

DUANE ARNOLD ENERGY CENTER

UNIT #1 PALO, IOWA

Commercial Service Date: February 1, 1975

INSERVICE 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

Date: 7/8/92

Reviewed by:

Codes & Materials, GL

Date: 7/14/92

Concurred by:

Supervising Engineer, Mech. Eng.

Date: 7-14-92

Approved by:

Manager, Engineering

Date: 7/15/92

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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
10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval.
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)

Date July 15 19 92 Signed Iowa Electric Light & Power Company By John Gray
Owner

C: Date 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 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.

Date July 17 19 92

William Muller
Inspector's Signature

Commissions NB 7542 "I" N" Ia 1046
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.

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

PART B pages 1 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
 - 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

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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

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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

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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, GE
Drawing 731E781,
APED B31-9, ISO No.
1.2-21A

Recirculation B Drain Line

P&ID M-116, GE
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

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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

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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. 2.2-35
RHR Pump Discharge (SE)	P&ID M-120, Bechtel Drawing M-714, ISO No. 2.2-36
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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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 M-
121, Bechtel Drawing
M-710, ISO No. 2.2-
49

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

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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

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PART C pages 1 of 1

- 1) Owners: Iowa Electric Light and Power Company
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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.

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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
REACTOR VESSEL	RV HEAD LUG (22 AZ)	91-123 MT	1.1-05	B-H	ACCEPTED

COMMENTS:

RPV	RV HEAD LUG (112AZ)	91-124 MT		B-H	ACCEPTED
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COMMENTS:

RPV	RV HEAD LUG (202AZ)	91-125 MT		B-H	ACCEPTED
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COMMENTS:

RPV	MSB-D001	91-132A UT0 91-132B UT45 91-132C UT60	1.1-06	B-D	NRI
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COMMENTS:

RPV	MSB-D001- INNER RAD	91-133 UT70		B-D	NRI
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COMMENTS:

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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RPV	VIA-D001	91-134A UT0 91-134B UT45 91-134C UT60		B-D	NRI
COMMENTS:					
RPV	VIA-D001- INNER RAD	91-135 UT70		B-D	NRI
COMMENTS:					
RPV	VIC-D001	91-136A UT0 91-136B UT45 91-136C UT60		B-D	NRI
COMMENTS:					
RPV	VIC-D001- INNER RAD	91-137 UT70		B-D	NRI
COMMENTS:					
RPV	VIF-D001	91-138A UT0 91-138B UT45 91-138C UT60		B-D	NRI
COMMENTS:					

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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RPV	VIF-D001- INNER RAD	91-139 UT70		B-D	NRI
COMMENTS:					
CONTROL ROD DRIVE BOLTING	1R215(02- 27)	91-426 VT-1 92-020	1.1-08	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(06- 19)	91-426 VT-1 92-020		B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(06- 35)	91-426 VT-1 92-020		B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(14- 39)	91-426 VT-1 92-020		B-G-2	ACCEPTED
COMMENTS:					

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

PART D pages 4 of 52

1) Owners: Iowa Electric Light and Power Company
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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CRD	1R215(22- 27)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(26- 07)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(26- 23)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(06- 23)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(14- 27)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					

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COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CRD	1R215(18- 23)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(18- 27)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(18- 43)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(26- 15)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(38- 27)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					

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COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CRD	1R215(14-35)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(22-39)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(26-03)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(26-35)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					
CRD	1R215(30-27)	91-426 92-020	VT-1	B-G-2	ACCEPTED
COMMENTS:					

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COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
MAIN STEAM A	CV-4412	92-069 VT-3	1.2-01	B-M-2	ACCEPTED
MSA	COMMENTS: CV-4412- BOLTING	92-070 VT-1		B-G-2	ACCEPTED
MSA	COMMENTS: CV-4413- BOLTING	92-068 VT-1		B-G-2	ACCEPTED
MSA	COMMENTS: MSA-J024	91-141 MT 91-142 UT45		B-J	NRI
MSA	COMMENTS: MSA-J024- IA	91-143 MT 91-144 UT45		B-J	NRI
MSA	COMMENTS: MSA-J024- OA	91-145 MT 91-146 UT45		B-J	NRI
	COMMENTS:				

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COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
MSA	MSA-K040	91-002	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
MSA	PSV-4400	92-034	VT-3	B-M-2	ACCEPTED
COMMENTS: S/N 189					
MSA	PSV-4400- A-BOLTING	92-035	VT-1	B-G-2	ACCEPTED
COMMENTS:					
MSA	PSV-4401- A-BOLTING	92-037	VT-1	B-G-2	ACCEPTED
COMMENTS: LINEAR INDICATION ON BOLT IN POSITION 6, BOLT REPLACED - ACCEPTED BY REPLACEMENT					
COMMENTS: ALL BOLTS/NUTS REPLACED(REF NIS2 11-92-22)					
MSA	PSV-4401	92-036 92-064 92-063	VT-3	B-M-2	ACCEPTED
COMMENTS:					

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COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
MSA	CV-4413	92-067	VT-3	B-M-2	ACCEPTED

COMMENTS: REPAIR OF LINEAR INDICATION. RESULTANT CAVITY 1/4"
X 3/4" DEEP

MAIN STEAM B	PSV-4402	92-038	VT-3	1.2-02	B-M-2	ACCEPTED
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MSB	COMMENTS: S/N 218					
	PSV-4403	92-048	VT-3		B-M-2	ACCEPTED

MSB	COMMENTS: CASTING FLAWS IN DISC GUIDE					
	MSB-J024	91-148	MT		B-J	NRI
		91-149	UT45			

MSB	COMMENTS:					
	MSB-J026	91-150	MT		B-J	NRI
		91-151	UT45			

MSB	COMMENTS:					
	MSB-J029	91-152	MT		B-J	NRI
		91-153	UT45			

COMMENTS:

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: Dwayne 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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
MSB	MSB-J029- IA	91-154 91-155	MT UT45	B-J	NRI
COMMENTS:					
MSB	MSB-J029- OA	91-156 91-157	MT UT45	B-J	NRI
COMMENTS:					
MSB	MSB-K012A	91-004	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
MSB	MSB-K012A	91-003	MT	B-K-1	ACCEPTED
COMMENTS:					
MSB	MSB-K012B	91-005	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					

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 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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
MSB	PSV-4402-A-BOLTING	92-039 VT-1		B-G-2	ACCEPTED
COMMENTS:					
MSB	PSV-4403-A-BOLTING	92-046 VT-1 92-047		B-G-2	ACCEPTED
COMMENTS:					
MAIN STEAM C	(REF. NIS2 11-92-41) CV-4419-BOLTING	92-059 VT-1	1.2-03	B-G-2	ACCEPTED
COMMENTS:					
MSC	MSC-K038	91-006 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
MSC	PSV-4404	92-051 VT-3		B-M-2	ACCEPTED
COMMENTS:					
MSC	PSV-4404-A-BOLTING	92-049 VT-1		B-G-2	ACCEPTED
COMMENTS:					

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6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
MSC	(REF. NIS2 11-92-34) PSV-4404- B-BOLTING	92-050 VT-1		B-G-2	ACCEPTED
COMMENTS:					
MSC	PSV-4405	92-040 VT-3		B-M-2	ACCEPTED
COMMENTS: S/N 141					
MSC	PSV-4405- A-BOLTING	92-041 VT-1		B-G-2	ACCEPTED
COMMENTS:					
MSC	BOLT IN POSITION 7 HAD THREE DAMAGED THREADS - REPLACED (REF. NIS2 11-92-26) CV-4419	92-058 VT-3		B-M-2	ACCEPTED
COMMENTS: REPAIRED (REF. NIS2 11-92-19)					
MAIN STEAM D	PSV-4406	92-042 VT-3	1.2-04	B-M-2	ACCEPTED
COMMENTS:					
MSD	PSV-4407	92-044 VT-3		B-M-2	ACCEPTED

COMMENTS: S/N 202

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
MSD	CV-4420	92-071	VT-3	B-M-2	ACCEPTED
MSD	COMMENTS: TWO GROUND AREAS UNCHANGED SINCE LAST EXAM				
	CV-4420- BOLTING	92-072	VT-1	B-G-2	ACCEPTED
MSD	COMMENTS:				
	MSD-K034	91-007	VT-3 VT-4	F-C	ACCEPTED
MSD	COMMENTS:				
	PSV-4406- A-BOLTING	92-043	VT-1	B-G-2	ACCEPTED
MSD	COMMENTS: REPLACED (REF. NIS2 11-92-27)				
	PSV-4407- A-BOLTING	92-045	VT-1	B-G-2	ACCEPTED
FEEDWATER A & B	COMMENTS: REPLACED (REF. NIS2 11-92-28)				
	FWA-J014	91-159 91-160	MT UT45	1.2-05 B-J	NRI
	COMMENTS:				
	ID GEO <50% DAC				

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- 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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
FWA & B	FWB-J018	91-161 MT 91-162 UT45		B-J	NRI
COMMENTS: ID GEO <50% DAC					
FWA & B	FWB-J041	91-163 MT 91-164 UT45		B-J	RI
COMMENTS: COUNTER-BORE AND CROWN					
FWA & B	FWB-K007	91-010 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
FWA & B	FWB-K017	91-009 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
FWA & B	FWB-K036	91-008 VT-3 VT-4		F-C	ACCEPTED
COMMENTS: REF. EVAL 92-E-018					

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

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1) Owners: Iowa Electric Light and Power Company
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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
FWA & B	V14-0003	92-006 VT-3		B-M-2	ACCEPTED
FWA & B	COMMENTS: V14-0003	92-004 VT-1		B-G-2	ACCEPTED
FEEDWATER C & D	COMMENTS: V14-0001	92-005 VT-3	1.2-06	B-M-2	ACCEPTED
FWC & D	COMMENTS: V14-0001	92-003 VT-1		B-G-2	ACCEPTED
CORE SPRAY B	COMMENTS: CSB-F004	91-168 PT 91-169 UT45	1.2-08	B-F	NRI
CSB	COMMENTS: CROWN 360 DEG <50% DAC CSB-J020	91-171 MT 91-172 UT45		B-J	NRI
	COMMENTS: ID GEO <50% DAC				

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CSB	CSB-J021	91-173 MT 91-174 UT45		B-J	NRI
COMMENTS: ID GEO <50% DAC					
CSB	CSB-K017	91-011 VT-3 VT-4		F-C	ACCEPTED
COMMENTS: ACCEPTED PER EVAL. 92-E-035					
HPCI STEAM	PSA-J010	91-175 MT 91-176 UT45	1.2-09	B-J	NRI
COMMENTS:					
HPCI ST.	PSA-K015	91-012 VT-3 VT-4		F-C	ACCEPTED
COMMENTS: SNUBBER S/N 1516					
HPCI ST.	PSA-K016	91-013 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
HPCI ST.	PSA-K019	91-014 VT-3 VT-4		F-B	ACCEPTED
COMMENTS:					

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS	
HPCI WATER	PSB-K001A	91-177	VT-3 VT-4	1.2-10	F-C	ACCEPTED
COMMENTS:						
RWCU-SUCTION	CUA-J008	91-183	PT	1.2-11A	B-J	NRI
COMMENTS:						
RWCU-SUCT	CUA-J012	91-186 91-187	PT UT45		B-J	NRI
COMMENTS:						
RWCU-SUCT	CUA-J013	91-188 91-189	PT UT45		B-J	NRI
COMMENTS:						
RWCU-SUCT	CUA-K007	91-015	VT-3 VT-4		F-C	ACCEPTED
COMMENTS:						
RWCU SUCT	CUA-K008A	91-016	VT-3 VT-4		F-C	ACCEPTED
COMMENTS:						

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

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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: 2/17/78
- 6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 . . .

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RWCU-SUCT	CUA-K016	91-017	VT-3 VT-4	F-C	ACCEPTED

COMMENTS:

RWCU-DISCH.	CUB-K009A	91-018	VT-3 VT-4	F-C	ACCEPTED
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COMMENTS:

CRD-RETURN	CRA-F004	91-201 91-202	PT UT45	1.2-12A	B-F	NRI
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COMMENTS:

RHR-20A	RHC-J001- LS	92-081 92-080	PT UT45	1.2-15	B-J	NRI
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COMMENTS:

RHR-20B	RHD-J022	91-207 91-208	MT UT45	1.2-16	B-J	RI
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COMMENTS:

ID GEO 105% DAC

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RHR-20B	RHD-K005	91-022	VT-3 VT-4	F-C	ACCEPTED

COMMENTS:

RHR-20B	RHD-K007A	91-021	VT-3 VT-4	F-C	ACCEPTED
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COMMENTS: (REF. NIS2 11-92-33)

RCIC-STEAM	RSA-J029	91-209 91-210	MT UT45	1.2-17	B-J	NRI
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COMMENTS:

RCIC-ST.	RSA-J031	91-211 91-212	MT UT45		B-J	NRI
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COMMENTS:

RCIC-ST.	RSA-K019	91-023	VT-3 VT-4	F-C	ACCEPTED
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COMMENTS:

RCIC ST.	RSA-K024A A	91-024	VT-3 VT-4	F-C	ACCEPTED
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COMMENTS:

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Central Iowa Power Coop.
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Corn Belt Power Coop.
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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: 2/17/75
6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	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-WATER	RSB-J011	91-213 91-214	MT UT45	1.2-18 B-J	NRI
COMMENTS:					
RCIC-WTR	RSB-K009A	91-027	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
RECIRC PUMP SUCTION 'B'	RBB-J003	91-236 91-237	PT UT45	1.2-21A B-J	NRI
COMMENTS:					

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RCB	RBB-K005A	91-028A VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
RCB	RBB-K005B	91-028B VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
RCB	RCB-J015	91-245 PT 91-246 UT45		B-J	NRI
COMMENTS: ID GEO <50% DAC					
RCB	RCB-J015- IA	91-247 PT 91-248 UT45		B-J	NRI
COMMENTS:					
RCB	12" FROM RCB-J015 RCB-J015- OA	91-249 PT 91-250 UT45		B-J	NRI
COMMENTS: 12" FROM RCB-J015					

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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RCB	RCB-K020	91-030	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
RCB	RCB-K020	91-029	PT	B-K-1	ACCEPTED
COMMENTS:					
RCB	RCB-K029	91-032	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
RCB	RCB-K029	91-031	PT	B-K-1	ACCEPTED
COMMENTS:					
RCB	RCB-K034	91-033	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
RECIRC DRAIN LINE 'B'	RDB-J018	91-261	PT	1.2-21B B-J	NRI
COMMENTS:					

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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RC DRAIN	RDB-J019	91-262 PT		B-J	NRI
RC DRAIN	COMMENTS: RDB-K008	91-034 VT-3 VT-4		F-C	ACCEPTED
RECIRC MANIFOLD 'B'	RMB-J001	91-263 PT 91-264 UT45	1.2-22	B-J	NRI
RC MAN. 'B'	ID GEO <50% DAC RMB-J001- LS	91-265 PT 91-266 UT45		B-J	NRI
RC MAN. 'B'	RMB-K010	91-036 VT-3 VT-4		F-C	ACCEPTED

COMMENTS:

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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RECIRC RISER 'B'	RRB-J007	91-274 PT 91-275 UT45		B-J	NRI
COMMENTS:					
RECIRC RISER 'C'	OD GEO 85% DAC RRC-F002	91-276 PT 91-277A UT45		B-F	NRI
COMMENTS:					
RC RISER 'C'	ROOT GEO, COUNTERBORE RRC-J004A	91-280 PT		B-J	ACCEPTED
RC RISER 'C'	COMMENTS:UT EXAM PERFORMED IN RFO08 RRC-J005	91-282 PT 91-283 UT45		B-J	NRI
COMMENTS:					
RC RISER 'C'	RRC-J005- IA	91-284 PT 91-285 UT45		B-J	NRI
COMMENTS:					

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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
HEAD VENT	HVA-FLG- BOLTING	91-289 VT-1	1.2-24	B-G-2	ACCEPTED

COMMENTS:

STANDBY LIQUID CONTROL	LCA-J024	91-292 PT	1.2-27	B-J	ACCEPTED
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COMMENTS:

LIQUID CONTROL	LCA-J025	91-293 PT		B-J	ACCEPTED
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COMMENTS:

LIQUID CONTROL	LCA-J026	91-294 PT		B-J	ACCEPTED
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COMMENTS:

LIQUID CONTROL	LCA-J026A	91-295 PT		B-J	ACCEPTED
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COMMENTS:

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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
LIQUID CONTROL	LCA-J027	91-296 PT		B-J	ACCEPTED
COMMENTS:					
LIQUID CONTROL	LCA-K002A	91-038 VT-3 VT-4		F-B	ACCEPTED
COMMENTS:					
LIQUID CONTROL	LCA-K003A	91-037 VT-3 VT-4		F-B	ACCEPTED
COMMENTS:					
VESSEL INSTR. N11A	VIA-F002	91-297 PT 91-298 UT45	1.2-28	B-F	ACCEPTED
COMMENTS:					
BOTTOM HEAD DRAIN	HDA-J035	91-299 PT	1.2-32	B-J	ACCEPTED
COMMENTS:					

