg. Co.                  | Item#107                   | N/A<br>N/A               | PSV-4401<br>PSV-4401              | 1975                 | Replaced                                | No  |
|     | Bolts (12ea)<br>Nuts (12ea) | JED Mfg. Co.<br>Target Rock   | Item#107<br>Item#150       | N/A                      | PSV-4401                          | 1991                 | Replacement                             | No  |
| _   | Nuts (12ea)                 | N/A                           | Item#150                   | N/A                      | PSV-4401                          | Unknown              | Replaced                                | No  |
|     | Plug                        | Target Rock                   | *Item#24                   | N/A                      | PSV-4401                          | 1991                 | Replacement                             | No  |
| ıg  |                             | Target Rock                   | Item#43                    | N/A                      | PSV-4401                          | 1975                 | Replaced                                | No  |
|     |                             | Work Replaced Pi              |                            | 226 with S/N             | • .                               |                      |   | s and Plug.                               |

sheet 2 of 2

| CERTIFICATE OF COMPLIANCE  We certify that the statements made in the report are correct and this replacement  Type Code Symbol Stamp None  Certificate of Authorization No. None  Signed Sumular Shearing Title  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Ve Inspectors and the State or Province of IOMA and employed by Hartford Steam Boiler Isl this Owner's Report during the period  This Owner's Report during the period  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or imple concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither Inspector nor his employer makes any warranty, expressed or imple concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither Inspector nor his employer makes any warranty, expressed or imple concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither Inspector nor his employer makes any warranty, expressed or imple concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions Manual Board, State, Province, and Endorsem National Board, State, Province, and Endorsem   | ddition the plug  | was replaced with the filter p   | lug as per Note 10 c  | on Dwg. B21-3379-001. A VT-1 (92-037) was  |
|--|---|--|---|--|
| CERTIFICATE OF COMPLIANCE  We certify that the statements made in the report are correct and this replacement to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp None  Certificate of Authorization No. None  Signed Survive State Sta | erformed and acce   | pted. A VT-3 (91-001) was com  | pleted on S/N 201 an  | d accepted. A VT-2 (91-304) was performe   |
| CERTIFICATE OF COMPLIANCE  We certify that the statements made in the report are correct and this replacement to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp None  Certificate of Authorization No. None Expiration Date None  Signed Survive Stamp Codes & Materials, GL Date 5-4-9 15  Owner or Owner's Designee, Titus  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Ve Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler Ist this Owner's Report during the period 1-24-92 to 5-26-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken correct measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By Sugning this certificate neither the Inspector nor his employer makes any warranty, expressed or imple concerning the examinations and torrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions Mallan Commissions Mallan Forvince, and Endorsem National Board, State, Province, and Endorsem  |   |  |   |  |
| We certify that the statements made in the report are correct and this replacement to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp None  Certificate of Authorization No. None  Signed Survey Share Codes & Materials, GL Date 5-4-9 , 19  Owner or Owner's Designee, Titus  CERTIFICATE OF INSURVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Ve Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler IsI of Hartford, Connecticut have inspected the components describe this Owner's Report during the period 3-34-9, to 5-26-9, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken correct measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By Signing this certificate neither the Inspector nor his employer makes any warranty, expressed or imple concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions MADSHO (LIN) Islands  National Board, State, Province, and Endorsem   | nstallation and a   | ccepted. (Ref. NIS-2 11-92-23  | for the main valve b  | ody replacement).  |
| Type Code Symbol Stamp None  Certificate of Authorization No. None  Signed Signed Symbol Stamp None  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Ve Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler IsI have inspected the components described in the Owner's Report during the period J-J4-92 to J-J6-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken correct measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or imple concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NAD-YD (IN) Ta NAGE National Board, State, Province, and Endorsem   |   | CE   | RTIFICATE OF COMPLIA  | NCB  |
| Type Code Symbol Stamp None  Certificate of Authorization No. None  Signed Signed Symbol Stamp None  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Ve Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler IsI have inspected the components described in the Owner's Report during the period J-J4-92 to J-J6-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken correct measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or imple concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NAD-YD (IN) Ta NAGE National Board, State, Province, and Endorsem   | We certify  | that the statements made in th   | ne report are correct   | and this replacement con   |
| CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Ve Inspectors and the State or Province of 10WA and employed by Hartford Steam Boiler Isl have inspected the components describe this Owner's Report during the period 3.4.7. to Owner has performed examinations and taken correct measured described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implection of the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NBJSYS (IN) 13 1046  National Board, State, Province, and Endorsem National Board, State, Province, and Endorsem  |   |  | -   | •  |
| Signed Survive Share and Codes & Materials, GL Date 5-4-9 , 19  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Ve Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler IsI of Hartford, Connecticut have inspected the components describe this Owner's Report during the period 3-74-73 to 5-26-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken correct measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implicance in the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NBJ-YJ (IN) Island National Board, State, Province, and Endorsem National Board, State, Province, and Endorsem  | Type Code S   | Symbol Stamp <u>None</u>   |   |  |
| CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Ve Inspectors and the State or Province of   | Certificate   | e of Authorization No. None  | 3   | Expiration Date None   |
| CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Ve Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler ISI have inspected the components describe this Owner's Report during the period 3-24-92 to 5-26-92, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken correct measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implicance on the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NAJSYS(IN) Is 1646  Inspectors Signature  Commissions NAJSYS(IN) Is 1646  National Board, State, Province, and Endorsem  | signed $\frac{St}{2\pi}$  | umler Shares   | Codes & Mate  | rials, GL Date 5-4-9 1   |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Verinspectors and the State or Province of IOWA and employed by Hartford Steam Boiler Isl of Hartford, Connecticut have inspected the components described this Owner's Report during the period, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken correct measured described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implicance concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions MBJ-YJ (IN) Island Martine Inspectors Signature  | Own   | er or Owner's Designee, Titue  |   |  |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Verinspectors and the State or Province of IOWA and employed by Hartford Steam Boiler Isl of Hartford, Connecticut have inspected the components described this Owner's Report during the period, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken correct measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implicance concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions MBJ-YJ (IN) Island Martine Inspectors Signature  |   |  |   |  |
| Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler I&I of Hartford, Connecticut have inspected the components described this Owner's Report during the period to 500000000000000000000000000000000000  |   |  |   |  |
| This Owner's Report during the period S-74-9.3 to 5-76-9.7  And state that to the best of my knowledge and belief, the Owner has performed examinations and taken correct measured described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implecton concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NATSYN(IN) Taled National Board, State, Province, and Endorsem   |   | CERTIFIC   | CATE OF INSERVICE INS   | SPECTION   |
| measured described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By digning this certificate neither the Inspector nor his employer makes any warranty, expressed or impliconcerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NBTSYD (IN) Ta 1046  Inspectors Signature  Commissions NBTSYD (IN) Ta 1046  National Board, State, Province, and Endorsem   | I, the undersign  | med, holding a valid commissi  | ion issued by the N   | Mational Board of Boiler and Pressure Ve   |
| measured described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or impleconcerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NBJSYD (IN) Ta 1046  Inspectors Signature  Commissions NBJSYD (IN) Ta 1046  National Board, State, Province, and Endorsem   | Inspectors and t  | ned, holding a valid commission the State or Province of   | ion issued by the N   | Mational Board of Boiler and Pressure Ve<br>and employed by Hartford Steam Boiler IS:  |
| By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implected concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NBTSW (IN) Ta 1046  Inspectors Signature  Commissions NBTSW (IN) Ta 1046  National Board, State, Province, and Endorsem  | Inspectors and t  | ned, holding a valid commission the State or Province of   | ion issued by the N   | Mational Board of Boiler and Pressure Ve<br>and employed by Hartford Steam Boiler IS:  |
| concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NB7-Y. (IN) Ta 1046  Inspectors Signature  National Board, State, Province, and Endorsem   | Inspectors and t of this Owner's Rep  | ned, holding a valid commission of the State or Province of Hartford, Connecticut cort during the period   | ion issued by the N IOWA 3-24-92  | Mational Board of Boiler and Pressure Version and employed by <u>Hartford Steam Boiler Is:</u> have inspected the components described to to   |
| concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NB7-Y2 (IN) Ta 1046  Inspectors Signature  National Board, State, Province, and Endorsem   | Inspectors and t  of this Owner's Rep , and state that  | ned, holding a valid commission of the State or Province of Hartford, Connecticut cort during the period to the best of my knowledge and   | ion issued by the N IOWA  3-34-93 d belief, the Owner h   | Tational Board of Boiler and Pressure Version and employed by Hartford Steam Boiler Is:  have inspected the components described to to   |
| Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a los any kind arising from or connected with this inspection.  Commissions NATSYN (IN) Ta 1646  Inspectors Signature  Commissions NATSYN (IN) Ta 1646  National Board, State, Province, and Endorsem   | Inspectors and to of this Owner's Rep, and state that measures describ  | med, holding a valid commission of the State or Province of Hartford, Connecticut cort during the period to the best of my knowledge and sed in the Owner's Report in according to the State of the Stat | ion issued by the N IOWA  3-34-93 d belief, the Owner h coordance with the re   | Tational Board of Boiler and Pressure Version and employed by Hartford Steam Boiler Is:  have inspected the components described to to   |
| Inspectors Signature  Commissions NB7-43 (IN) I a 1646  National Board, State, Province, and Endorsem  | Inspectors and to of this Owner's Rep , and state that measures describ   | med, holding a valid commission of the State or Province of Hartford, Connecticut fort during the period to the best of my knowledge and sed in the Owner's Report in actions certificate neither the Institute of the State of th | ion issued by the N IOWA  3-34-53 d belief, the Owner h coordance with the re   | Tational Board of Boiler and Pressure Version and employed by Hartford Steam Boiler Is:  have inspected the components described to  |
|  | Inspectors and to of this Owner's Rep, and state that measures describ  By signing the concerning the e Inspector nor hi  | med, holding a valid commission of the State or Province of Hartford, Connecticut cort during the period to the best of my knowledge and the Owner's Report in actions certificate neither the Insexaminations and corrective means employer shall be liable in  | ion issued by the N  IOWA  3-74-93  d belief, the Owner had the respector nor his employed assures described in the any manner for any positions. | Tational Board of Boiler and Pressure Version and employed by Hartford Steam Boiler Is:  |
|  | Inspectors and to of this Owner's Rep, and state that measures describ  By signing the concerning the e Inspector nor hi  | med, holding a valid commission of the State or Province of Hartford, Connecticut cort during the period to the best of my knowledge and the Cwner's Report in act is certificate neither the Insexaminations and corrective means employer shall be liable in a from or connected with this is  | d belief, the Owner has cordance with the respector nor his emploasures described in the any manner for any points pection.                       | Actional Board of Boiler and Pressure Versiand employed by <u>Hartford Steam Boiler IS:</u> have inspected the components described to <u>STOCHO</u> las performed examinations and taken correctly and the sequirements of the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XII.  Described to the ASME Code, Section XI.  D |
|  | Inspectors and to of this Owner's Rep, and state that measures describ  By signing the concerning the e Inspector nor hi  | med, holding a valid commission of the State or Province of Hartford, Connecticut cort during the period to the best of my knowledge and the Cwner's Report in act is certificate neither the Insexaminations and corrective means employer shall be liable in a from or connected with this is  | d belief, the Owner has cordance with the respector nor his emploasures described in the any manner for any points pection.                       | Actional Board of Boiler and Pressure Versiand employed by <u>Hartford Steam Boiler IS:</u> have inspected the components described to <u>STOCHO</u> las performed examinations and taken correctly and the sequirements of the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XII.  Described to the ASME Code, Section XI.  D |
|  | Inspectors and to of this Owner's Rep, and state that measured describ  By digning the concerning the e Inspector nor hi any kind arising                         | med, holding a valid commission of the State or Province of Hartford, Connecticut cort during the period to the best of my knowledge and the Cwner's Report in act is certificate neither the Insexaminations and corrective means employer shall be liable in a from or connected with this is  | d belief, the Owner has cordance with the respector nor his emploasures described in the any manner for any points pection.                       | Actional Board of Boiler and Pressure Versiand employed by <u>Hartford Steam Boiler IS:</u> have inspected the components described to <u>STOCHO</u> las performed examinations and taken correctly and the sequirements of the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XII.  Described to the ASME Code, Section XI.  D |
| 6-7A 62  | Inspectors and to of this Owner's Rep, and state that measured describ  By digning the concerning the e Inspector nor hi any kind arising                         | med, holding a valid commission of the State or Province of Hartford, Connecticut cort during the period to the best of my knowledge and the Cwner's Report in act is certificate neither the Insexaminations and corrective means employer shall be liable in a from or connected with this is  | d belief, the Owner has cordance with the respector nor his emploasures described in the any manner for any points pection.                       | Actional Board of Boiler and Pressure Versiand employed by <u>Hartford Steam Boiler IS:</u> have inspected the components described to <u>STOCHO</u> las performed examinations and taken correctly and the sequirements of the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XII.  Described to the ASME Code, Section XI.  D |
|  | Inspectors and to of this Owner's Rep, and state that measured describ  By digning the concerning the e Inspector nor hi any kind arising  Unification  Inspector | med, holding a valid commission of the State or Province of Hartford, Connecticut cort during the period to the best of my knowledge and the Cwner's Report in act is certificate neither the Insexaminations and corrective means employer shall be liable in a from or connected with this is  | d belief, the Owner has cordance with the respector nor his emploasures described in the any manner for any points pection.                       | Actional Board of Boiler and Pressure Versiand employed by <u>Hartford Steam Boiler IS:</u> have inspected the components described to <u>STOCHO</u> las performed examinations and taken correctly and the sequirements of the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XI.  Described to the ASME Code, Section XII.  Described to the ASME Code, Section XI.  D |

|     |                       | As Required b                 | y the Provi                | sions c                  | of the ASME Co          | ode Sec       | tion XI                                 | :   |          |
|-----|-----------------------|-------------------------------|----------------------------|--------------------------|-------------------------|---------------|---|---|----------|
|     | Owner <u>Iowa Ele</u> | ctric Light and Po<br>Name    | wer                        |                          | Date Apr                | il 30, 1      | 992                                     |   |          |
|     | P.O.Box 351, 0        | Cedar Rapids, IA 5<br>Address |                            |                          | Sheet 1 of              | 2             |   |   |          |
|     | Plant Duane Arr       | nold Energy Center<br>Name    |                            |                          | Unit 1                  |               |   |   |          |
|     | 3277 DAEC Rd.         | Palo, IA 52324                |                            |                          | CMA                     |               | /A06458<br>Organization P.O.            | No.,Job No                                    | <b>-</b> |
|     | Work Performed        | by Iowa Electric :            | Light and Powe             | er                       | Type Code Symbol        | Stamp         | None                                    | <del></del>                                   | _        |
|     |                       |                               |                            |                          | Authorization No.       | •             | None                                    |   |          |
|     | 3277 DAEC Road        | i, Palo, IA. 52324<br>Address |                            |                          | Expiration Date         |               | None                                    | -   |          |
|     | Identification        | of System <u>Main</u>         | Steam A (Clas              | s 1)                     |                         |               |   |   |          |
|     | Case                  | Const. Code ASME              |                            |                          |                         |               |   |   | Cod      |
|     |                       | Edition of Section            |                            |                          |                         |               |   |   |          |
|     | Identification        | of Components Rep             | aired or Repla             | ced and Rep.             | lacement Component      | :s<br>        | T                                       | ·<br>•  |          |
| )   | Name of<br>Component  | Name of<br>Manufacture        | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification | Year<br>Built | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No)     |          |
| in  | Valve                 | Target Rock                   | S/N 141                    | N/A                      | PSV-4401                | 1978          | Replacement                             | Yes   |          |
| n   | Valve                 | Target Rock                   | S/N 226                    | N/A                      | PSV-4401                | 1975          | Replaced                                | Yes   |          |
|     | ody Pilot Flg.        | Target Rock                   | S/N 141                    | N/A                      | PSV-4401                | 1978          | Repaired                                | Yes   |          |
| lot | Tube Strap            | N/A                           | N/A                        | N/A                      | PSV-4401                | 1992          | Repaired                                | 100   |          |
|     |                       |                               |                            |                          |                         |               |   |   |          |
|     |                       |                               |                            |                          |                         |               |   | <u>                                      </u> |          |
|     | Description of        | Work Replaced Ma              | in Valve Body              | S/N 226 wit              | h S/N 141.              |               |   |   |          |
|     | Tests Conducted       | _                             | لسا                        | matic                    | Nominal psi Test Ter    | _             | g Pressure                              | K   |          |
|     |                       | Other                         | Pressure                   | 1004                     | har reac in             |               |   |   |          |

sheet 2 of 2

| Remarks Main Valve S/N 226 was replaced with S/N 141 under CMAR A05311. Prior to installation S/N 141 was  |
|--|
| Applicable Manufacturer's Data Reports to be attached  |
| repaired under CMAR A06458. The main valve body-to-pilot flange face was machined per GE SIL 196 supplement 13.  |
| In addition, a new pilot tube strap was fabricated and welded in place. A VT-1(92-065) and VT-3 (92-064) was   |
|  |
| completed and accepted. A VT-2 (91-304) was completed after installation and accepted.   |
|  |
| CERTIFICATE OF COMPLIANCE  |
| We certify that the statements made in the report are correct and this <u>replacement</u> conforms   |
| to the rules of the ASME Code, Section XI. repair or replacement   |
|  |
| Type Code Symbol Stamp None  |
| Certificate of Authorization No. None Expiration Date None   |
| Signed Survive Sharp Codes & Materials, GL Date 5-2-, 19 92 Owner or Owner's Designee, Title   |
| Owner or Owner's Designee, Title   |
|  |
| CERTIFICATE OF INSERVICE INSPECTION  |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel  |
| Inspectors and the State or Province of of of Hartford, Connecticut have inspected the components described in   |
| this Owner's Report during the period $(a-13-9)$ to $5-30-91$  |
| , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  |
| By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied,   |
| concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. |
| $\frac{1}{2}$  |
| Inspectors Signature  Commissions NB7543 (IN) I3 1046  National Board, State, Province, and Endorsements   |
|  |
| Date 5-20-92 19 93   |
|  |
|  |

|      | Owner <u>lowa Elect</u> | ric Light and Pow<br>Name     | ver                        | <del>.</del>             | Date Apr                | il 30, 1                              | 992                                     |   |
|------|-------------------------|-------------------------------|----------------------------|--------------------------|-------------------------|---------------------------------------|---|---|
|      | P.O.Box 351, Ce         | edar Rapids, IA 52<br>Address | 2406                       |                          | Sheet 1 of              | 2                                     |   |   |
|      | Plant Duane Arno        | old Energy Center<br>Name     |                            |                          | Unit 1                  |                                       |   |   |
|      | 3277 DAEC Rd.           | Palo, IA 52324                |                            |                          |                         | Repair C                              | B<br>Organization P.O.1                 | No., Job No.                              |
|      | Work Performed b        | y Iowa Electric I             | ight and Powe              | r                        | Type Code Symbol        | Stamp                                 | None                                    |   |
|      |                         | Name                          |                            |                          | Authorization No.       |                                       | None                                    | <u></u>                                   |
|      | 3277 DAEC Road,         | Palo, IA. 52324<br>Address    |                            |                          | Expiration Date         | · · · · · · · · · · · · · · · · · · · | None                                    |   |
|      | Identification o        | of System <u>Main</u>         | Steam B (Clas              | s 1)                     |                         |                                       |   |   |
|      | Cago                    |                               |                            |                          | Edition, W68            |                                       |   | Cod                                       |
| (    | Name of<br>Component    | Name of<br>Manufacture        | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification | Year<br>Built                         | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| ot V | alve                    | Farget Rock                   | S/N 200                    | N/A                      | PSV-4402                | 1975                                  | Replacement                             | Yes                                       |
|      | alve                    | Target Rock                   | S/N 218                    | N/A                      | PSV-4402                | 1975                                  | Replaced                                | Yes                                       |
|      | Plug                    | Target Rock                   | *Item#24                   | N/A                      | PSV-4402                | 1991<br>1975                          | Replacement<br>Replaced                 | No<br>No                                  |
|      |                         | Farget Rock                   | Item#43                    | N/A                      | PSV-4402                | 1373                                  | NO TUBE                                 |   |
|      |                         |                               |                            |                          |                         |                                       |   |   |
|      | Description of W        |                               |                            | 218 with S/              | N 200. In addition      |                                       | g Pressure                              | K   |
|      |                         | Other                         | Pressure                   | 1004                     | psi Test Ter            | mp. 2                                 | 10° °F                                  | •   |

sheet 2 of 2

| lug was replaced with a filter plug assembly as  | er's Data Reports to be per Note 10 on Dwg. B21  |  |
|--|--|--|
|  |  |  |
| nd accepted. A VT-3 (90-272) was completed on 3  | /N 200 and accepted. A   | VT-2 (91-304) was completed and accepte  |
| fter installation.   |  |  |
|  |  |  |
| CKR  | TIFICATE OF COMPLIANCE   |  |
| We certify that the statements made in the   | report are correct and   | this replacement confor  |
| to the rules of the ASME Code, Section XI.   | s tehote are correct and   | repair or replacement  |
|  |  |  |
| Type Code Symbol Stamp None  |  |  |
| Certificate of Authorization NoNone  |  | Expiration Date None   |
| Signed Sumder Sharpa   |  | -  |
| signed Surule Thanks   | Codes & Materials  | , GL Date 5-2-, 19 9   |
| Owner or Owner's Designee, Title   |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| CERTIFICA  | ATE OF INSERVICE INSPECT   | TION   |
| I, the undersigned, holding a valid commission   | on issued by the Nation  | nal Board of Boiler and Pressure Vess  |
| I, the undersigned, holding a valid commission inspectors and the State or Province of   | on issued by the Nation  | nal Board of Boiler and Pressure Vess<br>employed by Hartford Steam Boiler I&I C   |
| I, the undersigned, holding a valid commission Inspectors and the State or Province of Of Hartford, Connecticut this Owner's Report during the period  | on issued by the Nation IOWA and hand $3-24-92$  | nal Board of Boiler and Pressure Vesse employed by <u>Hartford Steam Boiler I&amp;I Contains to</u>  |
| I, the undersigned, holding a valid commission Inspectors and the State or Province of Of Hartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge and   | on issued by the Nation  IOWA and  h  3-24-92  belief, the Owner has pe  | nal Board of Boiler and Pressure Vesse employed by <u>Hartford Steam Boiler I&amp;I Contains to 5-/3-43</u>  |
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| I, the undersigned, holding a valid commission inspectors and the State or Province of of Hartford, Connecticut this Owner's Report during the period, and state that to the best of my knowledge and measures described in the Owner's Report in accommendation of the Country of the Inspector of                      | on issued by the Nation  IOWA and  A 3-74-97  belief, the Owner has performed with the requirement of the control of the contr | nal Board of Boiler and Pressure Vess employed by <u>Hartford Steam Boiler I&amp;I C</u> ave inspected the components described to <u>S-/3-93</u> erformed examinations and taken correction ements of the ASME Code, Section XI.  makes any warranty, expressed or implied Componer's Report. Furthermore, neither to                                   |
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|    | Owner Iowa Elect     | ric Light and Pov<br>Name    | ver .                      |                          | Date <u>Apr</u>         | il 30, 1      | 992                                     |   | -    |
|----|----------------------|------------------------------|----------------------------|--------------------------|-------------------------|---------------|---|---|------|
|    | P.O.Box 351, Ce      | dar Rapids, IA 53<br>Address |                            | <del></del>              | Sheet 1 of              | _2            |   |   |      |
|    | Plant Duane Arno     | ld Energy Center<br>Name     |                            |                          | Unit 1                  |               |   |   |      |
|    | 3277 DAEC Rd.        | Palo, IA 52324               |                            |                          |                         | Repair C      | organization P.O.I                      | No.,Job No.                               |      |
|    | Work Performed b     | y Iowa Electric I            | Light and Powe             | or                       | Type Code Symbol        |               |   |   |      |
|    |                      |                              |                            |                          | Authorization No.       | ·             | None                                    |   |      |
|    | 3277 DAEC Road,      | Palo, IA. 52324<br>Address   | <u> </u>                   | <del></del>              | Expiration Date         |               | None                                    |   |      |
|    | Identification o     | f SystemSpare                | MSIV interna               | als (Class 1)            | )                       |               |   |   |      |
|    | Cage                 |                              |                            |                          | Edition,                |               |   |   | Code |
|    | Identification o     | f Components Repa            | aired or Repla             | nced and Repl            | lacement Component      | s             |   |   |      |
|    | Name of<br>Component | Name of<br>Manufacture       | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification | Year<br>Built | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |      |
| 'P | iston                | General Elect.               | 215585-9                   | N/A                      | N/A                     | 1990          | Repaired                                | No  |      |
|    |                      |                              |                            |                          |                         |               |   |   |      |
|    |                      |                              |                            |                          | ·                       |               |   |   |      |
|    |                      |                              |                            |                          |                         |               |   |   |      |
|    |                      |                              |                            |                          |                         |               |   |   |      |
|    | Description of W     | ork <u>Weld repair</u>       | and machining              | of Disc/Pis              | ston Assembly.          | <del></del>   |   |   |      |
|    |                      | Hydrostatic                  | Pneu                       | matic                    | Nominal Nominal         | Operatin      | g Pressure                              |   |      |
|    | Tests Conducted:     | •                            |                            |                          | psi Test Ter            |               | /A°F                                    |   |      |

FORM NIS-2 (Back) . sheet 2 of 2

| CERTIFICATE OF COMPLIANCE  We certify that the statements made in the report are correct and this repair repair or replacement  Type Code Symbol Stamp None  Certificate of Authorization No. None  Signed Signed Symbol Stamp None  Certificate of Authorization No. None  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of IOMA and employed by Bartford Steam Boiler of Rattford, Connecticut Nowner's Report during the period None: And state that to the best of my knowledge and belief, the Owner has performed examinations and taken commensures described in the Owner's Report in accordance with the requirements of the ASME Code, Section X:  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neith Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a any kind arising from or connected with this inspection.  Commissions No 15 Y 10 Y 10 Y 10 Y 10 Y 10 Y 10 Y 10 Y  |  | Disc/Piston S/N 215585-9 was machined then weld built-up on the quide and seat areas. Post weld Applicable Manufacturer's Data Reports to be attached   |
|--|--|---|
| CERTIFICATE OF COMPLIANCE  We certify that the statements made in the report are correct and this repair to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp None  Certificate of Authorization No. None  Signed Owner or Owner's Designee, Title  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components desor this Owner's Report during the period 1-423 to 5-2-29, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken cor measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section X:  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neithin proper to the property damage or a any kind erising from or connected with this inspection.  Commissions Walking Fred Trovince, and Endors   | heat tr  | eatment of the Disc/Piston was performed. Final Machining performed on the installation CMAR.   |
| CERTIFICATE OF COMPLIANCE  We certify that the statements made in the report are correct and this repair repair or replacement to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp None  Certificate of Authorization No. None  Signed Comer or Owner's Designee, Title  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler this Owner's Report during the period And the state of the Components described in the Owner's Report during the period And state that to the best of my knowledge and belief, the Owner has performed examinations and taken cormeasures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neithinspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neithinspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neithinspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neithinspector nor his employer makes any warranty, expressed or any kind arising from or connected with this inspection.  Commissions AND ASAD (I.N.) In 1046.  Inspectors Signature  Commissions AND ASAD (I.N.) In 1046.  National Board, State, Province, and Endorce   |  |   |
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| We certify that the statements made in the report are correct and this repair to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp None  Certificate of Authorization No. None  Signed Signed Symbol Stamp None  Certificate of Authorization No. None  Certificate of Authorization No. None  Signed Symbol Stamp None  Certificate of Authorization No. None  Certificate of Authorization No. None  Certificate of Authorization No. None  Certificate of Authorization No. None  Certificate of Authorization No. None  Certificate of Authorization No. None  Certificate of Authorization No. None  Certificate of Authorization No. None  Certificate of Authorization No. None  Certificate of Authorization No. None  Certificate of Authorization Season Season Note  Inspector during the period None None None None None None None None  |  |   |
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| Type Code Symbol Stamp None  Certificate of Authorization No. None  Signed Signed Survelle Separation Date None  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler this Owner's Report during the period 1000 Separate that to the best of my knowledge and belief, the Owner has performed examinations and taken cor measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section X.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neith Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a any kind arising from or connected with this inspection.  Commissions 1000 Separate National Board, State, Province, and Endors  |  | CERTIFICATE OF COMPLIANCE   |
| Certificate of Authorization No. None Expiration Date None  Signed Cover or Owner's Designee, Title  Cover or Owner or Owner's Designee, Title  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler of Rartford, Connecticut have inspected the components described owner's Report during the period 1/4/22 to 5-2/22, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken cormeasures described in the Owner's Report in accordance with the requirements of the ASME Code, Section X.  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neitinspector nor his employer shall be liable in any manner for any personal injury or property damage or a any kind arising from or connected with this inspection.  Commissions NB 15x3 (I.W) In 100 Commissions NB 15x3 (I.W) In 100 Commissions NB 15x3 (I.W) In 100 Commissions NB 15x3 (I.W) In 100 Commissions NB 15x3 (I.W) In 100 Commissions National Board, State, Province, and Endorse   |  |   |
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| CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described in the Dest of my knowledge and belief, the Owner has performed examinations and taken cormeasures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neith Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a any kind arising from or connected with this inspection.  Commissions Mo 25% (I, W) In 1046  National Board, State, Province, and Endorse   |  | Type Code Symbol Stomp None   |
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| CRRTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of  |  | C O.  |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described on the State of my knowledge and belief, the Owner has performed examinations and taken cormeasures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a any kind arising from or connected with this inspection.  Commissions NB 2543 (I,N) I 1046  Inspectors Signature  National Board, State, Province, and Endorse  |  | Signed Date 5- F  |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described this Owner's Report during the period I-492 to IO-2-2/92 , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken cormeasures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a any kind arising from or connected with this inspection.  Commissions NB 1543 (IN) I 1046  National Board, State, Province, and Endorse  |  | Owner or Owner's Designee, Title  |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described this Owner's Report during the period I-492 to IO-2-2/92 , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken cormeasures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a any kind arising from or connected with this inspection.  Commissions NB 1543 (IN) I 1046  National Board, State, Province, and Endorse  |  |   |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described this Owner's Report during the period I-492 to IO-2-2/92 , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken cormeasures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a any kind arising from or connected with this inspection.  Commissions NB 1543 (IN) I 1046  National Board, State, Province, and Endorse  |  | ·   |
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| and state that to the best of my knowledge and belief, the Owner has performed examinations and taken cormeasures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neith Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a any kind arising from or connected with this inspection.  Commissions NB 2543 (I,N) I 1046  National Board, State, Province, and Endors  |  | e undersigned, holding a valid commission issued by the National Board of Boiler and Pressure   |
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|  | this ( , and measuments)  By concerning the concern | e undersigned, holding a valid commission issued by the National Board of Boiler and Pressure tors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described that to the best of my knowledge and belief, the Owner has performed examinations and taken corresponded in the Owner's Report in accordance with the requirements of the ASME Code, Section X signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in this torn or his employer shall be liable in any manner for any personal injury or property damage or a and arising from or connected with this inspection.  |
| Date   | this ( , and measuments)  By concerning the concern | e undersigned, holding a valid commission issued by the National Board of Boiler and Pressure stors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described that to the best of my knowledge and belief, the Owner has performed examinations and taken corresponded in the Owner's Report in accordance with the requirements of the ASME Code, Section X signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in this owner's Report. Furthermore, neither nor his employer shall be liable in any manner for any personal injury or property damage or a story of the ASME Code, Section X and arising from or connected with this inspection.  |
| Date <u> </u>  | this ( , and measuments)  By concerning the concern | e undersigned, holding a valid commission issued by the National Board of Boiler and Pressure stors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described that to the best of my knowledge and belief, the Owner has performed examinations and taken corresponded in the Owner's Report in accordance with the requirements of the ASME Code, Section X signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in this owner's Report. Furthermore, neither nor his employer shall be liable in any manner for any personal injury or property damage or a story of the ASME Code, Section X and arising from or connected with this inspection.  |
|  | this of and measured by concerning the any kind of the any kin | e undersigned, holding a valid commission issued by the National Board of Boiler and Pressure stors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described that to the best of my knowledge and belief, the Owner has performed examinations and taken corresponded in the Owner's Report in accordance with the requirements of the ASME Code, Section X signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in this owner's Report. Furthermore, neither nor his employer shall be liable in any manner for any personal injury or property damage or a find arising from or connected with this inspection.  Commissions NB 2543(I,N) I and Induction of Inspectors Signature  National Board, State, Province, and Endor |
|  | this of and measured by concerning the any kind of the any kin | e undersigned, holding a valid commission issued by the National Board of Boiler and Pressure stors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described that to the best of my knowledge and belief, the Owner has performed examinations and taken corresponded in the Owner's Report in accordance with the requirements of the ASME Code, Section X signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in this owner's Report. Furthermore, neither nor his employer shall be liable in any manner for any personal injury or property damage or a find arising from or connected with this inspection.  Commissions NB 2543(I,N) I and Induction of Inspectors Signature  National Board, State, Province, and Endor |
|  | this of and measured by concerning the any kind of the any kin | e undersigned, holding a valid commission issued by the National Board of Boiler and Pressure stors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described that to the best of my knowledge and belief, the Owner has performed examinations and taken corresponded in the Owner's Report in accordance with the requirements of the ASME Code, Section X signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in this owner's Report. Furthermore, neither nor his employer shall be liable in any manner for any personal injury or property damage or a find arising from or connected with this inspection.  Commissions NB 2543(I,N) I and Induction of Inspectors Signature  National Board, State, Province, and Endor |
|  | this (, and measu:  By conce: Inspec   | e undersigned, holding a valid commission issued by the National Board of Boiler and Pressure stors and the State or Province of IOWA and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described that to the best of my knowledge and belief, the Owner has performed examinations and taken corresponded in the Owner's Report in accordance with the requirements of the ASME Code, Section X signing this certificate neither the Inspector nor his employer makes any warranty, expressed or in this owner's Report. Furthermore, neither nor his employer shall be liable in any manner for any personal injury or property damage or a find arising from or connected with this inspection.  Commissions NB 2543(I,N) I and Induction of Inspectors Signature  National Board, State, Province, and Endor |