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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
BOTT. HEAD	HDA-K014	91-039	VT-3 VT-4	F-B	ACCEPTED

COMMENTS:

VESSEL INSTR. N16B	VIF-F002	91-301 91-302	PT UT45	1.2-34	B-F	NRI
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COMMENTS:

MAIN STEAM DRAIN COMMON	MDR-K004	91-040	VT-3 VT-4	1.2-35	F-B	ACCEPTED
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COMMENTS:

RHR HEAT EXCHANGER 'A'	HEA-CA-5	91-305	UT45	2.1-01	C-A	NRI
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COMMENTS:

RHR EXCH. 'A'	HEA-CB-6	91-306 91-307	MT UT45		C-B	RI
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COMMENTS: 2 LINEAR INDICATIONS ACCEPTABLE PER IWC

1) Owners: Iowa Electric Light and Power Company
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GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RHR EXCH. 'A'	HEA-CC-8 (01)	91-308 MT		C-C	ACCEPTED

COMMENTS:

RHR EXCH. 'A'	HEA-CC-8 (02)	91-309 MT		C-C	ACCEPTED
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COMMENTS:

RHR EXCH. 'A'	HEA-CC-8 (03)	91-310 MT		C-C	ACCEPTED
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COMMENTS:

RHR EXCH. 'A'	HEA-CC-8 (04)	91-311 MT		C-C	RI
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COMMENTS:

RHR HEAT EXCH. STEAM SUPPLY	2 LINEAR INDICATIONS ACCEPTABLE PER IWC	2.2-35	F-A		
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RHD-CE008	91-045	VT-3 VT-4			ACCEPTED
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COMMENTS:

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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RHR ST. SUPPLY	RHD-CE013	91-312	VT-3 VT-4	F-A	ACCEPTED
COMMENTS:					
RHR ST. SUPPLY	RHD-CE016	91-044	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
RHR ST. SUPPLY	RHD-CE018	91-043	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
RHR ST. SUPPLY	RHD-CE026	91-042	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
RHR ST. SUPPLY	RHD-CF022	91-313	MT	C-F	ACCEPTED
COMMENTS:					

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RHR ST. SUPPLY	RHD-CF023	91-314 MT		C-F	ACCEPTED
COMMENTS:					
RHR PUMP DISCHARGE (SE)	RHE-CE029	91-047 VT-3 VT-4	2.2-36	F-C	ACCEPTED
COMMENTS:					
RHR PUMP DISCH. (SE)	RHE-CE029	91-046 MT		C-C	ACCEPTED
COMMENTS:					
RHR PUMP DISCH. (SE)	RHE-CF016	91-315 MT		C-F	ACCEPTED
COMMENTS:					
RHR PUMP DISCH. (SE)	RHE-CF048	91-316 MT		C-F	ACCEPTED
COMMENTS:					

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RHR PUMP DISCH. (SE)	RHE-CF063	91-317 MT		C-F	ACCEPTED

COMMENTS:

RHR PUMP DISCHARGE (NW)	RHI-CE008	91-055 VT-3 VT-4	2.2-39	F-C	ACCEPTED
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COMMENTS:

RHR PUMP DISCH. (NW)	RHI-CE008	91-054 MT		C-C	ACCEPTED
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COMMENTS:

RHR PUMP DISCH. (NW)	RHI-CE030	91-050 VT-3 VT-4		F-C	ACCEPTED
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COMMENTS:

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

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RHR PUMP DISCH. (NW)	RHI-CE045	91-051	VT-3 VT-4	F-C	ACCEPTED

COMMENTS:

RHR PUMP DISCH. (NW)	RHI-CF041	91-318	MT	C-F	ACCEPTED
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COMMENTS:

RHR PUMP DISCH. (NW)	RHI-CF076	91-319	MT	C-F	ACCEPTED
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COMMENTS:

RHR HEAT EXCH. DISCH. (NW)	RHJ-CE008	91-057	2.2-40 VT-3 VT-4	F-C	ACCEPTED
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COMMENTS:

RHR EXCH. DISCH. (NW)	RHJ-CE008	91-056	MT	C-C	ACCEPTED
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COMMENTS:

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Humboldt, IA.

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RHR EXCH. DISCH. (NW)	RHJ-CE033	91-058	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
	REF. EVAL 92-E-001				
RHR EXCH. DISCH. (NW)	RHJ-CE035	91-059	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
	REF. EVAL 92-E-002				
RHR EXCH. DISCH. (NW)	RHJ-CE040	91-060	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
	REF. EVAL 92-E-002				
RHR EXCH. DISCH. (NW)	RHJ-CE045	91-061	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
	REF. EVAL 92-E-002				
RHR EXCH. DISCH. (NW)	RHJ-CE054	91-063	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
	REF. EVAL 92-E-003				

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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: 2/17/75
6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RHR EXCH. DISCH. (NW)	RHJ-CE054	91-062 MT		C-C	ACCEPTED

COMMENTS:

RHR EXCH. DISCH. (NW)	RHJ-CE064	91-064 VT-3 VT-4		F-C	ACCEPTED
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COMMENTS:

RHR EXCH. DISCH. (NW)	REF. EVAL 92-E-004 RHJ-CF056	91-320 MT		C-F	ACCEPTED
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COMMENTS:

RHR EXCH. DISCH. (NW)	RHJ-CF073	91-321 MT		C-F	ACCEPTED
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COMMENTS:

RHR EXCH. DISCH. (NW)	RHJ-CF081	91-322 MT 92-021 UT45		C-F	ACCEPTED
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COMMENTS:

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
HPCI PUMP SUCTION	HPA-CE021	91-068	2.2-44 VT-3 VT-4	F-A	ACCEPTED

COMMENTS:

HPCI PUMP SUCTION	HPA-CE032	91-067	VT-3 VT-4	F-C	ACCEPTED
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COMMENTS:

HPCI PUMP SUCTION	HPA-CE041	91-066	VT-3 VT-4	F-B	ACCEPTED
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COMMENTS:

HPCI PUMP SUCTION	REF. EVAL 92-E-008				
	HPA-CE043	91-065	VT-3 VT-4	F-B	ACCEPTED

COMMENTS:

HPCI PUMP SUCTION	HPA-CF033	91-324	MT	C-F	ACCEPTED
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COMMENTS:

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
HPCI PUMP SUCTION	HPA-CF040	91-325 MT		C-F	ACCEPTED
COMMENTS:					
HPCI PUMP DISCHARGE	HPB-CE010	91-069 VT-3 VT-4	2.2-45	F-C	ACCEPTED
COMMENTS:					
HPCI PUMP DISCH	HPB-CE017	91-070 VT-3 VT-4		F-A	ACCEPTED
COMMENTS:					
HPCI PUMP DISCH	HPB-CE018	91-071 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
HPCI PUMP DISCH	HPB-CE025	91-072 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					

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6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
HPCI PUMP DISCH	HPB-CE052	91-073	VT-3 VT-4	F-A	ACCEPTED
COMMENTS:					
HPCI PUMP DISCH	HPB-CE053	91-074	VT-3 VT-4	F-A	ACCEPTED
COMMENTS:					
HPCI PUMP DISCH	HPB-CE055	91-075	VT-3 VT-4	F-A	ACCEPTED
COMMENTS:					
HPCI PUMP DISCH	HPB-CE059	91-076	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
HPCI PUMP DISCH	HPB-CE063	91-077	MT	C-C	ACCEPTED
COMMENTS:					

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6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
HPCI PUMP DISCH	HPB-CE063	91-078	VT-3 VT-4	F-C	ACCEPTED

COMMENTS:

HPCI PUMP DISCH	HPB-CE069	91-079	MT	C-C	
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COMMENTS: REF. RELIEF REQUEST NDE-005

HPCI PUMP DISCH	HPB-CE069	91-080	VT-3 VT-4	F-C	
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COMMENTS:

HPCI PUMP DISCH	HPB-CF048	91-326 91-327	MT UT45	C-F	RI
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COMMENTS:

CORE SPRAY DISCHARGE (SE)	CSB-CE020	91-081	VT-3 VT-4	F-C	ACCEPTED
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COMMENTS:

LAMINAR INDICATION ACCEPTABLE PER IWC
2.2-49

1) Owners: Iowa Electric Light and Power Company
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3) Plant Unit: #1
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6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CS DISCH (SE)	CSB-CE021	91-082	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
CS DISCH (SE)	CSB-CE050	91-084	MT	C-C	ACCEPTED
COMMENTS:					
CS DISCH (SE)	CSB-CE050	91-085	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
CS DISCH (SE)	CSB-CE058	91-086	VT-3 VT-4	F-A	ACCEPTED
COMMENTS:					
CS DISCH (SE)	CSB-CE080	91-087	VT-3 VT-4	F-B	ACCEPTED
COMMENTS:					
CORE SPRAY SUCTION (NW)	CSD-CE007	91-088	2.2-51 VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					

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Cedar Rapids, IA. 52406

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CS SUCT (NW)	CSD-CE012	91-089	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
CS SUCT (NW)	CSD-CE015	91-090	VT-3 VT-4	F-B	ACCEPTED
COMMENTS:					
CS SUCT (NW)	CSD-CE018	91-091	VT-3 VT-4	F-A	ACCEPTED
COMMENTS:					
CS SUCT (NW)	CSD-CE026	91-092	VT-3 VT-4	F-C	ACCEPTED
COMMENTS:					
CORE SPRAY DISCHARGE (NW)	CSE-CE012	91-093	VT-3 VT-4	F-A	ACCEPTED
COMMENTS:					

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6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CS DISCH (NW)	CSE-CE013	91-094 MT		C-C	ACCEPTED
COMMENTS:					
CS DISCH (NW)	CSE-CE013	91-095 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
CS DISCH (NW)	CSE-CE021	91-096 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
CS DISCH (NW)	CSE-CE026	91-097A MT 91-097B		C-C	ACCEPTED
COMMENTS:					
CS DISCH (NW)	CSE-CE026	91-098 VT-3 VT-4		F-B	ACCEPTED
COMMENTS:					
CS DISCH (NW)	CSE-CE031	91-099 VT-3 VT-4		F-B	ACCEPTED
COMMENTS:					

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6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 NWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CS DISCH (NW)	CSE-CE034	91-100 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
CS DISCH (NW)	CSE-CE040	91-101 VT-3 VT-4	2.2-52B	F-C	ACCEPTED
COMMENTS:					
CS DISCH (NW)	CSE-CE042	91-103 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
CS DISCH (NW)	CSE-CE042	91-102 MT	REF. EVAL 92-E-007	C-C	ACCEPTED
COMMENTS:					
CS DISCH (NW)	CSE-CE046	91-104 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
CS DISCH (NW)	CSE-CF052	91-328 MT		C-F	ACCEPTED
COMMENTS:					

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
MAIN STEAM LOOP 'B'	MSB-CF002	91-330 UT45	2.2-54	C-F	NRI
COMMENTS: MT COMPLETED DURING RFO10					
MAIN STEAM LOOP 'C'	MSC-CE013	91-105 VT-3 VT-4	2.2-55	F-C	ACCEPTED
COMMENTS:					
MSC	MSC-CE016	91-106 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
MSC	MSC-CE018	91-107 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
MSC	MSC-CE022	91-109 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					

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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: 2/17/75
6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
MSC	MSC-CF008	91-331 MT 91-332 UT45		C-F	ACCEPTED
COMMENTS:					
MAIN STEAM LOOP 'D'	ID ROOT 100% - 150% DAC		2.2-56	F-C	ACCEPTED
	MSD-CE013	91-110 VT-3 VT-4			
COMMENTS:					
MSD	MSD-CE016	91-111 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					
MSD	MSD-CE018	91-112 VT-3 VT-4		F-B	ACCEPTED
COMMENTS:					
MSD	MSD-CE022	91-113 VT-3 VT-4		F-C	ACCEPTED
COMMENTS:					

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3) Plant Unit: #1
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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
MSD	MSD-CE026	91-114	VT-3 VT-4	F-C	ACCEPTED
COMMENTS: REF. EVAL 92-E-013					
SCRAM DISCHARGE HDR (S)	SDN-CE001 B	91-115	VT-3 VT-4	2.2-61 F-A	ACCEPTED
COMMENTS:					
REACTOR VESSEL INTERNALS	CLAD PATCH-234 DEG	91-303	VT-3	N/A B-N-1	ACCEPTED
COMMENTS:					
RPV INTERNALS	CLAD PATCH-306 DEG	91-303	VT-3	B-N-1	ACCEPTED
COMMENTS:					
RPV INTERNALS	CLAD PATCH-342 DEG	91-303	VT-3	B-N-1	ACCEPTED
COMMENTS:					

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RPV INTERNALS	CORE PLATE(180 -360)			B-N-1	ACCEPTED
		91-303 VT-3			

COMMENTS:

RPV INTERNALS	EXAMINED 180 - 360 DEG.				
	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 DEG			B-N-2	ACCEPTED
		91-303 VT-3			

COMMENTS:

RPV INTERNALS	DSB - 208 DEG			B-N-2	ACCEPTED
		91-303 VT-3			

COMMENTS:

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6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

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

COMMENTS:

RPV INTERNALS	FWB WELDS-NW 225DEG	91-303	VT-3	B-N-2	ACCEPTED
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COMMENTS:

RPV INTERNALS	GRB WELDS-0 DEG AZ	91-303	VT-3	B-N-2	ACCEPTED
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COMMENTS:

RPV INTERNALS	DHB-31 DEG	91-303	VT-3	B-N-2	ACCEPTED
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COMMENTS:

RPV INTERNALS	DHB-149 DEG	91-303	VT-3	B-N-2	ACCEPTED
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COMMENTS:

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: 2/17/75
6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

COMPONENT AND WELD EXAMINATION IDENTIFICATION RECORDS

COMPONENT	DESCRIPTION	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RPV INTERNALS	DHB-211 DEG	91-303 VT-3		B-N-2	ACCEPTED
COMMENTS:					
RPV INTERNALS	DHB-329 DEG	91-303 VT-3		B-N-2	ACCEPTED
COMMENTS:					
RPV INTERNALS	SAMPLE HLDR-288 DEG	91-303 VT-3		B-N-1	ACCEPTED
COMMENTS:					
RPV INTERNALS	SH WELDS-288 DEG-LW	91-303 VT-3		B-N-2	ACCEPTED
COMMENTS:					
RPV INTERNALS	SH WELDS-288 DEG-UP	91-303 VT-3		B-N-2	ACCEPTED
COMMENTS:					

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
RPV INTERNALS	SHRD LEDG/VES WLD	91-303	VT-3	B-N-2	ACCEPTED

COMMENTS:

RPV INTERNALS	SHROUD LEDGE	91-303	VT-3	B-N-1	ACCEPTED
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COMMENTS:

RPV INTERNALS	EXAMINED 0 - 180 DEGS (ACCESSIBLE AREAS) TOP GUIDE	91-303	VT-3	B-N-1	ACCEPTED
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COMMENTS:

RPV INTERNALS	VESSEL HEAD	91-303	VT-3	B-N-1	ACCEPTED
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COMMENTS:

CLASS 1 PRESSURE TEST	CRD NOZZLES	91-304	VT-2	N/A	B-E ACCEPTED
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COMMENTS:

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

Corn Belt Power Coop.
Humboldt, IA.

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CLASS 1 PRESS. TEST	INSTRU. NOZZLES	91-304 VT-2		B-E	ACCEPTED
COMMENTS:					
CLASS 1 PRESS. TEST	PIPING	91-304 VT-2		B-P	ACCEPTED
COMMENTS:					
CLASS 1 PRESS. TEST	PUMPS	91-304 VT-2		B-P	ACCEPTED
COMMENTS:					
CLASS 1 PRESS. TEST	RPV	91-304 VT-2		B-P	ACCEPTED
COMMENTS:					
CLASS 1 PRESS. TEST	VALVES	91-304 VT-2		B-P	ACCEPTED
COMMENTS:					

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

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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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CORE SPRAY PRESS. TEST	CORE SPRAY	91-333	VT-2	C-H	ACCEPTED

COMMENTS:

SCRAM DISCH. PRESS. TEST	CRD SCRAM DISCHARGE	91-334	VT-2	C-H	ACCEPTED
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COMMENTS:

CLASS 2 INST. LINES	REF. NCR 92-072			C-H	ACCEPTED
	CS INSTRU. LINES	91-304	VT-2		

COMMENTS:

CLASS 2 INST. LINES	PERFORMED DURING THE CLASS 1 PRESSURE TEST			C-H	ACCEPTED
	HPCI INSTRU. LINES	91-304	VT-2		

COMMENTS:

CLASS 2 INST. LINES	PERFORMED DURING THE CLASS 1 PRESSURE TEST			C-H	ACCEPTED
	MS INSTRU. LINES	91-304	VT-2		

COMMENTS:

PERFORMED DURING THE CLASS 1 PRESSURE TEST

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	ISI REPORT	ISI ISO NUM.	CATEGORY	RESULTS
CLASS 2 INST. LINES	RC INSTRU. LINES	91-304	VT-2	C-H	ACCEPTED

COMMENTS:

CLASS 2 INST. LINES	PERFORMED DURING THE CLASS 1 PRESSURE TEST			C-H	ACCEPTED
	RCIC INSTRU. LINES	91-304	VT-2		

COMMENTS:

CLASS 2 INST. LINES	PERFORMED DURING THE CLASS 1 PRESSURE TEST			C-H	ACCEPTED
	RPV INSTRU. LINES	91-304	VT-2		

COMMENTS:

RHR PRESSURE TEST	PERFORMED DURING THE CLASS 1 PRESSURE TEST			C-H	ACCEPTED
	PUMP SUCTION-D ISC	91-335	VT-2		

COMMENTS:

INSERVICE INSPECTION REPORT

PART E pages 1 of 4

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
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

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

INSERVICE INSPECTION REPORT

PART E pages 2 of 4

September 11, 1990 through April 27, 1992

ABSTRACT OF ASME SECTION XI ADDITIONAL AND SUCCESSIVE EXAMINATIONS

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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

ADDITIONAL EXAMINATIONS

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

INSERVICE INSPECTION REPORT

PART E pages 3 of 4

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
Marion, IA.

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

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

INSERVICE INSPECTION REPORT

PART E pages 4 of 4

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
Marion, IA.Corn Belt Power Cooperative
Humboldt, IA.2) Plant: Duane Arnold Energy Center, Palo, IA. 523243) Plant Unit: #14) Owners Certificate of Authorization (if required): N/A5) Commercial Service Date: 2/1/756) National Board Number of Unit: N/AGROSS GENERATING CAPACITY: 565 MWE

ADDITIONAL EXAMINATIONS

Successive Examinations

<u>Component Examined</u>	<u>Class</u>	<u>Previous Exam Rpt</u>	<u>Exam Report #</u>	<u>ISI ISO</u>	<u>Results</u>
CUB-K012A	1	88-185/ 494	91-019	1.2 11B	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

PART F pages 1 of 4

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
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

<u>NIS-2 NO.</u>	<u>CLASS</u>	<u>COMPONENTS</u>	<u>DESCRIPTION</u>
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 assys
11-91-08	1	V14-0003	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

PART F pages 2 of 4

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
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

<u>NIS-2 NO.</u>	<u>CLASS</u>	<u>COMPONENTS</u>	<u>DESCRIPTION</u>
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 attachment
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

PART F pages 3 of 4

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
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

<u>NIS-2 NO.</u>	<u>CLASS</u>	<u>COMPONENTS</u>	<u>DESCRIPTION</u>
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	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

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

PART F pages 4 of 4

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
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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

<u>NIS-2 NO.</u>	<u>CLASS</u>	<u>COMPONENTS</u>	<u>DESCRIPTION</u>
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

PART G pages 1 of 91

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

Central Iowa Power Cooperative
Marion, IA.

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

- Owner Iowa Electric Light and Power Date December 14, 1990
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 P.O. S56276 (PMAR 1047488)
Address Repair Organization P.O.No., Job No.
3. Work Performed by Target Rock Type Code Symbol Stamp None
Name Authorization No. None
- 1966E Broadhollow Rd. Farmingdale, N.Y. 11735-0919 Expiration Date None
Address
4. Identification of System Main Steam (Class 1)
- 5.* (a)Applicable Const. Code ASME SECT. III 19 68 Edition, W68 Addenda, N/A Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
* GE SPEC. 21A9206 Rev. 6 & 7
6. Identification of Components Repaired or Replaced and Replacement Components

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)
MSRV Pilot Valve	Target Rock	S/N 200	N/A	SPARE	1975	Repaired	Yes
Second stage disc	Target Rock	S/N 629	N/A	N/A	1976	Replaced	No

7. Description of Work Pilot Disc and second stage disc machined for proper fit and replaced second stage disc
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other * ☒ Pressure 1130 +/- 1% psi Test Temp. 547 °F

*Set pressure test performed at WYLE Labs

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.

121-91

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Pilot valve (S/N 200) was removed and sent to Wyle Lab for testing. The second stage disc was replaced
Applicable Manufacturer's Data Report to be attached
and machined for proper fit. Pt was performed on the Pilot disc and the second stage disc by DAEC QA. VT-3
inspection of pilot assembly was performed under ISI# 90-196.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair and replacement conforms
 to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Quinn Shanahan Codes & Materials, GL Date 7-14, 19 91
 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 7-17-90 to 7-21-91
 , 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.

Scott Presler Commissions NB 8829(I)(N) 941-1A
 Inspectors Signature National Board, State, Province, and Endorsements

Date Jan 21 19 91

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

Owner Iowa Electric Light and Power Date December 18, 1990
 Name

P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
 Address

2. Plant Duane Arnold Energy Center Unit 1
 Name

3277 DAEC Rd. Palo, IA 52324 P.O. S56276 (PMAR 1047489)
 Address Repair Organization P.O.No., Job No.

3. Work Performed by Target Rock Type Code Symbol Stamp None
 Name Authorization No. None

1966E Broadhollow Rd. Farmingdale, N.Y. 11735-0919 Expiration Date None
 Address

4. Identification of System Main Steam (Class 1)

5.* (a)Applicable Const. Code ASME SECT. III 19 68 Edition, W68 Addenda, N/A Code Case
 (b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
 * GE SPEC. 21A9206 Rev. 6 & 7

6. Identification of Components Repaired or Replaced and Replacement Components

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)
MSRV Pilot Valve	Target Rock	S/N 207	N/A	SPARE	1974	Repaired	Yes

7. Description of Work Grind out linear indications in second stage disc bushing tack weld

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Other * ☒ Pressure 1130 +/- 1% psi Test Temp. 550 °F

*Set pressure test performed at WYLE Labs

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.

Handwritten: 12-19-91

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Pilot valve (S/N 207) was removed and sent to Wyle Labs for testing. The second stage disc was repaired
Applicable Manufacturer's Data Reports to be attached
by removing linear indications found. Pt was performed on the Pilot disc and the second stage disc by DAEC QA. VT-3
inspection of pilot assembly was performed under ISI# 90-355.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this repair conforms
to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Sandra Sharpe Codes & Materials, GL Date 1-21-91, 19 91
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 8-25-88 to 1-21-91
, 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.

Scott Keister Commissions NB 8829(I)(N) 941-1A
Inspectors Signature National Board, State, Province, and Endorsements

Date Jan. 21 19 91

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

- Owner Iowa Electric Light and Power Date December 26, 1990
 Name _____
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
 Address _____
2. Plant Duane Arnold Energy Center Unit 1
 Name _____
- 3277 DAEC Rd. Palo, IA 52324 CMAR #A 00575
 Address _____ Repair Organization P.O.No., Job No. _____
3. Work Performed by Iowa Electric Type Code Symbol Stamp None
 Name _____ Authorization No. None
- 3277 DAEC Road Palo, IA 52324 Expiration Date None
 Address _____
4. Identification of System RHR (class 2)
5. (a)Applicable Const. Code ANSI B31.7 19 69 Edition, 71 Addenda, W A Code Case
 (b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81 class 2
6. Identification of Components Repaired or Replaced and Replacement Components

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)
RHR ELBOW	Bechtel	n/a	N/A	12" GBB-9	1990	Repair	No

7. Description of Work Removal of 7 linear indications on elbow
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐
 Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Seven linear indications discovered by MT of elbow on line 12"-GBB-9, Between welds RHF-CF4 and RHF-CF-1.
Applicable Manufacturer's Data Reports to be attached
Repaired indications by grinding them out. Performed MT exam again and was found acceptable.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI. repeir or replacement

Type Code Symbol Stamp None

Certificate of Authorization No. None Expiration Date

Signed Shirley P. Rupp Codes & Materials, GL Date 1-14, 19 91
 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 6-19-90 to 1-21-91, 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.

Scott Pruden Commissions NB 8829(I)(N) 941-1A
 Inspectors Signature National Board, State, Province, and Endorsements

Date Jan. 21 19 91

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

- Owner Iowa Electric Light and Power Date January 7, 1991
 Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
 Address
2. Plant Duane Arnold Energy Center Unit 1
 Name
- 3277 DAEC Rd. Palo, IA 52324 CMAR A 05361
 Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Type Code Symbol Stamp None
 Name Authorization No. None
- 3277 DAEC Rd. Palo, IA 52324 Expiration Date None
 Address
4. Identification of System Main Steam (class 1)
5. (a) Applicable Const. Code SECT. III 19 68 Edition, W68 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Hex Bolt (4 ea)	JED Mfg. Co.	HT# 184N844	N/A	PSV-4401	1975	Replacement	No
Nut-Flexloc (12 ea)	Target Rock	Part # 00FC1812	N/A	PSV-4401	1975	Replacement	No

7. Description of Work Replaced 4 Hex Bolts and 12 Nuts on PSV-4401 during installation.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
 Other ☐ Pressure 1025 psi Test Temp. 540 °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.

AP
1-28-91

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks MSRV Pilot Valve S/N 201 showed signs of leaking. S/N 226 was installed. During installation it was
Applicable Manufacturer's Data Reports to be attached
required to replace the Hex Bolts and Nuts due to damage. A preservice VT-1 (Rpt# 90-369) of the replacement
bolting and a VT-2 (Rpt# 90-370) was conducted and accepted. Vt-3 preservice of S/N 226 performed under ISI No.
90-191.

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 NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shayan Codes & Materials, GL Date 1-14-, 19 91
 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 12-18-90 to 1-28-91
 , 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.

Scott P. Fisher Commissions NB 8829(I)(N) 941-1A
 Inspectors Signature National Board, State, Province, and Endorsements

Date Jan. 28 19 91

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Seal welded quick disconnect fitting to the discharge port of valve body. Performed PT and was accepted.
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 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 _____

Signed Sunder Shaugi Codes & Materials, GL Date 1-14-, 19 91
 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 12-14-90 to 1-28-91, 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.

Scott Bush Commissions NB 8829(1)(N) 941-1A
 Inspectors Signature National Board, State, Province, and Endorsements

Date Jan. 28 19 91

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

1. Owner Iowa Electric Light and Power Date July 5, 1991
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energ Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 CMAR A07553
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Co. Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam 'C' (class 1)
5. (a) Applicable Const. Code *ANSI B31.1 19 67 Edition, N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
*Base Code - GE Spec. 21A9230 Rev. 2.
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Disc-piston assembly	General Elect.	215585-9	N/A	CV-4418	1990	Replaced	No
Disc-piston assembly	General Elect.	214856-8	N/A	CV-4418	1990	Replacement	No
Stem-Stem/Disc Assem.	General Elect.	214856-23	N/A	CV-4418	1990	Replaced	No
Stem-Stem/Disc Assem.	General Elect.	6033641-203	N/A	CV-4418	1990	Replacement	No

7. Description of Work The Disc-piston and Stem-Stem/disc assemblies for CV-4418 were replaced
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1025 psi Test Temp. 443 °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.

7/23/91

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks 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
- Disc-piston Assemblies were replaced to reduce job duration. A VT-1 (91-414) and VT-3 (91-412) examinations were
performed and accepted. A VT-2 (91-413) examination was also performed and accepted after reassembly.

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 NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Sharpe Codes & Materials, GL Date 7-22-, 19 91
 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 6-25-91 to 7-25-91
 , 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.

Red J. Sharpe
 Inspectors Signature

Commissions

8/25/91 7-23-91
Red J. Sharpe IOWA 12/0
 National Board, State, Province, and Endorsements

Date 7-23 1991

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

1. Owner Iowa Electric Light and Power Date July 9, 1991
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 CMAR A07541 CSR'A'
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Co. Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Feedwater Class 1
5. (a)Applicable Const. Code ASME Sect. III 19 77 Edition, W77 Addenda, N/A Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81

6. Identification of Components Repaired or Replaced and Replacement Components

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)
Indicator Stuff. Box	Anchor/Darling	S/N-1	N/A	Ht#220872	1987	Replacement	Yes
Indicator Stuff. Box	Anchor/Darling	N/A	N/A	Item #64 of DWG.M310-035<1>	1979	Replaced	Yes

7. Description of Work The Indicator Stuffin Box for V14-0003 was re laced due to dama e.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1025 psi Test Temp. 443 °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.

712
73291

FORM NIS-2 (Back)

sheet 2 of 2

9.

Remarks The Indicator Stuffing Box was replaced due to damage to the threads to the packing follower.
Applicable Manufacturer's Data Reports to be attached

VT-1 (91-416) and VT-3 (91-415) examinations were performed and accepted. A VT-2 (91-413) examination was also
performed and accepted after reassembly.

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 Sunder Shargai Codes & Materials, GL Date 7-22-91, 19 91
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 6-25-91 to 7-22-91
, 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.

Neal J. Nelson Commissions Iowa 1210
Inspectors Signature National Board, State, Province, and Endorsements

Date 7-22 19 91

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

1. (a) Manufactured by Anchor/Darling Valve Co., 701 First St., Williamsport, PA 17701
(Name and address of NPT Certificate Holder)
- (b) Manufactured for Iowa Electric Light & Power Co., P.O. Box 351, Cedar Rapids, Iowa 52406
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part S/N - 1 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No. D12022 Drawing Prepared by Anchor/Darling Valve Company
- (b) Description of Part Inspected Indicator Stuffing Box, Heat No. 220872 SA350-LF1
- (c) Applicable ASME Code: Section III, Edition 1977, Addenda date Wnt '77, Case No. N/A Class 1
3. Remarks: 16"-900#-Tilt Disc Check
(Brief description of service for which component was designed)
- A/DV S.O. P-5881-14

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 6/10 19 87 Signed Anchor/Darling Valve Co. By R L Stannett
(NPT Certificate Holder)

Certificate of Authorization Expires 4/15/89 Certificate of Authorization No. N1713

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at _____

Stress analysis report on file at _____

Design specifications certified by _____ Prof. Eng. State _____ Reg. No. _____

Stress analysis report certified by _____ Prof. Eng. State _____ Reg. No. _____

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Pennsylvania and employed by Commercial Union Insurance Company of Boston, Mass. have inspected the part of a pressure vessel described in this Partial Data Report on 4-27-87 thru 6-10-87 19 87 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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.

Date 6-10 19 87

Charles Young Commissions Pennsylvania 2392
National Board, State, Province and No.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 3, "Remarks".

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

1. Owner Iowa Electric Light and Power Date July 12, 1991
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 CMAR #A 06146
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Rd. Palo, IA 52324 Expiration Date None
Address
4. Identification of System HPCI PUMP Discharge (class 2) (ISI ISO 2.2-45)
5. (a)Applicable Const. Code ANSI B 31.7 19 69 Edition, N/A Addenda, N/A Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
(c)Construction Code of replacement SECTION III 1983 Edition thru 85 Addenda class 1
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Hex Bolt (1 ea)	Bergan-pat	ASTM A307	N/A	EBB-5-H11	unknown	Replaced	No
Hex Nut (1 ea)	Bergan-pat	ASTM A307	N/A	EBB-5-H11	unknown	Replaced	No
Muliti-Bolt (1 ea)	Cardinal	Ht# C64683	N/A	EBB-5-H11	1990	Replacement	no
Muliti-Nut (1 ea)	Cardinal	Ht# KB5607	N/A	EBB-5-H11	1986	Replacement	no

7. Description of Work Replaced 1 Bolt and 1 Nut during force shutdown (Nut was missing)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

7/12
7-23-91

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Nut was found missing, replaced. A preservice VT-3/4 (Rpt# 91-382) was performed and accepted.
Applicable Manufacturer's Data Reports to be attached

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 Ken Maduh Codes & Materials, GL Date 7-17, 19 91
 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 6-3-91 to 7-23-91, 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.