|  | Owner Iowa Elec   | tric Light and Pow<br>Name  | ver  |   | Date Apr   | il 3 <b>0,</b> 19  | 992  |  |
|--|---|---|--|---|--|--|--|--|
|  | P.O.Box 351, C  | edar Rapids, IA 52<br>Address   | 2406   |   | Sheet 1 of   | 2  | •  |  |
|  | Plant <u>Duane Arn</u>  | old Energy Center<br>Name   |  |   | Unit 1   |  |  | <del></del> -                              |
|  |   |   |  |   | DMA  | 1052011  |  |  |
|  | 3277 DAEC Rd. Address   |   |  |   | PMA  | R 1052011<br>Repair O  | rganization P.O.   | No.,Job No.                                |
|  |   |   |  | _   | Time Code Simbol   | Stamp  | None   |  |
|  | Work Performed  | by Iowa Electric I  | ight and Powe  | Σ   |  |  |  |  |
|  |   |   |  | •   | Authorization No.  | ·  | None   |  |
|  | 3277 DAEC Road  | , Palo, IA. 52324<br>Address  |  |   | Expiration Date  |  | None   |  |
|  |   |   |  |   |  |  |  |  |
|  | Identification  | of System <u>Main</u>   | Steam C (Clas  | s 1)  |  |  |  |  |
|  | Case  | Const. Code ASME I  |  |   |  |  | Addenda,   | c  |
|  | (D)Applicable s   | MICTOR OF BECCION   | A1 00111100 1  |   |  |  | _  |  |
|  |   | _   |  |   | lacement Component   | -  |  |  |
|  | Identification  | of Components Repa  | aired or Repia   | сец апц кер.  | 1400mo   |  |  |  |
| •  | Name of Component   | Name of Manufacture   | Manufacturer<br>Serial No.   | National<br>Board<br>No.                                    | Other<br>Identification  | Year<br>Built  | Repaired<br>Replaced,<br>or Replacement  | ASME<br>Code<br>Stamped<br>(Yes<br>or No)  |
| )  | Name of<br>Component  | Name of<br>Manufacture  | Manufacturer<br>Serial No.   | National<br>Board<br>No.                                    | Other<br>Identification  | Year<br>Built  | Repaired<br>Replaced,<br>or Replacement  | Code<br>Stamped<br>(Yes                    |
|  | Name of<br>Component<br>Valve                                     | Name of   | Manufacturer   | National<br>Board   | Other  | Year<br>Built<br>1975  | Repaired Replaced, or Replacement Replacement Replacement  | Code Stamped (Yes or No) Yes Yes           |
| ilot   | Name of<br>Component  | Name of<br>Manufacture<br>Target Rock   | Manufacturer<br>Serial No.<br>S/N 176<br>S/N 141<br>Item#107                         | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A               | Other Identification  PSV-4405 PSV-4405 PSV-4405                                     | Year<br>Built<br>1975<br>1975                                    | Repaired Replaced, or Replacement Replacement Replaced Replaced  | Code Stamped (Yes or No)  Yes Yes          |
| llot<br>ilot<br>ilot                         | Name of Component  Valve Valve Bolts (6ea) Bolts (6ea)            | Name of Manufacture  Target Rock Target Rock JED Mfg. Co. Farget Rock                                     | Manufacturer<br>Serial No.<br>S/N 176<br>S/N 141<br>Item#107<br>Item#107             | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A               | Other Identification  PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405                   | Year<br>Built<br>1975<br>1975<br>1975                            | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced                                     | Code Stamped (Yes or No)  Yes Yes No       |
| ilot<br>ilot<br>ilot<br>ilot                 | Name of Component  Valve Valve Bolts (6ea) Bolts (6ea) Nuts (3ea) | Name of Manufacture  Target Rock Target Rock JED Mfg. Co. Target Rock Target Rock                         | Manufacturer<br>Serial No.<br>S/N 176<br>S/N 141<br>Item#107                         | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A               | Other Identification  PSV-4405 PSV-4405 PSV-4405                                     | Year<br>Built<br>1975<br>1975<br>1975<br>1975                    | Repaired Replaced, or Replacement Replacement Replaced Replaced  | Code Stamped (Yes or No)  Yes Yes          |
| ilot<br>ilot<br>ilot<br>ilot<br>ilot         | Name of Component  Valve Valve Bolts (6ea) Bolts (6ea)            | Name of Manufacture  Target Rock Target Rock JED Mfg. Co. Farget Rock                                     | Manufacturer<br>Serial No.<br>S/N 176<br>S/N 141<br>Item#107<br>Item#107<br>Item#150 | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A        | Other Identification  PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405                   | Year<br>Built<br>1975<br>1975<br>1975<br>1975                    | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced                   | Code Stamped (Yes or No)  Yes Yes No No    |
| ilot<br>ilot<br>ilot<br>ilot                 | Name of Component  Valve Valve Bolts (6ea) Bolts (6ea) Nuts (3ea) | Name of Manufacture  Target Rock Target Rock JED Mfg. Co. Target Rock Target Rock                         | Manufacturer<br>Serial No.<br>S/N 176<br>S/N 141<br>Item#107<br>Item#107<br>Item#150 | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A        | Other Identification  PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405                   | Year<br>Built<br>1975<br>1975<br>1975<br>1975                    | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced                   | Code Stamped (Yes or No)  Yes Yes No No    |
| Pilot<br>Pilot<br>Pilot                      | Name of Component  Valve Valve Bolts (6ea) Bolts (6ea) Nuts (3ea) | Name of Manufacture  Target Rock Target Rock JED Mfg. Co. Target Rock Target Rock                         | Manufacturer<br>Serial No.<br>S/N 176<br>S/N 141<br>Item#107<br>Item#107<br>Item#150 | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A        | Other Identification  PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405                   | Year<br>Built<br>1975<br>1975<br>1975<br>1975                    | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced                   | Code Stamped (Yes or No)  Yes Yes No No    |
| Pilot<br>Pilot<br>Pilot<br>Pilot             | Name of Component  Valve Valve Bolts (6ea) Bolts (6ea) Nuts (3ea) | Name of Manufacture  Target Rock Target Rock JED Mfg. Co. Target Rock Target Rock                         | Manufacturer<br>Serial No.<br>S/N 176<br>S/N 141<br>Item#107<br>Item#107<br>Item#150 | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A        | Other Identification  PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405                   | Year<br>Built<br>1975<br>1975<br>1975<br>1975                    | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced                   | Code Stamped (Yes or No)  Yes Yes No No    |
| ilot<br>ilot<br>ilot<br>ilot<br>ilot         | Name of Component  Valve Valve Bolts (6ea) Bolts (5ea) Nuts (3ea) | Name of Manufacture  Target Rock Target Rock JED Mfg. Co. Target Rock Target Rock                         | Manufacturer<br>Serial No.<br>S/N 176<br>S/N 141<br>Item#107<br>Item#150<br>Item#150 | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A | Other Identification  PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405 | Year<br>Built<br>1975<br>1975<br>1975<br>1975<br>1991<br>Unknown | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced                   | Code Stamped (Yes or No)  Yes Yes No No No |
| ilot<br>ilot<br>ilot<br>ilot<br>ilot<br>ilot | Name of Component  Valve Valve Bolts (6ea) Bolts (5ea) Nuts (3ea) | Name of Manufacture  Target Rock Target Rock JED Mfg. Co. Farget Rock Target Rock Target Rock Target Rock | Manufacturer Serial No.  S/N 176 S/N 141 Item#107 Item#150 Item#150                  | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A | Other Identification  PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405 PSV-4405 | Year<br>Built<br>1975<br>1975<br>1975<br>1975<br>1991<br>Unknown | Repaired Replaced, or Replacement Replacement Replaced Replaced Replaced Replaced Replaced Replaced Replaced | Code Stamped (Yes or No)  Yes Yes No No No |

| FORM NIS-2 (Bac) | c | ١ |
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| to damag | e. A VT-1(92-041)was completed and                                     | accepted. A VT-3 (90     | -176) on S/N 176 was co                | ompleted and accepted.   |
|----------|--|--------------------------|--|--------------------------|
| A VT-2 ( | 91-304) was completed and accepted                                     | after installation.      |  | · · · · ·                |
|          |  |                          | ·                                      |                          |
|          |  |                          |  |                          |
|          |  | •                        |  |                          |
|          | · · · · · · · · · · · · · · · · · · ·                                  | <del></del>              |  |                          |
|          |  | CERTIFICATE OF COME      | LIANCE                                 |                          |
| ,        | We certify that the statements made                                    | e in the report are cor  | rect and this replace                  | ement con                |
| to the   | e rules of the ASME Code, Section 2                                    | KI.                      | repair                                 | or replacement           |
|          |  |                          |  | •                        |
| 7        | Type Code Symbol Stamp <u>None</u>                                     |                          |  |                          |
|          | Certificate of Authorization No  | None                     |  | Expiration Date None     |
|          |  |                          |  |                          |
|          | Signed Surveler Show   | مومد مروب                | aterials CI Date                       | 5-2-                     |
| ,        | Owner or Owner's Designee,   | Title                    | aterials, GL Date                      | , 1                      |
|          | • ,  |                          |  |                          |
|          |  |                          |  |                          |
|          | a  | ERTIFICATE OF INSERVICE  | INSPECTION                             |                          |
|          |  |                          |  |                          |
|          | e undersigned, holding a valid co<br>tors and the State or Province of |                          |  |                          |
| Inspec   | of Hartford, Connecti  | Cut                      | have inspected                         | the components describe  |
| this C   | wner's Report during the period  | 4-23-92                  | to                                     | 5-21-92                  |
| , and    | state that to the best of my knowled                                   | dge and belief, the Own  | er has perform <mark>ed ex</mark> amin | nations and taken correc |
| measur   | es described in the Owner's Report                                     | ; in accordance with the | e requirements of the                  | ASME Code, Section XI.   |
| Ву       | signing this certificate neither t                                     | he Inspector nor his e   | mployer makes any warr                 | anty, expressed or imp   |
|          | ning the examinations and correcti                                     |                          |  |                          |
|          | tor nor his employer shall be liab                                     |                          | y personal injury or p                 | roperty damage or a los  |
| any Ki   | nd arising from or connected with                                      | •                        | •                                      |                          |
| 1600     | Man Meeller  | Commissions              | NB 7542 (IN)                           | I3 1046                  |
|          | Inspectors Signature   |                          | National Board, State,                 | Province, and Endorse    |
| 1        |  |                          |  |                          |
| 1        |  |                          |  |                          |

|         | Owner <u>Iowa Elect</u>  | ric Light and Po              | wer                        |                          | Date Apr                | il 30, 1              | 1992                                    |   |
|---------|--------------------------|-------------------------------|----------------------------|--------------------------|-------------------------|-----------------------|---|---|
|         | P.O.Box 351, Ce          | edar Rapids , IA 5<br>Address |                            |                          | Sheet 1 of              | 2                     |   | ··  |
| 2.      | Plant Duane Arno         | old Energy Center<br>Name     |                            | <del></del>              | Unit 1                  |                       |   |   |
|         | 3277 DAEC Rd.<br>Address | Palo, IA 52324                |                            |                          | PMA                     | R 105201<br>Repair (  | 2<br>Organization P.O.                  | No.,Job No.                               |
| 3.      | Work Performed b         |                               | Light and Powe             | er                       | Type Code Symbol        | Stamp_                | None                                    | ·   |
|         |                          | Name                          |                            |                          | Authorization No        | •                     | None                                    |   |
|         | 3277 DAEC Road,          | Palo, IA. 52324<br>Address    |                            | <del></del>              | Expiration Date         |                       | None                                    | · · · · · · · · · · · · · · · · · · ·     |
| •       | Identification o         | of System <u>Main</u>         | Steam D (Clas              | ss 1)                    |                         | •                     |   |   |
|         | Case                     |                               |                            |                          | Edition, <u>W68</u>     |                       |   | Cod                                       |
|         | (b)Applicable Ed         | ition of Section              | XI Utilized f              | or Repairs               | or Replacements 19      | 80 W81                |   |   |
| •       | Identification o         | f Components Repa             | aired or Repla             | aced and Repl            | acement Component       | .s                    |   |   |
|         | Name of<br>Component     | Name of<br>Manufacture        | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification | Y <b>ear</b><br>Built | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| Pilot V | /alve                    | Target Rock                   | S/N 227                    | N/A                      | PSV-4406                | 1975                  | Replacement                             | Yes                                       |
| Pilot V |                          | Target Rock                   | S/N 203                    | N/A                      | PSV-4406                | 1975                  | Replaced                                | Yes                                       |
|         | olts (12ea)              | JED Mfg. Co.                  | Item#107                   | N/A                      | PSV-4406                | 1975                  | Replacement                             | No<br>No                                  |
|         | olts (12ea)              | Cardinal                      | Item#107<br>Item#150       | N/A<br>N/A               | PSV-4406<br>PSV-4406    | 1989                  | Replaced<br>Replacement                 | No  |
|         | uts (12ea)<br>uts (12ea) | Target Rock N/A               | Item#150                   | N/A                      | PSV-4406                |                       | Replaced                                | No  |
| Filter  |                          | Farget Rock                   | *Item#24                   | N/A                      | PSV-4406                | 1991                  | Replacement                             | No  |
| Plug    |                          | Farget Rock                   | Item#43                    | N/A                      | PSV-4406                | 1975                  | Replaced                                | No  |
|         |                          |                               |                            |                          | <u>l</u>                |                       |   |   |
|         |                          | ork <u>Replaced Pil</u>       | _                          | 203 with S/N             | Nominal                 |                       |   | and Plug.                                 |
| •       | Tests Conducted.         | -                             |                            |                          |                         |                       |   |   |

| FORM | NIS-2 | (Back) |
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| Remarks Pilot Valve S/N 203 was replaced with S/N 227. In addition all Bolts and Nuts were replaced due to  Applicable Manufacturer's Data Reports to be attached   |
|---|
| damage. The plug was replaced with a filter plug as per Note 10 on Dwg. B21-3379-001. A VT-1 (92-043) was   |
| performed and accepted. A VT-3 (90-199) was completed and accepted on S/N 227. A VT-2 was completed and accepted  |
|   |
| after installation.   |
| CERTIFICATE OF COMPLIANCE   |
|   |
| We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the rules of the ASME Code, Section XI. repair or replacement   |
| Type Code Symbol Stamp None   |
| Certificate of Authorization No. None Expiration Date None  |
| Signed Sumular Shaufa: Codes & Materials, GL Date 5-2, 1992 Owner or Owner's Designee, Tible  |
|   |
| CERTIFICATE OF INSERVICE INSPECTION   |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel  Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler I&I Co.  of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3-3/-9/3 to 5-/9-9/3  , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective |
| measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  |
| By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.   |
| Inspectors Signature  Commissions NA 7540 (I,N) Is 1046  National Board, State, Province, and Endorsements  |
| Inspectors Signature National Board, State, Province, and Endorsements  |
| Date  |
|   |
|   |

|                              | Owner Iowa Elec   | tric Light and Pov   | wer  |   | Date Apr   | il 30, 1                                     | 992   |   |
|------------------------------|---|--|--|---|--|--|---|---|
|                              |   | Name   |  |   |  |  |   |   |
|                              | P.O.Box 351, C  | edar Rapids, IA 5  | 2406   |   | Sheet <u>1 of</u>  | 2  |   |   |
|                              |   | Address  |  |   |  |  |   |   |
|                              | Plant Duane Arn   | old Eneg Center  |  |   | Unit1  |  |   |   |
|                              |   | Name   |  |   |  |  |   |   |
|                              | 3277 DAEC Rd.   | Palo, IA 52324   |  |   | PMA1   | R 105201                                     |   |   |
|                              | Address   |  |  |   |  | Repair C                                     | organization P.O.   | No.,Job No.                                   |
|                              | Work Performed  | by Iowa Electric 1   | Light and Powe   | r                                       | Type Code Symbol   | Stamp  | None  |   |
|                              |   | Name   |  |   | Authorization No.  |  |   |   |
|                              |   |  |  |   | Authorization No.  | •  | None  |   |
|                              |   |  |  |   | Formi motion Doto  |  | None  |   |
|                              | 3277 DAEC Road  | l, Palo, IA. 52324<br>Address  |  |   | Expiration Date  | <u>.</u>                                     | NONE  |   |
|                              |   |  |  |   |  |  |   |   |
|                              | Identification  | of System <u>Main</u>  | Steam D (Clas  | s 1)                                    |  |  |   |   |
|                              |   |  |  |   | masas 255  |  | Addonda   | Co  |
|                              | (a)Applicable C   | Const. Code ASME   | III  | 19_68                                   | Edition,W68  |  | _Addenda,   |   |
|                              | (b)Applicable E   | dition of Section  | XI Utilized f  | or Repairs                              | or Replacements 19   | 80 W81                                       | <u> </u>  |   |
|                              |   |  |  |   | •  |  |   |   |
|                              | Identification  | of Components Repa   | aired or Repla   | ced and Rep.                            | lacement Component   | s  |   |   |
|                              |   |  |  |   |  |  |   |   |
|                              |   |  |  |   |  |  |   |   |
|                              |   |  |  |   |  |  |   | ASME  |
| <b>)</b>                     | _   |  |  | National                                | Other  | Year   | Repaired  | Code  |
|                              | Name of   | Name of<br>Manufacture   | Manufacturer<br>Serial No.                                 | National<br>Board<br>No.                | Other<br>Identification  | Year<br>Built                                | Repaired<br>Replaced,<br>or Replacement   | Code<br>Stamped<br>(Yes                       |
|                              | Name of<br>Component                                      | Name of<br>Manufacture   | 1  | Board                                   |  |  | Replaced,   | Code<br>Stamped                               |
|                              |   |  | 1  | Board                                   |  |  | Replaced,   | Code<br>Stamped<br>(Yes                       |
|                              | Component   | Manufacture  | Serial No.   | Board<br>No.                            | Identification   | Built  | Replaced,<br>or Replacement   | Code<br>Stamped<br>(Yes                       |
|                              | Component<br>Valve  | Manufacture<br>Target Rock   | 1  | Board                                   |  |  | Replaced,   | Code Stamped (Yes or No)  Yes Yes             |
| lot                          | Component   | Manufacture  | Serial No.   | No.  N/A  N/A  N/A                      | PSV-4407 PSV-4407 PSV-4407   | 1975<br>1975<br>1975                         | Replaced, or Replacement Replacement Replaced Replacement   | Code Stamped (Yes or No)  Yes Yes             |
| llot<br>llot<br>llot         | Valve Valve Bolts (3ea) Bolts (3ea)                       | Manufacture  Target Rock  Target Rock  JED Mfg. Co.  Target Rock                                     | Serial No.  S/N 199  S/N 202  Item#107  Item#107           | NO.  N/A  N/A  N/A  N/A                 | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407   | 1975<br>1975<br>1975<br>1975                 | Replaced, or Replacement Replacement Replaced Replacement Replaced  | Code Stamped (Yes or No)  Yes Yes No          |
| llot<br>ilot<br>ilot<br>ilot | Valve Valve Bolts (3ea) Nuts (3ea)                        | Manufacture  Target Rock  Target Rock  JED Mfg. Co.  Target Rock  Target Rock                        | Serial No.  S/N 199 S/N 202 Item#107 Item#107 Item#150     | NO.  N/A  N/A  N/A  N/A  N/A            | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407                                      | 1975<br>1975<br>1975<br>1975<br>1978         | Replaced, or Replacement Replacement Replaced Replacement Replaced Replaced   | Code Stamped (Yes or No)  Yes Yes             |
| lot<br>lot<br>lot            | Valve Valve Bolts (3ea) Bolts (3ea)                       | Manufacture  Target Rock  Target Rock  JED Mfg. Co.  Target Rock                                     | Serial No.  S/N 199  S/N 202  Item#107  Item#107           | NO.  N/A  N/A  N/A  N/A                 | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407   | 1975<br>1975<br>1975<br>1975                 | Replaced, or Replacement Replacement Replaced Replacement Replaced  | Code Stamped (Yes or No)  Yes Yes No No       |
| llot<br>ilot<br>ilot<br>ilot | Valve Valve Bolts (3ea) Nuts (3ea)                        | Manufacture  Target Rock  Target Rock  JED Mfg. Co.  Target Rock  Target Rock                        | Serial No.  S/N 199 S/N 202 Item#107 Item#107 Item#150     | NO.  N/A  N/A  N/A  N/A  N/A            | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407                                      | 1975<br>1975<br>1975<br>1975<br>1978         | Replaced, or Replacement Replacement Replaced Replacement Replaced Replaced   | Code Stamped (Yes or No)  Yes Yes No No       |
| llot<br>llot<br>llot         | Valve Valve Bolts (3ea) Nuts (3ea)                        | Manufacture  Target Rock  Target Rock  JED Mfg. Co.  Target Rock  Target Rock                        | Serial No.  S/N 199 S/N 202 Item#107 Item#107 Item#150     | NO.  N/A  N/A  N/A  N/A  N/A            | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407                                      | 1975<br>1975<br>1975<br>1975<br>1978         | Replaced, or Replacement Replacement Replaced Replacement Replaced Replaced   | Code Stamped (Yes or No)  Yes Yes No No       |
| llot<br>ilot<br>ilot<br>ilot | Valve Valve Bolts (3ea) Nuts (3ea)                        | Manufacture  Farget Rock  Farget Rock  JED Mfg. Co.  Farget Rock  Farget Rock  Farget Rock           | Serial No.  S/N 199 S/N 202 Item#107 Item#107 Item#150     | NO.  N/A  N/A  N/A  N/A  N/A            | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407                                      | 1975<br>1975<br>1975<br>1975<br>1978         | Replaced, or Replacement Replacement Replaced Replacement Replaced Replaced   | Code Stamped (Yes or No)  Yes Yes No No       |
| ilot<br>ilot<br>ilot<br>ilot | Valve Valve Bolts (3ea) Bolts (3ea) Nuts (3ea)            | Manufacture  Farget Rock Farget Rock JED Mfg. Co. Farget Rock Farget Rock Farget Rock                | Serial No.  S/N 199  S/N 202  Item#107  Item#150  Item#150 | NO.  N/A  N/A  N/A  N/A  N/A  N/A       | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407                                      | 1975<br>1975<br>1975<br>1978<br>1991<br>1975 | Replaced, or Replacement Replaced Replacement Replaced Replaced Replaced Replaced Replaced                                      | Code Stamped (Yes or No)  Yes Yes No No No    |
| llot<br>ilot<br>ilot<br>ilot | Valve Valve Bolts (3ea) Bolts (3ea) Nuts (3ea)            | Manufacture  Farget Rock  Farget Rock  JED Mfg. Co.  Farget Rock  Farget Rock  Farget Rock           | Serial No.  S/N 199  S/N 202  Item#107  Item#150  Item#150 | NO.  N/A  N/A  N/A  N/A  N/A  N/A       | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407                                      | 1975<br>1975<br>1975<br>1978<br>1991<br>1975 | Replaced, or Replacement Replaced Replacement Replaced Replaced Replaced Replaced Replaced                                      | Code Stamped (Yes or No)  Yes Yes No No No    |
| ilot<br>ilot<br>ilot<br>ilot | Valve Valve Bolts (3ea) Bolts (3ea) Nuts (3ea)            | Manufacture  Farget Rock Farget Rock JED Mfg. Co. Farget Rock Farget Rock Farget Rock                | Serial No.  S/N 199  S/N 202  Item#107  Item#150  Item#150 | NO.  N/A  N/A  N/A  N/A  N/A  N/A       | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407                                      | 1975<br>1975<br>1975<br>1978<br>1991<br>1975 | Replaced, or Replacement  Replacement  Replaced  Replaced  Replaced  Replaced  Replaced  Replaced  Replaced                     | Code Stamped (Yes or No)  Yes Yes No No No    |
| ilot<br>ilot<br>ilot<br>ilot | Valve Valve Bolts (3ea) Bolts (3ea) Nuts (3ea)            | Target Rock Target Rock Target Rock Target Rock Target Rock Target Rock Target Rock Work Replaced Pi | Serial No.  S/N 199 S/N 202 Item#107 Item#150 Item#150     | NO.  N/A  N/A  N/A  N/A  N/A  N/A       | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407                                      | 1975<br>1975<br>1975<br>1978<br>1991<br>1975 | Replaced, or Replacement Replaced Replacement Replaced Replaced Replaced Replaced Replaced                                      | Code Stamped (Yes or No)  Yes Yes No No No    |
| llot<br>ilot<br>ilot<br>ilot | Valve Valve Bolts (3ea) Bolts (3ea) Nuts (3ea) Nuts (3ea) | Target Rock Target Rock Target Rock Target Rock Target Rock Target Rock Target Rock Target Rock      | Serial No.  S/N 199 S/N 202 Item#107 Item#150 Item#150     | N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 N 199. In addition | 1975<br>1975<br>1975<br>1978<br>1991<br>1975 | Replaced, or Replacement  Replacement  Replaced  Replaced  Replaced  Replaced  Replaced  Replaced  Replaced                     | Code Stamped (Yes or No)  Yes Yes No No No No |
| llot<br>llot<br>llot         | Valve Valve Bolts (3ea) Bolts (3ea) Nuts (3ea) Nuts (3ea) | Target Rock Target Rock Target Rock Target Rock Target Rock Target Rock Target Rock Work Replaced Pi | Serial No.  S/N 199 S/N 202 Item#107 Item#150 Item#150     | N/A N/A N/A N/A N/A N/A N/A 202 with S/ | PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407 PSV-4407                                      | 1975<br>1975<br>1975<br>1978<br>1991<br>1975 | Replaced, or Replacement  Replacement  Replaced  Replaced  Replaced  Replaced  Replaced  Replaced  Replaced  Replaced  Replaced | Code Stamped (Yes or No)  Yes Yes No No No No |

| FORM NIS-2 (Back | FORM | NIS-2 | (Back) |
|------------------|------|-------|--------|
|------------------|------|-------|--------|

| Remarks Pilot Valve S/N 202 was replaced with S/N 199. In addition 3ea Bolts and Nuts were replaced due to  Applicable Manufacturer's Data Reports to be attached   |
|---|
| damage. A VT-1 (92-045) was completed and accepted. A VT-3 (90-201) on S/N 199 was completed and accepted.  |
| A VT-2 (91-304) was completed and accepted after installation.  |
|   |
|   |
| CERTIFICATE OF COMPLIANCE   |
| We certify that the statements made in the report are correct and this <u>replacement</u> conform to the rules of the ASME Code, Section XI. repair or replacement  |
| Type Code Symbol Stamp None   |
| Certificate of Authorization No. None Expiration Date None  |
| Signed Surule Shaufar Codes & Materials, GL Date 5-2, 19 92   |
| owner or owner's besignee, fitte  |
| CERTIFICATE OF INSERVICE INSPECTION   |
| I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vesse Inspectors and the State or Province of  |
| By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither th Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. |
| Commissions NB7543 (IN) Is 1646  Inspectors Signature National Board, State, Province, and Endorsement  |
| Date 5-/9 19 97   |
|   |
|   |

| Owner Iowa Electric Light and Power Name                 |                              |                            | Date <u>Apr</u>          | il 30, 1  | 992           |   |   |
|--|------------------------------|----------------------------|--------------------------|---|---------------|---|---|
| P.O.Box 351, Ce  | dar Rapids, IA 53<br>Address |                            |                          | Sheet <u>1 of</u>                                 | 2             |   |   |
| Plant Duane Arnold Energy Center Name                    |                              |                            | Unit 1                   |   |               |   |   |
| 3277 DAEC Rd. Palo, IA 52324                             |                              |                            |                          | CMAR A11300  Repair Organization P.O.No., Job No. |               |   |   |
| Address  Work Performed by Iowa Electric Light and Power |                              |                            | • •                      |   |               |   |   |
| Name   |                              |                            |                          | Authorization No. None                            |               |   |   |
| 3277 DAEC Road,  | Palo, IA. 52324<br>Address   |                            |                          | Expiration Date                                   |               | None                                    |   |
| Identification o   | f System <u>S are</u>        | e MSIV interna             | als )Class 1             |   |               |   |   |
| Case   |                              |                            |                          | Edition,  |               |   | c   |
| Identification o   | f Components Repa            | aired or Repla             | ced and Repl             | Lacement Component                                | 8             |   |   |
| Name of<br>Component                                     | Name of<br>Manufacture       | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification                           | Year<br>Built | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| ston   | General Elect.               | 215585-6                   | N/A                      | N/A   | 1990          | Repaired                                | No  |
| SCOIL  |                              |                            |                          |   |               |   |   |
|  |                              |                            |                          |   |               |   |   |
|  |                              |                            |                          |   |               |   |   |
|  |                              |                            |                          |   |               |   |   |
| Description of W   | ork <u>Weld repair</u>       | and machining              | of Disc/Pis              | ston Assembly.                                    |               |   | <u></u>                                   |
| Tests Conducted:   | Hydrostatic                  | Pneu                       | matic                    | Nominal   | Operatin      | g Pressure                              |   |
|  |                              | Pressure                   | N/A                      | psi Test Te                                       | nn N          | /A *F                                   |   |

| eatment of the Disc/Piston was performed. Final Machining  | performed on the installation CMAR.           |
|--|---|
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|  |   |
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|  |   |
|  |   |
| CERTIFICATE OF COMPLE  | TANCE   |
|  | . <del></del> -                               |
| We certify that the statements made in the report are correct or rules of the ASME Code, Section XI.                       | repair or replacement confe                   |
| is all the more social man   | Topast of Topasomono                          |
| Type Code Symbol Stamp None  |   |
|  |   |
| Certificate of Authorization No. None  | Expiration Date None                          |
| C $C$ $C$ $C$ $C$ $C$ $C$ $C$ $C$ $C$  | <b>~</b> 2                                    |
| Signed Surule Shaufai codes & Mat  | terials, GL Date, 19                          |
| Owner or Owner's Designee, Ditle   |   |
|  |   |
|  |   |
| CERTIFICATE OF INSERVICE I   | INSPECTION                                    |
| ne undersigned, holding a valid commission issued by the   | National Board of Boiler and Pressure Ves     |
| ctors and the State or Province ofIOWA   | and employed by Hartford Steam Boiler I&I     |
| of Hartford, Connecticut   | have inspected the components described       |
| Owner's Report during the period   |   |
| res described in the Owner's Report in accordance with the   |   |
| •  |   |
| signing this certificate neither the Inspector nor his emp   | • • • •                                       |
| rning the examinations and corrective measures described in<br>ctor nor his employer shall be liable in any manner for any | <del>_</del>                                  |
| ind arising from or connected with this inspection.  | personal injury or property damage or a rest  |
| $\mathcal{M}$ . $\mathcal{M}$  | 100 3 - 100 ( ) T                             |
| Inspectors Signature Commissions   | NA 1542 (I,N) La 1646                         |
| Inspectors Signature Na  | ational Board, State, Province, and Endorseme |
| A  | •   |
| 5-19 19 9J   |   |

| •     | Owner Iowa Elect                                | ric Light and Pow<br>Name   | ver   |  | Date <u>Ma</u>   | 1 1992   |   |   |      |
|-------|---|---|---|--|--|--|---|---|------|
|       | P.O.Box 351, Ce                                 | dar Rapids, IA 52<br>Address  | 406   | ,                                      | Sheet 1 of   | 2  |   |   |      |
|       | Plant Duane Arno                                | ld Energy Center<br>Name  |   |  | Unit1_   |  |   |   |      |
|       | 3277 DAEC Rd.                                   | Palo, IA 52324  |   |  | PMA:   | R 1045106<br>Repair O                          | rganization P.O.N   | No.,Job No.                               |      |
|       | Work Performed b                                | y Iowa Electric L<br>Name   | ight and Powe   | <u>r</u>                               | Type Code Symbol Authorization No  |  | None  |   |      |
|       |   |   |   |  | Authorization No   |  |   |   |      |
|       | 3277 DAEC Road,                                 | Palo, IA. 52324<br>Address  |   |  | Expiration Date  |  | None  |   |      |
|       | Identification o                                | f System Resid  | ual Heat Remo   | vel )RHR Cl                            | ass 2  |  |   |   |      |
|       | Case  |   |   |  | Edition,71or Replacements 19   |  |   |   | Code |
|       | Identification o                                |   |   |  |  |  |   |   |      |
|       |   | r components nepa   |   | <u> </u>                               |  | <b>.</b>                                       |   |   |      |
| )     | Name of<br>Component                            | Name of<br>Manufacture  | Manufacturer<br>Serial No.  | National<br>Board<br>No.               | Other<br>Identification  | Year<br>Built                                  | Repaired<br>Replaced,<br>or Replacement                             | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |      |
| in C  | Name of   | Name of   | Manufacturer  | National<br>Board                      | Other  | Year<br>Built                                  | Replaced,   | Code<br>Stamped<br>(Yes                   |      |
|       | Name of<br>Component                            | Name of<br>Manufacture  | Manufacturer<br>Serial No.  | National<br>Board<br>No.               | Other<br>Identification  | Year<br>Built<br>Unknown                       | Replaced,<br>or Replacement   | Code<br>Stamped<br>(Yes<br>or No)         |      |
| in C  | Name of<br>Component<br>Cylinder Tube           | Name of<br>Manufacture<br>BergenPatterson<br>BergenPatterson                          | Manufacturer<br>Serial No.<br>107-002x7.75                                      | National<br>Board<br>No.<br>N/A        | Other<br>Identification<br>HBB-23-SS-220   | Year<br>Built<br>Unknown<br>Unknown            | Replaced, or Replacement Replacement                                | Code<br>Stamped<br>(Yes<br>or No)         |      |
| in C  | Name of<br>Component<br>Cylinder Tube           | Name of Manufacture  BergenPatterson  BergenPatterson  BergenPatterson                | Manufacturer<br>Serial No.<br>107-002x7.75                                      | National<br>Board<br>No.<br>N/A<br>N/A | Other Identification HBB-23-SS-220 HBB-23-SS-220                                 | Year<br>Built<br>Unknown<br>Unknown            | Replaced, or Replacement Replacement                                | Code Stamped (Yes or No) No               |      |
| in C  | Name of Component  Cylinder Tube  Cylinder Tube | Name of Manufacture BergenPatterson BergenPatterson BergenPatterson                   | Manufacturer<br>Serial No.<br>107-002x7.75<br>107-002x7.75                      | National<br>Board<br>No.<br>N/A<br>N/A | Other Identification  HBB-23-SS-220  HBB-23-SS-220  HBB-23-SS-220                | Year<br>Built<br>Unknown<br>Unknown            | Replaced, or Replacement  Replacement  Replaced  Replacement        | Code Stamped (Yes or No) No No            |      |
| ain C | Name of Component  Cylinder Tube  Cylinder Tube | Name of Manufacture  BergenPatterson BergenPatterson BergenPatterson  BergenPatterson | Manufacturer Serial No.  107-002x7.75  107-002x7.75  106-001x15.0  106-001x15.0 | National Board No.  N/A  N/A  N/A  N/A | Other Identification  HBB-23-SS-220  HBB-23-SS-220  HBB-23-SS-220  HBB-23-SS-220 | Year<br>Built<br>Unknown<br>Unknown<br>Unknown | Replaced, or Replacement  Replacement  Replaced  Replaced  Replaced | Code Stamped (Yes or No) No No            |      |

| eplace the main cylinder tube and main pi  | iston rod due to damage. The   | se components were removed from snubber  |
|--|--|--|
| A-66 was tested and found acceptable. A  | VT-3 (92-022) was completed  | after installation and accepted.   |
|  |  |  |
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|  |  |  |
|  | CERTIFICATE OF COMPLIANCE  |  |
| We certify that the statements made  | in the report are correct an   | d this replacement confo   |
| to the rules of the ASME Code, Section X   |  | repair or replacement  |
|  |  |  |
| Type Code Symbol Stamp None  |  |  |
| Certificate of Authorization No  | None   | Expiration Date None   |
| 0 0.   |  | _  |
| signed Surula Sh   | aufa Codes & Material  | s, GL Date 5-2- , 19 9   |
| Owner or Owner's Designee,   | Title (  |  |
| • ,  |  |  |
|  |  |  |
|  |  |  |
|  | RTIFICATE OF INSERVICE INSPEC  | TION   |
| CKI  |  | - <del></del>  |
| CE<br>I, the undersigned, holding a valid co<br>Inspectors and the State or Province of  | mmission issued by the Nation IOWA and   | onal Board of Boiler and Pressure Vess<br>demployed by Hartford Steam Boiler I&I C   |
| I, the undersigned, holding a valid conspectors and the State or Province of of of Hartford, Connection  | mmission issued by the Natio   | onal Board of Boiler and Pressure Vess<br>demployed by <u>Hartford Steam Boiler I&amp;I C</u><br>have inspected the components described   |
| I, the undersigned, holding a valid considered of the State or Province of this Owner's Report during the period   | mmission issued by the National IOWA and Sut   | onal Board of Boiler and Pressure Vess i employed by <u>Hartford Steam Boiler I&amp;I C</u> have inspected the components described to   |
| I, the undersigned, holding a valid considered and the State or Province of Hartford, Connection this Owner's Report during the period, and state that to the best of my knowled   | mmission issued by the National IOWA and Ent.  2-27-97  Ige and belief, the Owner has property in the Ioward American Inches in the Ioward American Inches in the Ioward Inches in the Ioward Inches in the Ioward Inches in the Ioward Inches in the Ioward Ioward Inches in the Ioward I | onal Board of Boiler and Pressure Vess i employed by <u>Hartford Steam Boiler I&amp;I C</u> have inspected the components described to   |
| I, the undersigned, holding a valid considered and the State or Province of Hartford, Connection this Owner's Report during the period, and state that to the best of my knowled measures described in the Owner's Report  | mmission issued by the National IOWA and Ent.  2-27-97  Ige and belief, the Owner has print accordance with the requirements.  | onal Board of Boiler and Pressure Vess demployed by Hartford Steam Boiler I&I Components described to 5-/9-72 performed examinations and taken correction rements of the ASME Code, Section XI.  |
| I, the undersigned, holding a valid consistency of this Owner's Report during the period, and state that to the best of my knowled measures described in the Owner's Report  By signing this certificate neither the   | mmission issued by the National IOWA and IOWA an | onal Board of Boiler and Pressure Vessi employed by <u>Hartford Steam Boiler I&amp;I C</u> have inspected the components described to  |
| I, the undersigned, holding a valid consistency of this Owner's Report during the period, and state that to the best of my knowled measures described in the Owner's Report  By signing this certificate neither the concerning the examinations and corrective Inspector nor his employer shall be liable.  | mmission issued by the National IOWA and and sut    J-JJ-97     Ige and belief, the Owner has a coordance with the requirement of the Inspector nor his employer we measures described in this lee in any manner for any personal interpretations.   | onal Board of Boiler and Pressure Vess demployed by Hartford Steam Boiler ISI of have inspected the components described to  |
| I, the undersigned, holding a valid consistency of this Owner's Report during the period, and state that to the best of my knowled measures described in the Owner's Report  By signing this certificate neither the concerning the examinations and corrective Inspector nor his employer shall be liable.  | mmission issued by the National IOWA and and sut    J-JJ-97     Ige and belief, the Owner has a coordance with the requirement of the Inspector nor his employer we measures described in this lee in any manner for any personal interpretations.   | onal Board of Boiler and Pressure Vess demployed by Hartford Steam Boiler ISI of have inspected the components described to  |
| I, the undersigned, holding a valid considered of this Owner's Report during the period, and state that to the best of my knowled measures described in the Owner's Report  By signing this certificate neither the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the concerning the examinations and corrective inspector in the concerning the concerning the concerning the examinations and corrective inspector in the concerning the concernin | mmission issued by the National IOWA and and Euclipe IOWA and IOWA | onal Board of Boiler and Pressure Vess d employed by Hartford Steam Boiler ISI Control to Section 181 Control to Section 20 performed examinations and taken correction rements of the ASME Code, Section XI.  makes any warranty, expressed or implied Country Report. Furthermore, neither total injury or property damage or a loss |
| I, the undersigned, holding a valid considered of this Owner's Report during the period, and state that to the best of my knowled measures described in the Owner's Report  By signing this certificate neither the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the concerning the examinations and corrective inspector of the concerning the concernin | mmission issued by the National IOWA and and Euclipe IOWA and IOWA | onal Board of Boiler and Pressure Vess d employed by Hartford Steam Boiler I&I C have inspected the components described to  |
| I, the undersigned, holding a valid considered of this Owner's Report during the period, and state that to the best of my knowled measures described in the Owner's Report  By signing this certificate neither the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the concerning the examinations and corrective inspector of the concerning the concernin | mmission issued by the National IOWA and and Euclipe IOWA and IOWA | onal Board of Boiler and Pressure Vess d employed by Hartford Steam Boiler I&I C have inspected the components described to  |
| I, the undersigned, holding a valid considered of this Owner's Report during the period, and state that to the best of my knowled measures described in the Owner's Report  By signing this certificate neither the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the examinations and corrective inspector nor his employer shall be liable any kind arising from or connected with the concerning the content of the concerning the content of the concerning the content of the content o | mmission issued by the National IOWA and and Euclipe IOWA and IOWA | onal Board of Boiler and Pressure Vess demployed by Hartford Steam Boiler ISI Control have inspected the components described to   |