Paul Drobman Commissions Iowa 1210
 Inspectors Signature National Board, State, Province, and Endorsements

Date 7-23 19 91

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

1. Owner Iowa Electric Light and Power Date April 4, 1992
Name _____
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address _____
2. Plant Duane Arnold Energy Center Unit 1
Name _____
- 3277 DAEC Rd. Palo, IA 52324 CMAR A11359
Address _____ Repair Organization P.O.No., Job No. _____
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name _____ Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address _____
4. Identification of System Reactor Water Clean-up (RWCU) Class 1
5. (a)Applicable Const. Code B31.7 19 69 Edition, 71 Addenda, N/A Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81

6. Identification of Components Repaired or Replaced and Replacement Components

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)
Bolts (2ea)	BergenPatterson	A307Gr.B	N/A	DCA-6-H-1	Unknown	Replaced	No
Bolts (2ea)	Cardinal	Ht.A2113	N/A	(CUB-K007) "	1988	Replacement	No
Nuts (2ea)	BergenPatterson	A307Gr.B	N/A	"	Unknown	Replaced	No
Nuts (2ea)	Cardinal	Ht.Y592608	N/A	"	1988	Replacment	No

7. Description of Work Replaced 2 bolts and nuts on DCA-6-H-1 (CUB-K007)
under CMAR(EMA) A07372.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Hanger DCA-6H-1 (CUB-K007) was removed to allow access to perform the ISI scheduled UT of weld
Applicable Manufacturer's Data Reports to be attached
- CUB-J006. During disassembly one bolt was damaged and required replacement. Both bolts and nuts were replaced
during reassembly. A preservice VT-3/4 (92-082) was performed 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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shaffer Codes & Materials, GL Date 5-2-92, 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 Hartford, Connecticut have inspected the components described in
 this Owner's Report during the period 3-19-92 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.

William Mulla Commissions NO 7542 (IN) Iowa 1046
 Inspectors Signature National Board, State, Province, and Endorsements

Date 5-19 19 92

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

1. Owner Iowa Electric Light and Power Date April 7, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 CMAR A07307
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Residual Heat Removal (RHR) Class 2
5. (a) Applicable Const. Code ASME Pump & Valve Draft 19 68 Edition, Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Disc Skirt	Anchor Darling	0434-12	N/A	MO-2007	1972	Repaired	Yes
Disc Nut	Anchor Darling	N/A	N/A	MO-2007	1972	Repaired	Yes

7. Description of Work Weld Repair of Disc Skirt and tack welding of Disc Nut.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 170 psig psi Test Temp. 72.2 °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Inspection of MO-2007 revealed the disc was out-of-round. The disc nut was removed and the disc was
Applicable Manufacturer's Data Reports to be attached
weld build-up. Valve was reassembled and stroke tested acceptable. A Vt-2 (92-075) was completed and found
acceptable. NCR 92-031 was written on the tack welds for the disc nut and dispositioned and closed.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms
to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sunder Shange Codes & Materials, GL Date 5-21-, 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 3-9-92 to 5-21-92
, 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.

William M. Mc Commissions NB 7543 (I, N) IS 1046
Inspectors Signature National Board, State, Province, and Endorsements

Date 5-21 19 92

MO-2007

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 ANCHOR VALVE COMPANY HAYWARD, CALIF Order No. 0434-12
(Name & Address of Manufacturer) 7884-M-151A
2. Manufactured for BECHTEL CORP., SAN FRANCISCO, CALIF Order No. ITEM 3.1
(Name and Address)
3. Owner IOWA LIGHT AND POWER COMPANY, CEDAR RAPIDS, IOWA
4. Location DUANE ARNOLD ENERGY CENTER, PALO, IOWA
5. Pump or Valve Identification SERIAL # 2N-008 12" 300# GLOBE
- (a) Shop Drawing No. 1481-3 Prepared by M.A. SOLYAN
6. Design Conditions 720 psi 100 °F Specified by ANCHOR VALVE
(Pressure) (Temperature) (Name of Co. & Rep.)
7. The Design Complies with Class I (II) III.
(circle one)
 - (a) Design Information on file at IOWA ELECTRIC LIGHT AND POWER, PALO, IOWA
 - (b) Design Specification certified by JOHN GENTLES CALIF 2371 2-11-71
Prof. Engr. (I) State Reg. No. Date
 - (c) Design Report on file at N/A
 - (d) Design Report certified by N/A
Prof. Engr. (I) State Reg. No. Date
8. The Materials comply with Class I, (II,) III (circle one)

Mark No.		Manufacturer	Material Manufacturer
(a) Castings			
1 BODY 0434-12-1-4	A216WCB	ANCHOR VALVE	SKAGIT CORP
2 BONNET 0434-12-2-4	A216WCB	ANCHOR VALVE	SKAGIT CORP
3 DISC 0434-12-4-3	A216WCB	ANCHOR VALVE	SKAGIT CORP
4.			
(b) Forgings			
1 GLAND 825765-	A182GRF6	ANCHOR VALVE	CARPENTER STEEL
2.			
3.			
4.			
(c) Bolting			
1 BONNET STUDS CODE 1-O	A193 B7	FLANGE SPEC.	COPPERWELD
2 BONNET NUTS CODE DX	A194 2H	COAST INDUST.	MODULUS
(d) Other Component			
1 STEM 826311	A276TY410	ANCHOR VALVE	CARPENTER
2 SEAT RING 74251-8-2	A516GR70	ANCHOR VALVE	CARPENTER
3 GLAND BOLT CODE FA	A193 B7	KORTICK	E.M. JORGENSEN
4 GLAND NUT CODE DS	A194 2H	COAST INDUST.	MODULUS
5. OVER			

9. The Manufacture and Examination complies with Class I, (II,) III. (circle one)
(Shop Hydrostatic) Pneumatic Test
(circle one)
- Certificate of Authorization expires MARCH 9, 1974

APR 4 1972
BECHTEL CORP.

FORM NPV-1 (continued)

We certify the statements of items number 8 and 9 in this data report to be correct

Date APRIL 20, 1972

ANCHOR VALVE CO.
(Manufacturer)

By *M. S. Smith*
(Manufacturer's Representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of _____ and employed by equipment PRESSURE VESSEL SEC. of DIV. OF INDUSTRIAL SAFETY have inspected the equipment described in this manufacturer's data report on APRIL 20 19 72 and state that to the best of my knowledge and belief, the manufacturer has constructed this equipment in accordance with the applicable section of the ASME Code for Pumps & Valves for Nuclear Power equipment. In signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the XXXX described in the manufacturer's 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.

Date APRIL 20 19 72

Ray Johnson
Inspector

Commission

DIS 762

State and No.

MARK NUMBER	ASTM	MANUFACTURER	MATERIAL MANUFACTUR
5. CROSSPIN CODE EQ	A193 B7	FLANGE SPECIALTIES	COPPERWELD
6. GLAND FLANGE 68A741-6-S	A516 GR70	ANCHOR VALVE	U.S. STEEL CORP.
7. GLAND RET RING 68A741-6-S	A516 GR70	ANCHOR VALVE	U.S. STEEL CORP.
8. DRAIN CONNECTION CODE FH	A106 GRB	KEY PIPE & SUPPLY	U.S. STEEL CORP.

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

- Owner Iowa Electric Light and Power Date April 9, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 PMAR 1056712 / 1062384
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Control Rod Drive (CRD) Class 1
5. (a) Applicable Const. Code ASME III 19 74 Edition, W75 Addenda, 1361-2 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
(c) Capscrews constructed to ASME III 77 Edition S77 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Cylinder Tube & Flange	General Elect.	S/N A8840	N/A	1R215(10-27)	1990	Replacement	Yes
Cylinder Tube & Flange	General Elect.	A/N 4556	N/A	1R215(10-27)	N/A	Replaced	Yes
Capscrews	General Elect.	HT Code KOG	N/A	PN 117C4515P002	1990	Replacement	No

7. Description of Work Replacement of CRD Tube and Flange Assembly and capscrews.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psig psi Test Temp. 210 °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. 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
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 replacement conforms
 to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed Shaharai Codes & Materials, GL Date 4/25/, 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 3-28-92 to 5-17-92
 , 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.

William Muller
 Inspectors Signature

Commissions NB 3542 (I N) Ia 1046
 National Board, State, Province, and Endorsements

Date 5-17-92 19 92

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

1. Owner Iowa Electric Light and Power Date April 21, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 CMAR A12079
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Residual Heat Removal (RHR) Class 2
5. (a) Applicable Const. Code ASME III 19 68 Edition, W68 Addenda, 1361-2 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Bolts (8ea)	Unknown	N/A	N/A	Inlet Bolts	Unknown	Replaced	No
Nuts (8ea)	Unknown	N/A	N/A	Inlet Nuts	Unknown	Replaced	No
Bolts (8ea)	Cardinal	Ht#C66935	N/A	Inlet Bolts	1988	Replacement	No
Nuts (8ea)	Cardinal	Ht#4LC0913	N/A	Inlet Nuts	1986	Replacement	No

7. Description of Work Replaced Inlet Bolting due to damage on PSV-1952.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 190 psig psi Test Temp. 66.5 °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks The inlet bolting for PSV-1952 was replaced due to damage. The replacement bolting was cut (1" ⁺ 1/16)
Applicable Manufacturer's Data Reports to be attached
to facilitate acceptable assembly. The bolting was installed and a VT-2 (92-095) was performed and found acceptable

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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shaper Codes & Materials, GL Date 4/25/92, 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 Hartford, Connecticut have inspected the components described in
this Owner's Report during the period 4-8-92 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.

William M. Mull Commissions NB7542 (I, N) ID 1046
Inspectors Signature National Board, State, Province, and Endorsements

Date 5-19-92 19 92

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

1. Owner Iowa Electric Light and Power Date April 21, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 PMAR 1058487
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Residual Heat Removal (RHR) Class 2
5. (a)Applicable Const. Code ASME III 19 77 Edition, W77 Addenda, N249,N71,N225 Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
GBB-3-SS-238	BergenPatterson	2500-20-423	N/A	HSSA-20	N/A	Replaced	No
GBB-3-SS-238	BergenPatterson	2500-20-406	N/A	HSSA-20	N/A	Replacement	No

7. Description of Work Replaced snubber at GBB-3-SS-238 with new snubber.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Snubber 2500-20-406 was rebuilt for replacing snubber 2500-20-423 at GBB-3-SS-238 location. During
Applicable Manufacturer's Data Reports to be attached
rebuilding the calibrated valve was replaced. S/N 2500-20-406 was tested and accepted. A VT-3/4 (92-025) was
completed 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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Snubder Shauger Codes & Materials, GL Date 5/1/92, 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 Hartford, Connecticut have inspected the components described in
this Owner's Report during the period 2-13-92 to 5-20-92
, 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.

William M. Miller
Inspectors Signature

Commissions NB 7542 (I, N) Is 1046
National Board, State, Province, and Endorsements

Date 5-20 19 92

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

1. Owner Iowa Electric Light and Power Date April 21, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Eneg Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 PMAR 1058488
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Residual Heat Removal (RHR) Class 2
5. (a) Applicable Const. Code B31.7 19 69 Edition, 71 Addenda, Code
Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Main Cylinder Tube	Anchor Darling	107-001	N/A	GBB-4-SS-217A	Unknown	Replacement	No

7. Description of Work Replaced Main Cylinder Tube on rebuilt snubber S/N DA-10.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Snubber DA-10 was rebuilt and installed at GBB-4-SS-217A. During rebuilding it was necessary to
Applicable Manufacturer's Data Reports to be attached
replace the main cylinder tube due to damage. DA-10 was tested and found acceptable. A VT-3/4 (92-030) was
completed 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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shauger Codes & Materials, GL Date 5-1-, 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 2-17-92 to 5-20-92
, 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.

William Mueller Commissions NP7542 (I.N) I 2 1046
Inspectors Signature National Board, State, Province, and Endorsements

Date 5-20 19 92

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

1. Owner Iowa Electric Light and Power Date April 21, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 PMAR 1045086
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Residual Heat Removal (RHR) Class 2
5. (a) Applicable Const. Code B31.7 19 69 Edition, 71 Addenda, Code
Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81

6. Identification of Components Repaired or Replaced and Replacement Components

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)
Main Cylinder Tube	Anchor Darling	107-002	N/A	GBB- X -SS-237 3 4/19/92	Unknown	Replacement	No
Main Cylinder Tube	Bergen Patterson	107-002	N/A	GBB- X -SS-237 3	Unknown	Replaced	No

7. Description of Work Replaced Main Cylinder Tube on rebuilt snubber S/N DA-23.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Snubber DA-23 was rebuilt and installed at GBB-SS-237. During rebuilding it was necessary to
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 replacement conforms
to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sunder Shaugan Codes & Materials, GL Date 4/30/92, 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 Hartford, Connecticut have inspected the components described in
this Owner's Report during the period 2-26-92 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.

William M. McKibbin
Inspectors Signature

Commissions NB 7542 (I.N) I 2 1046
National Board, State, Province, and Endorsements

Date 5-19 19 92

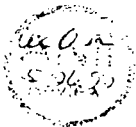
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Iowa Electric Light and Power Date April 24, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 3
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 see table CRD-11/12
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Rd. Palo, IA 52324 Expiration Date None
Address
4. Identification of System Control Rod Drives (Class 1)
5. (a) Applicable Const. Code ASME Section III 19 74 Edition, w75 Addenda, 1361-2 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
(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
6. Identification of Components Repaired or Replaced and Replacement Components

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)
CRD Bolting (8ea)	General Electric	HT Code KOG	NA	see CRD-11/12	1990	Replacement	No
Cylinder Tube & Flange Assy	General Electric	S/N A5273	NA	1R215(38-27)	1990	Replacement	Yes
Cylinder Tube & Flange Assy.	General Electric	S/N A3965	NA	1R215(38-27)	Unknown	Replaced	Yes

7. Description of Work Replacement of CRD Housing and one Cylinder Tube and Flange Assembly.
8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X
Other Pressure 1004 psi Test Temp. 210 °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.



FORM NIS-2 (Back)

sheet 2 of 3

9. Remarks Replacement of CRD Housing Bolting. A VT-2 (91-304) was performed after installation of CRD Housings and
Applicable Manufacturer's Data Reports to be attached
accepted. A VT-1 was completed prior to installation see CRD Table 11/12 for individual CRDs. (Note that the CRDs
that are reinstalled were removed from previous locations) except for 1R215 (38-27) where a new CRD Cylinder Tube
and Flange Assy. was installed. (Ref. NCR 92-074)

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 NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Sharpe Codes & Materials, GL Date 5-26, 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 2-13-92 to 5-26-92
 , 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.

William M. Mello Commissions NB 7540 (N.I.) Ia 1046
 Inspectors Signature National Board, State, Province, and
 Endorsements

Date 5-26 19 92

1. Owner Iowa Electric Light & Power Date April 24, 1992
 Name
P.O. Box 351, Cedar Rapids, IA 52406 Sheet 3 of 3
 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. Identification of System see below
 5. (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
1980 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 Manufac.	Board No.	Other Identif.	Year Built (Rep.)	ASME Code Repaired Replaced or Replacement	Stamped (Yes or No)
CRD Bolting	General Electric	None	See Below	1990	Replacement	No

Table CRD-11/12 (Class 1)

Installation Organization	Manufac. Serial No. (Removed)	Manufac. Serial No. (Installed)	Other Identification	Preservice VT-1 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

W. 21m
 5-26-92

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

1. Owner Iowa Electric Light and Power Date April 27, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 CMAR A12199
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Reactor Water Cleanup (RWCU) Class 1
5. (a) Applicable Const. Code ANSI B31.7 19 69 Edition, 71 Addenda, _____ Code
Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Pipe Clamp/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 Pin	BergenPatterson	Ht#N85132	N/A	N/A	1990	Replacement	No

7. Description of Work Replaced Pipe Clamp and Bolting on DCA-14-SS-073 with pipe clamp from EBB-15-H-13 and new Bolts Nuts and Load Pin.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks During the ISI exam (91-018) of DCA-14-SS-73 (CUB-K009A) 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 accomodate
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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed Shirley Sharpe Codes & Materials, GL Date 5-2-, 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 4-20-92 to 5-18-92
, 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.

William Mueller
Inspectors Signature

Commissions IBA 7542 (I, N) Ia 1046
National Board, State, Province, and Endorsements

Date 5-19 19 92

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

1. Owner Iowa Electric Light and Power Date April 28, 1992
Name _____
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address _____
2. Plant Duane Arnold Energy Center Unit 1
Name _____
- 3277 DAEC Rd. Palo, IA 52324 PMAR 1057994
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name _____
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address _____
4. Identification of System CRD H draulic ReturnLine Class 1
5. (a)Applicable Const. Code ANSI B31.7 19 69 Edition, 71 Addenda, _____ Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
(c)Construction Code for End Attachment ASME III & Code Case N-71
6. Identification of Components Repaired or Replaced and Replacement Components

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)
End Attachment	BergenPatterson	P/N1001/1.5K	N/A	DBA-6-SS-29	Unknown	Replaced	No
End Attachment	BergenPatterson	P/N1001/1.5K	N/A	DBA-6-SS-29	1992	Replacement	No

7. Description of Work Replaced End Attachment on DBA-6-SS-29 (CRA-K017AA).
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
- Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

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 1057994 was used to replace the end attachment
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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed Sunder Shauji 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 3-28-92 to 5-21-92
 , 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.