9.

| NIS2 | NO. | 11-92-31 |
|------|-----|----------|
|      |     |          |

|      | Owner Iowa Elec        | ctric Light and Pow<br>Name    | /er                        |                          | Date <u>May</u>                   | 1, 1992               |   |   |
|------|------------------------|--------------------------------|----------------------------|--------------------------|-----------------------------------|-----------------------|---|---|
|      | P.O.Box 351, 0         | Cedar Rapids, IA 52<br>Address | 2406                       |                          | Sheet 1 of                        | 2                     |   |   |
|      | Plant <u>Duane Arr</u> | nold Energy Center<br>Name     |                            |                          | Unit 1                            | <del> </del>          |   | <del></del> -                             |
|      | 3277 DAEC Rd.          | Palo, IA 52324<br>s            |                            |                          | PMA.                              | R 1045108<br>Repair O | rganization P.O.N                       | No.,Job No.                               |
|      | Work Performed         | by Iowa Electric L<br>Name     | ight and Powe              | <u>r</u>                 | Type Code Symbol Authorization No |                       |   |   |
|      | 3277 DAEC Road         | d, Palo, IA. 52324<br>Address  |                            |                          | Expiration Date                   |                       | None                                    |   |
|      | Identification         | of SystemResid                 | ual Heat Remo              | vel (RHR) C              | lass 2                            |                       |   |   |
|      | Cage                   | Const. Code B31.7              | _                          |                          |                                   |                       | Addenda,                                | C   |
|      | Identification         | of Components Repa             | ired or Repla              | ced and Rep              | lacement Component                | :s                    |   | •   |
|      | Name of<br>Component   | Name of<br>Manufacture         | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification           | Year<br>Built         | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| in C | ylinder Tube           | Anchor Darling                 | 107-002 <b>x</b> 8.00      | N/A                      | HBB-24-SS-221                     | Unknown               | Replacement                             | No  |
| in C | ylinder Tube           | BergenPatterson                | 107-002 <b>x</b> 8.00      | N/A                      | HBB-24-SS-221                     | Unknown               | Replaced                                | No  |
| libr | ated Valve             | Anchor Darling                 | 302-1127-41                | N/A                      | HBB-24-SS-221                     | Unknown               | Replacement                             | No  |
| libr | ated Valve             | BergenPatterson                | Unknown                    | N/A                      | HBB-24-SS-221                     | Unknown               | Replaced                                | No  |
|      |                        |                                |                            |                          |                                   |                       |   |   |
|      |                        | Work Replaced Mai              | in Cylinder Tu             | be and Cali              | brated Valve on re                | ebuilt sn             | ubber G22690-23R                        | -2 (GBC-11-S                              |
|      | Description of         | WOLK KODIGOG HE                |                            |                          |                                   |                       |   |   |
|      | Description of         |                                | Pneu                       | matic                    | Nominal Nominal                   | Operatin              | g Pressure                              |   |

|   | main cylinder tube and calibrated                                       |                       | . G22690-23R-2 was   | s tested and found ac |
|---|---|-----------------------|----------------------|-----------------------|
| A VT-3/4 92-02                          | 26 was com leted after installati                                       | on and acce ted.      |                      | р                     |
|   |   |                       |                      |                       |
|   | CKR   | TIFICATE OF COMPLIAN  | CE                   |                       |
|   | fy that the statements made in the of the ASME Code, Section XI.        | e report are correct  |                      | or replacement        |
| Type Cod                                | e Symbol Stamp None   |                       |                      |                       |
| Certific                                | ate of Authorization No. None   |                       |                      | Expiration Date Non   |
| Signed                                  | Surulu Shaugen Owner or Owner's Designee, The                           | Codes & Mater         | ials, <u>GL</u> Date | 5 2 - , 1             |
|   | CERTIFIC  | ATE OF INSERVICE INSE | PECTION              |                       |
|   | signed, holding a valid commission the State or Province of             |                       |                      |                       |
| of                                      | Hartford, Connecticut   |                       | have inspected t     | he components describ |
| , and state th                          | Report during the period  | belief, the Owner ha  |                      | tions and taken corre |
|   | this certificate neither the Insp<br>e examinations and corrective meas | sures described in th | is Owner's Report.   | Furthermore, neithe   |
| By signing concerning the Inspector nor | his employer shall be liable in a ing from or connected with this in    | aspection.            | 87545(IN             | To 1046               |

|      | Owner Iowa Elect        | ric Light and Pow<br>Name                          | er                        | <del></del>                | Date <u>May</u>                              | 1, 1992                     | <del></del> · · ·                       |   |
|------|-------------------------|--|---------------------------|----------------------------|--|-----------------------------|---|---|
|      | P.O.Box 351, Ce         | dar Rapids, IA 52<br>Address                       | 406                       |                            | Sheet 1 of                                   | 2                           |   |   |
|      | Plant Duane Arno        | ld Energy Center<br>Name                           |                           | <del></del>                | Unit1  | -                           |   |   |
|      | 3277 DAEC Rd.           | Palo, IA 52324                                     |                           |                            |  | R 1045107<br>Repair 0       | rganization P.O.N                       | No.,Job No.                               |
|      |                         |  | ight and Powe             | r                          | Type Code Symbol                             | •                           |   |   |
|      |                         | Name   |                           |                            | Authorization No.                            | ·                           | None                                    |   |
|      | 3277 DAEC Road,         | Palo, IA. 52324<br>Address                         |                           |                            | Expiration Date                              |                             | None                                    | · · · · · · · · · · · · · · · · · · ·     |
|      | Identification o        | f System Resid                                     | ual Heat Remo             | vel (RHR) Cl               | .ass 2                                       |                             |   |   |
|      | (a)Applicable Co        | nst. Code B31.7                                    |                           | 19 <u>69</u>               | Edition,71                                   |                             | _Addenda,                               | c   |
|      | (b)Applicable Ed        | ition of Section                                   | XI Utilized for           | or Repairs o               | or Replacements 19                           | 80 W81                      | _                                       |   |
|      | Identification o        | f Components Repa                                  | ired or Replac            | ced and Repl               | acement Component                            | .s                          |   |   |
|      |                         |  |                           |                            |  |                             |   |   |
|      | Name of<br>Component    | Name of<br>Manufacture                             | Manufacture<br>Serial No. | National<br>Board<br>No.   | Other<br>Identification                      | Year<br>Built               | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| n Cy |                         | - I  |                           | Board<br>No.               |  | Built                       | Replaced,                               | Code<br>Stamped<br>(Yes                   |
|      | Component               | Manufacture  | Serial No.                | Board<br>No.               | Identification                               | Built<br>Unknown            | Replaced,<br>or Replacement             | Code<br>Stamped<br>(Yes<br>or No)         |
|      | Component               | Manufacture  B chor Darling                        | Serial No.                | Board<br>No.<br>N/A        | Identification                               | Built<br>Unknown            | Replaced, or Replacement Replacement    | Code<br>Stamped<br>(Yes<br>or No)         |
|      | Component               | Manufacture  B chor Darling                        | Serial No.                | Board<br>No.<br>N/A        | Identification                               | Built<br>Unknown            | Replaced, or Replacement Replacement    | Code<br>Stamped<br>(Yes<br>or No)         |
|      | Component               | Manufacture  B chor Darling                        | Serial No.                | Board<br>No.<br>N/A        | Identification                               | Built<br>Unknown            | Replaced, or Replacement Replacement    | Code<br>Stamped<br>(Yes<br>or No)         |
|      | Component  Ylinder Tube | Manufacture  B chor Darling  BergenPatterson  B    | Serial No.  107-002x8.00  | Board<br>No.<br>N/A<br>N/A | Identification                               | Built<br>Unknown<br>Unknown | Replaced, or Replacement Replacement    | Code<br>Stamped<br>(Yes<br>or No)         |
|      | Component  Ylinder Tube | Manufacture  B chor Darling  BergenPatterson  B  B | Serial No.  107-002x8.00  | Board No.  N/A  N/A  9     | Identification  HBB-23-SS-229  HBB-23-SS-229 | Built<br>Unknown<br>Unknown | Replaced, or Replacement Replacement    | Code<br>Stamped<br>(Yes<br>or No)         |

| to replace the main cylinder tube due to dem                               | umage. DA-29 was tested and found acceptable.  |
|--|--|
| to replace the main cylinder tube due to dan                               | mage. DA-25 was tested and lound acceptable.   |
| VT-3/4 (92-023) was completed after instal                                 | llation and accepted.  |
|  |  |
|  |  |
|  |  |
|  | CERTIFICATE OF COMPLIANCE  |
| We certify that the statements made i                                      | in the report are correct and this <u>replacement</u> confo  |
| to the rules of the ASME Code, Section XI.                                 |  |
|  |  |
| Type Code Symbol Stamp None  |  |
| Certificate of Authorization No.   | None Expiration Date None  |
| 0 0 00 0   | `  |
| Signed Strucker Shauf  | Codes & Materials, GL Date 5-2-, 19.   |
| Owner or Owner's Designee, Tr  | Itle   |
|  | •  |
| Chou   | TIFICATE OF INSERVICE INSPECTION   |
|  |  |
| I, the undersigned, holding a valid community and the State or Province of | mission issued by the National Board of Boiler and Pressure Ves-<br><u>IOWA</u> and employed by <u>Hartford Steam Boiler I&amp;I (</u>   |
| of Hartford, Connecticut   | have inspected the components described $2-19-92$ to $5-19-92$   |
| this Owner's Report during the period                                      | ge and belief, the Owner has performed examinations and taken correct.   |
|  | in accordance with the requirements of the ASME Code, Section XI.  |
| By signing this certificate neither the                                    | e Inspector nor his employer makes any warranty, expressed or implic   |
| concerning the examinations and corrective                                 | e measures described in this Owner's Report. Furthermore, neither  |
| any kind arising from or connected with the                                | e in any manner for any personal injury or property damage or a loss nis inspection.   |
|  | Commissions NB 7542 (I,N) Is 1046  |
|  | Commissions // C - / C C // / C - / C C // / C - / C C // / C C // C C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C // C C C // C C // C C C // C C C // C C C // C |
|  | National Board, State, Province, and Endorsement   |
| Inspectors Signature   | National Board, State, Province, and Endorsement   |
| William Meulla   | National Board, State, Province, and Endorsement   |

9.

|            | Owner <u>Iowa Elect</u>  | ric Light and Pov<br>Name     | ver                        |                          | Date <u>May</u>                         | 4, 1992               |   | <u> </u>                                  |
|------------|--------------------------|-------------------------------|----------------------------|--------------------------|---|-----------------------|---|---|
|            |                          | edar Rapids, IA 52<br>Address | 2406                       |                          | Sheet 1 of                              | 2 .                   |   |   |
|            | Plant Duane Arno         | old Energy Center<br>Name     |                            |                          | Unit 1                                  |                       |   |   |
|            | 3277 DAEC Rd.<br>Address |                               |                            |                          | AMQ                                     | R 1058003<br>Repair C | grganization P.C.                       | No.,Job No.                               |
|            | Work Performed b         | y Iowa Electric I<br>Name     | ight and Powe              | or                       | Type Code Symbol Authorization No       |                       | None                                    |   |
|            | 3277 DAEC Road,          | Palo, IA. 52324<br>Address    |                            | <del></del>              | Expiration Date                         |                       | None                                    |   |
|            | Identification o         | of System Resid               | lual Heat Remo             | val 'B' Loo              | p (Class 1)                             |                       |   |   |
|            | Case (b)Applicable Ed    |                               | XI Utilized f              | or Repairs               | Edition, 71 or Replacements 19 ase N-71 |                       |   | Cc  |
|            | •                        |                               |                            |                          | lacement Component                      | s                     |   |   |
|            | Name of<br>Component     | Name of<br>Manufacture        | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other<br>Identification                 | Year<br>Built         | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
| . t        | tachment                 | BergenPatterson               | P/N EA1-50K                | N/A                      | DLA-6-SS-13                             | Unknown               | Replaced                                | No  |
| <u>-</u> 1 | achment                  | BergenPatterson               | P/N1001/50K                | N/A                      | DLA-6-SS-13                             | 1991                  | Replacement                             | No  |
| _          |                          |                               |                            |                          |   |                       |   |   |
| _          |                          |                               |                            |                          |   |                       |   |   |
|            | Description of W         | ork <u>Replaced End</u>       | Attachment o               | on DLA-6-SS-             | 13 (RHD-K007).                          |                       |   |   |
|            | Tests Conducted:         | Hydrostatic                   | Pneu                       | matic                    | Nominal psi Test Te                     | -                     | g Pressure                              |   |

FORM NIS-2 (Back)

| 9. | Remarks In 1977, DCR684 replaced all hydraulic/mechanical snubbers in the drywell with new Pacific Scientific   |
|----|---|
|    | Applicable Manufacturer's Data Reports to be attached   |
|    | mechanical snubbers. The existing end attachments had larger diameter holes than required for the load pins.  |
|    | Bushings were installed to facilitate snubber installation. PMAR 1058003 was used to replace the end attachment   |
|    | DEDITINGS WOLD INDICATION TO LABORATION STREET TRANSPORT TO THE TOTAL AND ADDRESS OF TOPIACO CHO CHA ACCREMINENT  |
|    | which would eliminate the use of the bushings. A VT-3/4 (92-088) was performed and accepted after replacement.  |
|    |   |
|    |   |
|    | CERTIFICATE OF COMPLIANCE   |
|    | We certify that the statements made in the report are correct and this <u>replacement</u> conforms  |
| •  | to the rules of the ASME Code, Section XI. repair or replacement  |
|    |   |
|    | Type Code Symbol Stamp None   |
|    | Certificate of Authorization No. None Expiration Date None  |
|    | Com to OP - 100   |
|    | Signed Surulu Sharife Codes & Materials, GL Date 5/5/92, 19 92 Owner or Owner's Designee, Title   |
|    |   |
|    |   |
|    | CERTIFICATE OF INSERVICE INSPECTION   |
|    | I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel   |
|    | Inspectors and the State or Province of IOWA and employed by Hartford Steam Boiler I&I Co.  |
|    | of <u>Hartford, Connecticut</u> have inspected the components described in this Owner's Report during the period <u>3-38-9.9</u> to <u>5-36-99</u>  |
|    | , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective  |
|    | measures described in the Owner's Report in accordance with the requirements of the ASME Code, Section XI.  |
|    | By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied,  |
|    | concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of |
|    | any kind arising from or connected with this inspection.  |
|    | William Mulla Commissions NB 7.5 X.2 (IN) Is 1046   |
|    | Inspectors Signature National Board, State, Province, and Endorsements  |
|    |   |
|    | Date 5-20 19 93   |
|    |   |
|    |   |

|       | Owner Iowa Elect         | tric Light and Pov            | ver                        | · · · · · · · · · · · · · · · · · · · | Date May                           | 6, 1992       |   |   |       |
|-------|--------------------------|-------------------------------|----------------------------|---------------------------------------|------------------------------------|---------------|---|---|-------|
|       | P.O.Box 351, Co          | edar Rapids, IA 53<br>Address | 2406                       |                                       | Sheet 1 of                         | _2            |   |   |       |
|       | Plant Duane Arno         | old Energy Center<br>Name     |                            |                                       | Unit1_                             |               |   |   | ·     |
|       |                          | Palo, IA 52324                |                            |                                       |                                    | R A12135      | rganization P.O.                        | No. Joh No.                               |       |
|       | Address Work Performed 1 |                               | Light and Powe             | r                                     | Type Code Symbol Authorization No. | Stamp         | None                                    |   |       |
|       |                          | , Palo, IA. 52324<br>Address  |                            |                                       | Expiration Date                    |               |   |   |       |
|       | (a)Applicable Co         | onst. Code ASME               | 111                        | 19 <u>68</u>                          | Edition, S69                       |               | _Addenda,                               |   | _Code |
|       | Identification of        | of Components Repa            | aired or Repla             | ced and Repl                          | lacement Component                 | s             |   | ·   |       |
| )     | Name of<br>Component     | Name of<br>Manufacture        | Manufacturer<br>Serial No. | National<br>Board<br>No.              | Other<br>Identification            | Year<br>Built | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |       |
| let . | Studs(12ea)              | B Cardinal                    | A193 B7                    | N/A                                   | PSV-4404                           | 1989/92       | Replacement                             | No  |       |
| let . | Studs(12ea)              | B Unknown                     | A193 B7                    | N/A                                   | PSV-4404                           | Unknown       | Replaced                                | No  |       |
|       |                          |                               |                            |                                       |                                    |               |   |   |       |
|       |                          |                               |                            |                                       |                                    |               |   |   |       |
|       |                          |                               |                            |                                       |                                    | <u> </u>      |   |   |       |
|       | Description of V         | Work Replaced In              | let Studs on P             | SV-4404.                              |                                    |               |   |   |       |
|       | Tests Conducted          | : Hydrostatic                 | Pneu                       | matic                                 | Nominal                            | Operatin      | g Pressure                              | K   |       |
|       |                          | Other                         | Pressure                   | 1004                                  | psi Test Ter                       | mp. 2         | 210°F                                   |   |       |

FORM NIS-2 (Back)

sheet 2 of 2

|   | cturer's Data Reports to be attached  |
|---|---|
| MAR A12135 was written to replace all twelv   | ve inlet stude because the existing stude were found to be too shore  |
| VT-1 (92-049) and a VT-2 (91-304) was perf  | formed and accepted.  |
|   |   |
|   |   |
|   |   |
|   | CERTIFICATE OF COMPLIANCE   |
| We certify that the statements made i   | n the report are correct and this replacement confo   |
| to the rules of the ASME Code, Section XI.  |   |
|   |   |
| Type Code Symbol Stamp None   |   |
| Certificate of Authorization No.  | None Expiration Date None   |
|   |   |
| Signed Slaulan  | Codes & Materials, GL Date 5-8-   |
|   |   |
| Owner or Owner's Desagnee, Ti   | tle   |
| Owner or Owner's Desagnee, Ti   | tle   |
| Owner or Owner's Desagnee, Ti   | tle   |
| Owner or Owner's Designee, Ti   | TFICATE OF INSERVICE INSPECTION   |
| CKRT  | IFICATE OF INSERVICE INSPECTION   |
| CERT.  I, the undersigned, holding a valid comm Inspectors and the State or Province of   | TFICATE OF INSERVICE IMSPECTION  sission issued by the National Board of Boiler and Pressure Vess  IOWA and employed by Hartford Steam Boiler I&I (   |
| I, the undersigned, holding a valid comm Inspectors and the State or Province of of Hartford, Connecticut   | TFICATE OF INSERVICE IMSPECTION  sission issued by the National Board of Boiler and Pressure Vess  IOWA and employed by Hartford Steam Boiler I&I (   |
| I, the undersigned, holding a valid comm Inspectors and the State or Province of of Hartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge  | TFICATE OF INSERVICE IMSPECTION  Dission issued by the National Board of Boiler and Pressure Vestoria and employed by Hartford Steam Boiler I&I and the inspected the components described to 5-20-52 and belief, the Owner has performed examinations and taken correct.   |
| I, the undersigned, holding a valid comm Inspectors and the State or Province of of Hartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge  | TFICATE OF INSERVICE IMSPECTION  Dission issued by the National Board of Boiler and Pressure Vest  TOWA and employed by Hartford Steam Boiler I&I of the components described to 5-20-52  |
| I, the undersigned, holding a valid comm Inspectors and the State or Province of  of  Bartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge measures described in the Owner's Report in  | rission issued by the National Board of Boiler and Pressure Vessure IOWA and employed by Hartford Steam Boiler I&I and the inspected the components described to 5.20.92 and belief, the Owner has performed examinations and taken corrects an accordance with the requirements of the ASME Code, Section XI.  |
| CERT.  I, the undersigned, holding a valid community of this Connecticut this Conner's Report during the period, and state that to the best of my knowledge measures described in the Owner's Report in By signing this certificate neither the concerning the examinations and corrective  | TFICATE OF INSERVICE INSPECTION  dission issued by the National Board of Boiler and Pressure Vest    IOWA   |
| CERT.  I, the undersigned, holding a valid comm Inspectors and the State or Province of  of  Bartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge measures described in the Owner's Report in  By signing this certificate neither the concerning the examinations and corrective Inspector nor his employer shall be liable  | rission issued by the National Board of Boiler and Pressure Vess  IOWA and employed by Hartford Steam Boiler I&I of have inspected the components described to 5-20-22 and belief, the Owner has performed examinations and taken corrects accordance with the requirements of the ASME Code, Section XI.  Inspector nor his employer makes any warranty, expressed or implied measures described in this Owner's Report. Furthermore, neither in any manner for any personal injury or property damage or a loss   |
| I, the undersigned, holding a valid comm Inspectors and the State or Province of  of  Bartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge measures described in the Owner's Report in  By signing this certificate neither the concerning the examinations and corrective Inspector nor his employer shall be liable any kind arising from or connected with the   | rission issued by the National Board of Boiler and Pressure Vessure IOWA and employed by Hartford Steam Boiler I&I and the inspected the components described to 5.20.52 and belief, the Owner has performed examinations and taken corrects an accordance with the requirements of the ASME Code, Section XI.  Inspector nor his employer makes any warranty, expressed or implied measures described in this Owner's Report. Furthermore, neither the in any manner for any personal injury or property damage or a loss is inspection.   |
| I, the undersigned, holding a valid comm Inspectors and the State or Province of  of  Bartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge measures described in the Owner's Report in  By signing this certificate neither the concerning the examinations and corrective Inspector nor his employer shall be liable any kind arising from or connected with the   | rission issued by the National Board of Boiler and Pressure Vestoriasion issued by the National Board of Boiler and Pressure Vestoriasion issued by the National Board of Boiler and Pressure Vestoriasion issued by Hartford Steam Boiler I&I of the National Board of Boiler and Pressure Vestoriasion issued by Hartford Steam Boiler I&I of the National Board of Boiler and Pressure Vestoriasion is and employed by Hartford Steam Boiler I&I of the National Board of Boiler and Pressure Vestoriasion in any manner for any performed examinations and taken corrects and accordance with the requirements of the ASME Code, Section XI.  Inspector nor his employer makes any warranty, expressed or implicate measures described in this Owner's Report. Furthermore, neither in any manner for any personal injury or property damage or a loss is inspection. |
| I, the undersigned, holding a valid comm Inspectors and the State or Province of  of  Bartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge measures described in the Owner's Report in  By signing this certificate neither the concerning the examinations and corrective Inspector nor his employer shall be liable any kind arising from or connected with the   | rission issued by the National Board of Boiler and Pressure Vessure IOWA and employed by Hartford Steam Boiler I&I and the inspected the components described to 5.20.52 and belief, the Owner has performed examinations and taken corrects an accordance with the requirements of the ASME Code, Section XI.  Inspector nor his employer makes any warranty, expressed or implied measures described in this Owner's Report. Furthermore, neither the in any manner for any personal injury or property damage or a loss is inspection.   |
| I, the undersigned, holding a valid comm Inspectors and the State or Province of  of  Eartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge measures described in the Owner's Report in  By signing this certificate neither the concerning the examinations and corrective Inspector nor his employer shall be liable any kind arising from or connected with the  Unlike Manualla.  Inspectors Signature | rission issued by the National Board of Boiler and Pressure Vestoriasion issued by the National Board of Boiler and Pressure Vestoriasion issued by the National Board of Boiler and Pressure Vestoriasion issued by Hartford Steam Boiler I&I of the National Board of Boiler and Pressure Vestoriasion issued by Hartford Steam Boiler I&I of the National Board of Boiler and Pressure Vestoriasion is and employed by Hartford Steam Boiler I&I of the National Board of Boiler and Pressure Vestoriasion in any manner for any performed examinations and taken corrects and accordance with the requirements of the ASME Code, Section XI.  Inspector nor his employer makes any warranty, expressed or implicate measures described in this Owner's Report. Furthermore, neither in any manner for any personal injury or property damage or a loss is inspection. |
| I, the undersigned, holding a valid comm Inspectors and the State or Province of  of  Bartford, Connecticut this Owner's Report during the period , and state that to the best of my knowledge measures described in the Owner's Report in  By signing this certificate neither the concerning the examinations and corrective Inspector nor his employer shall be liable any kind arising from or connected with the   | rission issued by the National Board of Boiler and Pressure Vess  IOWA and employed by Hartford Steam Boiler I&I of have inspected the components described to 5-20-22 and belief, the Owner has performed examinations and taken corrects an accordance with the requirements of the ASME Code, Section XI.  Inspector nor his employer makes any warranty, expressed or implied measures described in this Owner's Report. Furthermore, neither the in any manner for any personal injury or property damage or a loss  |

9.

|      | Owner <u>Iowa Elec</u>                             | tric Light and Pov<br>Name           | wer   |  | Date <u>May</u>                          | 14 1992                          |   |                                       |                                       |
|------|--|--------------------------------------|---|--|--|----------------------------------|---|---------------------------------------|---------------------------------------|
|      | P.O.Box 351, C                                     | edar Rapids, IA 57<br>Address        |   |  | Sheet 1 of                               | 2                                |   |                                       |                                       |
|      | Plant Duane Arn                                    | old Energy Center<br>Name            |   |  | Unit 1                                   |                                  |   |                                       |                                       |
|      | 3277 DAEC Rd.<br>Address                           | Palo, IA 52324                       |   |  |  | R A12131<br>Repair O             | organization P.O.I                                  | No.,Job No.                           |                                       |
|      | Work Performed                                     | by Iowa Electric                     | Light and Powe  | <u>r</u>                               | Type Code Symbol                         | Stamp                            | None  |                                       |                                       |
|      |  | Name '                               |   |  | Authorization No                         | •                                | None  |                                       |                                       |
|      | 3277 DAEC Road                                     | , Palo, IA. 52324<br>Address         |   |  | Expiration Date                          |                                  | None  |                                       | · · · · · · · · · · · · · · · · · · · |
|      | Identification                                     | of System <u>Main</u>                | Steam B (Clas   | s 1)                                   |  |                                  |   |                                       |                                       |
|      | Case   | onst. Code <u>ASME</u>               |   |  |  |                                  |   | · · · · · · · · · · · · · · · · · · · | Code                                  |
|      | Tanned Edmandam .                                  | of Components Pers                   | aired or Repla  | ced and Repl                           | lacement Component                       | .s                               |   |                                       |                                       |
|      |  |                                      |   | National                               |  |                                  | Repaired<br>Replaced,                               | ASME<br>Code<br>Stamped               |                                       |
|      | Name of Component                                  | Name of<br>Manufacture               | Manufacturer<br>Serial No.                              |  | Other<br>Identification                  | Year<br>Built                    |   |                                       |                                       |
| et s | Name of  | Name of                              | Manufacturer<br>Serial No.<br>A193 B7                   | National<br>Board                      | Other                                    | Year<br>Built                    | Repaired<br>Replaced,                               | Code<br>Stamped<br>(Yes               |                                       |
|      | Name of<br>Component                               | Name of<br>Manufacture               | Manufacturer<br>Serial No.                              | National<br>Board<br>No.               | Other<br>Identification                  | Year<br>Built                    | Repaired<br>Replaced,<br>or Replacement             | Code<br>Stamped<br>(Yes<br>or No)     |                                       |
|      | Name of<br>Component<br>Studs(6 ea)                | Name of<br>Manufacture<br>Unknown    | Manufacturer<br>Serial No.<br>A193 B7                   | National<br>Board<br>No.               | Other<br>Identification                  | Year<br>Built<br>Unknown         | Repaired Replaced, or Replacement Replaced          | Code<br>Stamped<br>(Yes<br>or No)     |                                       |
|      | Name of<br>Component<br>Studs(6 ea)                | Name of<br>Manufacture<br>Unknown    | Manufacturer<br>Serial No.<br>A193 B7                   | National<br>Board<br>No.               | Other<br>Identification                  | Year<br>Built<br>Unknown         | Repaired Replaced, or Replacement Replaced          | Code<br>Stamped<br>(Yes<br>or No)     |                                       |
|      | Name of<br>Component<br>Studs(6 ea)                | Name of<br>Manufacture<br>Unknown    | Manufacturer<br>Serial No.<br>A193 B7                   | National<br>Board<br>No.               | Other<br>Identification                  | Year<br>Built<br>Unknown         | Repaired Replaced, or Replacement Replaced          | Code<br>Stamped<br>(Yes<br>or No)     |                                       |
|      | Name of<br>Component<br>Studs(6 ea)<br>Studs(6 ea) | Name of<br>Manufacture<br>Unknown    | Manufacturer<br>Serial No.<br>A193 B7<br>Ht#<br>8869139 | National<br>Board<br>No.<br>N/A<br>N/A | Other<br>Identification                  | Year<br>Built<br>Unknown         | Repaired Replaced, or Replacement Replaced          | Code<br>Stamped<br>(Yes<br>or No)     |                                       |
|      | Name of<br>Component<br>Studs(6 ea)<br>Studs(6 ea) | Name of Manufacture Unknown Cardinal | Manufacturer<br>Serial No.  A193 B7  Bt# 8869139        | National<br>Board<br>No.<br>N/A<br>N/A | Other Identification  PSV-4403  PSV-4403 | Year<br>Built<br>Unknown<br>1989 | Repaired Replaced, or Replacement Replaced Replaced | Code<br>Stamped<br>(Yes<br>or No)     |                                       |

FORM NIS-2 (Back)

|  | PSV-4403 (S/N BM8491) was removed for testing and reinstalled per PMAR 1052009. During installation Applicable Manufacturer's Data Reports to be attached  |
|--|--|
|  |  |
| CMAR A   | 12131 was written to replace six inlet studs because the existing studs were found to be too short.  |
| A VT-1   | (92-046) and a VT-2 (91-304) was performed and accepted.   |
|  | •  |
|  |  |
|  |  |
| <del></del>  |  |
|  | CERTIFICATE OF COMPLIANCE  |
|  | We certify that the statements made in the report are correct and this replacement correct   |
| to th  | ne rules of the ASME Code, Section XI. repair or replacement   |
|  |  |
|  | Type Code Symbol Stamp None  |
|  | Certificate of Authorization No. None Expiration Date Nor  |
|  |  |
|  | Show the Stranger  |
|  | Signed Surulu Shaufe Codes & Materials, GL Date 5/18/92,   |
|  | omes of exist a session, first (   |
|  |  |
|  |  |
|  |  |
|  | CERTIFICATE OF INSERVICE INSPECTION  |
| I, th  | CERTIFICATE OF INSERVICE INSPECTION  of undersigned, holding a valid commission issued by the National Board of Boiler and Pressure V  |
| Inspe  | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vectors and the State or Province of  |
| Inspe  | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vectors and the State or Province of  |
| this (   | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vectors and the State or Province of IOWA and employed by Hartford Steam Boiler Is and of Hartford, Connecticut have inspected the components description of Hartford, Connecticut have inspected the components description of Seport during the period A-/4-93 to 5-0/-93  State that to the best of my knowledge and belief, the Owner has performed examinations and taken corrections.   |
| this (   | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vectors and the State or Province of  |
| this of measurements and measurements and By   | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vectors and the State or Province of  |
| this of and measu:   | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vectors and the State or Province of  |
| this of and measure By concerning the second | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vectors and the State or Province of  |
| this of and measu:  By conce: Inspectany k:  | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Value of the State or Province of 10WA and employed by Hartford Steam Boiler Is of Hartford, Connecticut have inspected the components described owner's Report during the period 10WA to |
| this of and measu:  By conce: Inspectany k:  | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Value of the State or Province of 10WA and employed by Hartford Steam Boiler Is of Hartford, Connecticut have inspected the components described owner's Report during the period 10WA to |
| this of and measu:  By conce: Inspectany k:  | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vectors and the State or Province of  |
| this of and measu:  By conce: Inspectany k:  | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Value of the State or Province of 10WA and employed by Hartford Steam Boiler Is of Hartford, Connecticut have inspected the components described owner's Report during the period 10WA to |
| this of and measu:  By concer Inspectanty k:   | CERTIFICATE OF INSERVICE INSPECTION  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Value of the State or Province of 10WA and employed by Hartford Steam Boiler Is of Hartford, Connecticut have inspected the components described owner's Report during the period 10WA to |

| NIS2 | NO. | 11-92-42 |
|------|-----|----------|
|      |     |          |

|     | Owner Iowa Elect                                      | ric Light and Po   | Wer  |  | Date May  | 19,1992                       |   |   |              |
|-----|---|--|--|--|---|-------------------------------|---|---|--------------|
|     | P.O.Box 351, Ce                                       | dar Rapids, IA 5   | 2406   |  | Sheet 1 of  | 2                             |   |   |              |
|     | Plant Duane Arno                                      | ld Energy Center<br>Name                                   |  |  | Unit 1  | <del></del>                   |   | -   |              |
|     | 3277 DAEC Rd.<br>Address                              | Palo, IA 52324   |  |  | CMA   | R A04867<br>Repair C          | Organization P.O.                       | No.,Job No                                | <del>-</del> |
|     | Work Performed b                                      | y Iowa Electric I<br>Name                                  | Light and Powe   | er                                     | Type Code Symbol Authorization No   |                               | None                                    |   |              |
|     | 3277 DAEC Road,                                       | Palo, IA. 52324<br>Address                                 |  |  | Expiration Date   |                               | None                                    |   |              |
|     | Identification of                                     | f System <u>1 1/4</u>                                      | " Relief valv  | e line for E                           | HPCI Barometeric (  | Condenser                     | (Class 2)                               |   |              |
|     | Case (b)Applicable Edi (c) Construction Sect. III 197 | ition of Section<br>Code of Replacem<br>77 Edition, S78 Ad | XI Utilized f<br>ent item <u>Sect</u><br>denda(flange) | or Repairs of ion III 1974E; Sect. III | Edition,  or Replacements 19 dition, <u>S75</u> Addenda 1983 Edition S85 Lacement Component | 80 W81<br>with Co<br>Addenda( | de Case(pipe)                           |   | _Code        |
|     | Name of<br>Component                                  | Name of<br>Manufacture                                     | Manufacturer<br>Serial No.                             | National<br>Board<br>No.               | Other<br>Identification   | Year<br>Built                 | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |              |
|     |   |  |  |  |   |                               |   |   | •            |
| et  | piping welds  |  |  |  | ·   |                               |   |   |              |
|     | piping welds<br>and W1B                               | *  | *  | N/A                                    | PSV-2223  | *                             | *                                       | No  |              |
|     |   | *  | *  | N/A                                    | PSV-2223  | *                             | *                                       | No  |              |
|     |   | *  | *  | N/A                                    | PSV-2223  | *                             |   | No  |              |
| A a |   | or information (   | attached)  |  |   |                               | *                                       | No  |              |
| A a | and W1B   | or information (a  | attached)<br>e Inlet pipin                             |  | \/W1B) for PSV-222  | 3.                            | Pressure                                | No  |              |

the number of sheets is recorded at the top of this form.

| FORM | NIS-2 | (Book) |
|------|-------|--------|
| rum  | N13-2 | (Back) |

| accepted.   | This was documented on NIS-2 10-90-41. Subsequent to power operation from RFO10 the gauge used   |
|---|--|
| hydro was   | found out of calibration. A use history evaluation was performed and CMAR A04867 was written to  |
|   |  |
| he hydro d  | during RFO11. The hydro was performed and accepted. This NIS-2 is to supplement NIS-2 (10-90-  |
|   |  |
|   | CERTIFY THUSE OF COMPLIANCE  |
| We  | certify that the statements made in the report are correct and thisreplacement   |
|   | rules of the ASME Code, Section XI. repair or replacement  |
|   |  |
| Туре  | e Code Symbol Stamp None   |
| Cer   | tificate of Authorization No. None Expiration Date   |
|   | Curry D. CP  |
| Sign  | owner or Owner's Designee, Title ( Codes & Materials, GL Date 5-21-  |
|   | Owner of Owner's Designee, little  |
|   |  |
|   | CERTIFICATE OF INSERVICE INSPECTION  |
|   | undersigned, holding a valid commission issued by the National Board of Boiler and Pressure  |
| Inspector   | rs and the State or Province of IOWA and employed by <u>Hartford Steam Boiler</u> of have inspected the components desc  |
| this Owne   | er's Report during the period 4-15-91 to 5-27-93   |
|   | ate that to the best of my knowledge and belief, the Owner has performed examinations and taken co<br>described in the Owner's Report in accordance with the requirements of the ASME Code, Section  |
| , and sta   | described in the Owner's Report in accordance with the requirements of the Roma code, bection .  |
| , and sta   |  |
| , and sta<br>measures<br>By sig                           | gning this certificate neither the Inspector nor his employer makes any warranty, expressed or   |
| , and sta<br>measures<br>By sig<br>concernin<br>Inspector | gning this certificate neither the Inspector nor his employer makes any warranty, expressed or<br>ng the examinations and corrective measures described in this Owner's Report. Furthermore, nei<br>r nor his employer shall be liable in any manner for any personal injury or property damage or a   |
| , and sta<br>measures<br>By sig<br>concernin<br>Inspector | gning this certificate neither the Inspector nor his employer makes any warranty, expressed or no the examinations and corrective measures described in this Owner's Report. Furthermore, neign roor his employer shall be liable in any manner for any personal injury or property damage or a marising from or connected with this inspection. |
| By sig concernin Inspector any kind                       | gning this certificate neither the Inspector nor his employer makes any warranty, expressed or no the examinations and corrective measures described in this Owner's Report. Furthermore, neign roor his employer shall be liable in any manner for any personal injury or property damage or a marising from or connected with this inspection. |
| By sig concernin Inspector any kind                       | gning this certificate neither the Inspector nor his employer makes any warranty, expressed or<br>ng the examinations and corrective measures described in this Owner's Report. Furthermore, nei<br>r nor his employer shall be liable in any manner for any personal injury or property damage or a   |

### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

| •           | Owner <u>lowa Elec</u>               | tric Light and Pow<br>Name  | er                                      | <del></del>                                  | Date <u>Septemb</u>                                    | <u>xer 11,</u>      | 1990                                    | <del></del>                               |              |
|-------------|--------------------------------------|---|---|--|--|---------------------|---|---|--------------|
|             | P.O.Box 351, C                       | edar Rapids, IA 52<br>Address   | 2406                                    |  | Sheet 1 of   | 2                   |   |   | <del>-</del> |
|             | Plant Duane Arno                     | old Energy Center<br>Name   |   | <del>-</del>                                 | Unit <u>1</u>  |                     |   |   |              |
|             | 3277 DAEC Rd. Palo, IA 52324 Address |   |   |  |  | CMAR #A<br>Repair O | 01133 (EMA)<br>Organization P.O.        | lo., Job No                               | <del>-</del> |
|             | Work Performed                       | by <u>lowa Electric</u><br>Name   |   | ·  | Type Code Symbol                                       | Stamp               | None                                    |   |              |
|             |                                      | n alle  |   |  | Authorization No.                                      |                     | None                                    |   |              |
|             | 3277 DAEC Road                       | Palo, IA 52324<br>Address   |   |  | Expiration Date _                                      |                     | None                                    | -   |              |
| •           | Identification                       | of System <u>1 1/4</u>  | " Relief valv                           | e line for h                                 | HPCI Barometeric C                                     | ondenser            | (Class 2)                               | <del></del>                               |              |
|             |                                      | onst. Code <u>ANSI B</u> 3  | 31.7                                    | 19 <u>_67</u>                                | Edition,   |                     | _Addenda,                               | N/A                                       | Cod          |
|             | (c)Constructi<br>Sect. III 19        | dition of Section<br>ion Code of Replac<br>277 Edition,S78 Ad<br>of Components Repa | ement item <u>Seg</u><br>Idenda(flange) | <u>ction III</u> 19 <u>7</u><br>;Section III | <u>4</u> Edition, <u>S75</u> Adder<br>1983 Edition S85 | nda with<br>Addenda | Code Case (studs, nuts)                 | pipe)                                     |              |
|             | Name of<br>Component                 | Name of<br>Manufacture  | Manufacturer<br>Serial No.              | National<br>Board<br>No.                     | Other<br>Identification                                | Year<br>Built       | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) | ,            |
| 1 1/4"      | ' pipe (sch 80)                      | Bechtel   | n/a                                     | n/a  | relief valve line                                      | 1972                | Replaced                                | No  |              |
| <del></del> | pipe (sch 80)                        | Chicago-<br>Tube & Iron   | n/a                                     | n/a  | 1 1/4" HBB-*   | 1979                | Replacement                             | No  |              |
|             | # Flanges                            | Hub Inc.  | Ht. Code<br>ARPN-Coffer                 | n/a  | 1 1/4" HBB-*   | 1990                | Replacement                             | No  |              |
| - st        |                                      | Cardinal  | Ht. No.<br>X569B                        | n/a  | 1 1/4" HBB-*   | 1986                | Replacement                             | No  |              |
| B - nu      | uts                                  | Cardinal  | Ht. No.<br>KC 8972                      | n/a  | 1 1/4" HBB-*   | 1986                | Replacement                             | No  |              |
| Je i ds     | W1A, W18                             | Iowa Electric   | n/a                                     | n/a  | 1 1/4" HBB-*   | 1990                | Replacement                             | No  |              |
| •           | Description of                       | Work <u>Replaced pi</u>   | pe with pipe a                          | and flange co                                | onnections   |                     |   |   |              |
| •           | Tests Conducted                      |   |   | matic  |  | Operatio            | n Pressu <b>re</b>                      | П   |              |
| •           |                                      |   |   |  |  |                     |   |   |              |

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in.,(2)information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.



| tested with                           | VT-2 personnel under ISI report # 90-323.   |                        |
|---------------------------------------|---|------------------------|
|                                       |   |                        |
| * line desi                           | nation not identified in Betchel M-190.   |                        |
| · · · · · · · · · · · · · · · · · · · | CERTIFICATE OF COMPLIANCE   |                        |
| Ue ca                                 |   |                        |
| to the rul                            | rtify that the statements made in the report are correct and this <u>replacement</u> c<br>es of the ASME Code, Section XI. repair or replacement  | onfo                   |
| Туре                                  | Code Symbol Stamp None  |                        |
| Certi                                 | icate of Authorization No. None Expiration Date   |                        |
| Signe                                 | Owner or Owner's Designee, Title Codes & Materials, TGL Date 10-5-  | 19 9                   |
| I, the und                            | CERTIFICATE OF INSERVICE INSPECTION  ersigned, holding a valid commission issued by the National Board of Boiler and Pressure and the State or Province of  | Vacc                   |
| this Owner                            | Hartford, Connecticut  have inspected the components descri   | 1 <u>81</u><br>bed     |
| measures de                           | that to the best of my knowledge and belief, the Owner has performed examinations and taken corr<br>scribed in the Owner's Report in accordance with the requirements of the ASME Code, Section XI  |                        |
| Inspector r                           | ng this certificate neither the Inspector nor his employer makes any warranty, expressed or im<br>the examinations and corrective measures described in this Owner's Report. Furthermore, neith<br>or his employer shall be liable in any manner for any personal injury or property damage or a i<br>ising from or connected with this inspection. | plie<br>er ti<br>oss ( |
| In                                    | pectors Signature Commissions NB 8829(1)(N) 941-1A  |                        |
|                                       | pectors Signature  Commissions NB 8829(I)(N) 941-IA  National Board, State, Province, and Endorse  A 15 19 90   | emen                   |
| Date//                                |   |                        |

| NIS2 | NO. | 11-92-45 |  |
|------|-----|----------|--|

| •                                    | Owner Iowa Elect   | ric Light and Pov   | weir  |  | Date July 2                                       | , 1992                                       |  |   |
|--------------------------------------|--|---|---|--|---|--|--|---|
|                                      | P.O.Box 351, Ce  | dar Rapids, IA 52<br>Address  |   |  | Sheet 1 of  | 3  |  |   |
|                                      | Plant Duane Arno   | ld Energy Center<br>Name  |   |  | Unit 1  | ···  | · · · · · · · · · · · · · · · · · · ·  |   |
|                                      | 3277 DAEC Rd.  | Palo, IA 52324  |   |  | DCP 14  | 99 up to                                     | and including FC   | N 4                                       |
|                                      | Address  |   | · <del></del>   |  |   | Repair (                                     | Organization P.O.  | No.,Job No.                               |
|                                      | Work Performed b   | y Iowa Electric<br>Name   | <del>.</del>  |  | Type Code Symbol                                  | Stamp  | None   |   |
|                                      |  |   |   |  | Authorization No.                                 | •  | None   |   |
|                                      | 3277 DAEC Road   | Palo, IA 52324<br>Address   |   |  | Expiration Date                                   |  | None   |   |
|                                      | Identification o   |   |   | 14 Hangers                                 | (Class 2)   |  |  |   |
|                                      | (a)Applicable Con  | nst. Code ANSI B3   | 1.7   | 19_69                                      | Edition, 1971                                     |  | Addenda, N-411 F   | Rev 1 Cod                                 |
|                                      | (b)Applicable Ed   | ition of Section  | XI Utilized f   | or Repairs o                               | or Replacements 19                                | 80 W81                                       |  |   |
|                                      | Identification of  | f Components Repa   | aired or Repla  | ced and Repl                               | lacement Component                                | s  |  |   |
|                                      |  |   |   |  |   |  |  |   |
|                                      | Name of<br>Component   | Name of<br>Manufacture  | Manufacturer<br>Serial No.                                    | National<br>Board<br>No.                   | Other<br>Identification                           | Year<br>Built                                | Repaired<br>Replaced,<br>or Replacement  | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |
|                                      | Component  | Manufacture   | Serial No.  | Board<br>No.                               | Identification                                    | Built  | Replaced,<br>or Replacement  | Code<br>Stamped<br>(Yes<br>or No)         |
|                                      | Component  -H-7 Spring Cans  |   |   | Board<br>No.                               | 1   |  | Replaced,  | Code<br>Stamped<br>(Yes                   |
| BB-14-<br>BB-14-                     | Component  -H-7 Spring Cans -H-7 Spring Cans -H-8  | Manufacture BergenPatterson BergenPatterson BergenPatterson   | Serial No.<br>S/N065184/59<br>VS1B Size 9<br>N/A              | Board<br>No.<br>L N/A<br>N/A<br>N/A        | Identification  HPC-CE062  HPC-CE062  HPC-CE058   | 1992<br>1971<br>1992                         | Replaced, or Replacement  Replacement  Replaced  Replacement   | Code Stamped (Yes or No)  No No           |
| BB-14-<br>BB-14-<br>BB-14-           | Component  -H-7 Spring Cans -H-7 Spring Cans -H-8 -H-8   | Manufacture  BergenPatterson BergenPatterson BergenPatterson BergenPatterson  | Serial No.<br>S/NO65184/59<br>VS1B Size 9<br>N/A<br>N/A       | Board<br>No.<br>L N/A<br>N/A<br>N/A        | HPC-CE062 HPC-CE058 HPC-CE058                     | 1992<br>1971<br>1992<br>1971                 | Replaced, or Replacement  Replacement  Replaced  Replaced  Replaced  Replaced                        | Code Stamped (Yes or No)  No No No        |
| BB-14-<br>BB-14-<br>BB-14-<br>BB-14- | H-7 Spring Cans H-7 Spring Cans H-8  | Manufacture BergenPatterson BergenPatterson BergenPatterson   | Serial No. S/N065184/59 VS1B Size 9 N/A N/A A193 B7           | Board<br>No.<br>L N/A<br>N/A<br>N/A        | Identification  HPC-CE062  HPC-CE062  HPC-CE058   | 1992<br>1971<br>1992                         | Replaced, or Replacement  Replacement  Replaced  Replacement   | Code Stamped (Yes or No)  No No           |
| BB-14-<br>BB-14-<br>BB-14-<br>BB-14- | Component  H-7 Spring Cans H-7 Spring Cans H-8 H-8 H-4(Rod)  | Manufacture BergenPatterson BergenPatterson BergenPatterson BergenPatterson Iowa Electric Bergen Patterson                  | Serial No. S/N065184/59 VS1B Size 9 N/A N/A A193 B7           | Board<br>No.<br>L N/A<br>N/A<br>N/A<br>N/A | HPC-CE062 HPC-CE062 HPC-CE058 HPC-CE058           | 1992<br>1971<br>1992<br>1971<br>1992         | Replaced, or Replacement  Replacement  Replaced  Replacement  Replaced  Replaced                     | Code Stamped (Yes or No)  No No No No     |
| BB-14-<br>BB-14-<br>BB-14-<br>BB-14- | Component  H-7 Spring Cans H-7 Spring Cans H-8 H-8 H-4(Rod)  | Manufacture BergenPatterson BergenPatterson BergenPatterson BergenPatterson Iowa Electric Bergen Patterson                  | Serial No. S/N065184/59 VS1B Size 9 N/A N/A A193 B7           | Board<br>No.<br>L N/A<br>N/A<br>N/A<br>N/A | HPC-CE062 HPC-CE062 HPC-CE058 HPC-CE058           | 1992<br>1971<br>1992<br>1971<br>1992         | Replaced, or Replacement  Replacement  Replaced  Replacement  Replaced  Replaced                     | Code Stamped (Yes or No)  No No No No     |
| BB-14-<br>BB-14-<br>BB-14-<br>BB-14- | Component  H-7 Spring Cans H-7 Spring Cans H-8 H-8 H-4(Rod)  | Manufacture BergenPatterson BergenPatterson BergenPatterson BergenPatterson Iowa Electric Bergen Patterson                  | Serial No. S/N065184/59 VS1B Size 9 N/A N/A A193 B7           | Board<br>No.<br>L N/A<br>N/A<br>N/A<br>N/A | HPC-CE062 HPC-CE062 HPC-CE058 HPC-CE058           | 1992<br>1971<br>1992<br>1971<br>1992         | Replaced, or Replacement  Replacement  Replaced  Replacement  Replaced  Replaced                     | Code Stamped (Yes or No)  No No No No     |
| BB-14-<br>BB-14-<br>BB-14-<br>BB-14- | Component  H-7 Spring Cans H-7 Spring Cans H-8 H-8 H-4(Rod)  | Manufacture  BergenPatterson BergenPatterson BergenPatterson Iowa Electric Bergen Patterson itional items                   | Serial No.  S/N065184/59  VS1B Size 9  N/A  N/A  A193 B7  N/A | Board No.  L N/A N/A N/A N/A N/A N/A       | HPC-CE062 HPC-CE062 HPC-CE058 HPC-CE072 HPC-CE072 | 1992<br>1971<br>1992<br>1971<br>1992<br>1971 | Replaced, or Replacement  Replacement  Replaced  Replaced  Replaced  Replaced  Replaced              | Code Stamped (Yes or No)  No No No No No  |
| BB-14-<br>BB-14-<br>BB-14-<br>BB-14- | Component  H-7 Spring Cans H-7 Spring Cans H-8 H-8 H-4(Rod) H-4(Rod) Co Sheet 3 for add  Description of Wo | Manufacture  BergenPatterson BergenPatterson BergenPatterson Iowa Electric Bergen Patterson itional items  ork Replaced EBB | Serial No.  S/N065184/59  VS1B Size 9  N/A  N/A  A193 B7  N/A | Board No.  N/A N/A N/A N/A N/A N/A N/A N/A | HPC-CE062 HPC-CE062 HPC-CE058 HPC-CE072 HPC-CE072 | 1992<br>1971<br>1992<br>1971<br>1992<br>1971 | Replaced, or Replacement  Replacement Replaced Replaced Replaced Replaced Replaced , and reset of va | Code Stamped (Yes or No)  No No No No No  |

| FORM NIS-2 | 2 (Back) |
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|------------|----------|

|   | able Manufacturer's Data          | -                      |   |
|---|-----------------------------------|------------------------|---|
| new piping analysis was performed                                   | i on EBB-14 line. The ar          | nalysis revealed that  | the hangers (see sheet 3) req                   |
| readjusting and/or replacement.                                     | A preservice examination          | n was performed on all | l hangers effected and accepte                  |
|   |                                   |                        |   |
| An NCR (92-094) was written on EB                                   | BB-14-H-4, which was dis          | positioned and accepte | ed.   |
|   | CERTIFICATE                       | OF COMPLIANCE          |   |
| We certify that the stateme   | ents made in the report           | are correct and this   | replacement con                                 |
| to the rules of the ASME Code,                                      |                                   | -                      | repair or replacement                           |
|   |                                   |                        | •   |
| Type Code Symbol Stamp  | None                              |                        |   |
|   |                                   |                        |   |
| Certificate of Authorization  | on No. None                       |                        | Expiration Date                                 |
| C   | Charage                           |                        | Date 7-7-92, 1                                  |
| SignedOwner or Owner's De   | Co SVCALL Co                      | des & Materials, GL    | _ Date  |
| Owner of Owner's De   | esignee, fitte G                  |                        |   |
|   | CERTIFICATE OF IN                 | SERVICE INSPECTION     |   |
| I, the undersigned, holding a                                       | valid commission issued           | i by the National Boa  | ard of Boiler and Pressure V                    |
| Inspectors and the State or Prov                                    | ince of Iowa                      | and employe            | ed by Hartford Steam Boiler I                   |
| of Hartf this Owner's Report during the p                           | ora, Connecticut<br>Deriod 3-10-9 | have ins               | spected the components describ                  |
| , and state that to the best of m                                   | y knowledge and belief,           | the Owner has performe | d examinations and taken corre                  |
| measures described in the Owner'                                    | 's Report in accordance v         | with the requirements  | of the ASME Code, Section XI.                   |
|   |                                   |                        | any warranty, expressed or imp                  |
| concerning the examinations and<br>Inspector nor his employer shall |                                   |                        |   |
| any kind arising from or connect                                    |                                   |                        | / or property damage of a re                    |
| Treal I   | Commi                             | iggions TR # 1035      | "" F" In 12/0                                   |
| Inspectors Signature  | Colum                             | National Board,        | 2 "N" Ia 12/0<br>, State, Province, and Endorse |
|   |                                   |                        |   |
| Date  | <b>-</b> -                        |                        |   |

REPORT FOR REPAIRS OR REPLACEMENTS FORM NIS-2 OWNER'S by the Provisions of the ASME Code Section As Required July 2, 1992 Owner Iowa Electric Light and Power Date Name P.O.Box 351, Cedar Rapids, IA 52406 Sheet 3 of 3 Address \_\_\_Unit Plant Duane Arnold Energy Center 2. DCP 1499 up to and including FCN 4 3277 DAEC Rd. Palo, IA 52324 Repair Organization P.O.No., Job No. Address Type Code Symbol Stamp None з. Work Performed by Iowa Electric Authorization No. None 3277 DAEC Road Palo, IA 52324 Expiration Date None Address Identification of System HPCI line 10" EBB-14 Hangers (Class 2) 4. (a)Applicable Const. Code ANSI B31.7 19 69 Edition, 1971 Addenda, N-411 Rev 1 Code Case 5. (b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81

6. Identification of Components Repaired or Replaced and Replacement Components

The following hangers were readjusted in accordance with the new piping analysis:

| Hanger ID   | ISI ID    | VT-3/4 Rpt # |
|-------------|-----------|--------------|
| EBB-14-H-1  | HPC-CE090 | 91-385       |
| EBB-14-H-2  | HPC-CE082 | 91-386       |
| EBB-14-H-3  | HPC-CE077 | 91-387       |
| EBB-14-H-4  | HPC-CE072 | 91-388       |
| EBB-14-H-5  | HPC-CE067 | 91-389       |
| EBB-14-H-6  | HPC-CE064 | 91-390       |
| EBB-14-H-7  | HPC-CE062 | 91-391       |
| EBB-14-H-8  | HPC-CE058 | 91-392       |
| EBB-14-H-9  | HPC-CE051 | 91-393       |
| EBB-14-H-10 | HPC-CE047 | 91-394       |
| EBB-14-H-11 | HPC-CE042 | 91-395       |
| EBB-14-H-12 | HPC-CE039 | 91-396       |
| EBB-14-H-13 | HPC-CE036 | 91-397       |
| EBB-14-H-14 | HPC-CE030 | 91-398       |
| EBB-14-H-15 | HPC-CE018 | 91-399       |
| EBB-14-H-16 | HPC-CE006 | 91-400       |



#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

Date

1.

Owner Iowa Electric Light and Power

| 1.     | . Owner <u>Iowa Electric Light and Power</u> Name |  |   |                            | Date <u>September 3 , 1990</u>              |                          |   |   |         |
|--------|---|--|---|----------------------------|---|--------------------------|---|---|---------|
|        |   |  |   |                            |   |                          |   | •   |         |
|        | P.O.Box 351, 0                                    | <u>Cedar Rapids, IA :</u><br>Address             |   |                            | Sheet <u>1 of</u>                           | 2                        |   |   |         |
| 2.     | Plant <u>Duane Arr</u>                            | nold Energy Center                               | •                                       |                            | Unit 1                                      |                          |   |   |         |
|        |   | Name   |   |                            |   |                          |   |   |         |
|        |   | 3277 DAEC Rd. Palo, IA 52324                     |   |                            |   |                          | and including FC                        | N 1 DCN 0                                 |         |
| _      | Address   | -  |   |                            |   |                          | Organization P.O.                       |   |         |
| 3.     | Work Performed                                    | by <u>Iowa Electric</u><br>Name                  |   |                            | Type Code Symbol                            | Stamp_                   | None                                    |   |         |
|        |   |  |   |                            | Authorization No                            | •                        | None                                    |   |         |
|        | 3277 DAEC Road                                    | I Palo, IA 52324<br>Address                      |   |                            | Expiration Date                             |                          | None                                    | •   | ·-      |
| •      |   |  |   |                            |   |                          | -                                       |   |         |
| 4.     |   |  | •                                       |                            | <b>)</b>                                    |                          |   |   |         |
| 5. `   | (a)Applicable C                                   | onst. Code <u>ANSI B</u>                         | 31.7                                    | 19 <u>_69</u>              | _ Edition, <u>1971</u>                      |                          | Addenda, NONE                           | Co  | de Case |
|        | (b)Applicable E                                   | dition of Section                                | XI Utilizad 1                           | for Repairs                | or Replacements 19                          | 80 W81                   |   |   |         |
|        | Name of<br>Component                              | Name of<br>Manufacture                           | Manufacturer<br>Serial No.              | National<br>Board<br>No.   | Other<br>Identification,                    | Year<br>Built            | Repaired<br>Replaced,<br>or Replacement | ASME<br>Code<br>Stamped<br>(Yes<br>or No) |         |
| 10" P  | ipe(tee)  | Bechtel  | EBB-16-1                                | N/A                        | 10"-EBB-14                                  | 1971                     | Replaced                                | No  |         |
| Hange  | r   | Bergen-<br>Patterson                             | N/A                                     | N/A                        | EBB-14-SR-17                                | 1973                     | Replaced                                | No  |         |
| 10" P  | ipe(elbow)  | Tioga Pipe Co.                                   | HT7814A                                 | N/A                        | 10"-EBB-14                                  | 1990                     | Replacement                             | No  |         |
| Weld   | HPC-CF55R   | lowa Electric                                    | N/A                                     | N/A                        | FW-3A                                       | 1990                     | Replacement                             | No  |         |
| Weld I | HPC-CF57R   | lowa Electric                                    | H/A                                     | N/A                        | FW-1A                                       | 1990                     | Replacement                             | No  |         |
| Weld I | IPC-CF56R   | Iowa Electric                                    | N/A                                     | N/A                        | FW-2A                                       | 1990                     | Replacement                             | No  |         |
| -      | 6" bolt<br>8" bolt<br>Description of W            | Cardinal<br>Cardinal<br>Jork <u>Remeved cros</u> | A2213-A2<br>HT D66732<br>ss tie line 10 | N/A<br>N/A<br>"-EBB-16, Re | EBB-14-H8<br>EBB-14-H8<br>eplace with Elbow | 1986<br>1988<br>(HPCI si | Replacement<br>Replacement<br>de)       | No<br>No                                  |         |
| 3.     | Tests Conducted:                                  | Hydrostatic                                      | x Pneur                                 | natic                      | Nominal                                     | Operation                | n Pressure                              |   |         |
|        |   | Other  | Pressure                                | 1430                       | psi TestTem                                 | p                        | °F                                      | <del>_</del>                              |         |

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8% in. x 11 in.,(2)information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

| FORM | NIS-2 | (Back) |
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|------|-------|--------|

| Remarks <u>Replace</u>                              | ment crosstie line 10"-EBB-16 w  | with elbow and pipe   | on HPCI side (see NIS-2 1090   | 19 for RHR side)  |
|---|--|---|--|---|
|   | Applicable Manufactu   |   |  |   |
| following NDE: p                                    | preservice UT for weld HPC-CF55  | R,ISI Report #90-33   | 35,#90-336;preservice MT ISI R   | leport #90-337.   |
|   | or weld HPC-CF56R #90-338, #90-  |   |  |   |
|   | e MT #90-334. RT of each weld  |   |  |   |
|   | a  | ERTIFICATE OF COMPL   | IANCE  | <u> </u>  |
| We certify<br>to the rules of                       | / that the statements made in t<br>f the ASME Code, Section XI.  | he report are corre   | ect and this <u>replacement</u><br>repair or repl  | confo   |
| Type Code   | Symbol Stamp <u>None</u>   |   | ٠,   |   |
| Certificat  | e of Authorization No. <u>Non</u>  | ne  | Expirat  | tion Date   |
|   | mer or Owner's Designee Title  |   |  |   |
|   |  | CATE OF INSERVICE I   |  |   |
| of  | gned, holding a valid commiss<br>the State or Province of<br><u>Hartford, Connectic</u>  | ut 10wa   | and amployed by Hartford S   | Steam Boiler 1&1  |
| this Owner's Rep                                    | port during the period<br>to the best of my knowledge and<br>bed in the Owner's Report in ac   | 7-2-9-90  | 0 to   | -90   |
| By signing the concerning the e<br>Inspector nor hi | nis certificate neither the Insexaminations and corrective mea<br>is amployer shall be liable in<br>a from or camplected with this i | spector nor his amp<br>asures described in<br>any manner for any<br>inspection. | oloyer makes any warranty, exp<br>n this Owner's Report. Furthe<br>personal injury or property d | ressed or implication in the second or implication in the second in the |
| Inspecto  | ors Signature  | Commissions   | NB 8829(I)(N) 941-IA<br>ational Board, State, Province   | d <b>F</b>  |
| •   |  | N C   | Jilonal Board, State, Province   | . and Endorsemer  |

<sup>\*\*</sup>Preservice VI-3/4 on EBD-14-H8 was performed under ISI No. 90-012.

FOR REPAIRS OR REPLACEMENTS FORM NIS-2 OWNER'S REPORT ASME - Code Required by the Provisions of the Section XI Owner Iowa Electric Light and Power Date June 12,1992 Name P.O.Box 351, Cedar Rapids, IA 52406 of 2 Sheet 2. Plant Duane Arnold Energy Center Unit DCP 1525 3277 DAEC Rd. Palo, IA 52324 Repair Organization P.O.No., Job No. Address Work Performed by <u>Iowa Electric Light and Power</u> Type Code Symbol Stamp<u>None</u> з. Name Authorization No. None Expiration Date None 3277 DAEC Road, Palo, IA. 52324 4. Identification of System Feedwater A (V14-0001), Class 1 (a) Applicable Const. Code ASME III 19 77 Edition, W77 Addenda, N-24,N-38 Code 5. Case (b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81 Identification of Components Repaired or Replaced and Replacement Components 6. ASME Repaired Code National Name of Name of Manufacturer Board Other Year Replaced, Stamped (Yes or Replacement Component Manufacture Serial No. No. Identification Built or No) 1992 No Hinge Pin Cover (2ea) Ht#218815 Item 37 Replacement Anchor Darling N/A None 1980 Replaced No Actuator Assy Anchor Darling N/A N/A Cover Studs (12ea) Anchor Darling SA193 B7 N/A Item 208 1992 Replacement No Stuffing Box Studs(12ea Anchor Darling SA193 B7 N/A Item 208 1980 Replaced No Cover Nuts (12ea) Anchor Darling SA194 2H N/A Item 229 1992 Replacement No Stuffing Box Nuts (12ea Inchor Darling SA194 2H N/A Item 229 1980 Replaced No Anchor Darling Hinge Pin Cover (2ea) Ht#218815 N/A Item 37 1992 Repaired Description of Work Replaced Stuffing Box with Hinge Pin Cover and Associated Bolting. 7. Nominal Operating Pressure Tests Conducted: Hydrostatic Pneumatic 1004 psi Test Temp.\_ 210 Other Pressure NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 81 in. x 11

in.,(2)information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and

the number of sheets is recorded at the top of this form.

|  | he covers were machined fo   | r proper assembly. DCP 1525 c   | ontains the analysis for this modifi  |
|--|--|---|---|
| (ref Item No. 5.0  | 1, Cal-IELP-M91-08). A VT  | -3 (92-005) and VT-1 (92-003)   | was completed and accepted. A VT-2(   |
| was completed and  | accepted after reassembly  | •   |   |
|  |  |   |   |
|  |  |   |   |
|  |  | CERTIFICATE OF COMPLIANCE   |   |
| We certify<br>to the rules of  | y that the statements made<br>f the ASME Code, Section XI  | in the report are correct and   | this <u>repair/replacement</u> conf<br>repair or replacement  |
| Type Code  | Symbol Stamp None  |   | ì   |
| Certificat   | te of Authorization No   | None  | Expiration Date None  |
| Signed   | Sumudu Shan<br>mer or Owner's Designee, I  | Codes & Materials,  | GL Date 6-22-92, 19   |
|  | CEF  | TIPICATE OF INSERVICE INSPECTI  | CON :   |
|  | gned, holding a valid cor  | umission issued by the Nation   | al Board of Boiler and Pressure Ve  |
| I, the undersig  | the State or Province of   |   | employed by Hartford Steam Boiler I&I   |
| Inspectors and   |  | nt he   | ive inspected the components describe   |
| Inspectors and to of this Owner's Rep  | Hartford, Connectic  | 3-1/-90   | to <u></u>  |
| Inspectors and to of of this Owner's Rep., and state that  | Hartford, Connectic<br>port during the period<br>t to the best of my knowledge   | $\mathcal{I} \mathcal{I} \mathcal{I} \mathcal{I}$ ge and belief, the Owner has pe   | to $\frac{\mathcal{J}-\mathcal{J}-\mathcal{J}_{2}}{\mathcal{J}}$ rformed examinations and taken correct ments of the ASME Code, Section XI.   |
| Inspectors and to of this Owner's Rep , and state that measures describe By signing the concerning the linspector nor his                    | Hartford, Connectice port during the period t to the best of my knowledge to the Owner's Report his certificate neither the examinations and corrective is employer shall be liable g from or connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the con | ge and belief, the Owner has pe<br>in accordance with the require<br>e Inspector nor his employer m<br>e measures described in this O<br>e in any manner for any persona<br>his inspection. | rformed examinations and taken correctments of the ASME Code, Section XI.  takes any warranty, expressed or implement's Report. Furthermore, neither all injury or property damage or a los |
| Inspectors and of of this Owner's Rep, and state that measures describe By signing the concerning the concerning the any kind arising Callan | Hartford, Connectice port during the period t to the best of my knowledge to the Owner's Report his certificate neither the examinations and corrective is employer shall be liable g from or connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the connected  | ge and belief, the Owner has pe<br>in accordance with the require<br>e Inspector nor his employer m<br>e measures described in this O<br>e in any manner for any persona<br>his inspection. | rformed examinations and taken correctments of the ASME Code, Section XI.  takes any warranty, expressed or implement's Report. Furthermore, neither all injury or property damage or a los |
| Inspectors and of of this Owner's Rep, and state that measures describe By signing the concerning the concerning the any kind arising Callan | Hartford, Connectice port during the period t to the best of my knowledge to the Owner's Report his certificate neither the examinations and corrective is employer shall be liable g from or connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the part of the connected with the connected  | ge and belief, the Owner has pe<br>in accordance with the require<br>e Inspector nor his employer m<br>e measures described in this O<br>e in any manner for any persona<br>his inspection. | to  |