William Mueller
 Inspectors Signature

Commissions NR 7-542 (I.N) Is 1046
 National Board, State, Province, and Endorsements

Date 5-21- 19 92

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

1. Owner Iowa Electric Light and Power Date April 28, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 PMAR 1058001
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Feedwater (Class 1)
5. (a) Applicable Const. Code ANSI B31.7 19 69 Edition, 71 Addenda, Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
(c) Construction Code for End Attachment ASME III & Code Case N-71
6. Identification of Components Repaired or Replaced and Replacement Components

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)
End Attachment	BergenPatterson	N/A	N/A	DLA-2-SS-9	Unknown	Replaced	No
End Attachment	BergenPatterson	P/N1001-6	N/A	DLA-2-SS-9	1992	Replacement	No
Pipe Clamp	BergenPatterson	P/N EA-3	N/A	DLA-2-SS-9	Unknown	Replaced	No
Bolts/Nuts	BergenPatterson	N/A	N/A	DLA-2-SS-9	Unknown	Replaced	No
Pipe Clamp	BergenPatterson	SPEA-3/3"	N/A	DLA-2-SS-9	1992	Replacement	No
Bolts/Nuts	BergenPatterson	N/A	N/A	DLA-2-SS-9	1992	Replacement	No

7. Description of Work Replaced End Attachment and Clamp with associated Bolting on DLA-2-SS-9 (FWC-K014).
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

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 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 NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shaper Codes & Materials, GL Date 5-2-, 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 3-31-92 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.

William M. Mulla Commissions NB7542(I,N) I-2 1046
 Inspectors Signature National Board, State, Province, and Endorsements

Date 5-19 19 92

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

1. Owner Iowa Electric Light and Power Date April 28, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 CMAR A08847
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam A (Class 1)
5. (a)Applicable Const. Code *ANSI B31.1 19 67 Edition, Addenda, Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
* Base Code - GE Spec 21A9230 Rev. 2
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Bonnet Bore	General Elect.	214856-10	N/A	CV-4413	1990	Repaired	No
Bonnet Guide	General Elect.	214856-10	N/A	CV-4413	1990	Repaired	No
Bonnet Studs	N/A	RI-VB23	N/A	CV-4413	Unknown	Repaired	No
Bore/Ribs/Pads	General Elect.	N/A	N/A	CV-4413	1990	Repaired	No
Disc/Piston	General Elect.	214856-9	N/A	CV-4413	1990	Replacement	No
Disc/Piston	General Elect.	215585-12	N/A	CV-4413	1990	Replaced	No
Stem/Stem Disc	General Elect.	6033641-204	N/A	CV-4413	1990	Replacement	No
Stem/Stem Disc	General Elect.	214856-20	N/A	CV-4413	1990	Replaced	No

7. Description of Work Repair of bonnet and bonnet studs on CV-4413. Also replaced Disc/Piston and Stem/Stem Disc Assy
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. 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 conforms
to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed

Shaugan
Owner or Owner's Designer, Title

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
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.

William O. Muehle
Inspectors Signature

Commissions

NB 7542 (I, N) Iowa 1046
National Board, State, Province, and Endorsements

Date

5-1919 92

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

1. Owner Iowa Electric Light and Power Date April 28, 1992
Name _____
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address _____
2. Plant Duane Arnold Energy Center Unit 1
Name _____
- 3277 DAEC Rd. Palo, IA 52324 CMAR A08846
Address _____ Repair Organization P.O.No., Job No. _____
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name _____ Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address _____
4. Identification of System Main Steam A (Class 1)
5. (a)Applicable Const. Code *ANSI B31.1 19 67 Edition, _____ Addenda, _____ Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
* Base Code - GE Spec 21A9230 Rev. 2
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Bonnet	General Elect.	Ht# T8116-1	N/A	CV-4412	1992	Replacement	No
Bonnet	General Elect.	214856-17	N/A	CV-4412	1990	Replaced	No
Bonnet Studs	N/A	RI-VB23	N/A	CV-4412	Unknown	Repaired	No
Bore/Ribs/Pads	General Elect.	N/A	N/A	CV-4412	1990	Repaired	No
Bonnet Guide	General Elect.	Ht# T8116-1	N/A	CV-4412	1992	Repaired	No
Disc/Piston	General Elect.	215585-12	N/A	CV-4412(from4413	1990	Replacement	No
Disc/Piston	General Elect.	215585-6	N/A	CV-4412	1990	Replaced	No
Stem/Stem Disc	General Elect.	214856-20	N/A	CV-4412(from4413	1990	Replacement	No
Stem/Stem Disc	General Elect.	214856-21	N/A	CV-4412	1990	Replaced	No

7. Description of Work Replaced Bonnet, Disc/Piston, and Stem/Stem Disc Assys. Bonnet Studs and replacement Bonnet were repaired.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks CV-4412 failed as found LLRT. CMAR A08846 was written to initiate repairs. The bonnet guide and studs
Applicable Manufacturer's Data Reports to be attached
were machined to improve valve clearances. The bonnet, disc/piston and stem/stem disc assys. were replaced. Body
bore, ribs and pads were machined. The disc/piston and stem/stem disc assys. were from CV4413. A VT-3 (92-069) and
VT-1 (92-070) were performed and accepted. A VT-2 (91-304) was completed and accepted after reassembly.

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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed

S. Shaugan
Owner or Owner's Designee, Title

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
this Owner's Report during the period 3-5-92 to 6-26-92
, 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.

William Mueller
Inspectors Signature

Commissions

NB 7542 (I, N) Is 1046

National Board, State, Province, and Endorsements

Date

6-2619 92

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

1. Owner Iowa Electric Light and Power Date April 28, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 CMAR A07553A
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam C (Class 1)
5. (a)Applicable Const. Code *ANSI B31.1 19 67 Edition, Addenda, Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
* Base Code - GE Spec 21A9230 Rev. 2
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Bonnet Bore	General Elect.	214856-16	N/A	CV-4418	1990	Repaired	No
Bonnet Guide	General Elect.	214856-16	N/A	CV-4418	1990	Repaired	No
Bonnet Studs (2ea)	N/A	RI-VB23	N/A	CV-4418	Unknown	Repaired	No
Bore/Ribs/Pads	General Elect.	N/A	N/A	CV-4418	1990	Repaired	No
Bonnet Rabbit	General Elect.	214856-16	N/A	CV-4418	1990	Repaired	No
Disc/Piston	General Elect.	215585-9	N/A	CV-4418	1990	Replacement	No
Disc/Piston	General Elect.	215585-8	N/A	CV-4418	1990	Replaced	No
Stem/Stem Disc	General Elect.	214856-21	N/A	CV-4418(from4412	1990	Replacement	No
Stem/Stem Disc	General Elect.	6033641-203	N/A	CV-4418	1990	Replaced	No

7. Description of Work Repaired Bonnet guide, bore, and rabbit. Repaired Body,Pads,and Ribs. Replaced Disc/Piston and Stem/Stem Disc Assys.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.



FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks CV-4418 failed as found LLRT. CMAR A07553A was written to initiate repairs. The bonnet guide, bore, and rabbit were machined to improve valve clearances. The valve body, ribs and pads were also machined. The Disc /Piston and Stem/Stem Disc Assys. were replaced. Stem/Stem Disc coming from CV4412 while the Disc/Piston was a spare (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 (91-304) was completed and accepted after reassembly.

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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shayer 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 Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2-28-92 to 6-8-92, 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.

William M. Muller Commissions NA 7542 (IN) ID 1046
 Inspectors Signature National Board, State, Province, and Endorsements

Date 6-8 19 92

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

1. Owner Iowa Electric Light and Power Date April 29, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 CMAR A06716B
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam C (Class 1)
5. (a) Applicable Const. Code *ANSI B31.1 19 67 Edition, Addenda, Code
Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
* Base Code - GE Spec 21A9230 Rev. 2
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Bonnet Bore	General Elect.	214856-13	N/A	CV-4419	1990	Repaired	No
Bonnet Stud	N/A	N/A	N/A	CV-4419	Unknown	Repaired	No
Stem/Stem Disc	General Elect.	214856-23	N/A	CV-4419(from 4418)	1990	Replacement	No
Stem/Stem Disc	General Elect.	214856-18	N/A	CV-4419	1990	Replaced	No

7. Description of Work Repaired Bonnet bore and stud. Replaced Stem/Stem Disc with one from CV-4418.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. 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 and
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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed Sumner Shaugen Codes & 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 2-28-92 to 5-18-92
, 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.

William C. Muller
Inspectors Signature

Commissions NA 7540 (I.N) Iowa 1046
National Board, State, Province, and Endorsements

Date 5-18 1992

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

1. Owner Iowa Electric Light and Power Date April 29, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 CMAR A10826
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam D (Class 1)
5. (a)Applicable Const. Code *ANSI B31.1 19 67 Edition, Addenda, Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
* Base Code - GE Spec 21A9230 Rev. 2
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Bonnet Bore	General Elect.	214856-15	N/A	CV-4420	1990	Repaired	No
Bonnet Stud	N/A	N/A	N/A	CV-4420	Unknown	Repaired	No
Stem/Stem Disc	General Elect.	6033641-203	N/A	CV-4420(from4418	1990	Replacement	No
Stem/Stem Disc	General Elect.	214856-24	N/A	CV-4420	1990	Replaced	No
Disc/Piston	General Elect.	214856-8	N/A	CV-4420(from4418	1990	Replacement	No
Disc/Piston	General Elect.	215585-7	N/A	CV-4420	1990	Replaced	No

7. Description of Work Repaired Bonnet bore and stud. Replaced Stem/Stem Disc and Disc/Piston from CV-4418 (ref CMAR A07553)
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.

W. L. H.
5/29/92
11-92-20

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks CV-4420 failed LLRT. CMAR A10826 was written to initiate the repairs. The bonnet bore was machined
Applicable Manufacturer's Data Reports to be attached
to improve valve clearances. One bonnet stud was also machined. The Stem/Stem Disc and Disc/Piston Assys were
replaced using the assys removed from CV4418 under CMAR A07553. A VT-1 (92-072) and a VT-3 (92-071) were performed
and accepted. A VT-2 (91-304) was performed after reassembly and 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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumudu Shaujan Codes & Materials, GL Date 5-21-, 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 3-5-92 to 6-8-92
 , 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.

William M. Mullin Commissions NB 7582 (I N) Ia 1046
 Inspectors Signature National Board, State, Province, and Endorsements

Date 6-8 19 92

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

1. Owner Iowa Electric Light and Power Date April 30, 1992
Name _____
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address _____
2. Plant Duane Arnold Energy Center Unit 1
Name _____
- 3277 DAEC Rd. Palo, IA 52324 PMAR 1052006
Address _____ Repair Organization P.O.No., Job No. _____
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name _____ Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address _____
4. Identification of System Main Steam A (Class 1)
5. (a) Applicable Const. Code ASME III 19 68 Edition, W68 Addenda, _____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Pilot Valve	Target Rock	S/N 207	N/A	PSV-4400	1975	Replacement	Yes
Pilot Valve	Target Rock	S/N 189	N/A	PSV-4400	1975	Replaced	Yes
Pilot Bolts (2ea)	JED Mfg. Co.	Item#107	N/A	PSV-4400	1975	Replacement	No
Pilot Bolts (2ea)	N/A	Item#107	N/A	PSV-4400	Unknown	Replaced	No
Pilot Nuts (2ea)	Target Rock	Item#150	N/A	PSV-4400	1991	Replacement	No
Pilot Nuts (2ea)	N/A	Item#150	N/A	PSV-4400	Unknown	Replaced	No
Filter Plug	Target Rock	*Item#24	N/A	PSV-4400	1991	Replacement	No
Plug	Target Rock	Item#43	N/A	PSV-4400	1975	Replaced	No

7. Description of Work Replaced Pilot Valve S/N 189 with S/N 207. In addition replaced 2ea Bolts and Nuts and Plug.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.

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

FORM NIS-2 (Back)

sheet 2 of 2

9. 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 indication 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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shauger Codes & Materials, GL Date 5-5-, 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 3-24-92 to 5-20-92
 , 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.

William Mulla
 Inspectors Signature

Commissions NB2542 (IN) ID 1046
 National Board, State, Province, and Endorsements

Date 5-20 19 92

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

1. Owner Iowa Electric Light and Power Date April 30, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 PMAR 1052007
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam A (Class 1)
5. (a) Applicable Const. Code ASME III 19 68 Edition, W68 Addenda, _____ Code
Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Pilot Valve	Target Rock	S/N 201	N/A	PSV-4401	1975	Replacement	Yes
Pilot Valve	Target Rock	S/N 226	N/A	PSV-4401	1975	Replaced	Yes
Pilot Bolts (12ea)	JED Mfg. Co.	Item#107	N/A	PSV-4401	1975	Replacement	No
Pilot Bolts (12ea)	JED Mfg. Co.	Item#107	N/A	PSV-4401	1975	Replaced	No
Pilot Nuts (12ea)	Target Rock	Item#150	N/A	PSV-4401	1991	Replacement	No
Pilot Nuts (12ea)	N/A	Item#150	N/A	PSV-4401	Unknown	Replaced	No
Filter Plug	Target Rock	*Item#24	N/A	PSV-4401	1991	Replacement	No
Plug	Target Rock	Item#43	N/A	PSV-4401	1975	Replaced	No

7. Description of Work Replaced Pilot Valve S/N 226 with S/N 201. In addition replaced 12ea Bolts/Nuts and Plug.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.

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

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Pilot Valve S/N 226 was replaced with S/N 201. All studs and nuts were replaced due to damage. In
Applicable Manufacturer's Data Reports to be attached
addition the plug was replaced with the filter plug as per Note 10 on Dwg. B21-3379-001. A VT-1 (92-037) was
performed and accepted. A VT-3 (91-001) was completed on S/N 201 and accepted. A VT-2 (91-304) was performed after
installation and accepted. (Ref. NIS-2 11-92-23 for the main valve body 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 NoneCertificate of Authorization No. NoneExpiration Date None

Signed Sumner Shaugan Codes & Materials, GL Date 5-4-92, 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 Hartford, Connecticut have inspected the components described in
this Owner's Report during the period 3-24-92 to 5-20-92
, 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.

William Muller Commissions NB7542(I.N) Ia 1046
Inspectors Signature National Board, State, Province, and Endorsements

Date 5-20 19 92

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

1. Owner Iowa Electric Light and Power Date April 30, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 CMAR A05311/A06458
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam A (Class 1)
5. (a) Applicable Const. Code ASME III 19 68 Edition, W68 Addenda, _____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Main Valve	Target Rock	S/N 141	N/A	PSV-4401	1978	Replacement	Yes
Main Valve	Target Rock	S/N 226	N/A	PSV-4401	1975	Replaced	Yes
Main Body Pilot Flg.	Target Rock	S/N 141	N/A	PSV-4401	1978	Repaired	Yes
Pilot Tube Strap	N/A	N/A	N/A	PSV-4401	1992	Repaired	No

7. Description of Work Replaced Main Valve Body S/N 226 with S/N 141.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. 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 replacement conforms
to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shaughnessy Codes & Materials, GL Date 5-2-, 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 10-18-91 to 5-20-92
, 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.

William Mueller
Inspectors Signature

Commissions NB 7542 (IN) IS 1046
National Board, State, Province, and Endorsements

Date 5-20-92 19 92

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

1. Owner Iowa Electric Light and Power Date April 30, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 PMAR 1052008
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam B (Class 1)
5. (a) Applicable Const. Code ASME III 19 68 Edition, W68 Addenda, Code
Case
- (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Pilot Valve	Target Rock	S/N 200	N/A	PSV-4402	1975	Replacement	Yes
Pilot Valve	Target Rock	S/N 218	N/A	PSV-4402	1975	Replaced	Yes
Filter Plug	Target Rock	*Item#24	N/A	PSV-4402	1991	Replacement	No
Plug	Target Rock	Item#43	N/A	PSV-4402	1975	Replaced	No

7. Description of Work Replaced Pilot Valve S/N 218 with S/N 200. In addition replaced plug with filter plug.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
- Other ☐ Pressure 1004 psi Test Temp. 210° °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.

*See note 10 on Dwg. APED B21-3379-001.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Pilot Valve S/N 218 was replaced with S/N 200 (Ref. NIS-2 11-90-01 for repairs). In addition, the
Applicable Manufacturer's Data Reports to be attached
plug was replaced with a filter plug assembly as per Note 10 on Dwg. B21-3379-001. A VT-1 (92-039) was performed
and accepted. A VT-3 (90-272) was completed on S/N 200 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 replacement conforms
to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed Sumner Shaugi Codes & Materials, GL Date 5-2-, 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 3-24-92 to 5-17-92
, 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.