| NIS2 | NO. | 11-92-47 |
|------|-----|----------|
|      |     |          |

| . Owner Iowa Ele   | ctric Light and Po<br>Name  | ower  |  | Date Ju  | ne 12,199   | 92  |   |
|--|---|---|--|--|---|---|---|
| P.O.Box 351,   | Cedar Rapids , IA 5<br>Address  |   |  | Sheet 1 of   | 2   |   |   |
| Plant <u>Duane Ar</u>  | Plant Duane Arnold Energy Center Name   |   |  |  |   | <del></del>   |   |
| 2277 DAFC PA   | Dalo IN 52374   |   |  | ncp  | 1525  |   |   |
|  | 3277 DAEC Rd. Palo, IA 52324<br>Address   |   |  |  |   | Organization P.O.   | No.,Job No.                                 |
| Work Performed   | Work Performed by Iowa Electric Light and Power   |   |  |  |   | None  |   |
|  | Name  |   |  | Authorization No   |   | None  |   |
| •  |   |   |  |  | -   | · · · · · · · · · · · · · · · · · · ·   |   |
| 3277 DAEC Road   | , Palo, IA. 52324   |   |  | Expiration Date  |   | None  |   |
|  | Address   |   |  | •  |   |   |   |
| Identification   | of System Feed  | water B V14-0   | 0003 ),Class   | 1  |   |   |   |
| (a)Applicable (<br>Case  | onst. Code ASME   | III   | 19_77  | Edition,W77  | 7   | _Addenda, N-24,1  | N-38 Coc                                    |
|  | dition of Section   | XI Utilized f   | or Repairs o   | or Replacements 19   | 80 W81  |   |   |
|  |   |   |  |  |   |   |   |
| Identification   | of Components Rep   | aired or Repla  | ced and Repl   | acement Component  | s   | Repaired  | ASME<br>Code                                |
| Identification  Name of Component  | of Components Rep.  Name of  Manufacture  | aired or Repla<br>Manufacturer<br>Serial No.  | National   | Other Identification   | Year<br>Built   | Repaired<br>Replaced,<br>or Replacement   |   |
| . Name of<br>Component   | Name of<br>Manufacture  | Manufacturer<br>Serial No.  | National<br>Board<br>No.                             | Other<br>Identification  | Year<br>Built   | Replaced,   | Code<br>Stamped<br>(Yes                     |
| . Name of<br>Component<br>age Pin Cover (2ea)  | Name of   | Manufacturer  | National<br>Board                                    | Other<br>Identification<br>Item 37   | Year<br>Built<br>;<br>1992  | Replaced, or Replacement  Replacement  Replaced   | Code Stamped (Yes or No) No                 |
| Name of Component  age Pin Cover (2ea) Cuator Assy (er Studs (12ea)  | Name of Manufacture  Anchor Darling Anchor Darling Anchor Darling   | Manufacturer<br>Serial No.<br>Ht#218615<br>N/A<br>SA193 B7  | National<br>Board<br>No.<br>N/A<br>N/A               | Other Identification  Item 37 None Item 208                                    | Year<br>Built<br>;<br>1992<br>1980                                    | Replaced, or Replacement Replacement Replaced Replacement   | Code Stamped (Yes or No) No No              |
| Name of Component  age Pin Cover (2ea) Cuator Assy For Studs (12ea) Confirm Box Studs(12ea)  | Name of Manufacture  Anchor Darling Anchor Darling Anchor Darling Anchor Darling  | Manufacturer<br>Serial No.<br>Ht#218615<br>N/A<br>SA193 B7<br>SA193 B7                                      | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A        | Other Identification  Item 37 None Item 208 Item 208                           | Year<br>Built<br>;<br>1992<br>1980<br>1992<br>1980                    | Replaced, or Replacement Replacement Replaced Replacement Replaced  | Code Stamped (Yes or No)  No No No No       |
| Name of Component  nge Pin Cover (2ea) tuator Assy ver Studs (12ea) affing Box Studs(12ea) ver Nuts (12ea)   | Name of Manufacture  Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling   | Manufacturer<br>Serial No.<br>Ht#218615<br>N/A<br>SA193 B7<br>SA193 B7<br>SA194 2H                          | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A | Other Identification  Item 37 None Item 208 Item 208 Item 229                  | Year<br>Built<br>;<br>1992<br>1980<br>1992<br>1980                    | Replaced, or Replacement  Replacement  Replaced  Replacement  Replaced  Replaced                          | Code Stamped (Yes Or No)  No No No No No    |
| Name of Component  age Pin Cover (2ea) Cuator Assy For Studs (12ea) Effing Box Studs(12ea) For Nuts (12ea) Effing Box Nuts (12ea)                        | Name of Manufacture  Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling  | Manufacturer<br>Serial No.<br>Ht#218615<br>N/A<br>SA193 B7<br>SA193 B7                                      | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A        | Other Identification  Item 37 None Item 208 Item 208                           | Year<br>Built<br>;<br>1992<br>1980<br>1992<br>1980                    | Replaced, or Replacement Replacement Replaced Replacement Replaced  | Code Stamped (Yes or No)  No No No No       |
| Name of Component  nge Pin Cover (2ea) tuator Assy ver Studs (12ea) iffing Box Studs(12ea) ver Nuts (12ea)   | Name of Manufacture  Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling   | Manufacturer<br>Serial No.<br>Ht#218615<br>N/A<br>SA193 B7<br>SA193 B7<br>SA194 2H<br>SA194 2H              | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A | Other Identification  Item 37 None Item 208 Item 208 Item 229 Item 229         | Year<br>Built<br>;<br>1992<br>1980<br>1992<br>1980<br>1992            | Replaced, or Replacement  Replacement  Replaced  Replaced  Replaced  Replaced  Replaced                   | Code Stamped (Yes Or No)  No No No No No No |
| Name of Component  nge Pin Cover (2ea) tuator Assy ver Studs (12ea) uffing Box Studs(12ea) ver Nuts (12ea)   | Name of Manufacture  Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling  | Manufacturer<br>Serial No.<br>Ht#218615<br>N/A<br>SA193 B7<br>SA193 B7<br>SA194 2H<br>SA194 2H              | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A | Other Identification  Item 37 None Item 208 Item 208 Item 229 Item 229         | Year<br>Built<br>;<br>1992<br>1980<br>1992<br>1980<br>1992            | Replaced, or Replacement  Replacement  Replaced  Replaced  Replaced  Replaced  Replaced                   | Code Stamped (Yes Or No)  No No No No No No |
| Name of Component  nge Pin Cover (2ea) tuator Assy ver Studs (12ea) uffing Box Studs(12ea) ver Nuts (12ea) uffing Box Nuts (12ea)                        | Name of Manufacture  Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling  | Manufacturer<br>Serial No.<br>Ht#218615<br>N/A<br>SA193 B7<br>SA193 B7<br>SA194 2H<br>SA194 2H              | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A<br>N/A | Other Identification  Item 37 None Item 208 Item 208 Item 229 Item 229         | Year<br>Built<br>;<br>1992<br>1980<br>1992<br>1980<br>1992            | Replaced, or Replacement  Replacement  Replaced  Replaced  Replaced  Replaced  Replaced                   | Code Stamped (Yes Or No)  No No No No No No |
| Name of Component  nge Pin Cover (2ea) tuator Assy ver Studs (12ea) uffing Box Studs(12ea) ver Nuts (12ea) uffing Box Nuts (12ea) nge Pin Cover (2ea)    | Name of Manufacture  Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling  | Manufacturer<br>Serial No.<br>Ht#218615<br>N/A<br>SA193 B7<br>SA193 B7<br>SA194 2H<br>SA194 2H<br>Ht#218615 | National Board No.  N/A N/A N/A N/A N/A N/A N/A      | Other Identification  Item 37 None Item 208 Item 208 Item 229 Item 229 Item 37 | Year<br>Built<br>;<br>1992<br>1980<br>1992<br>1980<br>1992            | Replaced, or Replacement  Replacement  Replaced  Replaced  Replaced  Replaced  Replaced  Replaced         | Code Stamped (Yes Or No)  No No No No No No |
| Name of Component  nge Pin Cover (2ea) tuator Assy ver Studs (12ea) uffing Box Studs(12ea) ver Nuts (12ea) uffing Box Nuts (12ea) uffing Box Nuts (12ea) | Name of Manufacture  Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling Anchor Darling | Manufacturer<br>Serial No.<br>Ht#218615<br>N/A<br>SA193 B7<br>SA193 B7<br>SA194 2H<br>SA194 2H<br>Ht#218615 | National Board No.  N/A N/A N/A N/A N/A N/A N/A      | Other Identification  Item 37 None Item 208 Item 208 Item 229 Item 229 Item 37 | Year<br>Built<br>1992<br>1980<br>1992<br>1980<br>1992<br>1980<br>1992 | Replaced, or Replacement Replaced Replaced Replaced Replaced Replaced Replaced Replaced Replaced Replaced | Code Stamped (Yes Or No)  No No No No No No |

the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

| to installation the cover                   | rs were machined for pr                            | oper assembly. DCP 1525 cont   | ains the analysis for this                                    | modific   |
|---|--|--|---|-----------|
| (ref Item No. 5.01, Cal-                    | IELP-M91-08). A VT-3 (                             | 92-006) and VT-1 (92-004) was  | completed and accepted.                                       | A VT-2(9  |
| was completed and accepte                   | ed after reassembly.                               |  |   |           |
|   |  |  |   |           |
|   |  |  |   |           |
|   | a  | ERTIFICATE OF COMPLIANCE   |   |           |
| We certify that t<br>to the rules of the AS |  | he report are correct and thi  | s repair/replacement repair or replacement                    |           |
| Type Code Symbol                            | Stamp None   |  | ,   |           |
| Certificate of Au                           | thorization No. Non                                | e  | Expiration Da   | te None   |
| Signed Owner or                             | owner's Designee, Title                            | Codes & Materials, GI  | L Date 6-22   | , 19      |
|   | COMMITTO   | CATE OF INSERVICE INSPECTION   | ,   |           |
|   |  |  |   |           |
| Inspectors and the Stat                     | te or Province of                                  | ion issued by the National IOWA and emp  | Board of Boiler and Pres<br>loyed by <u>Hartford Steam Bo</u> |           |
| of Bonort du                                | Hartford, Connecticut                              | <b>3- 2</b> / - 92   | inspected the components                                      | described |
| , and state that to the                     | best of my knowledge an                            | nd belief, the Owner has perfo   | ermed examinations and take                                   | n correct |
| measures described in 1                     | the Owner's Report in a                            | ccordance with the requiremen  | nts of the ASME Code, Secti                                   | lon XI.   |
| concerning the examinat                     | tions and corrective me<br>over shall be liable in | spector nor his employer make<br>asures described in this Owne<br>any manner for any personal :<br>inspection. | er's Report. Furthermore,                                     | neither   |
| any kind arising from o                     | -ma .*.*   | 110-   | 41(x N) To 104  | <i>l</i>  |
| any kind arising from o                     | 11 la like -                                       | Commissions (1/1) 1/15   |   |           |
| any kind arising from o                     | nature   | Commissions NB 7.5   | ard, State, Province, and I                                   | Endorseme |

|               | Owner Iowa Elec                                    | Date Jun  | e 30,199  | 2   |   |  |  |                                   |
|---------------|--|---|---|---|---|--|--|-----------------------------------|
|               | P.O.Box 351, C                                     | edar Rapids, IA 5<br>Address                              |   |   | Sheet 1 of  | 2  | <del> </del>   |                                   |
|               | Plant Duane Arn                                    | old Energy Center   |   |   | Unit 1  |  |  |                                   |
|               |  | ום  | 43D 10501   | 32  |   |  |  |                                   |
|               | Address  | Palo, IA 52324  | · · · · · · · · · · · · · · · · · · ·                               |   | F1  | Repair O   | rganization P.O.   | No.,Job No.                       |
|               | Work Performed                                     | by Iowa Electric  | Light and Powe  | <u>r</u>                                      | Type Code Symbol  | Stamp  | None   |                                   |
|               | Name   |   |   |   | Authorization No  | •  | None   |                                   |
|               |  |   |   |   | Post and a Rota   |  | Nana   | •                                 |
|               | 3277 DAEC Road                                     | , Palo, IA. 52324<br>Address                              |   | <del></del>                                   | Expiration Date   |  | None   |                                   |
|               | Identification                                     | of SystemCore   | Spray (CS) (C   | lass 2)                                       |   |  |  |                                   |
|               | (a)annligable G                                    | onst. CodeASME_   | T T T   | 19 68   | Edition. W68  |  | Addenda. 1361-   | -2                                |
|               | Case   |   |   |   |   |  | •  |                                   |
|               | (b)Applicable E                                    | dition of Section   | XI Utilized I   | or kepairs c                                  | r kepiacements is   | 00 W01_  | <del></del>  |                                   |
|               | tdontification :                                   | of Components Rep   | aired or Repla  | ced and Repl                                  | acement Component   | s  |  |                                   |
|               |  | or components rep   |   |   |   | -  |  |                                   |
|               | Name of  | Name of   | Manufacturer  | National<br>Board                             | Other   | Year   | Repaired<br>Replaced,  | ASME<br>Code<br>Stamped           |
|               |  | T   |   | National                                      |   |  | -  | Code                              |
| olts          | Name of  | Name of   | Manufacturer  | National<br>Board                             | Other   | Year<br>Built<br>;                               | Replaced,  | Code<br>Stamped<br>(Yes           |
|               | Name of<br>Component                               | Name of<br>Manufacture                                    | Manufacturer<br>Serial No.  | National<br>Board<br>No.                      | Other<br>Identification   | Year<br>Built<br>;<br>Unknown                    | Replaced,<br>or Replacement  | Code<br>Stamped<br>(Yes<br>or No) |
| olts<br>uts ( | Name of<br>Component<br>(12ea)                     | Name of<br>Manufacture<br>Unknown                         | Manufacturer<br>Serial No.<br>N/A                                   | National<br>Board<br>No.                      | Other<br>Identification<br>Inlet Bolts  | Year<br>Built<br>;<br>Unknown                    | Replaced,<br>or Replacement  | Code<br>Stamped<br>(Yes<br>or No) |
| uts (         | Name of<br>Component<br>(12ea)<br>12ea)            | Name of<br>Manufacture<br>Unknown<br>Unknown              | Manufacturer<br>Serial No.<br>N/A<br>N/A                            | National<br>Board<br>No.<br>N/A               | Other Identification Inlet Bolts Inlet Nuts                                       | Year<br>Built<br>Unknown                         | Replaced, or Replacement Replaced                                      | Code Stamped (Yes or No) No       |
| olts<br>uts ( | Name of<br>Component<br>(12ea)<br>12ea)            | Name of<br>Manufacture<br>Unknown<br>Unknown<br>Cardinal  | Manufacturer<br>Serial No.<br>N/A<br>N/A<br>Ht#D66732               | National<br>Board<br>No.<br>N/A<br>N/A        | Other Identification  Inlet Bolts Inlet Nuts Inlet Bolts                          | Year<br>Built<br>Unknown<br>Unknown              | Replaced, or Replacement  Replaced  Replaced  Replaced                 | Code Stamped (Yes or No) No No    |
| uts (         | Name of<br>Component<br>(12ea)<br>12ea)            | Name of<br>Manufacture<br>Unknown<br>Unknown<br>Cardinal  | Manufacturer<br>Serial No.<br>N/A<br>N/A<br>Ht#D66732               | National<br>Board<br>No.<br>N/A<br>N/A        | Other Identification  Inlet Bolts Inlet Nuts Inlet Bolts                          | Year<br>Built<br>Unknown<br>Unknown              | Replaced, or Replacement  Replaced  Replaced  Replaced                 | Code Stamped (Yes or No) No No    |
| olts<br>uts ( | Name of<br>Component<br>(12ea)<br>12ea)            | Name of<br>Manufacture<br>Unknown<br>Unknown<br>Cardinal  | Manufacturer<br>Serial No.<br>N/A<br>N/A<br>Ht#D66732               | National<br>Board<br>No.<br>N/A<br>N/A        | Other Identification  Inlet Bolts Inlet Nuts Inlet Bolts                          | Year<br>Built<br>Unknown<br>Unknown              | Replaced, or Replacement  Replaced  Replaced  Replaced                 | Code Stamped (Yes or No) No No    |
| uts (         | Name of<br>Component<br>(12ea)<br>(12ea)<br>(12ea) | Name of<br>Manufacture<br>Unknown<br>Unknown<br>Cardinal  | Manufacturer<br>Serial No.<br>N/A<br>N/A<br>Ht#D66732<br>Ht#Y592608 | National<br>Board<br>No.<br>N/A<br>N/A<br>N/A | Other Identification  Inlet Bolts Inlet Nuts Inlet Bolts Inlet Nuts               | Year<br>Built<br>Unknown<br>Unknown              | Replaced, or Replacement  Replaced  Replaced  Replaced                 | Code Stamped (Yes or No) No No    |
| olts<br>uts ( | Name of<br>Component<br>(12ea)<br>(12ea)<br>(12ea) | Name of Manufacture  Unknown  Unknown  Cardinal  Cardinal | Manufacturer<br>Serial No.<br>N/A<br>N/A<br>Ht#D66732<br>Ht#Y592608 | National Board No.  N/A N/A N/A N/A           | Other Identification  Inlet Bolts Inlet Nuts Inlet Bolts Inlet Nuts  On PSV-2129. | Year<br>Built<br>,<br>Unknown<br>Unknown<br>1988 | Replaced, or Replacement  Replaced  Replaced  Replacement  Replacement | Code Stamped (Yes or No) No No    |

FORM NIS-2 (Back)

| A functional test VT-2 (91-333) was completed and accepted.   |   |
|---|---|
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |
| CERTIFICATE OF COMPLIANCE   |   |
| We contifue that the statements made in the money are required and the  |   |
| We certify that the statements made in the report are correct and this to the rules of the ASME Code, Section XI.   | replacement con   |
|   | •   |
|   | •   |
| Type Code Symbol Stamp None   |   |
| Certificate of Authorization No. None   | Expiration Date Nor   |
|   |   |
| Surude Shaula codos ( Matoriala of  | 7-1-  |
| Signed Survey Shaufar Codes & Materials, GL Owner or Owner's Designee, Title  | Date,   |
| anner or anner a paperance, reard   |   |
|   |   |
|   |   |
| CERTIFICATE OF INSERVICE INSPECTION   | ;   |
| I, the undersigned, holding a valid commission issued by the National E   | Poard of Roiler and Pressure V  |
| Inspectors and the State or Province of IOWA and emplo  | oyed by <u>Hartford Steam Boiler IS</u>   |
| Thispectors and the State of Province of TOWN and empire  | inspected the components describ  |
| of Hartford, Connecticut have i   | to 7-2-90   |
| of Hartford, Connecticut have in this Owner's Report during the period 48-72  |   |
| of Hartford, Connecticut have in this Owner's Report during the period 48-72, and state that to the best of my knowledge and belief, the Owner has perform  | med examinations and taken corre  |
| of Hartford, Connecticut have in this Owner's Report during the period 48-72  | med examinations and taken corre  |
| this Owner's Report during the period, and state that to the best of my knowledge and belief, the Owner has performeasures described in the Owner's Report in accordance with the requirement By signing this certificate neither the Inspector nor his employer makes  | med examinations and taken corresons of the ASME Code, Section XI.  s any warranty, expressed or imp  |
| of Hartford, Connecticut have in this Owner's Report during the period (AS-GO), and state that to the best of my knowledge and belief, the Owner has perform measures described in the Owner's Report in accordance with the requirement.  By signing this certificate neither the Inspector nor his employer makes concerning the examinations and corrective measures described in this Owner.  | med examinations and taken corress of the ASME Code, Section XI.  s any warranty, expressed or imports Report. Furthermore, neithermore,  |
| of Hartford, Connecticut have in this Owner's Report during the period #8-% , and state that to the best of my knowledge and belief, the Owner has perform measures described in the Owner's Report in accordance with the requirement.  By signing this certificate neither the Inspector nor his employer makes concerning the examinations and corrective measures described in this Owner Inspector nor his employer shall be liable in any manner for any personal in                      | med examinations and taken corress of the ASME Code, Section XI.  s any warranty, expressed or imports Report. Furthermore, neithermore,  |
| this Owner's Report during the period #8-% , and state that to the best of my knowledge and belief, the Owner has performeasures described in the Owner's Report in accordance with the requirement  By signing this certificate neither the Inspector nor his employer makes concerning the examinations and corrective measures described in this Owner Inspector nor his employer shall be liable in any manner for any personal in any kind arising from or connected with this inspection. | med examinations and taken corresponds of the ASME Code, Section XI.  any warranty, expressed or imports Report. Furthermore, neither and or property damage or a longitury or property damage or a longitury or property damage. |
| this Owner's Report during the period #8-% , and state that to the best of my knowledge and belief, the Owner has performeasures described in the Owner's Report in accordance with the requirement  By signing this certificate neither the Inspector nor his employer makes concerning the examinations and corrective measures described in this Owner Inspector nor his employer shall be liable in any manner for any personal in any kind arising from or connected with this inspection. | med examinations and taken corresponds of the ASME Code, Section XI.  any warranty, expressed or imports Report. Furthermore, neither and or property damage or a longitury or property damage or a longitury or property damage. |
| this Owner's Report during the period #8-% , and state that to the best of my knowledge and belief, the Owner has performeasures described in the Owner's Report in accordance with the requirement  By signing this certificate neither the Inspector nor his employer makes concerning the examinations and corrective measures described in this Owner Inspector nor his employer shall be liable in any manner for any personal in any kind arising from or connected with this inspection. | med examinations and taken correson to the ASME Code, Section XI.  any warranty, expressed or imports Report. Furthermore, neither injury or property damage or a lo  |
| of Hartford, Connecticut have in this Owner's Report during the period #8-% , and state that to the best of my knowledge and belief, the Owner has perform measures described in the Owner's Report in accordance with the requirement.  By signing this certificate neither the Inspector nor his employer makes concerning the examinations and corrective measures described in this Owner Inspector nor his employer shall be liable in any manner for any personal in                      | med examinations and taken correson to the ASME Code, Section XI.  any warranty, expressed or imports Report. Furthermore, neither injury or property damage or a lo  |
| this Owner's Report during the period #8-% , and state that to the best of my knowledge and belief, the Owner has performeasures described in the Owner's Report in accordance with the requirement  By signing this certificate neither the Inspector nor his employer makes concerning the examinations and corrective measures described in this Owner Inspector nor his employer shall be liable in any manner for any personal in any kind arising from or connected with this inspection. | med examinations and taken correson to the ASME Code, Section XI.  any warranty, expressed or imports Report. Furthermore, neither injury or property damage or a lo  |

## INSERVICE INSPECTION REPORT September 11,1990 through April 27,1992

PART H pages 1 of 1

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Marion, IA. Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

### Abstract of Conditions Noted and Corrective Measures Taken:

The corrective measures addressed in this report were performed in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI, 1980 Edition through Winter 1981 Addenda, and the Duane Arnold Energy Center Updated Final Safety Analysis Report. The corrective measures performed as Repairs or Replacements are listed in Part F of this report and are documented, using Form NIS-2, in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI, 1980 Edition through Winter 1981 Addenda. Specific details and associated records of additional corrective measures are on file at Iowa Electric Light and Power Company. The corrective measures addressed were performed during the period of September 11, 1990 through April 27, 1992.

# INSERVICE INSPECTION REPORT September 11,1990 through April 27,1992

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date:  $\frac{2}{1/75}$
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

#### ISI FIGURES AND ISOMETRICS

PLEASE NOTE: ISI Figures & Isometrics are listed in Part B and Part E of this report.

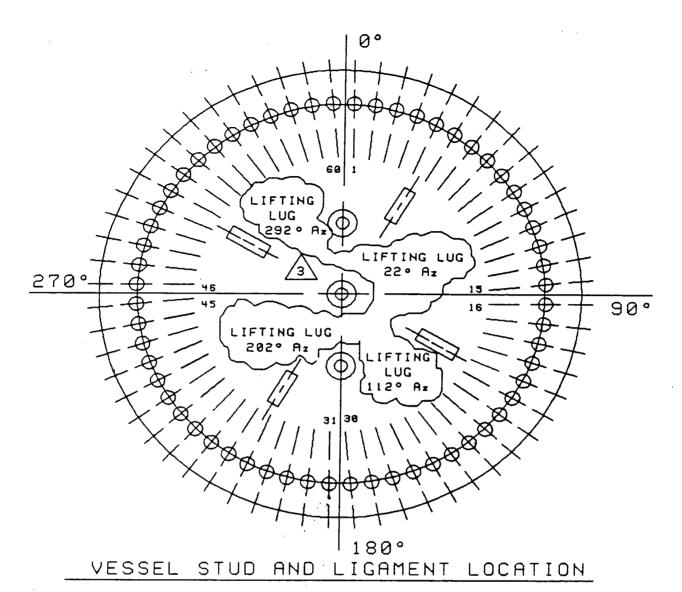


Figure No. <u>1.1-5</u>

PR-Pressure Retaining
A-Studs
B-Nuts
C-Bushings
D-Washers
E-Ligaments

| DRAWING RELEASE RECORD |         |          |          |          |   |  |  |  |  |  |
|------------------------|---------|----------|----------|----------|---|--|--|--|--|--|
| REV                    | DATE    | PREPARED | REVIEWED | APPROVED | PURPOSE                                   |  |  |  |  |  |
| 1                      | 4-3-86  | SML      | SML      | RCM      | ISO'S FOR 2nd 10 YEAR PLAN                |  |  |  |  |  |
| 2                      | 9-24-90 | DA       | GP       | KKM      | ISO'S TO CAD FORMAT AS PER NG-89-0794     |  |  |  |  |  |
| 3                      | 5-13-91 | DA       | 6P       | 42m      | PCH "B" CORRECTLY IDENTIFIED LIFTING LUGS |  |  |  |  |  |
|                        |         |          |          |          |   |  |  |  |  |  |
|                        |         |          |          |          |   |  |  |  |  |  |
|                        |         |          |          | ,        |   |  |  |  |  |  |

DAEC INSERVICE INSPECTION ASME SECTION XI ISOMETRIC ωINI⊶

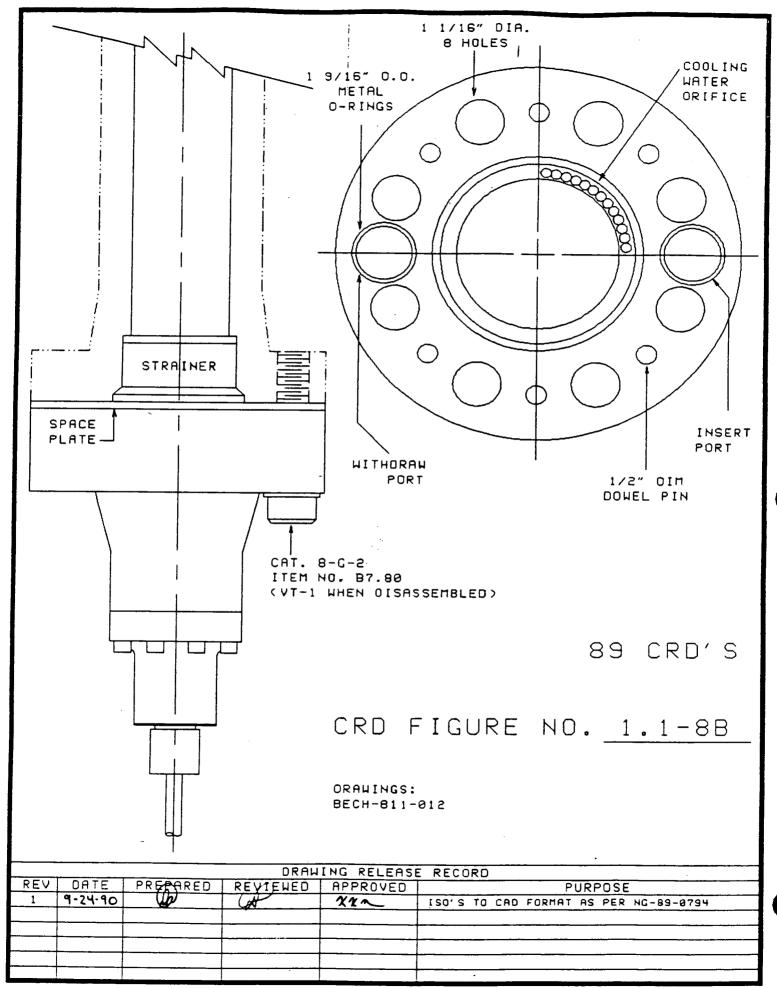
|          | CHANGE HOTTEL A |         |          |         |          |          |          |         |         |         |
|----------|-----------------|---------|----------|---------|----------|----------|----------|---------|---------|---------|
|          |                 |         |          |         |          | 1        | EFFECTIV | E DATE: | 14 m    |         |
|          |                 |         |          | IR215   | 1R215    | 1R215    | ן ן      | - CRO   |         |         |
|          |                 |         |          | (56-93) | (22-03)  | (18-03)  | -        | - PDSI  | ноіт    |         |
|          |                 | 1R215   | 1R215    | 1R215   | 1R215    | 1R215    | 1R215    | 1R215   |         |         |
|          |                 | (34-07) | (30-07)  | (26-07) | (22-07)  | (18-07)  | (14-07)  | (10-07) |         |         |
|          | 1R215           | 1R215   | 1R215    | 1R215   | 18215    | 1R215    | 1R215    | 1R215   | 18215   |         |
|          | (38-11)         | (34-11) | (30-11)  | (26-11) | (22-11)  | (18-11)  | (14-11)  | (10-11) | (06-11) |         |
|          | 1R215           | 1R215   | 1R215    | 1R215   | 1R215    | 1R215    | 18215    | 1R215   | 1R215   |         |
|          | (38-15)         | (34-15) | (30-15)  | (26-15) | (22-15)  | (18-15)  | (14-15)  | (10-15) | (06-15) |         |
| 1R215    | 1R215           | 18215   | 1Ř215    | 1R215   | 1R215    | 1R215    | 18215    | 1R215   | 18215   | 1R215   |
| (42-19)  | (38-19)         | (34-19) | (30-19)  | (26-19) | (22-19)  | (18-19)  | (14-19)  | (10-19) | (06-19) | (02-19) |
| 1R215    | 1R215           | 1R215   | 1R215    | 18215   | 1R215    | 1R215    | 1R215    | 1R215   | 18215   | 1R215   |
| (42-23)  | (38-23)         | (34-23) | (30-23)  | (26-23) | (55-53)  | (18-23)  | (14-23)  | (10-23) | (06-23) | (62-53) |
| 1R215    | 1R215           | 1R215   | 1R215    | 1R215   | 1R215    | 1R215    | 1R215    | 1R215   | 18215   | 1R215   |
| (42-27)  | (38-27)         | (34-27) | (30-27)  | (26-27) | (22-27)  | (18-27)  | (14-27)  | (10-27) | (06-27) | (02-27) |
| <u> </u> | 1R215           | 1R215   | 1R215    | 1R215   | 1R215    | 1R215    | 1R215    | 1R215   | 1R215   |         |
|          | (38-31)         | (34-31) | (30-31)  | (26-31) | (22-31)  | (18-31)  | (14-31)  | (10-31) | (06-31) |         |
|          | 1R215           | 1R215   | 1R215    | 1R215   | 1R215    | 1R215    | 1R215    | 1R215   | 1R215   |         |
| •        | (38-35)         | (34-35) | (30-35)  | (26-35) | (22-35)  | (18-35)  | (14-35)  | (10-35) | (06-35) |         |
|          |                 | 18215   | 1R215    | 18215   | 1R215    | 1R215    | 1R215    | 1R215   |         |         |
|          |                 | (34-39) | (30-39)  | (26-39) | (ee-39)  | (18-39)  | (14-39)  | (10-39) | ,       |         |
|          | •               |         | <b>L</b> | 1R215   | 1R215    | 1R215    |          |         | •       |         |
|          |                 |         |          | (26-43) | (22-43)  | (18-43)  | חנ       | RAWIN   | GS:     |         |
|          | •               |         | į        | ·       | <u> </u> | <u> </u> | .=       |         | 115-1   | 5-2     |

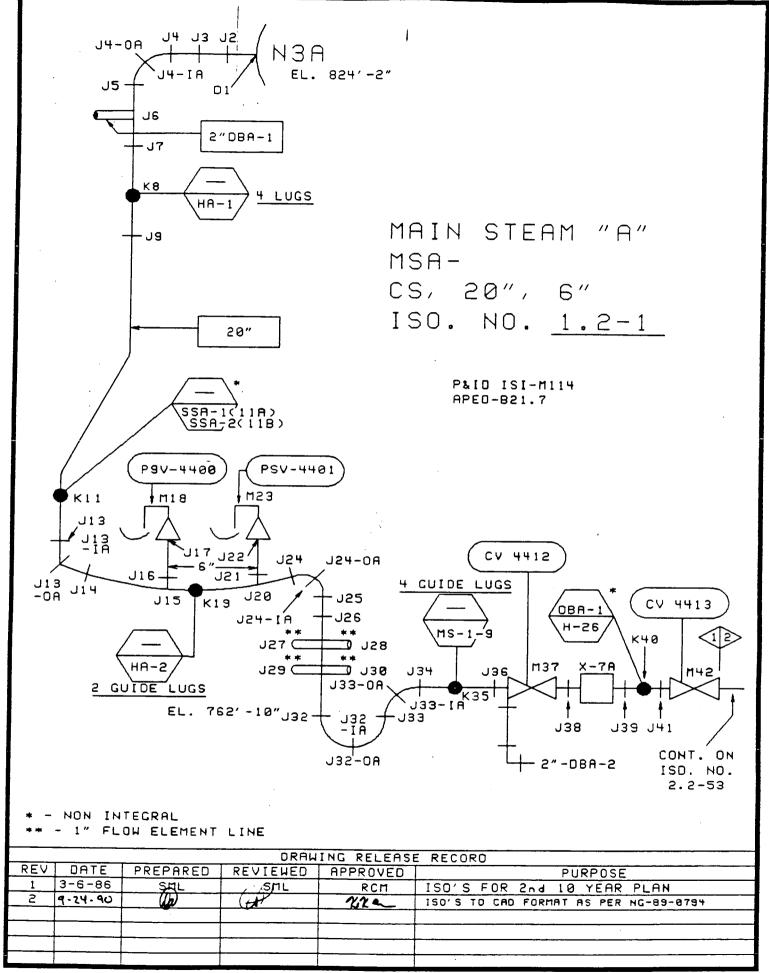
CRD LOCATION 7884-M115-15-2 7884-M115-16-2

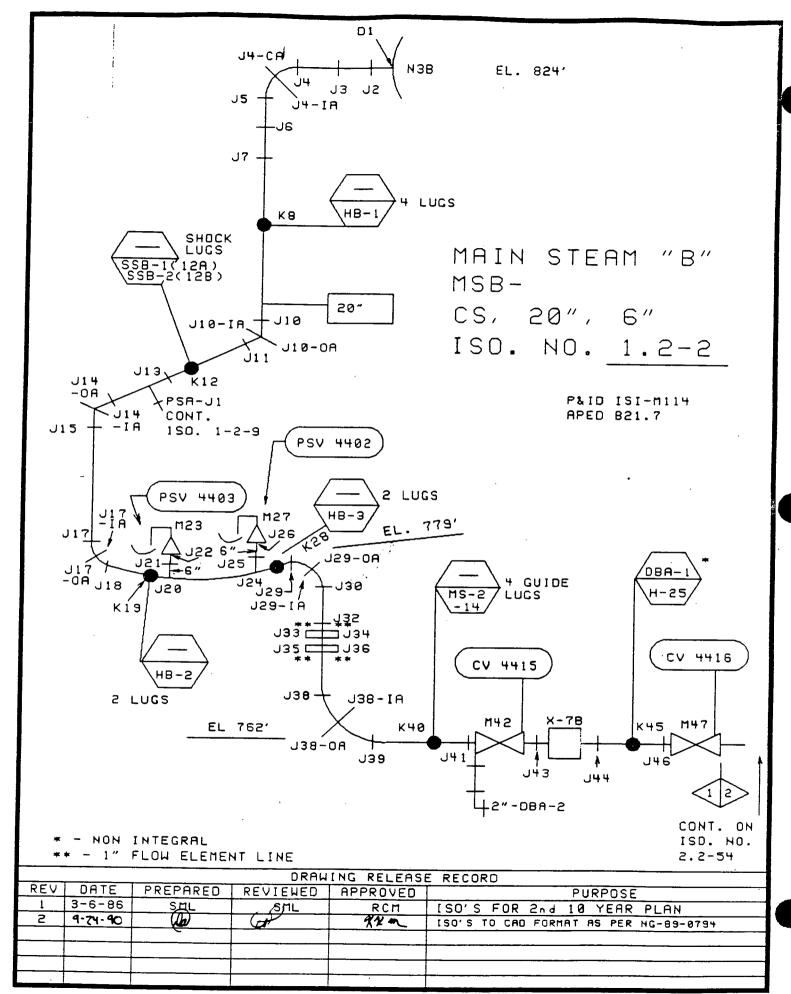
FIGURE NO. 1.1-8A

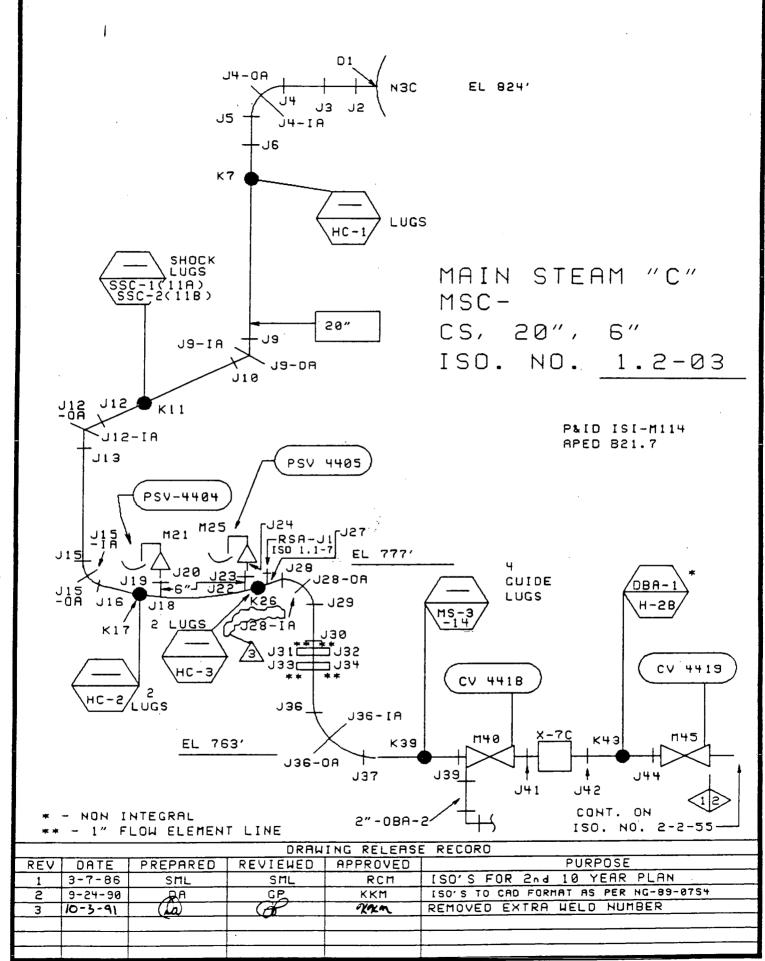
8 BOLTS PER CRD

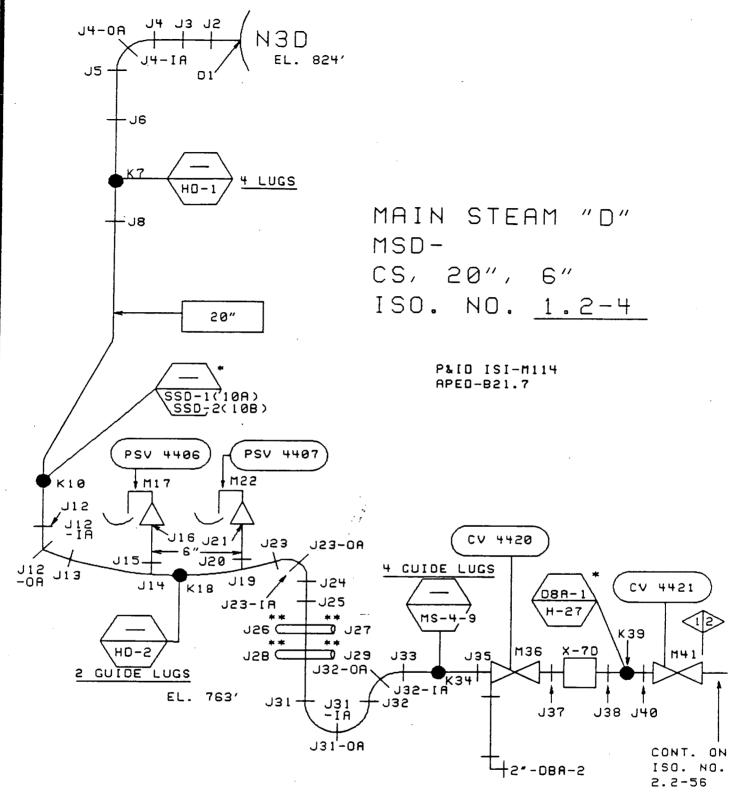
|     |          |   | DRAH     | ING RELEASI | RECORD                                |
|-----|----------|---|----------|-------------|---------------------------------------|
| REV | OATE     | PREPARED                                | REVIEHED | APPROVED    | PURPOSE                               |
| 1   | 4-3-86   | STIL                                    | SML      | RCM         | ISO'S FOR 2nd 10 YEAR PLAN            |
| 2   | 9-24-90  |   | a        | 4xa         | ISO'S TO CAD FORMAT AS PER NG-89-0794 |
| 2A  | 12-12-90 | 17)                                     | GP .     | 722         | change CAB location identification    |
|     |          |   |          |             |                                       |
|     |          |   |          |             |                                       |
|     |          | - · · · · · · · · · · · · · · · · · · · |          |             |                                       |