William Mueller Commissions NC 7542 (IN) Ia 1046
Inspectors Signature National Board, State, Province, and Endorsements

Date 5-19 19 92

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

1. Owner Iowa Electric Light and Power Date April 30, 1992
Name _____
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address _____
2. Plant Duane Arnold Energy Center Unit 1
Name _____
- 3277 DAEC Rd. Palo, IA 52324 CMAR A08822
Address _____ Repair Organization P.O.No., Job No. _____
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name _____ Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address _____
4. Identification of System Spare MSIV internals (Class 1)
5. (a)Applicable Const. Code ASME III 19 86 Edition, _____ Addenda, _____ Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81

6. Identification of Components Repaired or Replaced and Replacement Components

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)
Disc/Piston	General Elect.	215585-9	N/A	N/A	1990	Repaired	No

7. Description of Work Weld repair and machining of Disc/Piston Assembly.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Disc/Piston S/N 215585-9 was machined then weld built-up on the guide and seat areas. Post weld
Applicable Manufacturer's Data Reports to be attached
heat treatment of the Disc/Piston was performed. Final Machining performed on the installation CMAR.
(Ref. NIS-2 11-92-18 for installation).

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms
 to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed Sumudu Shaurin Codes & Materials, GL Date 5-8-, 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.
Hartford, Connecticut have inspected the components described in
 this Owner's Report during the period 2-14-92 to 5-21-92
 , 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.

William M. Neuman Commissions NB 2582 (I.N) I-1046
 Inspectors Signature National Board, State, Province, and Endorsements

Date 5-21- 19 92

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

1. Owner Iowa Electric Light and Power Date April 30, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 PMAR 1052011
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam C (Class 1)
5. (a)Applicable Const. Code ASME III 19 68 Edition, W68 Addenda, Code
Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81

6. Identification of Components Repaired or Replaced and Replacement Components

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)
Pilot Valve	Target Rock	S/N 176	N/A	PSV-4405	1975	Replacement	Yes
Pilot Valve	Target Rock	S/N 141	N/A	PSV-4405	1975	Replaced	Yes
Pilot Bolts (6ea)	JED Mfg. Co.	Item#107	N/A	PSV-4405	1975	Replacement	No
Pilot Bolts (6ea)	Target Rock	Item#107	N/A	PSV-4405	1975	Replaced	No
Pilot Nuts (3ea)	Target Rock	Item#150	N/A	PSV-4405	1991	Replacement	No
Pilot Nuts (3ea)	Target Rock	Item#150	N/A	PSV-4405	Unknown	Replaced	No

7. Description of Work Replaced Pilot Valve S/N 141 with S/N 176. In addition replaced 6ea Bolts and 3ea Nuts.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Pilot Valve S/N 141 was replaced with S/N 176. In addition 6ea Bolts and 3ea Nuts were replaced due
Applicable Manufacturer's Data Reports to be attached
to damage. A VT-1(92-041) was completed and accepted. A VT-3 (90-176) on S/N 176 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 replacement conforms
 to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed Surinder Shanger Codes & Materials, GL Date 5-2-, 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 4-23-92 to 5-21-92
 , 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.

William Muller Commissions NB 7542 (I, N) Is 1046
 Inspectors Signature National Board, State, Province, and Endorsements

Date 5-21 19 92

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

1. Owner Iowa Electric Light and Power Date April 30, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 PMAR 1052012
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam D (Class 1)
5. (a) Applicable Const. Code ASME III 19 68 Edition, W68 Addenda, Code
Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Pilot Valve	Target Rock	S/N 227	N/A	PSV-4406	1975	Replacement	Yes
Pilot Valve	Target Rock	S/N 203	N/A	PSV-4406	1975	Replaced	Yes
Pilot Bolts (12ea)	JED Mfg. Co.	Item#107	N/A	PSV-4406	1975	Replacement	No
Pilot Bolts (12ea)	Cardinal	Item#107	N/A	PSV-4406	1989	Replaced	No
Pilot Nuts (12ea)	Target Rock	Item#150	N/A	PSV-4406	1991	Replacement	No
Pilot Nuts (12ea)	N/A	Item#150	N/A	PSV-4406	Unknown	Replaced	No
Filter Plug	Target Rock	*Item#24	N/A	PSV-4406	1991	Replacement	No
Plug	Target Rock	Item#43	N/A	PSV-4406	1975	Replaced	No

7. Description of Work Replaced Pilot Valve S/N 203 with S/N 227. In addition replaced 12ea Bolts/Nuts and Plug.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.

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

FORM NIS-2 (Back)

sheet 2 of 2

9. 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 replacement conforms
 to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed

Sumner Shauger
 Owner or Owner's Designee, Title

Codes & Materials, GL

Date

5-2, 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
 this Owner's Report during the period 3-21-92 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.

William Mankin
 Inspectors Signature

Commissions

NB 7540 (I, N) Is 1046
 National Board, State, Province, and Endorsements

Date

5-19

19 92

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

1. Owner Iowa Electric Light and Power Date April 30, 1992
Name _____
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address _____
2. Plant Duane Arnold Energy Center Unit 1
Name _____
- 3277 DAEC Rd. Palo, IA 52324 PMAR 1052013
Address _____ Repair Organization P.O.No., Job No. _____
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name _____ Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address _____
4. Identification of System Main Steam D (Class 1)
5. (a) Applicable Const. Code ASME III 19 68 Edition, W68 Addenda, _____ Code
Case _____
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Pilot Valve	Target Rock	S/N 199	N/A	PSV-4407	1975	Replacement	Yes
Pilot Valve	Target Rock	S/N 202	N/A	PSV-4407	1975	Replaced	Yes
Pilot Bolts (3ea)	JED Mfg. Co.	Item#107	N/A	PSV-4407	1975	Replacement	No
Pilot Bolts (3ea)	Target Rock	Item#107	N/A	PSV-4407	1978	Replaced	No
Pilot Nuts (3ea)	Target Rock	Item#150	N/A	PSV-4407	1991	Replacement	No
Pilot Nuts (3ea)	Target Rock	Item#150	N/A	PSV-4407	1975	Replaced	No

7. Description of Work Replaced Pilot Valve S/N 202 with S/N 199. In addition replaced 3ea Bolts/Nuts.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210° °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. 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 replacement conforms
 to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shaugan Codes & Materials, GL Date 5-2-, 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 3-23-92 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.

William Mullin Commissions NB7542(I,N) Is 1046
 Inspectors Signature National Board, State, Province, and Endorsements

Date 5-19 19 92

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

1. Owner Iowa Electric Light and Power Date April 30, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 CMAR A11300
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System S are MSIV internals)Class 1
5. (a)Applicable Const. Code ASME III 19 86 Edition, Addenda, Code
Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81

6. Identification of Components Repaired or Replaced and Replacement Components

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)
Disc/Piston	General Elect.	215585-6	N/A	N/A	1990	Repaired	No

7. Description of Work Weld repair and machining of Disc/Piston Assembly.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Disc/Piston S/N 215585-6 was machined then weld built-up on the guide and seat areas. Post weld
Applicable Manufacturer's Data Reports to be attached
heat treatment 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 conforms
 to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shaupe Codes & Materials, GL Date 5-2-, 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 3-28-92 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.

William Mueller Commissions NB 7542 (I, N) Ia 1646
 Inspectors Signature National Board, State, Province, and Endorsements

Date 5-19 19 92

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

1. Owner Iowa Electric Light and Power Date Ma 1 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 PMAR 1045106
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Residual Heat Removal)RHR Class 2
5. (a)Applicable Const. Code B31.7 19 69 Edition, 71 Addenda, Code
Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Main Cylinder Tube	BergenPatterson	107-002x7.75	N/A	HBB-23-SS-220	Unknown	Replacement	No
Main Cylinder Tube	BergenPatterson	107-002x7.75	N/A	HBB-23-SS-220	Unknown	Replaced	No
Main Piston Rod	BergenPatterson	106-001x15.09	N/A	HBB-23-SS-220	Unknown	Replacement	No
Main Piston Rod	BergenPatterson	106-001x15.09	N/A	HBB-23-SS-220	Unknown	Replaced	No

7. Description of Work Replaced Main Cylinder Tube and Piston Rod on rebuilt snubber S/N DA-66
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Snubber DA-66 was rebuilt and installed at HBB-23-SS-220. During rebuilding it was necessary to
Applicable Manufacturer's Data Reports to be attached
replace the main cylinder tube and main piston rod due to damage. These components were removed from snubber DA-2.
DA-66 was tested and found acceptable. A VT-3 (92-022) was completed 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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumda Shauji Codes & Materials, GL Date 5-2-, 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 2-27-92 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.

William M. Muller Commissions NB 7540 (IN) Is 1046
Inspectors Signature National Board, State, Province, and Endorsements

Date 5-19 19 92

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

1. Owner Iowa Electric Light and Power Date May 1, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 PMAR 1045108
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Residual Heat Removal (RHR) Class 2
5. (a) Applicable Const. Code B31.7 19 69 Edition, 71 Addenda, _____ Code
Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81

6. Identification of Components Repaired or Replaced and Replacement Components

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)
Main Cylinder Tube	Anchor Darling	107-002x8.00	N/A	HBB-24-SS-221	Unknown	Replacement	No
Main Cylinder Tube	BergenPatterson	107-002x8.00	N/A	HBB-24-SS-221	Unknown	Replaced	No
Calibrated Valve	Anchor Darling	302-1127-41	N/A	HBB-24-SS-221	Unknown	Replacement	No
Calibrated Valve	BergenPatterson	Unknown	N/A	HBB-24-SS-221	Unknown	Replaced	No

7. Description of Work Replaced Main Cylinder Tube and Calibrated Valve on rebuilt snubber G22690-23R-2 (GBC-11-SS-26)
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Snubber G22690-23R-2 was rebuilt and installed at HBB-24-SS-221. During rebuilding it was necessary
Applicable Manufacturer's Data Reports to be attached
to replace the main cylinder tube and calibrated valve due to damage. G22690-23R-2 was tested and found acceptable
A VT-3/4 92-026 was completed after installation and accepted. p

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 NoneCertificate of Authorization No. None Expiration Date None

Signed Sumner Shauger Codes & Materials, GL Date 5-2-, 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 2-29-92 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.

William M. Muller Commissions NB 7542 (I.N) ID 1046
Inspectors Signature National Board, State, Province, and Endorsements

Date 5-19 19 92

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

1. Owner Iowa Electric Light and Power Date May 1, 1992
Name
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
- 3277 DAEC Rd. Palo, IA 52324 PMAR 1045107
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
- Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Residual Heat Removal (RHR) Class 2
5. (a)Applicable Const. Code B31.7 19 69 Edition, 71 Addenda, Code
Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacture	Manufacture Serial No.	National Board No.	Other Identification	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
Main Cylinder Tube	B chor Darling	107-002x8.00	N/A	HBB-23-SS-229	Unknown	Replacement	No
Main Cylinder Tube	BergenPatterson	107-002x8.00	N/A	HBB-23-SS-229	Unknown	Replaced	No
	B		B				
	B		B				

7. Description of Work Replaced Main Cylinder Tube on rebuilt snubber S/N DA-29.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Snubber DA-29 was rebuilt and installed at HBB-23-SS-229. During rebuilding it was necessary
Applicable Manufacturer's Data Reports to be attached
to replace the main cylinder tube due to damage. DA-29 was tested and found acceptable.
A VT-3/4 (92-023) was completed 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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed Surinder Shaurani Codes & Materials, GL Date 5-2-, 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 2-19-92 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.

William Mueller
Inspectors Signature

Commissions NB 7542 (I.N) I 3 1046
National Board, State, Province, and Endorsements

Date 5-19 19 92

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

1. Owner Iowa Electric Light and Power Date May 4, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address

2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 PMAR 1058003
Address Repair Organization P.O.No., Job No.

3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address

4. Identification of System Residual Heat Removal 'B' Loop (Class 1)

5. (a)Applicable Const. Code ANSI B31.7 19 69 Edition, 71 Addenda, Code Case
(b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
(c)Construction Code for End Attachment ASME III & Code Case N-71

6. Identification of Components Repaired or Replaced and Replacement Components

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)
End Attachment	BergenPatterson	P/N EA1-50K	N/A	DLA-6-SS-13	Unknown	Replaced	No
End Attachment	BergenPatterson	P/N1001/50K	N/A	DLA-6-SS-13	1991	Replacement	No

7. Description of Work Replaced End Attachment on DLA-6-SS-13 (RHD-K007).

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 2

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
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 replacement conforms
 to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Swinder Shauge 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 Hartford, Connecticut have inspected the components described in
 this Owner's Report during the period 3-28-92 to 5-20-92
 , 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.

William Mueller
 Inspectors Signature

Commissions NB 7542 (I, N) I 2 1046
 National Board, State, Province, and Endorsements

Date 5-20 19 92

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

1. Owner Iowa Electric Light and Power Date May 6, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 CMAR A12135
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Main Steam C (Class 1)
5. (a) Applicable Const. Code ASME III 19 68 Edition, S69 Addenda, _____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Inlet Studs(12ea)	B Cardinal	A193 B7	N/A	PSV-4404	1989/92	Replacement	No
Inlet Studs(12ea)	B Unknown	A193 B7	N/A	PSV-4404	Unknown	Replaced	No

7. Description of Work Replaced Inlet Studs on PSV-4404.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210 °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks PSV-4404 (S/N BM8490) was removed for testing and reinstalled per PMAR 1052010. During installation
Applicable Manufacturer's Data Reports to be attached
- CMAR A12135 was written to replace all twelve inlet studs because the existing studs were found to be too short.
- A VT-1 (92-049) and a VT-2 (91-304) was performed 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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Shaujan Codes & Materials, GL Date 5-8-, 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 4-14-92 to 5-20-92
 , 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.

William Mueller Commissions NB 7542 (IN) Ia 1046
 Inspectors Signature National Board, State, Province, and Endorsements

Date 5-20 19 92

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

1. Owner Iowa Electric Light and Power Date May 14 1992
Name _____
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address _____
2. Plant Duane Arnold Energy Center Unit 1
Name _____
- 3277 DAEC Rd. Palo, IA 52324 CMAR A12131
Address _____ Repair Organization P.O.No., Job No. _____
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name _____ Authorization No. None
- 3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address _____
4. Identification of System Main Steam B (Class 1)
5. (a) Applicable Const. Code ASME III 19 68 Edition, S69 Addenda, _____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components:

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)
Inlet Studs(6 ea)	Unknown	A193 B7	N/A	PSV-4403	Unknown	Replaced	No
Inlet Studs(6 ea)	Cardinal	Ht# 8869139	N/A	PSV-4403	1989	Replacement	No

7. Description of Work Replaced 6 Inlet Studs on PSV-4403.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210 °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks 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 A12131 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.

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 Sumner Shaug Codes & Materials, GL Date 5/18/92, 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 Hartford, Connecticut have inspected the components described in
this Owner's Report during the period 4-14-92 to 5-21-92
, 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.

William Mueller Commissions NP 7542 (I, N) Ia 1042
Inspectors Signature National Board, State, Province, and Endorsements

Date 5-21 19 92

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

1. Owner Iowa Electric Light and Power Date May 19, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 CMAR A04867
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System 1 1/4" Relief valve line for HPCI Barometric Condenser (Class 2)
5. (a) Applicable Const. Code ANSI B31.7 19 67 Edition, Addenda, Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
(c) Construction Code of Replacement item Section III 1974 Edition, S75 Addenda with Code Case (pipe)
Sect. III 1977 Edition, S78 Addenda (flange); Sect. III 1983 Edition S85 Addenda (studs, nuts)
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Inlet piping welds W1A and W1B	*	*	N/A	PSV-2223	*	*	No

*Ref. NIS-2 10-90-41 for information (attached)

7. Description of Work Rehydroed the Inlet piping welds (W1A/W1B) for PSV-2223.
8. Tests Conducted: Hydrostatic ☒ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure 18.8 psi Test Temp. 69.7 °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks The inlet piping for PSV-2223 was replaced during RFO10 under CMAR A01133. A Hydro was performed and
Applicable Manufacturer's Data Reports to be attached
accepted. This was documented on NIS-2 10-90-41. Subsequent to power operation from RFO10 the gauge used for the
hydro was found out of calibration. A use history evaluation was performed and CMAR A04867 was written to perform
the hydro during RFO11. The hydro was performed and accepted. This NIS-2 is to supplement NIS-2 (10-90-41).

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 NoneCertificate of Authorization No. NoneExpiration Date None

Signed Sumudu Shange Codes & Materials, GL Date 5-21-, 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 4-15-91 to 5-27-92
, 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.