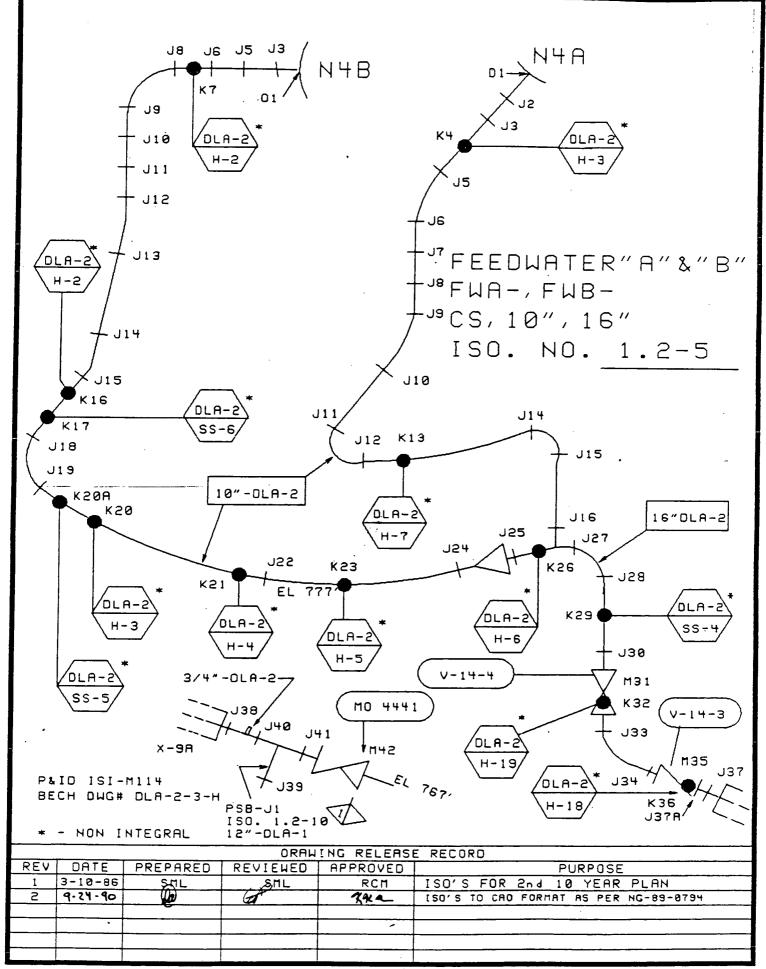


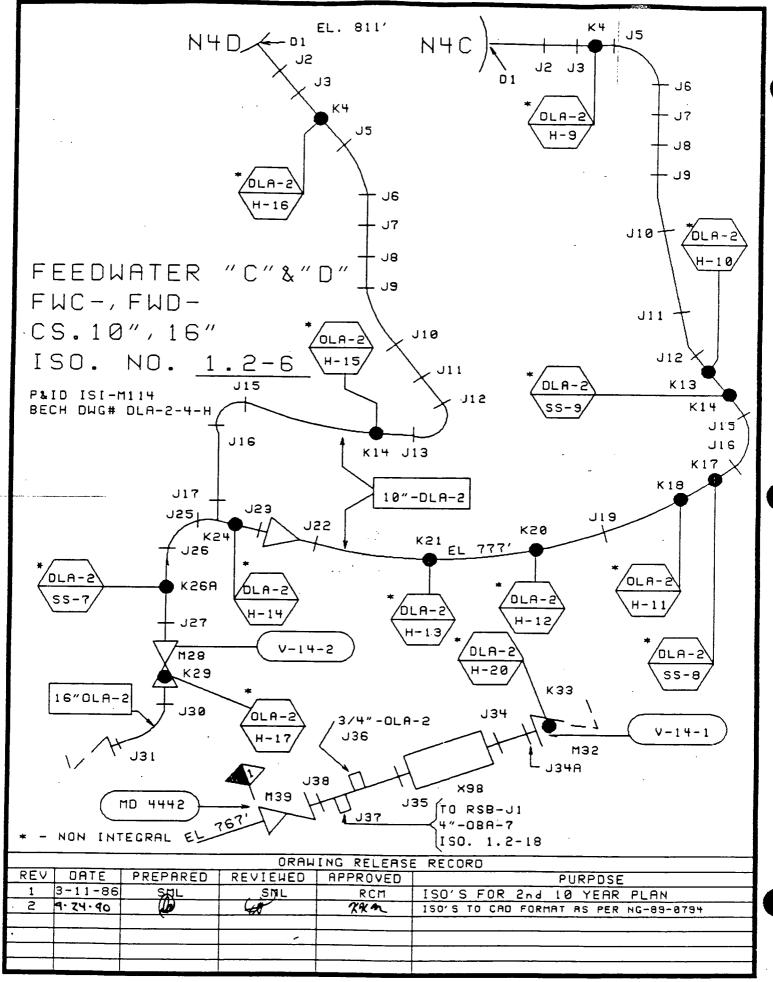


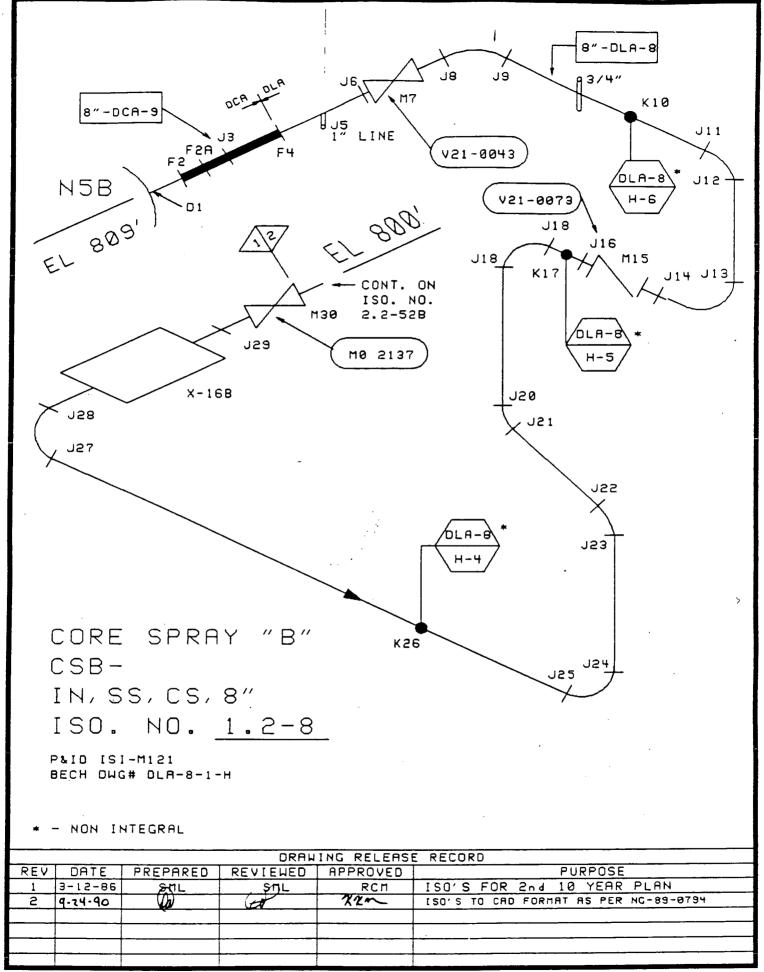


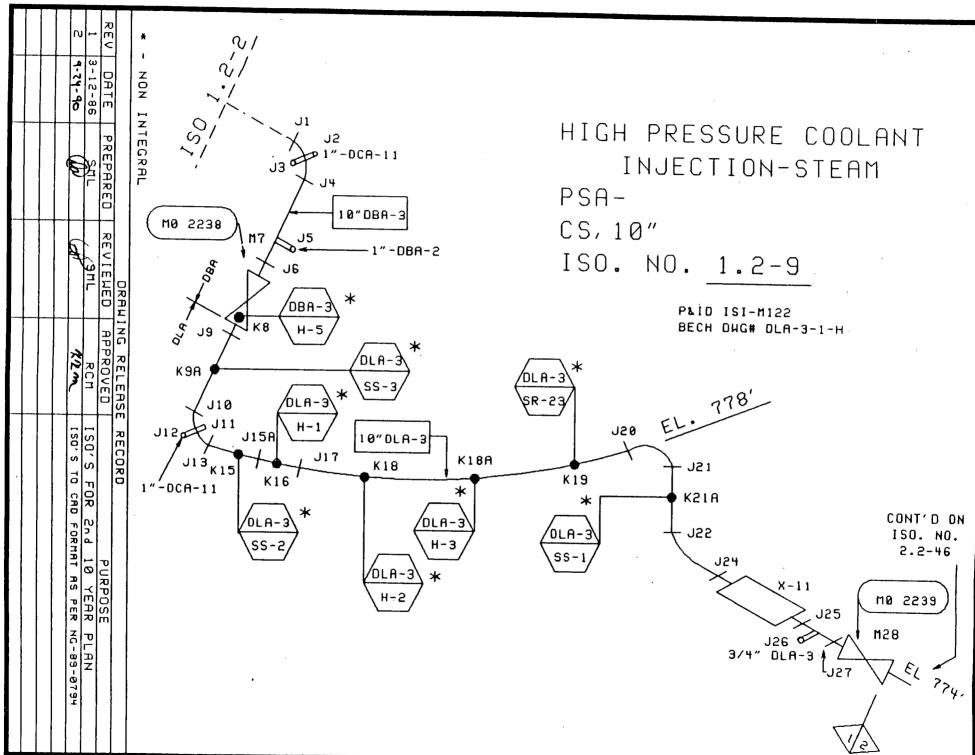
- \* NON INTEGRAL
- \*\* 1" FLOW ELEMENT LINE

|     |         |          | ORAW     | ING RELEASE | RECORD                                |
|-----|---------|----------|----------|-------------|---------------------------------------|
| REV | DATE    | PREPAREO | REVIEWED | APPROVED    | PURPOSE                               |
| 1   | 3-7-86  | ŞĦL      | , SML    | RCM         | ISO'S FOR 2nd 10 YEAR PLAN            |
| 2   | 9-24-90 | (b)      | الهجا    | 222         | ISO'S TO CAD FORMAT AS PER NG-89-0794 |
|     |         |          |          |             |                                       |
|     |         |          |          |             |                                       |
|     |         |          |          |             |                                       |
|     |         |          |          |             |                                       |

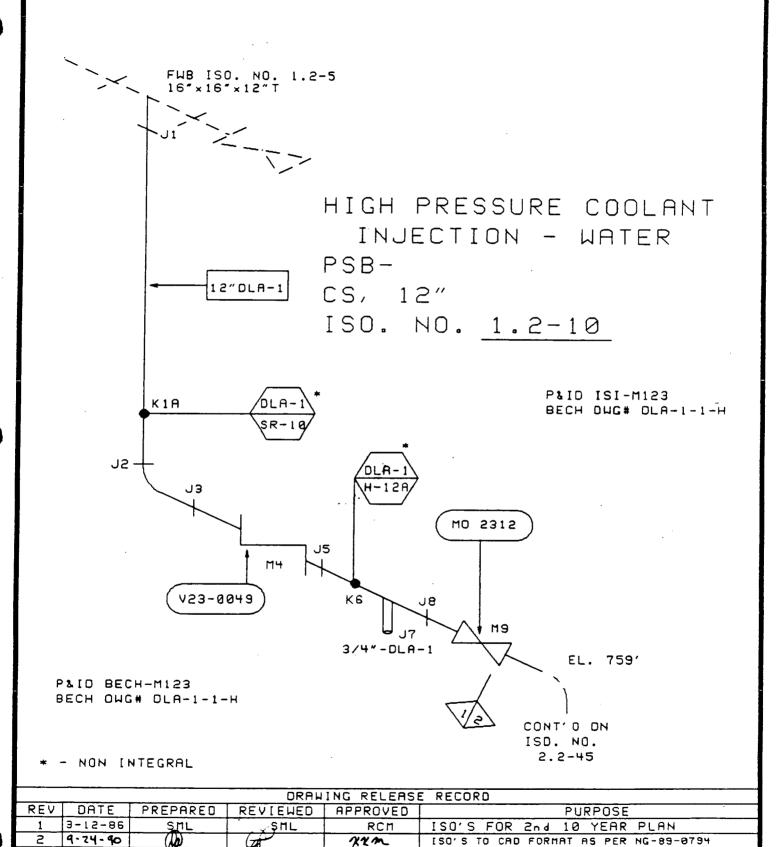


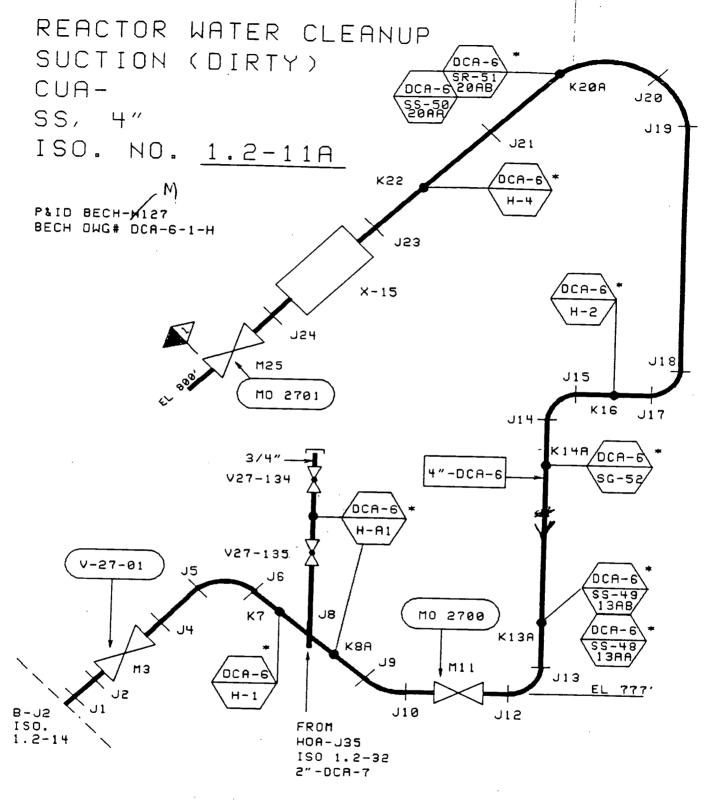






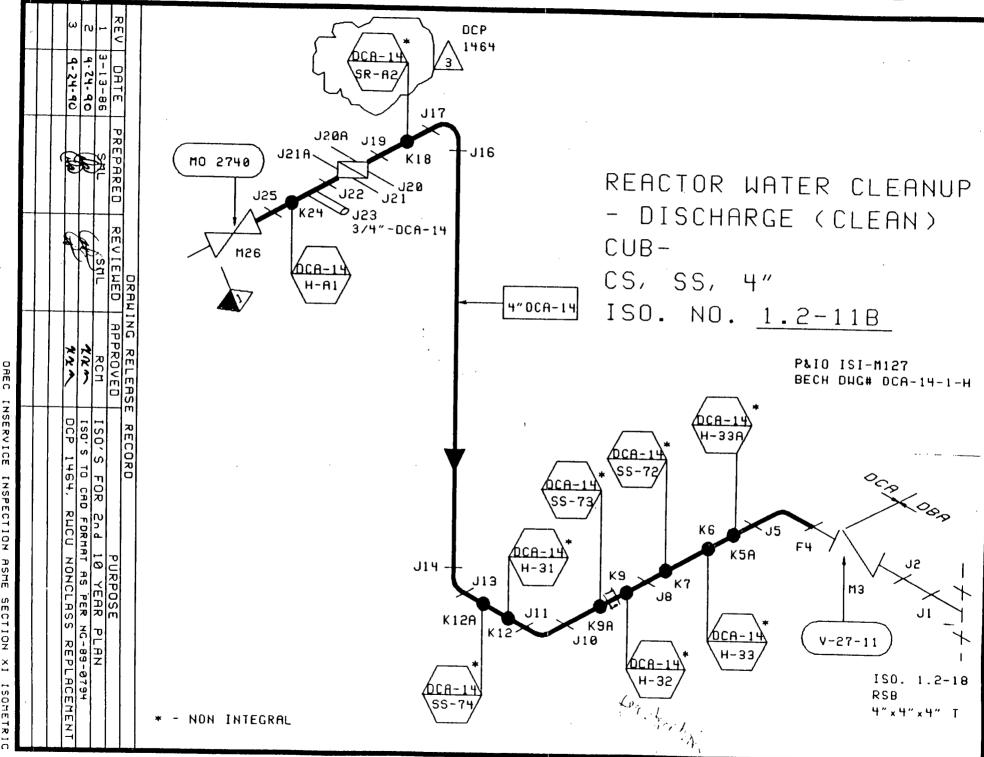
DREC INSERVICE INSPECTION ASME SECTION X1 [SOMETRIC



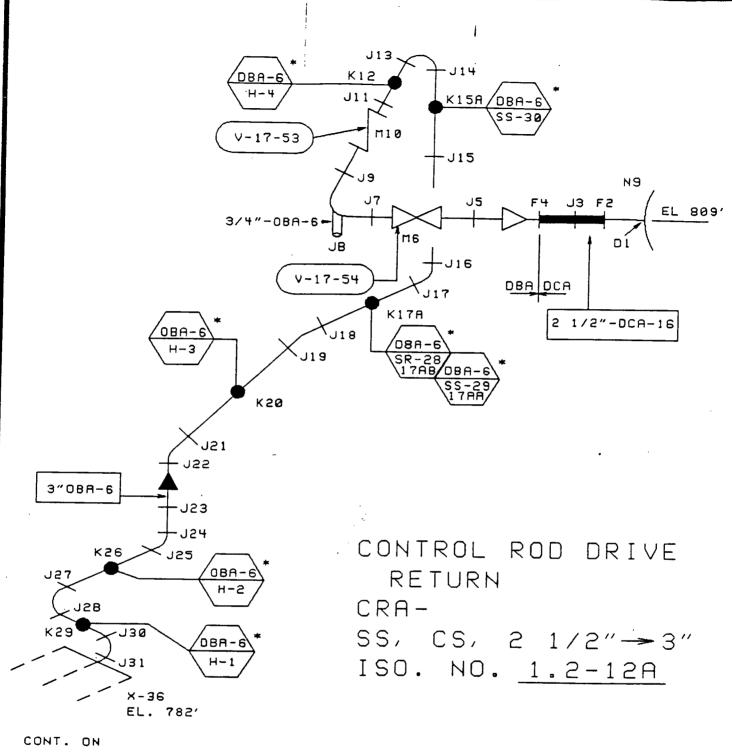


\* - NON INTEGRAL

| 0511 |         |          | DRAW     | ING RELEAS | RECORD                                |
|------|---------|----------|----------|------------|---------------------------------------|
| REV  | DATE    | PREPARED | REVIEWED | APPROVED   | PURPOSE                               |
|      | 3-13-86 |          | SML      | RCM        | ISO'S FOR 2nd 10 YEAR PLAN            |
|      | 9-24-90 |          | (d)      | xxm        | ISO'S TO CAD FORMAT AS PER NG-89-0794 |
|      |         |          |          |            |                                       |
|      |         | ·        |          |            |                                       |
|      |         |          |          |            |                                       |
|      |         |          |          |            |                                       |



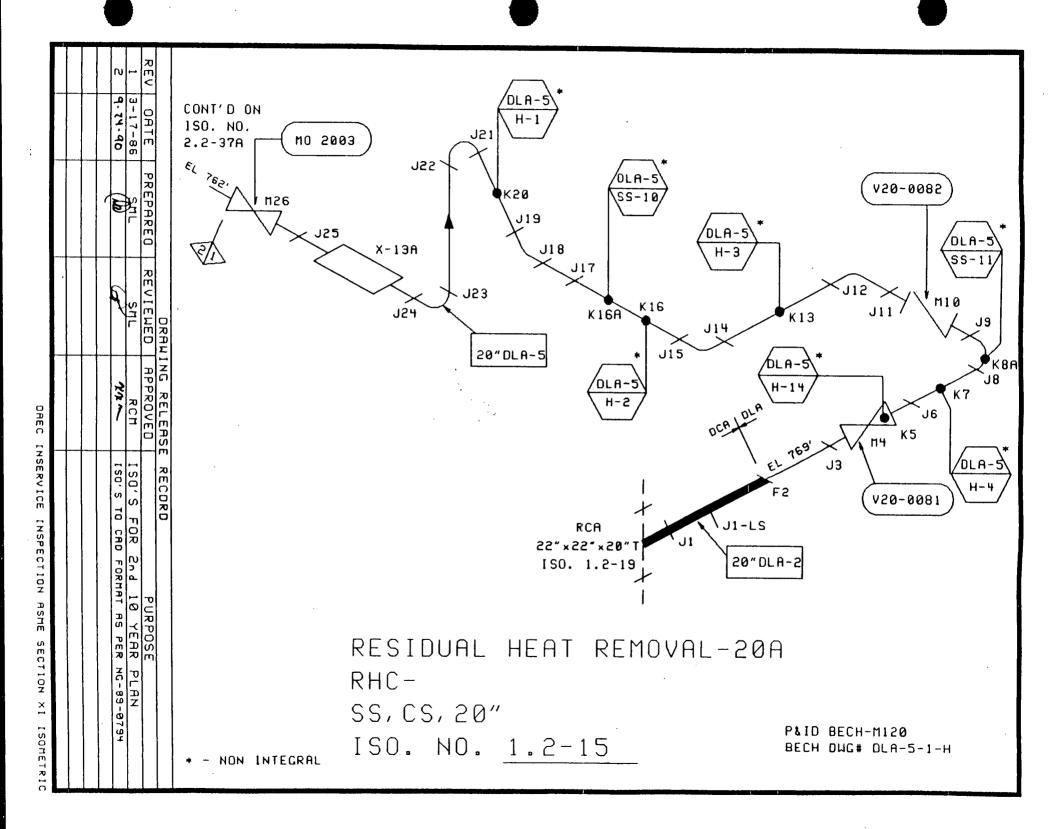
INSERVICE INSPECTION ASME SECTION XI ISOMETRIC



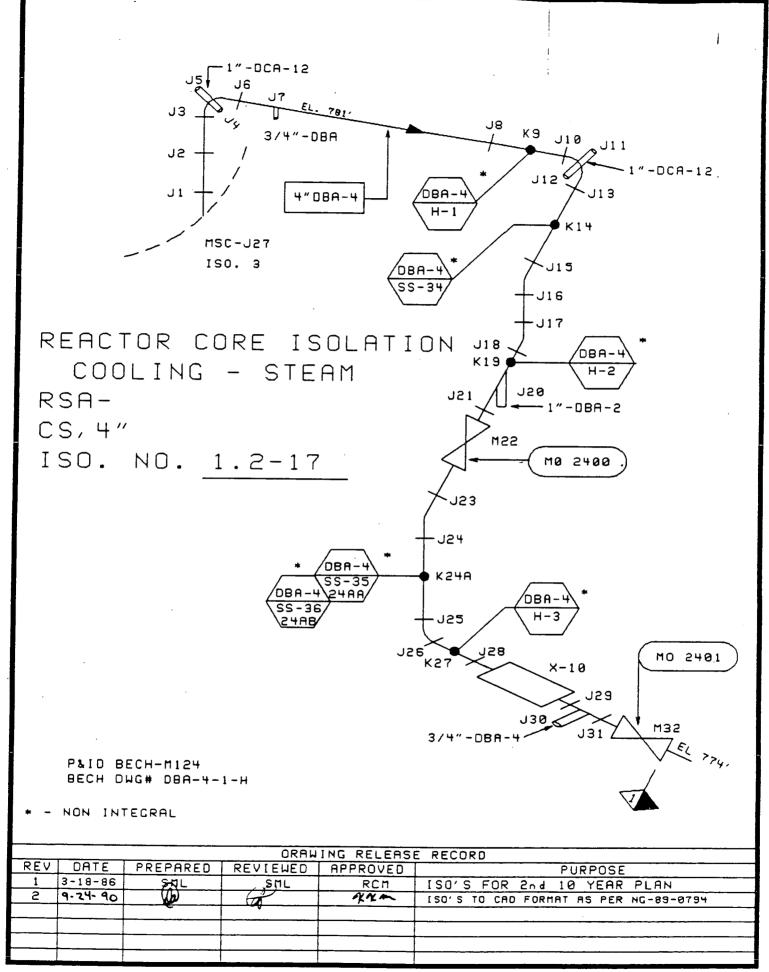
[SO. NO. 1.2-12B

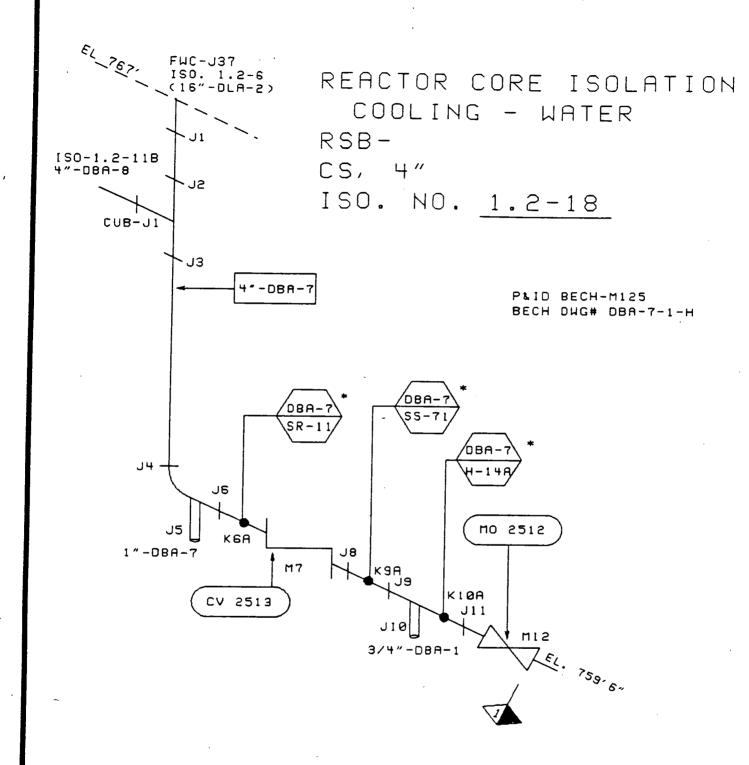
P&IS ISI-M117 BECH. DWG# DBA-6-1-H

|           |         |          | DRAW     | ING RELEASE | RECORD                                |
|-----------|---------|----------|----------|-------------|---------------------------------------|
| REV       | DATE    | PREPARED | REVIEWED | APPROVED    | PURPOSE                               |
| 1         | 3-13-86 | SUL      | ; SML    | RCM         | ISO'S FOR 2nd 10 YEAR PLAN            |
| 2         | 9-74-90 | (D)      | T.       | 22~         | ISO'S TO CAD FORMAT AS PER NG-89-0794 |
|           |         |          |          |             |                                       |
|           |         |          |          |             |                                       |
| <b>  </b> |         |          |          |             |                                       |
|           |         |          |          |             |                                       |



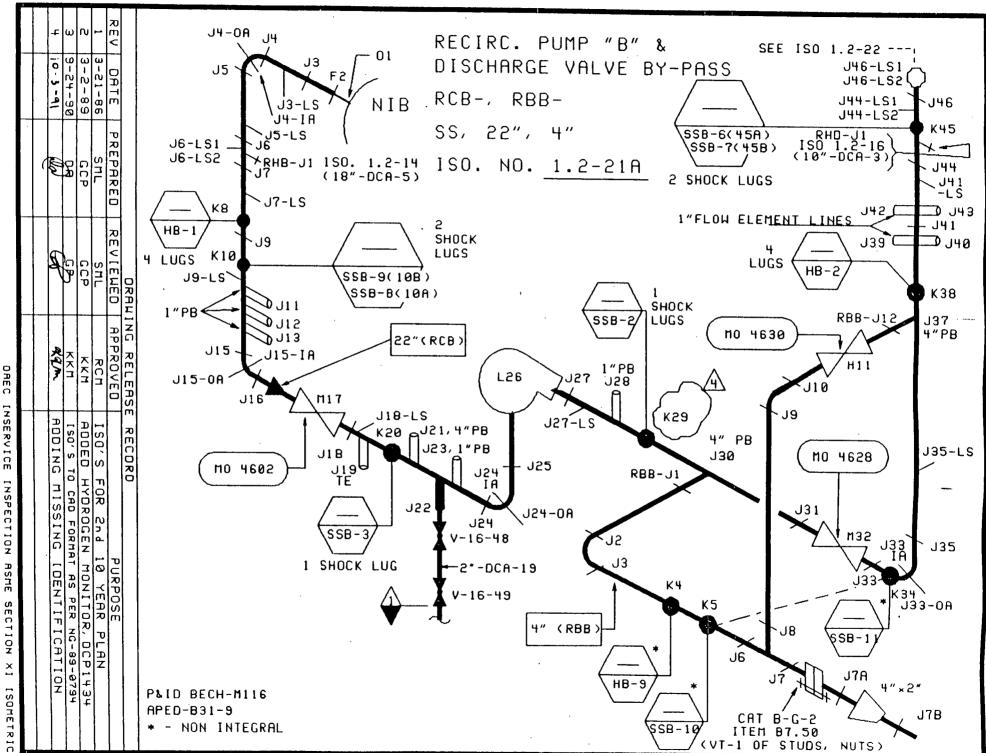
DREC INSERVICE INSPECTION ASME SECTION XI ISOMETR



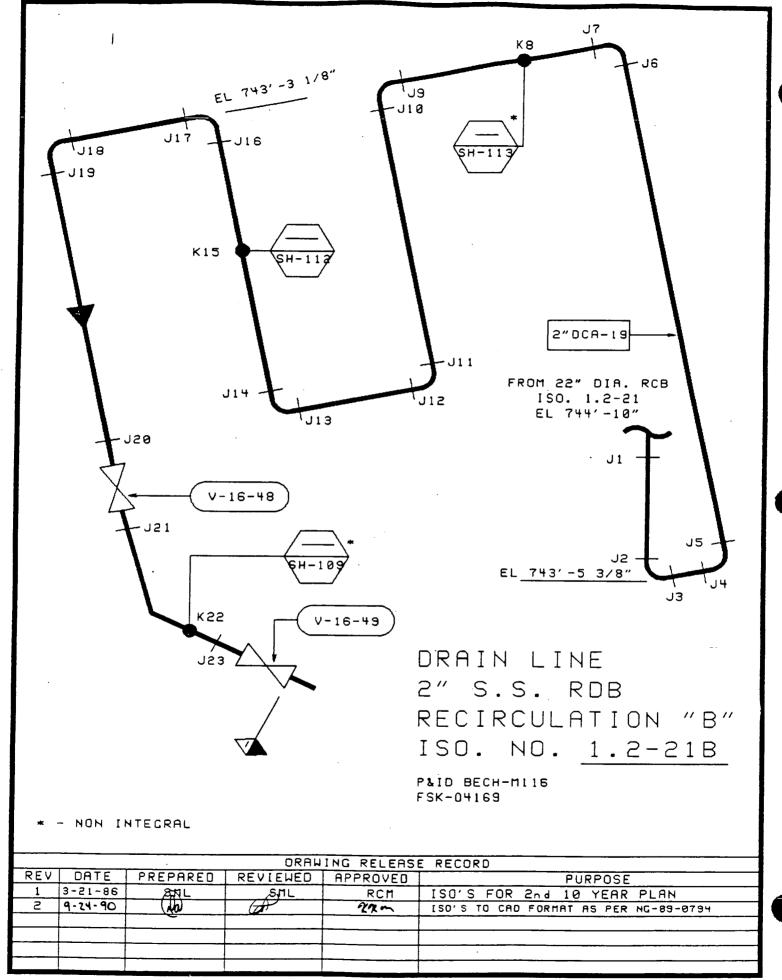


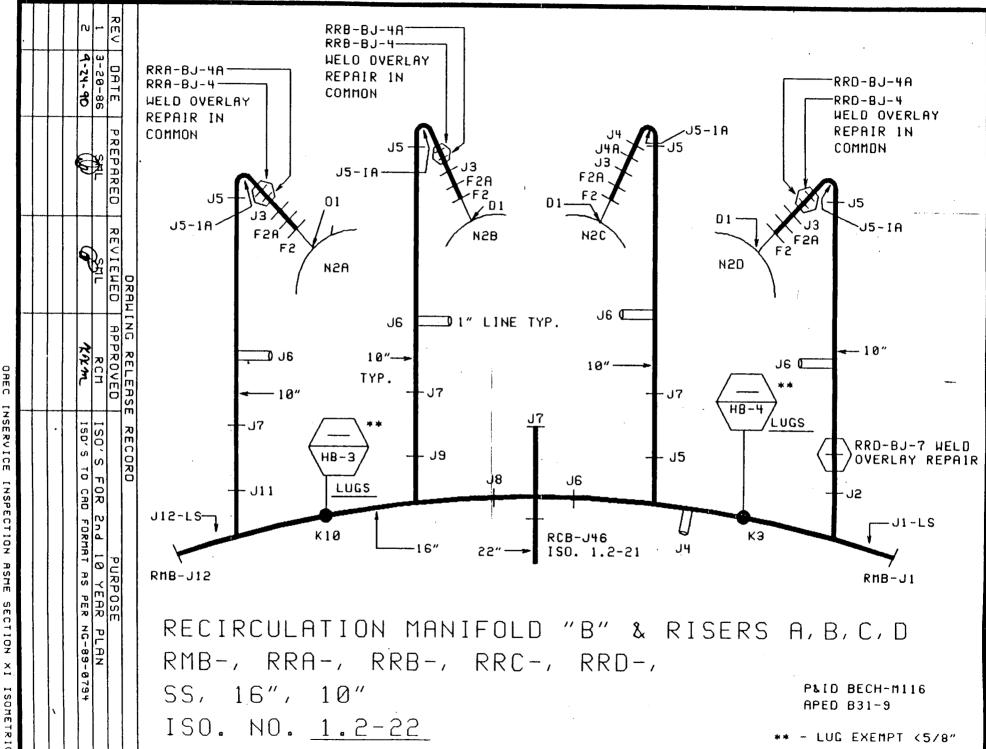
## \* - NON INTEGRAL

| DRAWING RELEASE RECORD |          |          |          |          |                                       |  |  |
|------------------------|----------|----------|----------|----------|---------------------------------------|--|--|
| REV                    | DATE     | PREPARED | REVIEWED | APPROVED | PURPOSE                               |  |  |
| 1                      | 3-19-86  | SAL      | SML      | RCM      | ISO'S FOR 2nd 10 YEAR PLAN            |  |  |
|                        | 9-24-90  |          | G G      | 2×12     | ISO'S TO CAD FORMAT AS PER NG-85-0794 |  |  |
|                        | ļ ļ      |          |          |          |                                       |  |  |
|                        | <u> </u> |          |          |          |                                       |  |  |
|                        |          |          |          |          |                                       |  |  |
| _                      |          |          |          |          |                                       |  |  |