William Mueller
Inspectors Signature

Commissions NB 7542 (NI) IS 1046
National Board, State, Province, and Endorsements

Date 5-27 19 92

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

1. Owner Iowa Electric Light and Power Date September 11, 1990
 Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
 Address
2. Plant Duane Arnold Energy Center Unit 1
 Name
3277 DAEC Rd. Palo, IA 52324 CHAR #A 01133 (EMA)
 Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Type Code Symbol Stamp None
 Name
 Authorization No. None
3277 DAEC Road Palo, IA 52324 Expiration Date None
 Address
4. Identification of System 1 1/4" Relief valve line for HPCI Barometric Condenser (Class 2)
5. (a)Applicable Const. Code ANSI B31.7 19 67 Edition, Addenda, N/A Code Case
 (b)Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
 (c)Construction Code of Replacement item Section III 1974 Edition, S75 Addenda with Code Case (pipe)
 Sect. III 1977 Edition, S78 Addenda (flange); Section III 1983 Edition S85 Addenda (studs, nuts)
6. Identification of Components Repaired or Replaced and Replacement Components

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)
1 1/4" pipe (sch 80)	Bechtel	n/a	n/a	relief valve line	1972	Replaced	No
1 1/4" pipe (sch 80)	Chicago-Tube & Iron	n/a	n/a	1 1/4" HBB-*	1979	Replacement	No
2- 150# Flanges	Hub Inc.	Ht. Code ARP-N-Coffer	n/a	1 1/4" HBB-*	1990	Replacement	No
4 - studs	Cardinal	Ht. No. X5698	n/a	1 1/4" HBB-*	1986	Replacement	No
8 - nuts	Cardinal	Ht. No. KC 8972	n/a	1 1/4" HBB-*	1986	Replacement	No
Welds W1A, W1B	Iowa Electric	n/a	n/a	1 1/4" HBB-*	1990	Replacement	No

7. Description of Work Replaced pipe with pipe and flange connections
8. Tests Conducted: Hydrostatic ☒ Pneumatic ☐ Nominal Operation Pressure ☐
 Other ☐ Pressure 18.75 psi Test Temp. 74.5 °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 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.



FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Replacement of pipe with pipe, flange connection. Welds were PT examined and the new line was hydrostatic
Applicable Manufacturer's Data Reports to be attached
tested with VT-2 personnel under ISI report # 90-323.

* Line designation not identified in Betchel M-190.

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

Signed Swinder Shauger Codes & Materials, TGL Date 10-5-, 19 90
 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 8-14-90 to 10-15-90
 , 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.

Scott Presler
 Inspectors Signature

Commissions NB 8829(I)(N) 941-1A

National Board, State, Province, and Endorsements

Date Oct 15 19 90

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

1. Owner Iowa Electric Light and Power Date July 2, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 3
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 DCP 1499 up to and including FCN 4
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road Palo, IA 52324 Expiration Date None
Address
4. Identification of System HPCI line 10" EBB-14 Hangers (Class 2)
5. (a) Applicable Const. Code ANSI B31.7 19 69 Edition, 1971 Addenda, N-411 Rev 1 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
EBB-14-H-7 Spring Cans	BergenPatterson	S/N065184/591	N/A	HPC-CE062	1992	Replacement	No
EBB-14-H-7 Spring Cans	BergenPatterson	VS1B Size 9	N/A	HPC-CE062	1971	Replaced	No
EBB-14-H-8	BergenPatterson	N/A	N/A	HPC-CE058	1992	Replacement	No
EBB-14-H-8	BergenPatterson	N/A	N/A	HPC-CE058	1971	Replaced	No
EBB-14-H-4(Rod)	Iowa Electric	A193 B7	N/A	HPC-CE072	1992	Replacement	No
EBB-14-H-4(Rod)	Bergen Patterson	N/A	N/A	HPC-CE072	1971	Replaced	No
Refer to Sheet 3 for additional items							

7. Description of Work Replaced EBB-14-H-7(spring cans), EBB-14-H-8, EBB-14-H-4 (rod), and reset of various hangers.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

FORM NIS-2 (Back)

sheet 2 of 3

9. Remarks DCP-1499 removed the crosstie line 10" EBB-16 (Ref. NIS-2's 10-90-19 & 20). As a result of this DCP a
Applicable Manufacturer's Data Reports to be attached
new piping analysis was performed on EBB-14 line. The analysis revealed that the hangers (see sheet 3) required
readjusting and/or replacement. A preservice examination was performed on all hangers effected and accepted.
An NCR (92-094) was written on EBB-14-H-4, which was dispositioned 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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date _____

Signed Sunder Shaugi Codes & Materials, GL Date 7-7-92, 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 Hartford, Connecticut have inspected the components described in
 this Owner's Report during the period 3-10-92 to 7-7-92
 , 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.

[Signature]
 Inspectors Signature

Commissions TIB # 10352 "N" I Ia 1210-
 National Board, State, Province, and Endorsements

Date 7-7 19 92

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

1. Owner Iowa Electric Light and Power Date July 2, 1992
Name _____
- P.O.Box 351, Cedar Rapids, IA 52406 Sheet 3 of 3
Address _____
2. Plant Duane Arnold Energy Center Unit 1
Name _____
- 3277 DAEC Rd. Palo, IA 52324 DCP 1499 up to and including FCN 4
Address _____ Repair Organization P.O.No., Job No. _____
3. Work Performed by Iowa Electric Type Code Symbol Stamp None
Name _____
- Authorization No. None
- 3277 DAEC Road Palo, IA 52324 Expiration Date None
Address _____
4. Identification of System HPCI line 10" EBB-14 Hangers (Class 2)
5. (a) Applicable Const. Code ANSI B31.7 19 69 Edition, 1971 Addenda, N-411 Rev 1 Code Case
- (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

7-7-92

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks Replacement crosstie line 10"-EBB-16 with elbow and pipe on HPCI side (see NIS-2 109019 for RHR side)
- Applicable Manufacturer's Data Reports to be attached
- following NDE: preservice UT for weld HPC-CF55R, ISI Report #90-335, #90-336; preservice MT ISI Report #90-337.
- Preservice UT for weld HPC-CF56R #90-338, #90-339; preservice MT #90-340. Preservice UT for weld HPC-CF57R 90-332,
- 90-333; Preservice MT #90-334. RT of each weld per construction code. VT-2 performed under procedure STP46G010.**

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 NoneCertificate of Authorization No. None Expiration Date _____Signed S. Sharyan Codes & Materials, TGL Date 11-13-, 19 90
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 7-28-90 to 11-14-90, 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.

Scott L. Becker Commissions NB 8829(I)(N) 941-1A
Inspectors Signature National Board, State, Province, and Endorsements

Date Nov 14 1990

**Preservice VT-3/4 on EBD-14-HB was performed under ISI No. 90-012.

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

1. Owner Iowa Electric Light and Power Date June 12, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 DCP 1525
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Feedwater A (V14-0001), Class 1
5. (a) Applicable Const. Code ASME III 19 77 Edition, W77 Addenda, N-24, N-38 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Hinge Pin Cover (2ea)	Anchor Darling	Ht#218815	N/A	Item 37	1992	Replacement	No
Actuator Assy	Anchor Darling	N/A	N/A	None	1980	Replaced	No
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)	Anchor Darling	SA194 2H	N/A	Item 229	1980	Replaced	No
Hinge Pin Cover (2ea)	Anchor Darling	Ht#218815	N/A	Item 37	1992	Repaired	No

7. Description of Work Replaced Stuffing Box with Hinge Pin Cover and Associated Bolting.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210 °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks The existing stuffing box and bolting were replaced with a new hinge pin cover with bolting. Prior
Applicable Manufacturer's Data Reports to be attached
to installation the covers were machined for proper assembly. DCP 1525 contains the analysis for this modification
(ref Item No. 5.01, Cal-IELP-M91-08). A VT-3 (92-005) and VT-1 (92-003) was completed and accepted. A VT-2(91-304)
was completed and accepted after reassembly.

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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumudu Shanigan Codes & Materials, GL Date 6-22-92, 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 Hartford, Connecticut have inspected the components described in
this Owner's Report during the period 2-1-92 to 7-1-92
, 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.

William M. Muller
Inspectors Signature

Commissions NB 2543 (I, N) IS 1046
National Board, State, Province, and Endorsements

Date 7-1 19 92

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

1. Owner Iowa Electric Light and Power Date June 12, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 DCP 1525
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Feedwater B V14-0003), Class 1
5. (a) Applicable Const. Code ASME III 19 77 Edition, W77 Addenda, N-24, N-38 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Hinge Pin Cover (2ea)	Anchor Darling	Ht#218615	N/A	Item 37	1992	Replacement	No
Actuator Assy	Anchor Darling	N/A	N/A	None	1980	Replaced	No
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)	Anchor Darling	SA194 2H	N/A	Item 229	1980	Replaced	No
Hinge Pin Cover (2ea)	Anchor Darling	Ht#218615	N/A	Item 37	1992	Repaired	No

7. Description of Work Replaced Stuffing Box with Hinge Pin Cover and Associated Bolting.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 1004 psi Test Temp. 210 °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks The existing stuffing box and bolting were replaced with a new hinge pin cover with bolting. Prior
Applicable Manufacturer's Data Reports to be attached
to installation the covers were machined for proper assembly. DCP 1525 contains the analysis for this modification
(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(91-304)
was completed and accepted after reassembly.

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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. NoneExpiration Date None

Signed Sumuel Sharpe Codes & Materials, GL Date 6-22, 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 3-21-92 to 7-1-92
 , 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.

William M. Miller
 Inspectors Signature

Commissions NB 2542(I,N) Ia 1046
 National Board, State, Province, and Endorsements

Date 7-1 19 92

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

1. Owner Iowa Electric Light and Power Date June 30, 1992
Name
P.O.Box 351, Cedar Rapids, IA 52406 Sheet 1 of 2
Address
2. Plant Duane Arnold Energy Center Unit 1
Name
3277 DAEC Rd. Palo, IA 52324 PMAR 1059132
Address Repair Organization P.O.No., Job No.
3. Work Performed by Iowa Electric Light and Power Type Code Symbol Stamp None
Name
Authorization No. None
3277 DAEC Road, Palo, IA. 52324 Expiration Date None
Address
4. Identification of System Core Spray (CS) (Class 2)
5. (a) Applicable Const. Code ASME III 19 68 Edition, W68 Addenda, 1361-2 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1980 W81
6. Identification of Components Repaired or Replaced and Replacement Components

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)
Bolts (12ea)	Unknown	N/A	N/A	Inlet Bolts	Unknown	Replaced	No
Nuts (12ea)	Unknown	N/A	N/A	Inlet Nuts	Unknown	Replaced	No
Bolts (12ea)	Cardinal	Ht#D66732	N/A	Inlet Bolts	1988	Replacement	No
Nuts (8ea)	Cardinal	Ht#Y592608	N/A	Inlet Nuts	1986	Replacement	No

7. Description of Work Replaced Inlet Bolting due to damage on PSV-2129.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 295 psi Test Temp. 84 °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.

FORM NIS-2 (Back)

sheet 2 of 2

9. Remarks The inlet bolting for PSV-2129 was replaced due to damage.
Applicable Manufacturer's Data Reports to be attached
A functional test VT-2 (91-333) was completed 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. repair or replacement

Type Code Symbol Stamp NoneCertificate of Authorization No. None Expiration Date None

Signed Sumudu Shanfar Codes & Materials, GL Date 7-1-, 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 4-8-92 to 7-2-92, 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.

William Mueller
 Inspectors Signature

Commissions NB 7542 (N, I) ID 1046
 National Board, State, Province, and Endorsements

Date 7-2 19 92

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

PART I pages 1 of 53

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

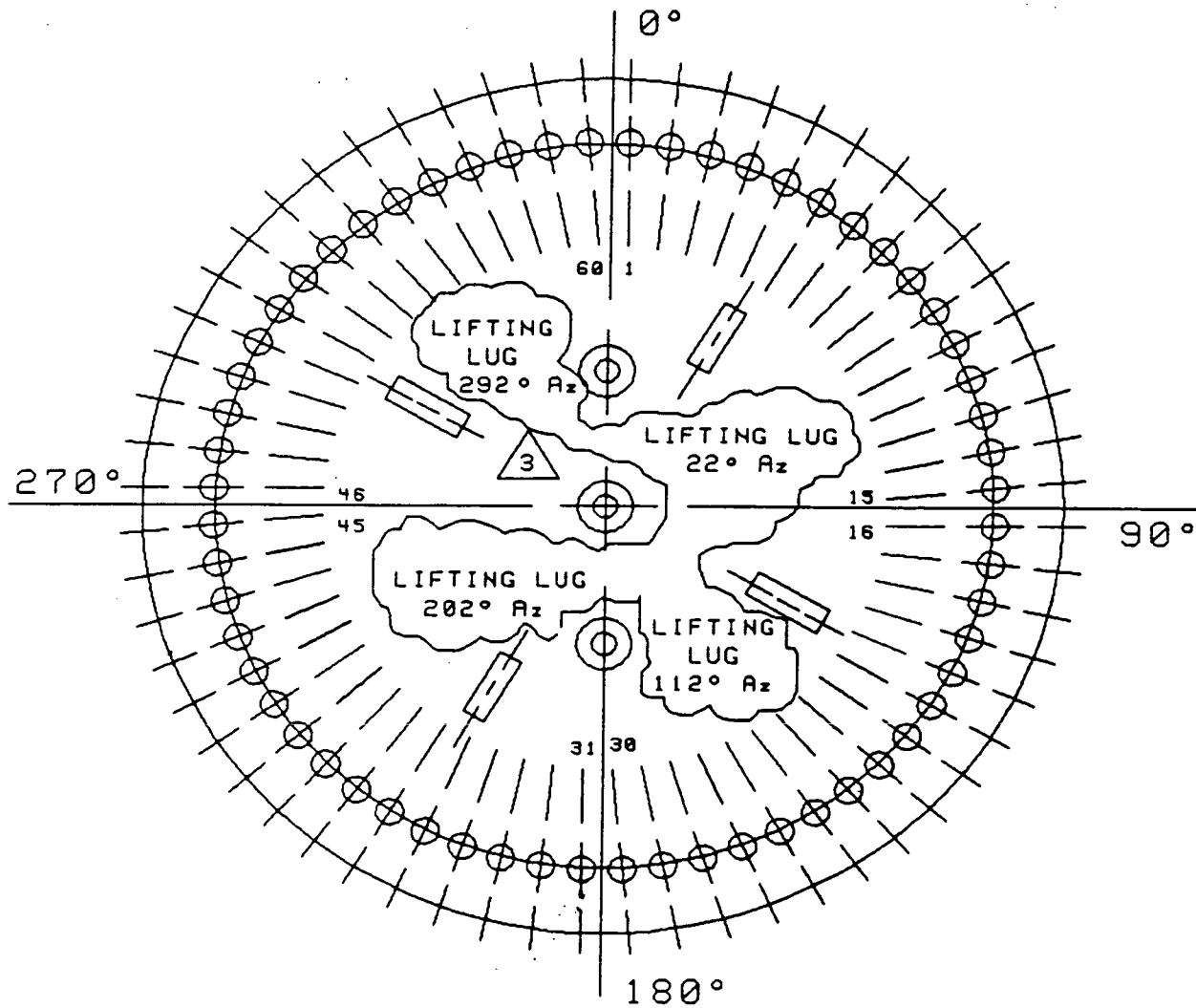
5) Commercial Service Date: 2/1/75

6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

ISI FIGURES AND ISOMETRICS

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



VESSEL STUD AND LIGAMENT LOCATION

Figure No. 1.1-5

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

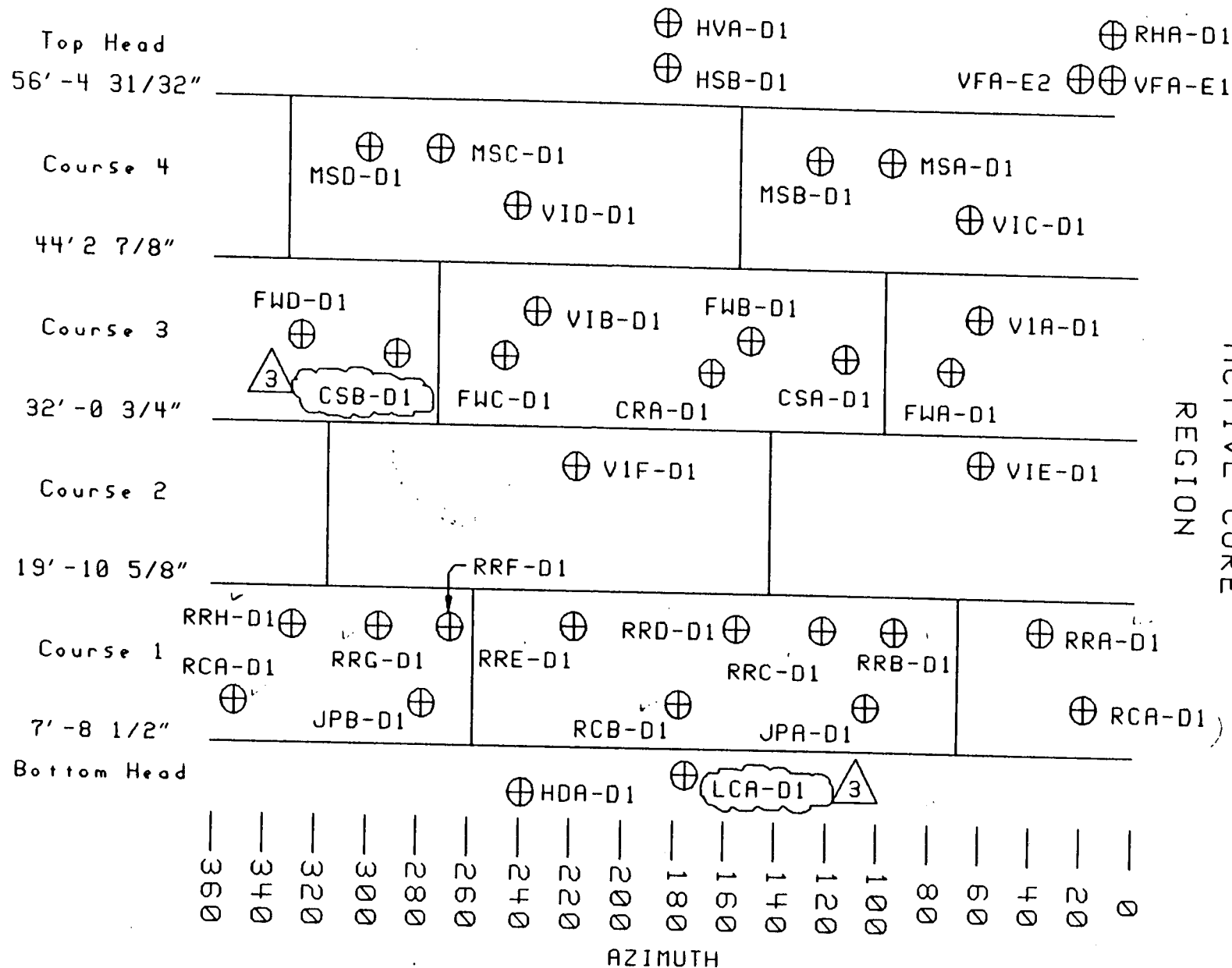
DRAWING RELEASE RECORD

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 HG-89-8794
3	5-13-91	DA	GP	KRM	PCN "B" CORRECTLY IDENTIFIED LIFTING LUGS