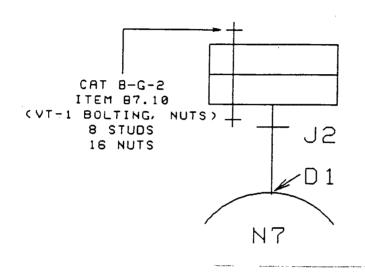


INSERVICE INSPECTION





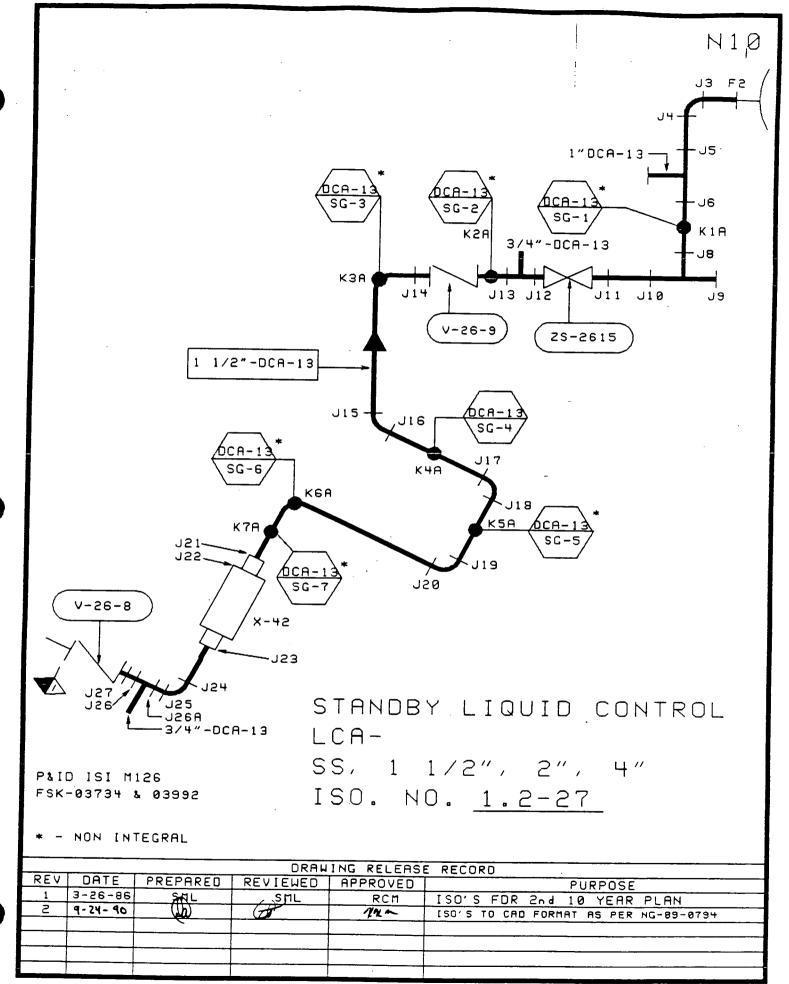
INSERVICE INSPECTION ASME SECTION ×

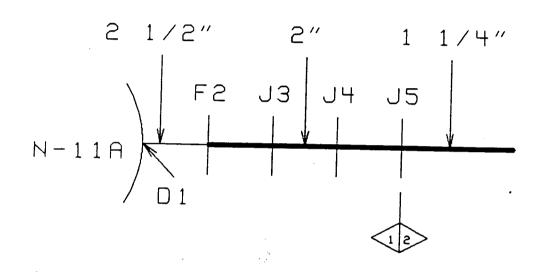


HEAD VENT HVA-CS, 4" ISO. NO. 1.2-24

P&ID BECH-M114 APED-B11-2655-104-3

| DRAWING RELEASE RECORD |         |             |          |          |                                       |  |
|------------------------|---------|-------------|----------|----------|---------------------------------------|--|
| REV                    | DATE    | PREPARED    | REVIEWED | APPROVED | PURPOSE                               |  |
| 1                      | 3-26-86 | SAL         | ∠ SML    | RCM      | ISO'S FOR 2nd 10 YEAR PLAN            |  |
| _2                     | 9-24-90 |             | G        | XIM      | ISO'S TO CHO FORMAT AS PER NG-99-0794 |  |
|                        |         | <del></del> | ···      |          |                                       |  |
|                        |         |             |          | •        |                                       |  |
|                        |         |             |          |          |                                       |  |
|                        |         |             |          |          |                                       |  |

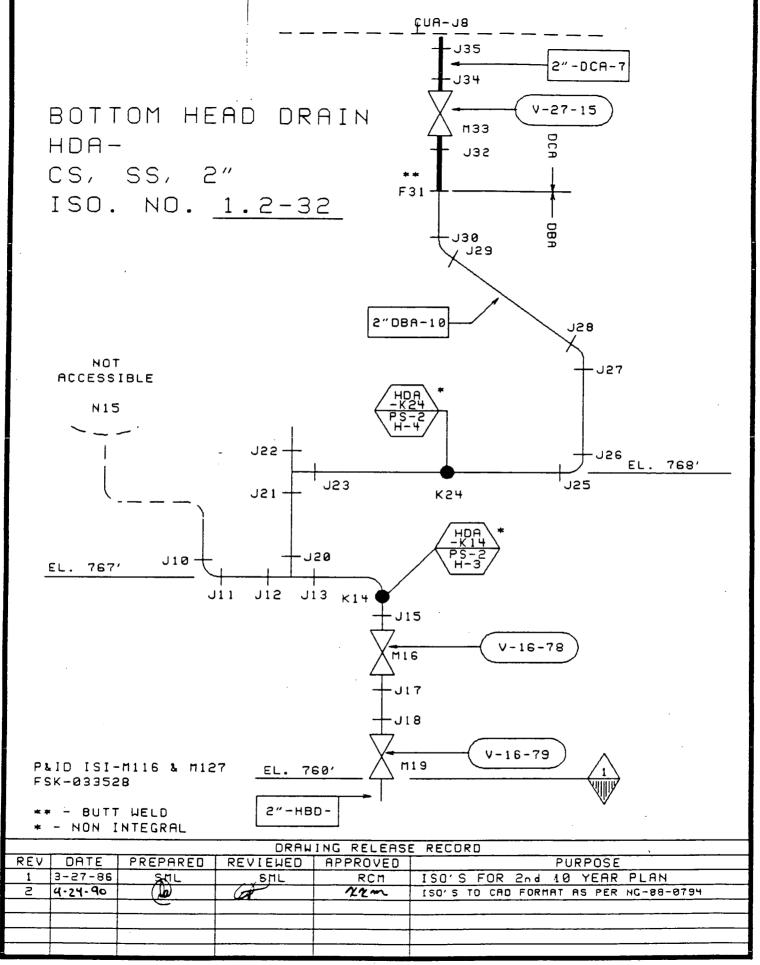


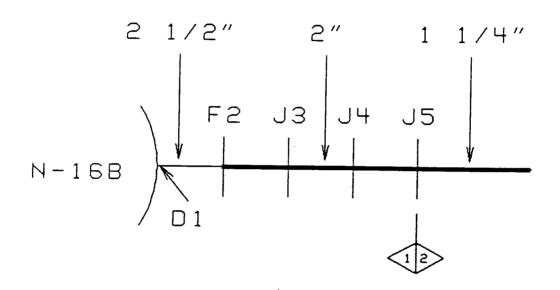


VESSEL INSTRUMENTATION N-11A VIA-SS, 1 1/4", 2", 2 1/2" ISO. NO. <u>1.2-28</u>

P&ID 8ECH-M115 FSK-5560

| 5.5 | T = = = -   | · · · · · · · · · · · · · · · · · · · | DRAW     | ING RELEASE | RECORD                                |
|-----|-------------|---------------------------------------|----------|-------------|---------------------------------------|
| REV |             | PREPARED                              | REVIEWED | APPROVED    | PURPDSE                               |
|     | 3-27-86     | SAL                                   | SML      | RCM         | ISO'S FOR 2nd 10 YEAR PLAN            |
|     | 9-24-90     | (LD)                                  | TH'      | 72m         | ISO'S TO CAD FORMAT AS PER NG-89-0784 |
|     | <del></del> |                                       |          |             |                                       |
|     | <u> </u>    |                                       |          |             |                                       |
|     |             |                                       |          |             |                                       |
|     |             |                                       |          |             |                                       |

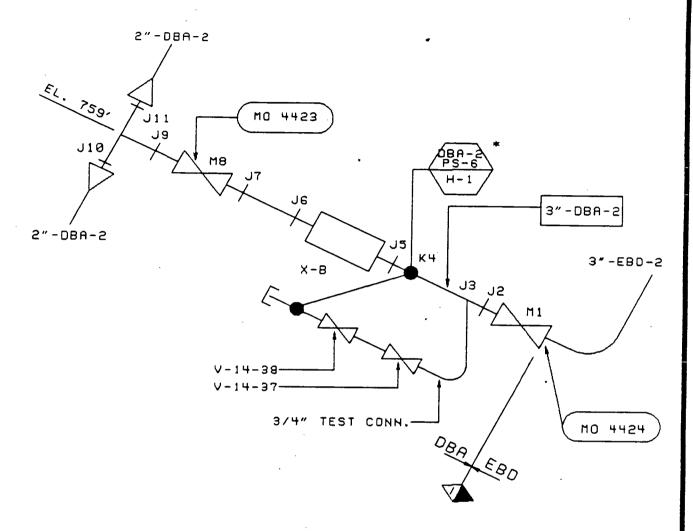




VESSEL INSTRUMENTATION N-16B VIF- SS, 1 1/4", 2", 2 1/2" ISO. NO. 1.2-34

P&ID BECH-M115 FSK-5556

|     |         |          | ORAW     | ING RELEASI | RECORD                                |
|-----|---------|----------|----------|-------------|---------------------------------------|
| REV | DATE    | PREPARED | REVIEHED | SPPROVED    | PURPOSE                               |
| 1   | 3-28-86 | SANL     | SML      | RCM         | ISO'S FOR 2nd 10 YEAR PLAN            |
| 2   | 9-24-90 | (44)     | GAP .    | xxm         | ISO'S TO CAD FORMAT AS PER NG-89-0794 |
|     |         |          |          |             |                                       |
|     |         |          |          |             |                                       |
|     |         |          |          |             |                                       |
|     |         |          |          |             |                                       |



MAIN STEAM DRAIN-COMMON

MDR-

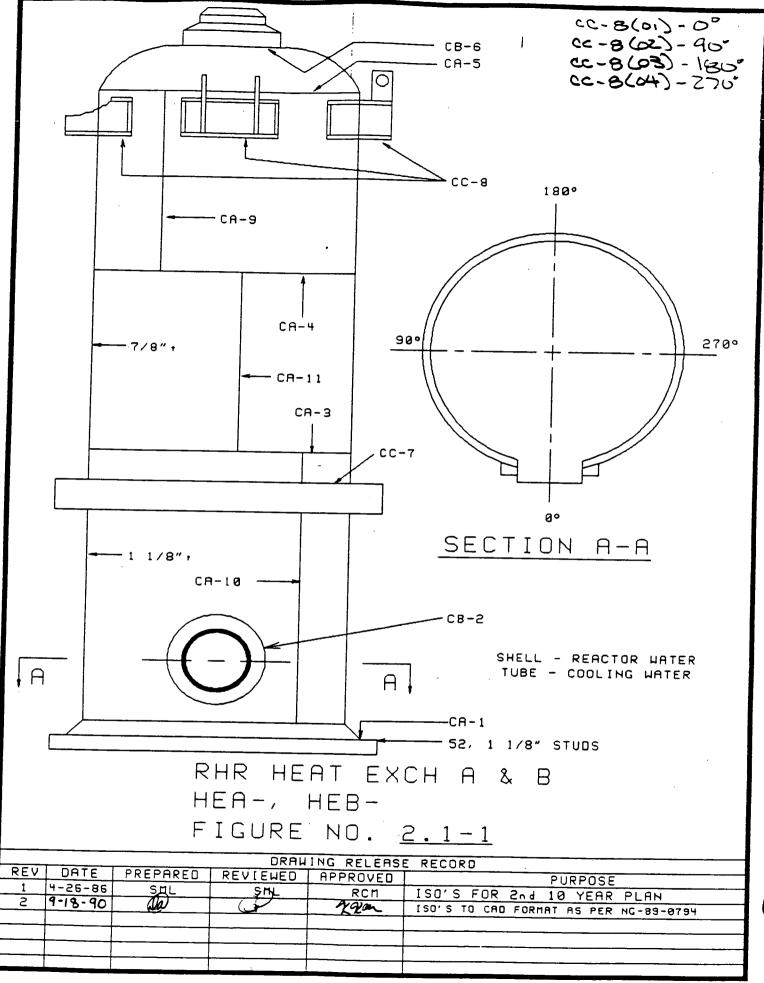
CS, 3"

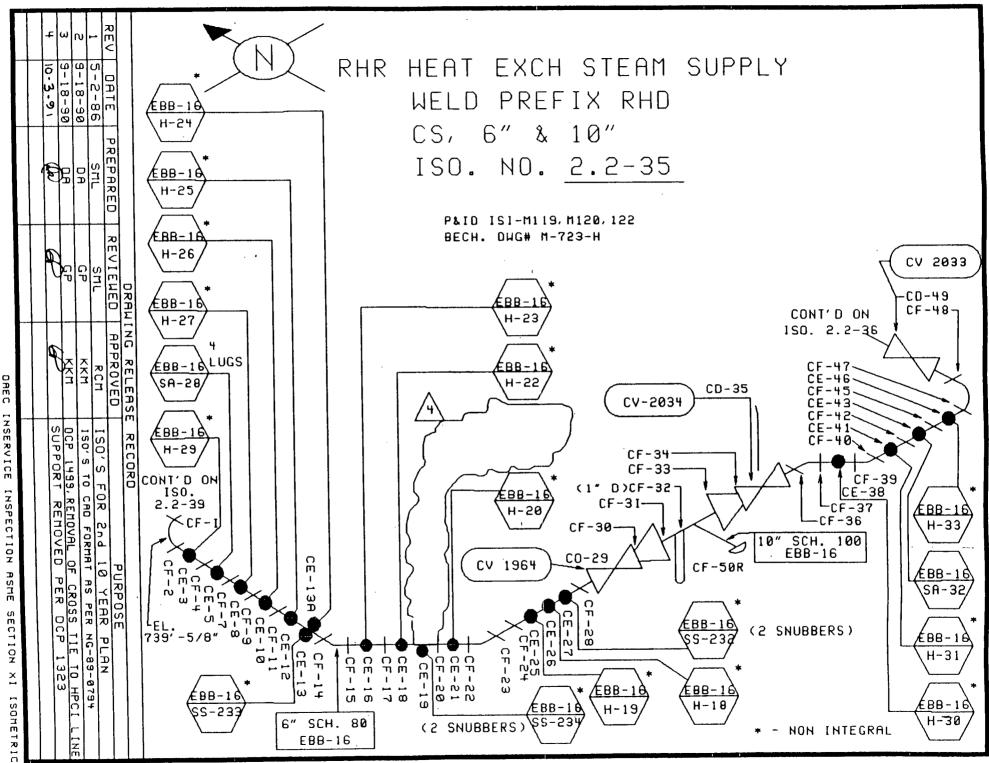
ISO. NO. <u>1.2-35</u>

P&ID ISI-M114 FSK-04220B

\* - NON INTEGRAL

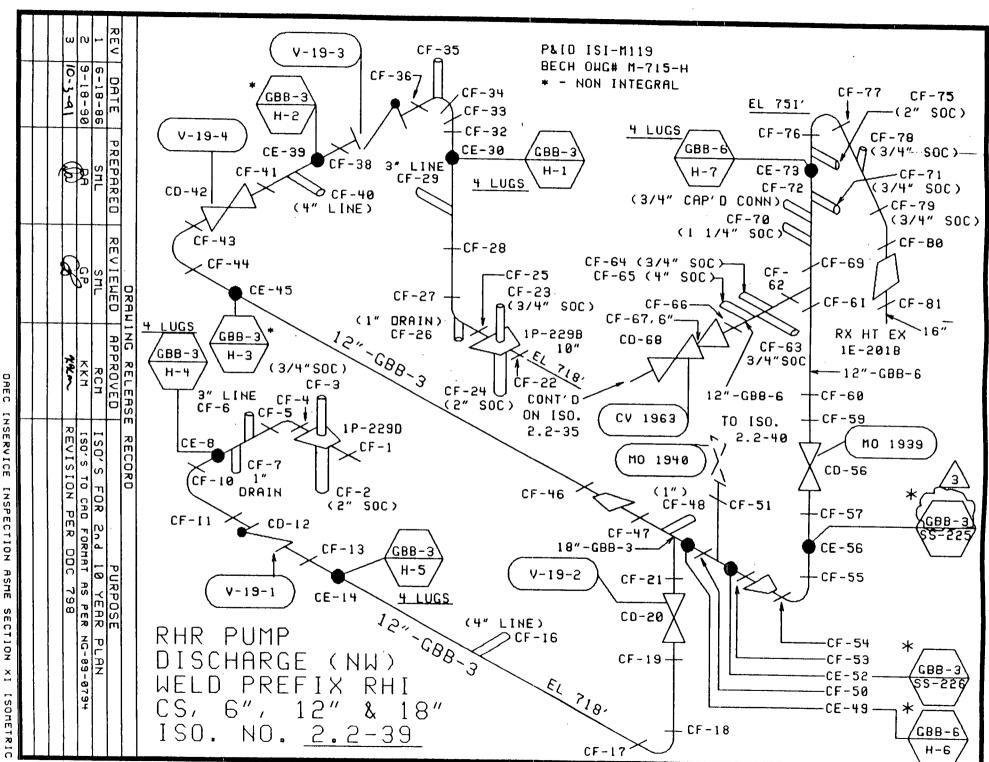
|     |         |          | DRAW     | ING RELEASE | RECORD                                |
|-----|---------|----------|----------|-------------|---------------------------------------|
| REV | DATE    | PREPARED | REVIEWED | APPROVED    | PURPOSE                               |
| 1   | 3-28-86 | 341r     | SML      | RCM         | ISO'S FOR 2nd 10 YEAR PLAN            |
| 2   | 9-24-90 | (44)     | Car      | R2M         | 150'S TO CAD FORMAT AS PER NG-89-0794 |
|     |         |          |          |             |                                       |
|     |         |          |          | -           |                                       |
|     |         |          |          | ·           |                                       |
|     |         |          |          |             |                                       |

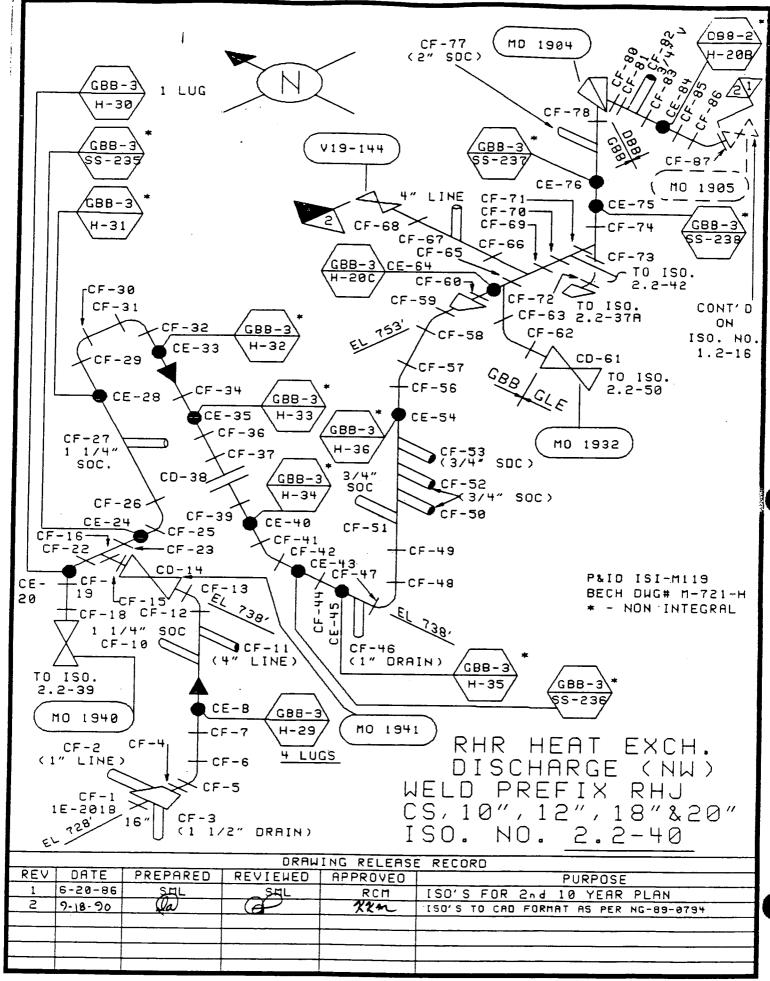


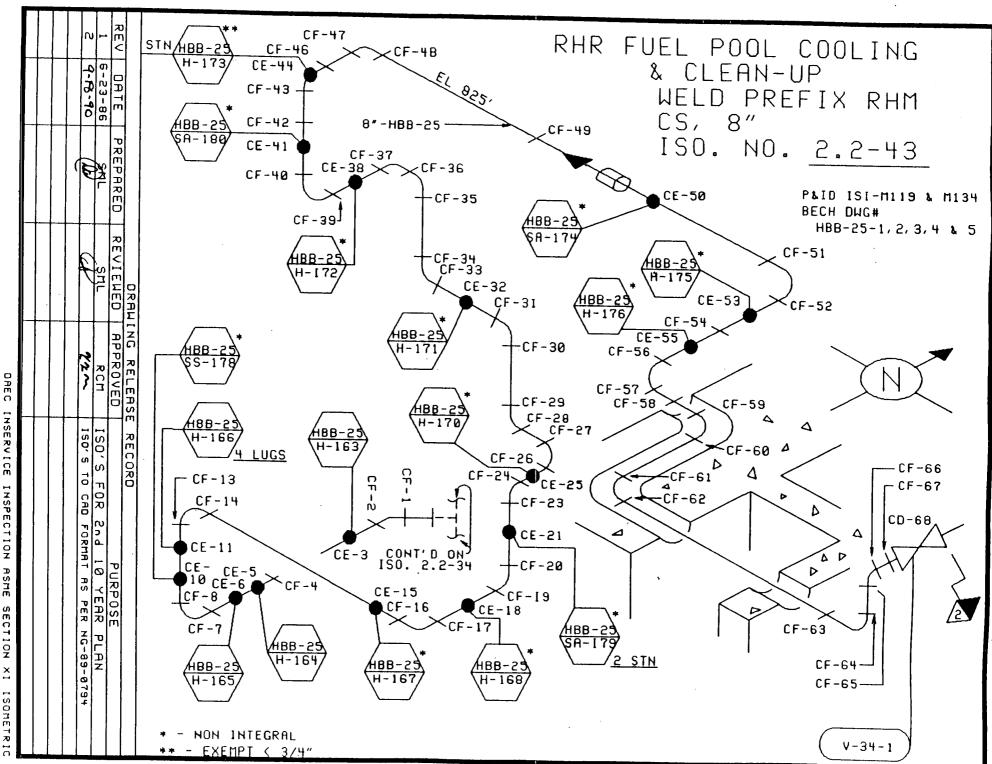


INSERVICE

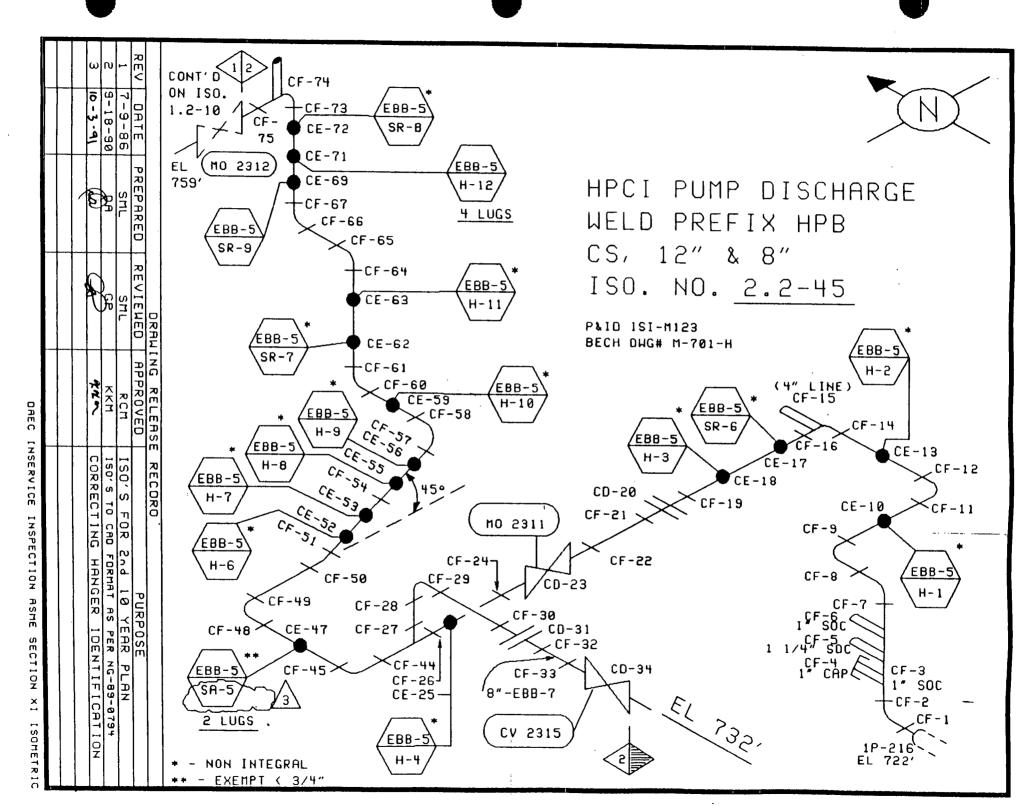
INSERVICE INSPECTION ASME SECTION × ISOMETRI







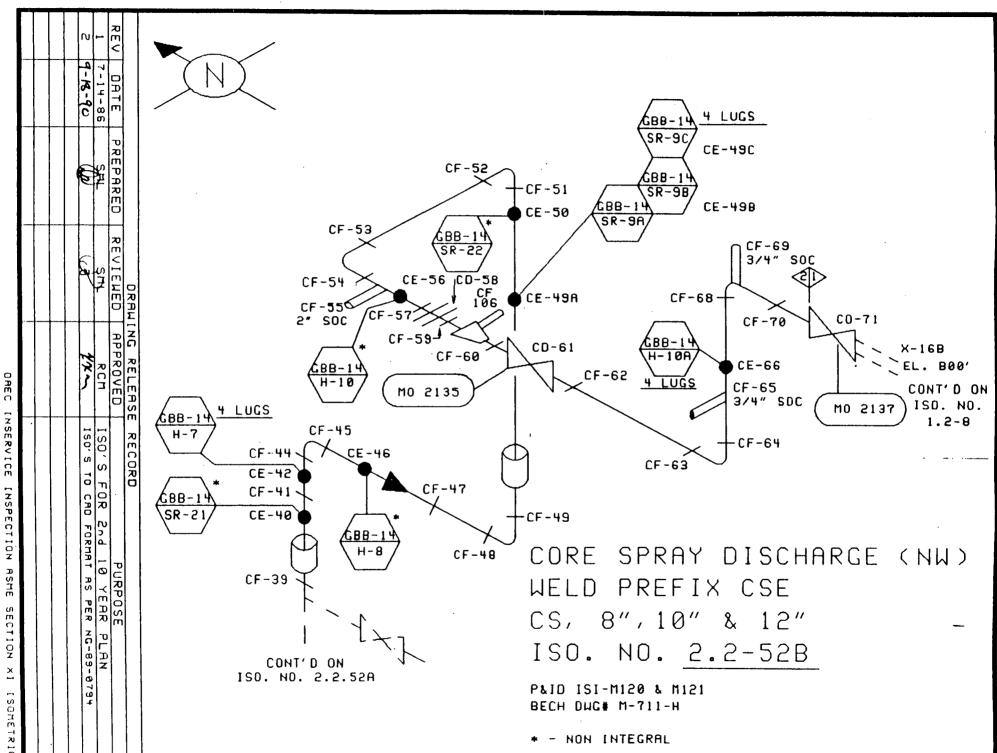
DAEC INSERVICE INSPECTION ASME SECTION ×



SOC 9-18-90 98-11-31HD 19-211B 4 LUGS HBB-118, SPRAY SUCTION (NW) CORE EPARED WELD PREFIX CSD CF-40 CF-36 CS, 12" 3/4" SOC CD-38 ISO. NO. 2.2-51 CF-37 CF-35 CF-34 34 CF-32 CE-33 2" \$0C CD-30 V-21-2 P&1D 1S1-M121 APPROVED BECH DWG# M-709-H нвв-SR-5 24~ RCI DREC HBB-CF-22-CE-21 CF-31 -CF-24 CD-23 H-6 -R-78 HBB-CF-20 HBB-ISO'S FOR H-5 **HBB** CF-27 SR-CF-19 45°H CE-56 CE-18 45°H CF-11 HBB-CF-10 HBB-MD 2120 CF-N-227B CE-12 SR-3 17 PURPOSE
FORMAT AS PER NG-89-8794 CF-16 CF-14 CF-13 CF-.12"-HBB-1 MO 2146 CE-7 ′нвв-H-11 SOMETR NON INTEGRAL EXEMPT < 3/4"

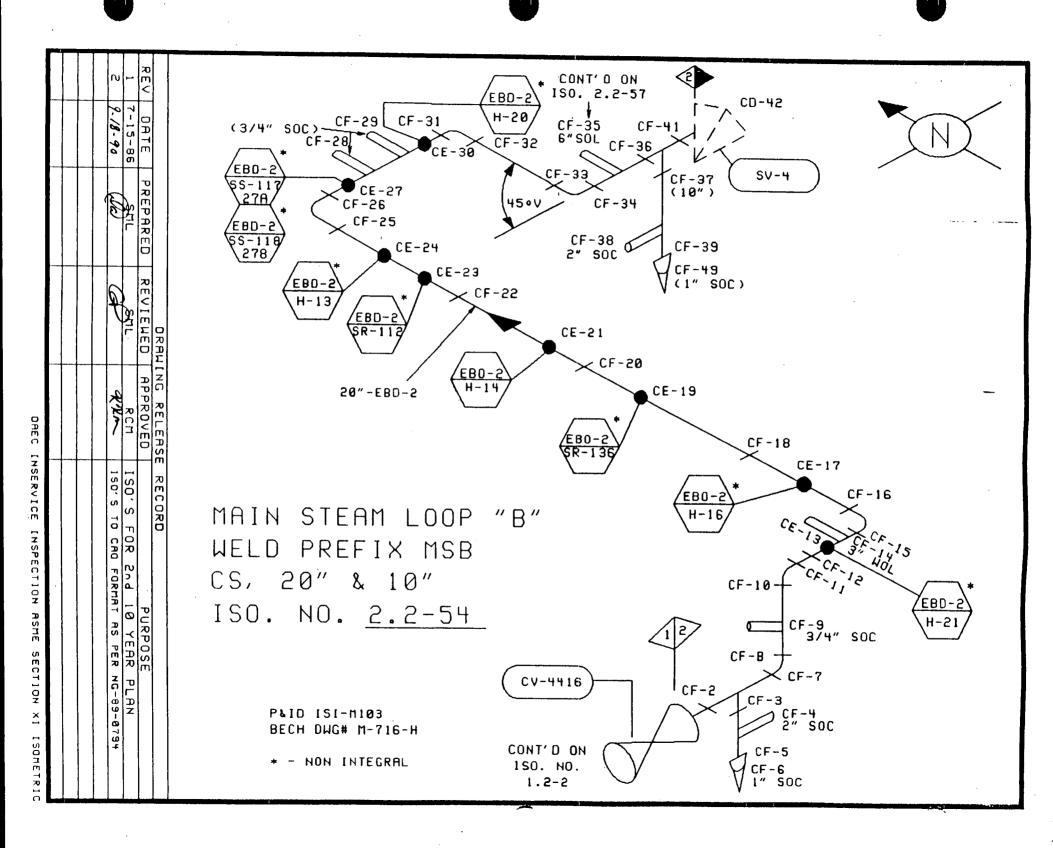
INSERVICE INSPECTION ASME SECTION X

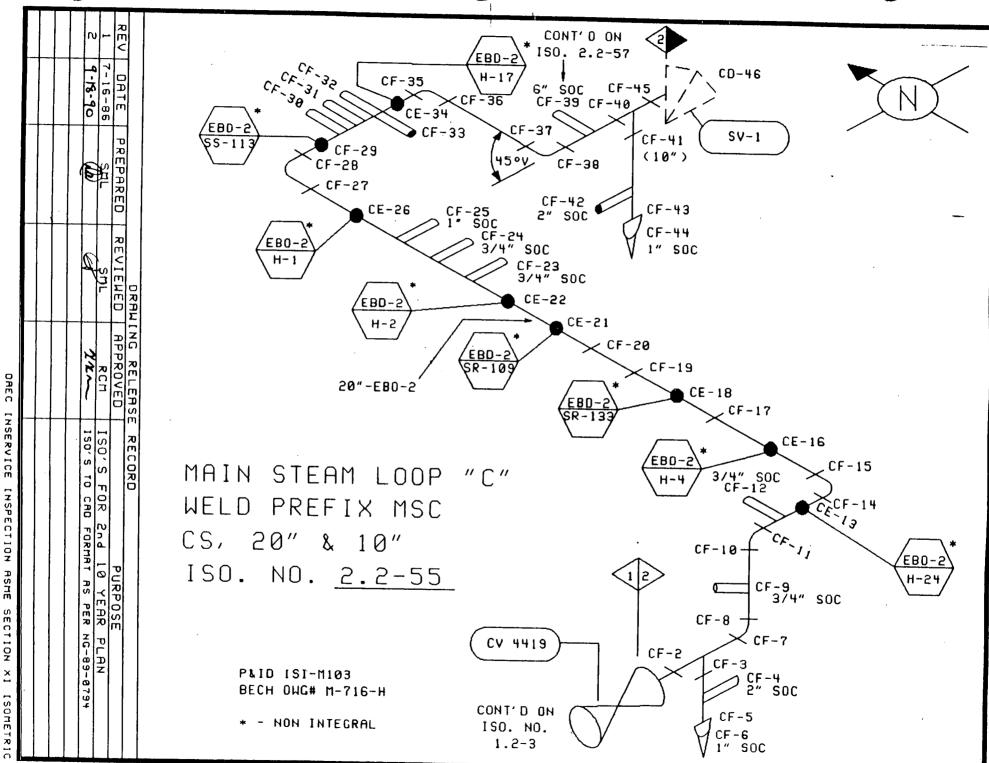
INSERVICE INSPECTION ASME SECTION XI ISOMETRI



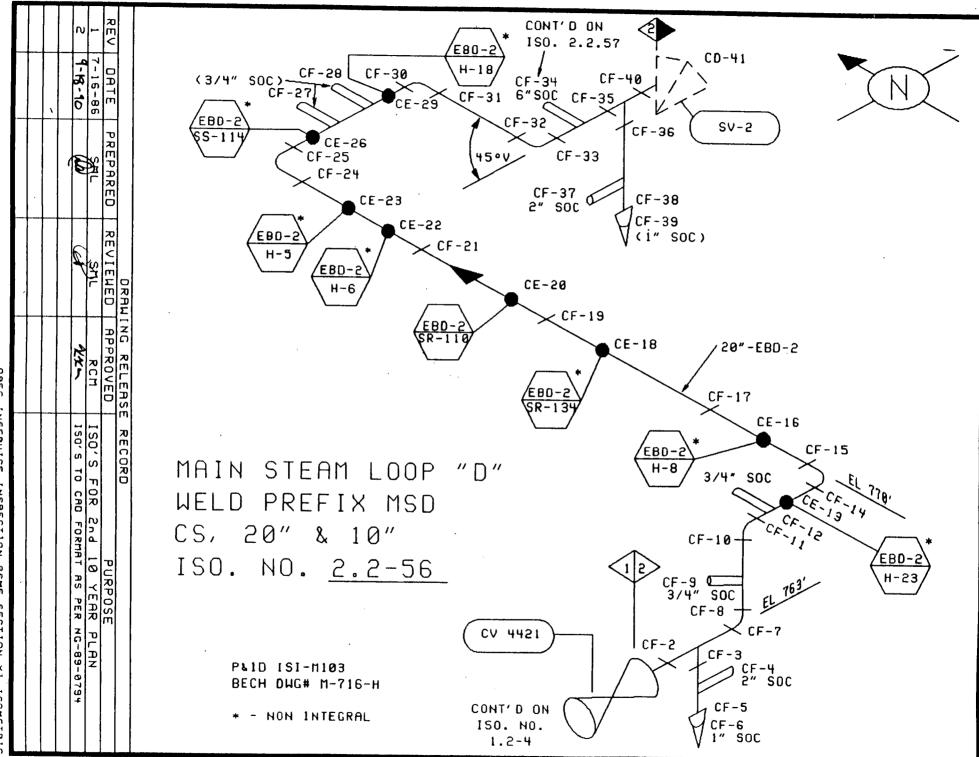
| DAEC  | REV DATE PREPARED REVIEWED APPROVED 1 7-14-86 SAL STL RCM 2 9-18-90 (4)                | EBD-2  CF-35  CF-35  CF-36  CF-37  CF-37  CF-38  CF-38  CF-28  SOC.  CF-38  CF-42  CF-42  CF-43  CF-43  CF-43  CF-44  CF-44  CF-44  CF-44  CF-45  CF-45  CF-45  CF-47  CF-48  CF- |
|---|--|--|
| C INSERVICE INSPECTION ASME SECTION XI ISOMETRI | ASE RECORD  PURPOSE  ISO'S FOR 2nd 10 YEAR PLAN  ISO'S TO CAO FORMAT AS PER NG-89-0794 | MAIN STEAM LOOP "A"  WELD PREFIX MSA  CS, 20" & 10"  ISO. NO. 2.2-53  PMID ISI-MI03 BECH DHG# M-716-H  * - NON INTEGRAL  CE-18  EBD-2  H-12  CF-17  CF-10  1 1/4" SOC  CF-3  CF-3  CF-4  2" SOC  CF-5  CF-6  1.2-1   |

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DAEC INSERVICE INSPECTION ASME SECTION ×

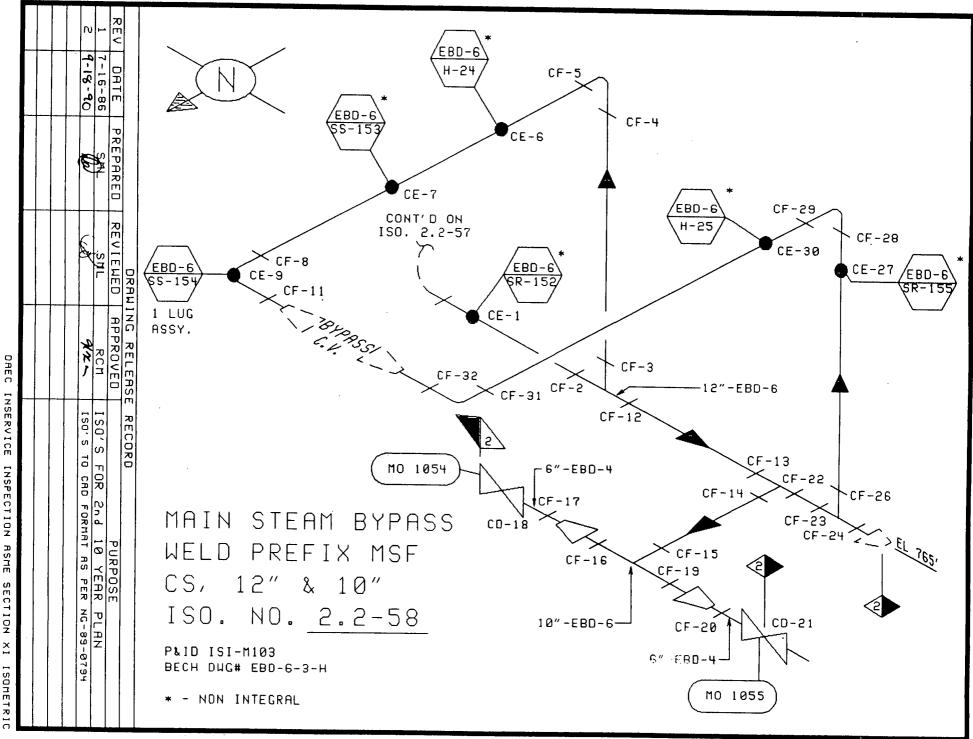


OREC INSERVICE INSPECTION ASME SECTION XI ISOMETRIC

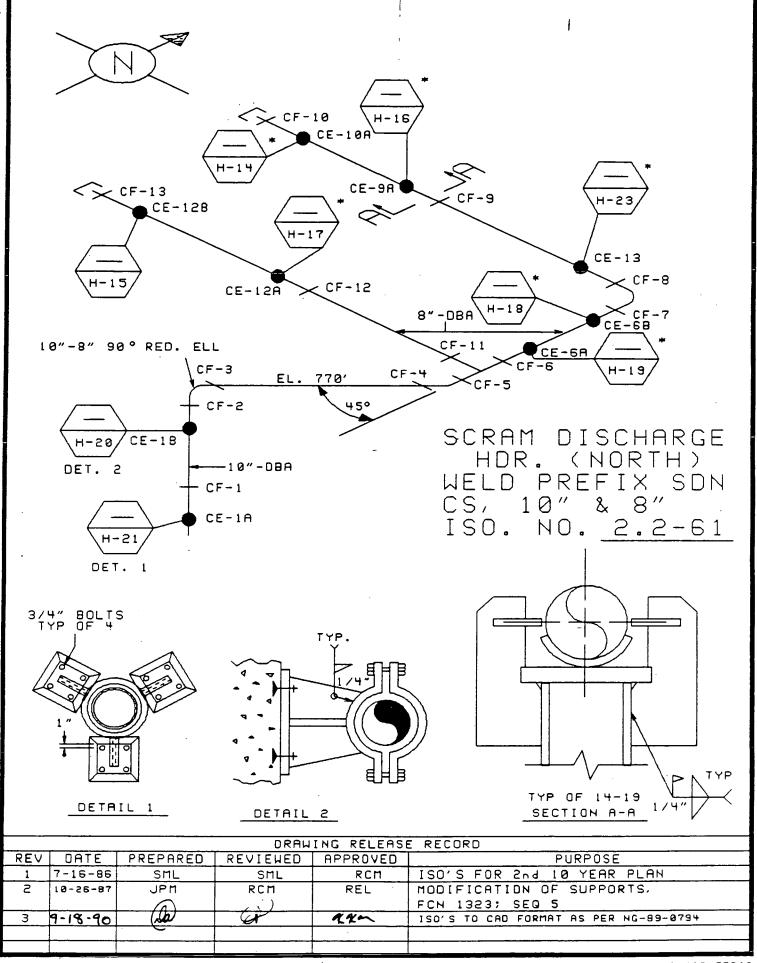
|            | 70   |   |
|------------|--|---|
|            | REV 0  | * CF-3<br>CE-4  |
|            | 0ATE<br>7-16-86<br>4-18-90   | H-18 CF-5 CF-2  |
|            | PREPAR   | RED. TEE CF-9   |
|            | ARED   | CF-13 CF-10 |
|            | REVI   | 12"-EBD-6<br>CF-14<br>CF-15<br>CF-15  |
|            | SUL<br>SUL<br>SUL<br>SUL<br>SUL<br>SUL<br>SUL<br>SUL<br>SUL<br>SUL | CF-16<br>CF-20<br>CF-21<br>CF-21<br>CF-7<br>CF-21<br>3/4" SOC<br>CONT' D ON<br>ISO. 2.2-53  |
|            | ING RE   | ISO. 2.2-56<br>CF-11  |
| OBEC IN    | NG RELEASE<br>APPROVED<br>RCM                                      |   |
| INSERVICE  | RECORD<br>ISO'S FO   | CF-19 CF-24   |
|            | FOR<br>FOR   | CE-25 * CF-34 + CF-35 FD 0*   |
| INSPECTION | FORM   | CF-26 ISO. 2.2-55  CF-27  CF-27  CF-27  |
| ASME S     | PURPOSE<br>10 YEAR<br>1F AS PER                                    | CE-32 (EBD-6) CE-37 (S-15)  |
| SECTION    |  | H-20<br>CF-29<br>CF-30<br>CF-39<br>CF-39<br>CF-39   |
| DS1 IX     | PLAN<br>PLAN   | WELD PREFIX MSE  PAID ISI-M103  PAID ISI-M103  CONT'D ON  |
| ISOMETRIC  |  | CS, 12" & 6"<br>ISO. NO. <u>2.2-57</u> *- NON INTEGRAL  |

•

•



DAEC INSERVICE INSPECTION ASME SECTION XI



1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

#### STATUS OF WORK FOR SECOND INTERVAL

(Those percentages shown are actual, where the percentages exceed the allowable only the maximum (34% for period one and 67% for period two) will be taken credit for).

#### CLASS 1

| Item No. | Total # | Period 1 | Period 2 | Remarks                      |
|----------|---------|----------|----------|------------------------------|
|          |         |          |          |                              |
| B1.11    | 1       | 0%       | 0%       | Permissible                  |
| B1.12    | 1       | 0%       | 0%       | Permissible                  |
| B1.21B   | ī       | 0%       | 0%       | Permissible                  |
| B1.21T   | ī       | 33%      | 66%      | 1/3 each period              |
| B1.22B   | ī       | 0%       | 0%       | Permissible                  |
| B1.22T   | 1       | 33%      | 66%      | 1/3 each period              |
| B1.30    | ī       | 33%      | 66%      | 1/3 each period              |
| B1.40    | ī       | 33%      | 66%      | 1/3 each period              |
| вз.90    | 34      | 28%      | 58%      |                              |
| B3.100   | 34      | 28%      | 58%      |                              |
| B4.12    | 89      | 0%       | 0%       | Permissible                  |
| B4.13    | 30      | 0%       | 0%       | Permissible                  |
| B5.10    | 14      | 73%      | 73%      | See Note 1                   |
| B5.20    | 8       | 12%      | 50%      | See Note 2                   |
| B5.130   | 8       | 50%      | 75%      | See Note 3                   |
| B5.140   | 2       | 0%       | 50%      |                              |
| B6.10    | 60      | 0%       | 66%      | Permi <b>s</b> sibl <b>e</b> |
| B6.20    | 60      | 0%       | 66%      | Permissible                  |
| B6.40    | 60      | 0%       | 66%      | Permissible                  |
| B6.50    | 60      | 0%       | 66%      | Permissibl <b>e</b>          |
| B6.180   | 2       | 0%       | 100%     | 16 per pump                  |
| B6.190   | 2       | 0%       | 100%     |                              |
| B6.200   | 2       | 0%       | 100%     | 16 per pump                  |

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

#### STATUS OF WORK FOR SECOND INTERVAL

(Those percentages shown are actual, where the percentages exceed the allowable only the maximum (34% for period one and 67% for period two) will be taken credit for).

#### CLASS 1 (cont.)

| Item No. | Total #     | l # Period 1 Period 2 |      | Remarks  |
|----------|-------------|-----------------------|------|--|
| B7.10    | 3           | 66%                   | 66%  |  |
| B7.50    | 3<br>2<br>2 | 0%                    | 50%  |  |
| B7.60    | 2           | 0%                    | 66%  |  |
| B7.70    | 40          | N/A                   | N/A  | Relief Request<br>NDE-002 (when<br>disassembled) |
| B7.80    | 89          | N/A                   | N/A  | See Note 4                                       |
| B8.10    | 9           | 18%                   | 64%  | -  |
| B9.11    | 131         | 38%                   | 68%  | Minimum for interval                             |
| B9.12    | 51          | 19%                   | 60%  |  |
| B9.21    | 12          | 41%                   | 66%  |  |
| B9.31    | 8           | 37%                   | 100% |  |
| B9.32    | 1           | 0%                    | 100% |  |
| B9.40    | 41          | 19%                   | 46%  |  |
| B10.10   | 34          | 35%                   | 73%  | See Note 5                                       |
| B10.20   | . 8         | 25%                   | 50%  |  |
| B12.20   | 2           | 0%                    | 100% | •  |
| B12.50   | 45          | N/A                   | N/A  | Relief Request<br>NDE-002                        |
| B13.10   | *           | *                     | *    |  |
| B13.20   | *           | *                     | *    | *Accessible areas                                |
| B13.21   | *           | *                     | *    | during refueling outages.                        |
| B13.22   | *           | *                     | *    | Permissible                                      |
| B14.10   | 28          | 0%                    | 0%   | Permissible                                      |

Central Iowa Power Cooperative Corn Belt Power Cooperative Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

#### STATUS OF WORK FOR SECOND INTERVAL

(Those percentages shown are actual, where the percentages exceed the allowable only the maximum (34% for period one and 67% for period two) will be taken credit for).

#### CLASS 1 (cont.)

| Item No. | Total # | Period 1 | Period 2 | Remarks                    |
|----------|---------|----------|----------|----------------------------|
| B15.10   | 3       | N/A      | N/A      | 100% each refueling outage |
| B15.11   | 3       | N/A      | N/A      | Once per interval          |
| B15.50   | 1       | N/A      | N/A      | 100% each refueling outage |
| B15.51   | 1       | N/A      | N/A      | Once per interval          |
| B15.60   | 2       | N/A      | N/A      | 100% each refueling outage |
| B15.61   | 2       | N/A      | N/A      | Once per interval          |
| B15.70   | 1       | N/A      | N/A      | 100% each refueling outage |
| B15.71   | 1       | N/A      | N/A      | Once per interval          |

#### PART J pages 4 of 6

### INSERVICE INSPECTION REPORT September 11,1990 through April 27,1992

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Marion, IA. Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

#### STATUS OF WORK FOR SECOND INTERVAL

(Those percentages shown are actual, where the percentages exceed the allowable only the maximum (34% for period one and 67% for period two) will be taken credit for).

#### CLASS 2

| Item No. | Total #    | Period 1 | Period 2 | Remarks           |
|----------|------------|----------|----------|-------------------|
|          |            |          |          |                   |
| C1.10    | 2          | 50%      | 50%      |                   |
| C1.20    | 1          | 0%       | 100%     |                   |
| C2.21    | 2          | 0%       | 50%      | ,                 |
| C3.10    | 5          | 20%      | 100%     | •                 |
| C3.20    | 44         | 16%      | 59%      |                   |
| C5.11    | 77         | 33%      | 66%      |                   |
| C5.21    | 39         | 33%      | 66%      |                   |
| C5.31    | 4          | 100%     | 100%     |                   |
| C7.10    | 2          | N/A      | N/A      | Once per period   |
| C7.20    | 2          | N/A      | N/A      | Once per interval |
| C7.30    | 12         | N/A      | N/A      | Once per period   |
| C7.40    | 14         | N/A      | N/A      | Once per interval |
| C7.50    | 3          | N/A      | N/A      | Once per period   |
| C7.60    | 3          | N/A      | N/A      | Once per interval |
| C7.70    | 1 <b>2</b> | N/A      | N/A      | Once per period   |
| C7.80    | 12         | N/A      | N/A      | Once per interval |

1) Owners: Iowa Electric Light and Power Company P.O. Box 351 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Marion, IA. Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date:  $\frac{2}{1/75}$
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

#### STATUS OF WORK FOR SECOND INTERVAL

(Those percentages shown are actual, where the percentages exceed the allowable only the maximum (34% for period one and 67% for period two) will be taken credit for).

#### SUPPORTS

#### CLASS 1

| Item No.       | Total #   | Period 1   | Period 2   | Remarks |
|----------------|-----------|------------|------------|---------|
| F2.00<br>F3.00 | 15<br>166 | 20%<br>35% | 60%<br>67% |         |
| CLASS 2        |           |            | 50% min    | ·       |
|                |           | 16%-34%    | 67% max    | _ ,     |
| Item No.       | Total #   | Period 1   | Period 2   | Remarks |
| F1.00          | 71        | 38%        | 67%        | ·       |
| F2.00          | 34        | 20%        | 58%        |         |
| F3.00          | 231       | 34%        | 70%        |         |

#### Note 1 - Item Number B5.10

11 Nozzle-to-Safeend welds were completed during Outage 08, period 1. These were submitted in the Summary Report for that period thus credit was taken for those completed. During period 2, 4 of the 11 Nozzle-to-Safeend welds were examined again and are submitted in this Summary Report. Because these 4 were already examined the percentages do not change. 7 of the 11, completed during Outage 08, are scheduled for examination during the remainder of this interval.

1) Owners: Iowa Electric Light and Power Company
 P.O. Box 351
 Cedar Rapids, IA. 52406

Central Iowa Power Cooperative Corn Belt Power Cooperative Marion, IA. Humboldt, IA.

- 2) Plant: Duane Arnold Energy Center, Palo, IA. 52324
- 3) Plant Unit: #1
- 4) Owners Certificate of Authorization (if required): N/A
- 5) Commercial Service Date: 2/1/75
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

### STATUS OF WORK FOR SECOND INTERVAL

(Those percentages shown are actual, where the percentages exceed the allowable only the maximum (34% for period one and 67% for period two) will be taken credit for).

#### Note 2 - Item Number B5.20

There was one nozzle-to-safeend weld  $\leq$  4" scheduled during Outage 08, period 1. Because of an oversight, there weren't any scheduled in Outage 09, period 1. CRA-F002 was completed during Outage 10 which brings the percentage within Code allowable. There were 2 more completed for this refueling outage which brings the percentage to 50% at the end of period 2.

Note 3 - Item Number B5.130

There are two scheduled for the Outage 12 including CSA-F002A which was completed during Outage 08.

Note 4 - Item Number B7.80 (CRD Bolting)

There are no percentages calculated for this item number because each CRD that is removed a VT-1 examination is performed on the associated bolting. There are usually 20 scheduled per outage.

Note 5 - Item Number B10.10

Relief Request NDE-008 requires MSA-K035, MSB-K040, MSC-K038 and MSD-K034 to be visually (VT-3/4) examined every period versus a surface exam on the integral attachment. This is counted into the percentage which makes it appear high.

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2) Plant: Duane Arnold Energy Center, Palo, IA. 52324

3) Plant Unit: #1

4) Owners Certificate of Authorization (if required): N/A

5) Commercial Service Date: 2/1/75

6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

#### RELIEF REQUESTS

The following are the relief requests that were used during the period of this Summary Report.

| Relief Request # | Description   |
|------------------|---|
| NDE-002          | All Valves under Category B-M-<br>2                                 |
| NDE-003          | Class 2 Piping Welds (NDE Exemption)                                |
| NDE-005          | HPB-CE069 Lugs (Inaccessible)                                       |
| NDE-006          | Level III Recertification Requirements                              |
| NDE-007          | All Valve Pressure Retaining<br>Bolting under Category B-G-2        |
| NDE-008          | MSC-K038 and MSD-K034, Surface examination of integral attachments. |



| System or<br>Component<br>Description | A<br>C | R | Inspection<br>Requirement | Weld or<br>Component<br>Description             | UT<br>Report<br>Number | PT<br>Report<br>Number | Visual<br>Report<br>Number | ISI<br>ISO/Fig.<br>Number | Comments  |
|---------------------------------------|--------|---|---------------------------|---|------------------------|------------------------|----------------------------|---------------------------|---|
| RPV Interior                          | C<br>X | J | C,J                       | Core Spray<br>Spargers                          |                        |                        | *                          | None                      | Spargers A,B,C,D Thermal Sleeve A,B and T-Box Welds   |
|                                       | x      |   | В                         | CRDRL Nozzle                                    |                        |                        | *                          | 1.1.6                     |   |
|                                       | х      |   | В                         | Feedwater<br>Nozzle A                           |                        |                        | *                          | 1.1.6                     |   |
|                                       | х      |   | В                         | Feedwater<br>Nozzle B                           |                        |                        | *                          | 1.1.6                     |   |
|                                       | х      |   | В                         | Feedwater<br>Nozzle C                           |                        |                        | *                          | 1.1.6                     |   |
|                                       | х      |   | В                         | Feedwater<br>Nozzle D                           |                        |                        | *                          | 1.1.6                     |   |
|                                       | x      |   | . B                       | Feedwater<br>Spargers                           |                        |                        | *                          | None                      | NCR 92-033 Indications on<br>Feedwater Tee Box<br>NCR-92-032 Indication on<br>Feedwater mounting<br>adjustment bracket<br>Both evaluated acceptable |
|                                       | х      |   | D                         | Jet Pump<br>Restrainer<br>Bracket Tack<br>Welds |                        |                        | *                          | None                      | All 16 Jet Pumps NCR 92-034 - Jet Pump #9 set screw, NCR-92-017 Jet Pump #10 set screw Both evaluated acceptable                                    |
|                                       | х      |   | E                         | Jet Pump Mixer<br>Inlet Lip                     |                        |                        | *                          | None                      | Jet Pumps 1-8   |
|                                       | х      |   | F                         | Jet Pump Riser<br>Brace                         |                        |                        | *                          | None                      | Jet Pumps 1-8   |
|                                       | х      |   | G                         | Steam Separator                                 |                        |                        | *                          | None                      | NCR 92-036 Separator Tie<br>bars and Standpipe -<br>acceptable  |
|                                       | х      |   | Н                         | Shroud Seam<br>Welds                            |                        |                        | *                          | None                      |   |

| System or Component Description | A<br>C<br>C | R<br>E<br>J | Inspection<br>Requirement | Weld or<br>Component<br>Description | UT<br>Report<br>Number | PT<br>Report<br>Number | Visual<br>Report<br>Number | ISt<br>tSO/Fig.<br>Number | Comments                                 |
|---------------------------------|-------------|-------------|---------------------------|-------------------------------------|------------------------|------------------------|----------------------------|---------------------------|--|
| RPV Interior                    | х           |             | J                         | Steam Dryer Drain<br>Channei        |                        |                        | *                          | None                      | Drain Channel #4 Indication (NCR 90-069) |
| · :                             | X           |             | G                         | Steam Dryer<br>Exterior             |                        |                        | *                          | None                      |  |
|                                 | X           |             | N                         | Vessel Head                         |                        |                        | *                          | None                      |  |
|                                 | Х           |             | 0                         | Top Guide                           |                        |                        | *                          | None                      |  |
| Feedwater B                     | х           |             | В                         | Feedwater B<br>Thermal Sleeve       | 91-131A<br>91-131B     |                        |                            | 1.1.6                     |  |
| Feedwater C                     | х           |             | В                         | Feedwater C<br>Thermal Sleeve       | 92-061A<br>92-061B     |                        |                            | 1.1.6                     |  |
| Feedwater D                     | ×           |             | В                         | Feedwater D<br>Thermal Sleeve       | 92-062A<br>92-062B     |                        |                            | 1.1.6                     |  |
| Core Spray B                    | х           |             | A,K                       | CSB-F002                            | 91-166                 |                        |                            | 1.2.8                     |  |
|                                 | х           |             | A                         | CSB-F002A                           | 91-167                 |                        |                            | 1.2.8                     |  |
|                                 | Х           |             | Α                         | CSB-F004                            | 91-169                 |                        |                            | 1.2.8                     |  |
|                                 | х           |             | A                         | CSB-J003                            | 91-170                 |                        |                            | 1.2.8                     |  |
| Reactor Water Cleanup Suction   | X           |             | Α .                       | CUA-J001                            | 91-178                 |                        |                            | 1.2.11A                   |  |
|                                 | х           |             | A                         | CUA-J002                            | 91-179                 |                        |                            | 1.2.11A                   |  |
|                                 | X           |             | A                         | CUA-J004                            | 91-180                 |                        |                            | 1.2.11A                   |  |
|                                 | X           |             | A                         | CUA-J005                            | 91-181                 |                        |                            | 1.2.11A                   |  |
|                                 | X           |             | A                         | CUA-J006                            | 91-182                 |                        |                            | 1.2.11A                   |  |
|                                 | Х           |             | A                         | CUA-J008                            | 91-183                 |                        |                            | 1.2.11A                   |  |
|                                 | х           |             | A                         | CUA-J009                            | 91-184                 |                        |                            | 1.2.11A                   |  |

# AUGMENTED INSPECTIONS RESULTS RF0-11

|  | Page | 3 | of | 6 |
|--|------|---|----|---|
|--|------|---|----|---|

| System or<br>Component<br>Description   | A C C | REJ | Inspection<br>Requirement | Weld or<br>Component<br>Description | UT<br>Report<br>Number | PT<br>Report<br>Number | Visual<br>Report<br>Number | ISI<br>ISO/Fig.<br>Number | Comments  |
|---|-------|-----|---------------------------|-------------------------------------|------------------------|------------------------|----------------------------|---------------------------|---|
| RWCU (cont.)                            | х     |     | Α                         | CUA-J010                            | 91-185                 |                        |                            | 1.2.11A                   |   |
|   | х     |     | A                         | CUA-J012                            | 91-186                 |                        |                            | 1.2.11A                   |   |
|   | x     |     | A                         | CUA-J013                            | 91-189                 |                        |                            | 1.2.11A                   |   |
|   | ×     |     | A                         | CUA-J014                            | 91-190                 |                        |                            | 1.2.11                    |   |
| , | х     |     | A                         | CUA-J015                            | 91-191                 |                        |                            | 1.2.11A                   |   |
|   | x     |     | A                         | CUA-J017                            | 91-192                 |                        |                            | 1.2.11A                   |   |
|   | x     |     | A                         | CUA-J018                            | 91-193                 |                        |                            | 1.2.11A                   |   |
|   | х     |     | А                         | CUA-J019                            | 91-194                 |                        |                            | 1.2.11A                   |   |
|   | х     |     | Α                         | CUA-J020                            | 91-195                 |                        |                            | 1.2.11A                   |   |
|   | х     |     | A                         | CUA-J021                            | 91-196                 |                        |                            | 1.2.11A                   |   |
|   | х     |     | A                         | CUA-J023                            | 91-197                 |                        |                            | 1.2.11A                   |   |
|   | X     |     | A                         | CUA-J024                            | 91-198                 |                        |                            | 1.2.11A                   |   |
| Control Rod Drive<br>Return             | x     |     | В                         | CRA-F002                            | 91-200                 |                        |                            | 1.2.12A                   |   |
|   | х     |     | В                         | CRA-F004                            | 91-202                 |                        |                            | 1.2.12A                   |   |
|   | х     |     | В                         | CRA-J003                            | 91-203                 | .,                     |                            | 1.2.12A                   |   |
| Residual Heat<br>Removal - 18B          | х     |     | <b>A</b> .                | RHB-J001-OVL                        | 91-204                 |                        |                            | 1.2.14                    | ,   |
| Residual Heat<br>Removal 20A            | x     |     | A                         | RHC-F002                            | 91-205                 |                        |                            | 1.2-15                    | , in the second |





| System or<br>Component<br>Description                 | A<br>C<br>C | REJ | Inspection<br>Requirement | Weld or Component<br>Description | UT<br>Report<br>Number | PT<br>Report<br>Number | Visual<br>Report<br>Number | ISI<br>ISO/Fig.<br>Number | Comments |
|---|-------------|-----|---------------------------|----------------------------------|------------------------|------------------------|----------------------------|---------------------------|----------|
| Residual Heat<br>Removal 20A                          | Х           |     | А                         | RHC-J001                         | 91-206                 |                        |                            | 1.2-15                    |          |
| Recirculation Pump A<br>& Discharge Valve By-<br>Pass | х           |     | A                         | RCA-J013                         | 91-216                 |                        |                            | 1.2.19A                   |          |
| ·   | Х           |     | A                         | RCA-J015                         | 91-217                 |                        |                            | 1.2.19A                   |          |
| Recirculation Manfold A                               | X           |     | A                         | RMA-J001                         | 91-218                 |                        |                            | 1.2.20                    |          |
|   | Х           |     | A                         | RMA-J002                         | 91-219                 |                        |                            | 1.2.20                    |          |
| Recirculation A Risers                                | X           |     | A                         | RRE-J004/J004A-OVL               | 91-222                 |                        |                            | 1.2.20                    |          |
|   | х           |     | A                         | RRF-J004/J004A-OVL               | 91-225                 |                        |                            | 1.2.20                    |          |
|   | Х           |     | A                         | RRG-J004/J004A-OVL               | 91-228                 |                        |                            | 1.2.20                    |          |
|   | Х           |     | A                         | RRH-J004/J004A-OVL               | 91-231                 |                        |                            | 1.2.20                    |          |
|   | Х           |     | A,L                       | RRH-J005                         | 91-232                 | 91-420                 |                            | 1.2.20                    |          |
|   | Х           |     | A                         | RRH-J007                         | 91-233                 |                        |                            | 1.2.20                    |          |
| Recirculation Pump B & Discharge Valve By-Pass        | х           |     | A                         | RBB-J001                         | 91-234                 |                        |                            | 1.2.21A                   |          |
|   | х           |     | A                         | RBB-J002                         | 91-235                 |                        |                            | 1.2.21A                   |          |
|   | Х           |     | A                         | RBB-J003                         | 91-237                 |                        |                            | 1.2.21A                   |          |
|   | х           |     | A                         | RBB-J006                         | 91-238                 |                        |                            | 1.2.21A                   |          |



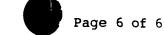




| System or Component<br>Description                           | A<br>C<br>C | R<br>E<br>J | Inspection<br>Requirement | Weld or Component<br>Description | UT<br>Report<br>Number | PT<br>Report<br>Number | Visual<br>Report<br>Number | ISI<br>ISO/Fig.<br>Number | Comments |
|--|-------------|-------------|---------------------------|----------------------------------|------------------------|------------------------|----------------------------|---------------------------|----------|
| Recirculation Pump<br>B & Discharge Valve By-<br>Pass (cont) | ×           |             | Α                         | RBB-J007                         | 91-239                 |                        |                            | 1.2-21A                   |          |
|  | х           |             | Α                         | RBB-J008                         | 91-240                 |                        |                            | 1.2.12A                   |          |
|  | Х           | ,           | Α                         | RBB-J009                         | 91-241                 |                        |                            | 1.2.21A                   |          |
|  | ×           |             | Α                         | RBB-J010                         | 91-242                 |                        |                            | 1.2.21A                   |          |
|  | х           |             | А                         | RBB-J012                         | 91-243                 |                        |                            | 1.2.21A                   |          |
|  | х           |             | A,K                       | RCB-F002                         | 91-244                 |                        |                            | 1.2.21A                   |          |
|  | Х           |             | A                         | RCB-J016                         | 91-251                 |                        |                            | 1.2.21A                   |          |
|  | Х           |             | Α                         | RCB-J018                         | 91-252                 |                        |                            | 1.2.21A                   |          |
|  | х           |             | Α                         | RCB-J021                         | 91-253                 |                        |                            | 1.2.21A                   |          |
|  | х           |             | A,L                       | RCB-J024                         | 91-254                 | 91-430                 |                            | 1.2.21A                   |          |
|  | х           |             | Α                         | RCB-J025                         | 91-255                 |                        |                            | 1.2.21A                   |          |
|  | х           |             | Α                         | RCB-J027                         | 91-256                 |                        |                            | 1.2.21A                   |          |
|  | х           |             | Α                         | RCB-J030                         | 91-257                 |                        | ·                          | 1.2.21A                   |          |
|  | х           |             | Α                         | RCB-J031                         | 91-258                 |                        |                            | 1.2.21A                   |          |
|  | х           |             | Α                         | RCB-J033                         | 91-259                 |                        |                            | 1.2.21A                   |          |
|  | х           |             | Α                         | RCB-J037                         | 91-260                 |                        |                            | 1.2.21A                   |          |
| Recirculation Manifold                                       | х           |             | A                         | RMB-J001                         | 91-264                 |                        |                            | 1.2.22                    |          |
|  | x           |             | A                         | RMB-J002                         | 91-267                 |                        |                            | 1.2.22                    |          |

#### AUGMENTED IN TIONS RESULTS

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| System or<br>Component<br>Description | A<br>C<br>C | R<br>E<br>J | Inspection<br>Requirement | Weld or Component Description | UT<br>Report<br>Number | PT<br>Report<br>Number | Visual<br>Report<br>Number | ISI<br>ISO/Fig.<br>Number | Comments |
|---------------------------------------|-------------|-------------|---------------------------|-------------------------------|------------------------|------------------------|----------------------------|---------------------------|----------|
| Recirculation B Risers                | ×           |             | A,K                       | RRA-F002                      | 91-258                 |                        |                            | 1.2-22                    |          |
|                                       | х           |             | A                         | RRA-J004/J004A-OVL            | 91-270                 |                        |                            | 1.2.22                    |          |
|                                       | Х           |             | L                         | RRA-J005                      |                        | 91-431                 |                            | 1.2.22                    |          |
|                                       | ×           | -           | A,K                       | RRB-F002                      | 91-271                 |                        |                            | 1.2.22                    |          |
|                                       | х           |             | Α                         | RRB-J004/J004A-OVL            | 91-273                 |                        |                            | 1.2.22                    |          |
|                                       | Х           |             | L                         | RRB-J005                      |                        | 91-432                 |                            | 1.2.22                    |          |
|                                       | Х           |             | A,K                       | RRC-F002                      | 91-277                 |                        |                            | 1.2.22                    |          |
|                                       | Х           |             | LL                        | RRC-J004                      |                        | 91-433                 |                            | 1.2.22                    |          |
|                                       | х           |             | A,K                       | RRD-F002                      | 91-281                 |                        |                            | 1.2.22                    |          |
|                                       | Х           |             | A                         | RRD-J004/J004A-OVL            | 91-287                 |                        |                            | 1.2.22                    |          |
|                                       | X           |             | L                         | RRD-J005                      |                        | 91-434                 |                            | 1.2.22                    |          |
| <del></del>                           | x           |             | A                         | RRD-J007-OVL                  | 91-288                 |                        |                            | 1.2.22                    |          |
| Refueling Bellows                     | X           |             | м                         | Refueling Bellows             |                        |                        | 91-378                     | None                      |          |

A NUREG-0313 (GL 88-01) H GE RICSIL 054

ACC Accept

B NUREG-0619

I GE SIL 474

REJ Reject

IEB-80-13

J GE SIL 289

D NCR-90-076

K GE SIL 455

E GE SIL 465

L GE RICSIL 058

F GE RICSIL 045

M IE Letter NG-87-4355 (GL 87-05)

G QCI Proc. 2162.11

N GE RICSIL 050/051

O GE RICSIL 059

<sup>\*</sup> Examination of augmented reactor pressure vessel (RPV) interior is in the GE Refuel Outage #11, Invessel Visual Inspection (IVVI) Report