DRAWING RELEASE RECORD

PURPOSE

ELEVATION

ACTIVE CORE
REGION

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	4-3-86	SML	SML	RCH	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	DA	GP	KKN	ISO'S TO CAD FORMAT AS PER NG-89-0794
3	10-3-91	DA	GP	KKN	CORRECTING NOZZLE IDENTIFICATION

EFFECTIVE DATE: 07/20/90

			1R215 (26-03)	1R215 (22-03)	1R215 (18-03)							← CRO INDENT. ← POSITION
		1R215 (34-07)	1R215 (30-07)	1R215 (26-07)	1R215 (22-07)	1R215 (18-07)	1R215 (14-07)	1R215 (10-07)				
	1R215 (38-11)	1R215 (34-11)	1R215 (30-11)	1R215 (26-11)	1R215 (22-11)	1R215 (18-11)	1R215 (14-11)	1R215 (10-11)	1R215 (06-11)			
	1R215 (38-15)	1R215 (34-15)	1R215 (30-15)	1R215 (26-15)	1R215 (22-15)	1R215 (18-15)	1R215 (14-15)	1R215 (10-15)	1R215 (06-15)			
1R215 (42-19)	1R215 (38-19)	1R215 (34-19)	1R215 (30-19)	1R215 (26-19)	1R215 (22-19)	1R215 (18-19)	1R215 (14-19)	1R215 (10-19)	1R215 (06-19)	1R215 (02-19)		
1R215 (42-23)	1R215 (38-23)	1R215 (34-23)	1R215 (30-23)	1R215 (26-23)	1R215 (22-23)	1R215 (18-23)	1R215 (14-23)	1R215 (10-23)	1R215 (06-23)	1R215 (02-23)		
1R215 (42-27)	1R215 (38-27)	1R215 (34-27)	1R215 (30-27)	1R215 (26-27)	1R215 (22-27)	1R215 (18-27)	1R215 (14-27)	1R215 (10-27)	1R215 (06-27)	1R215 (02-27)		
	1R215 (38-31)	1R215 (34-31)	1R215 (30-31)	1R215 (26-31)	1R215 (22-31)	1R215 (18-31)	1R215 (14-31)	1R215 (10-31)	1R215 (06-31)			
	1R215 (38-35)	1R215 (34-35)	1R215 (30-35)	1R215 (26-35)	1R215 (22-35)	1R215 (18-35)	1R215 (14-35)	1R215 (10-35)	1R215 (06-35)			
		1R215 (34-39)	1R215 (30-39)	1R215 (26-39)	1R215 (22-39)	1R215 (18-39)	1R215 (14-39)	1R215 (10-39)				
				1R215 (26-43)	1R215 (22-43)	1R215 (18-43)						

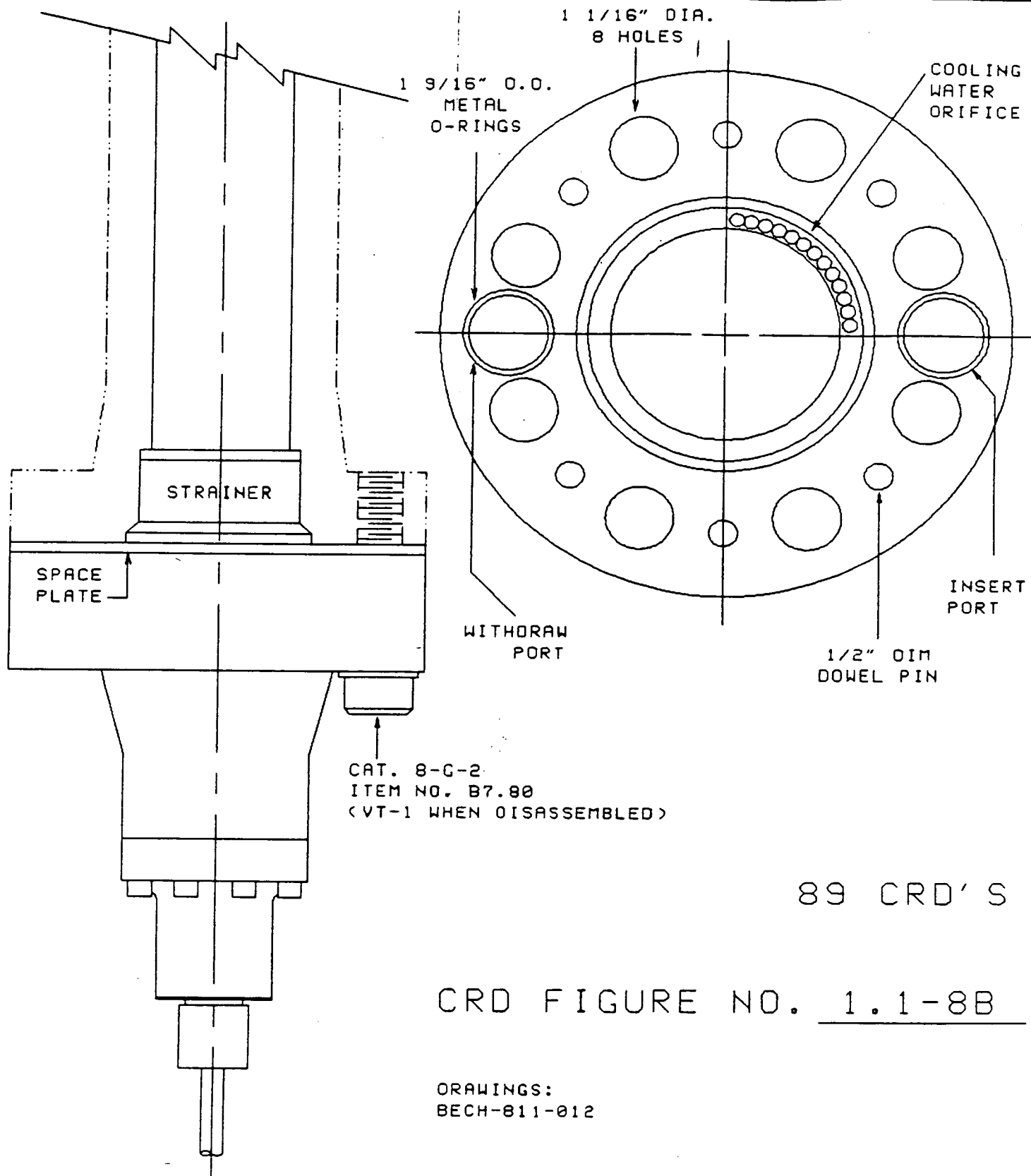
DRAWINGS:

7884-M115-15-2
7884-M115-16-2CRD LOCATIONFIGURE NO. 1.1-8A

8 BOLTS PER CRD

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	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794
2A	12-12-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	change CRD location identification



89 CRD' S

CRD FIGURE NO. 1.1-8B

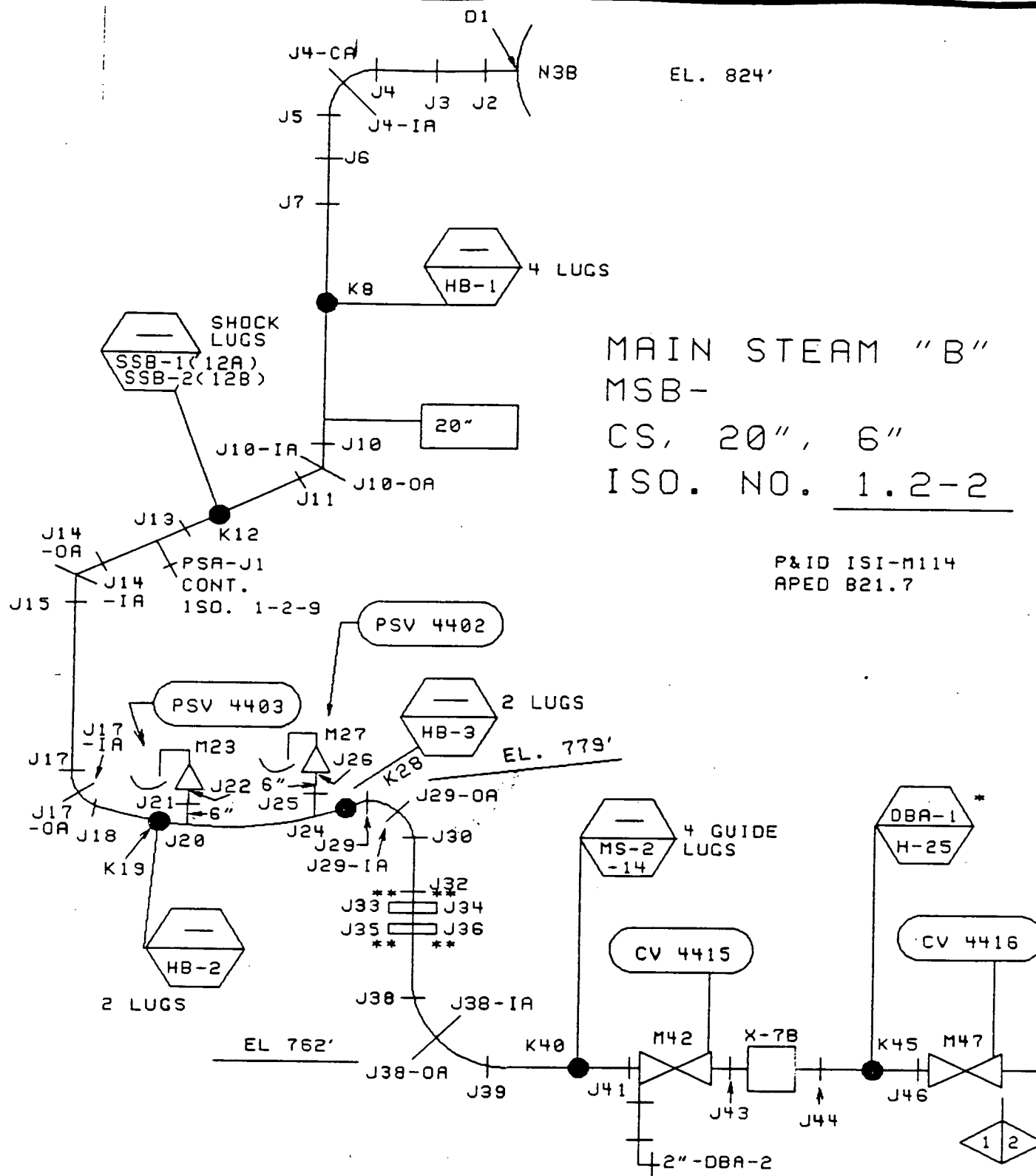
DRAWINGS:
BECH-811-012

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794



DAEC INSERVICE INSPECTION ASME SECTION XI ISOMETRIC

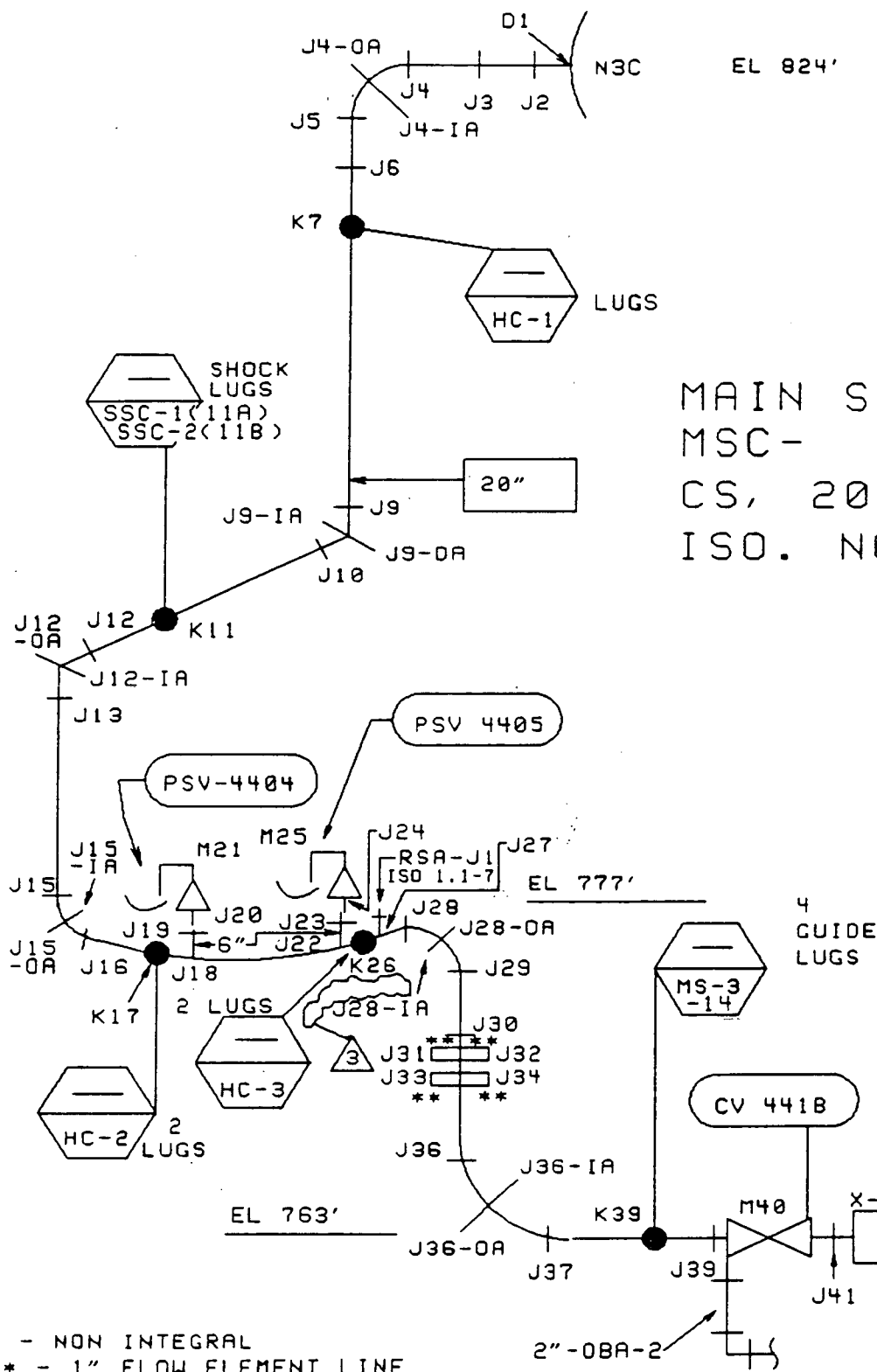


* - NON INTEGRAL
 ** - 1" FLOW ELEMENT LINE

CONT. ON
 ISO. NO.
 2.2-54

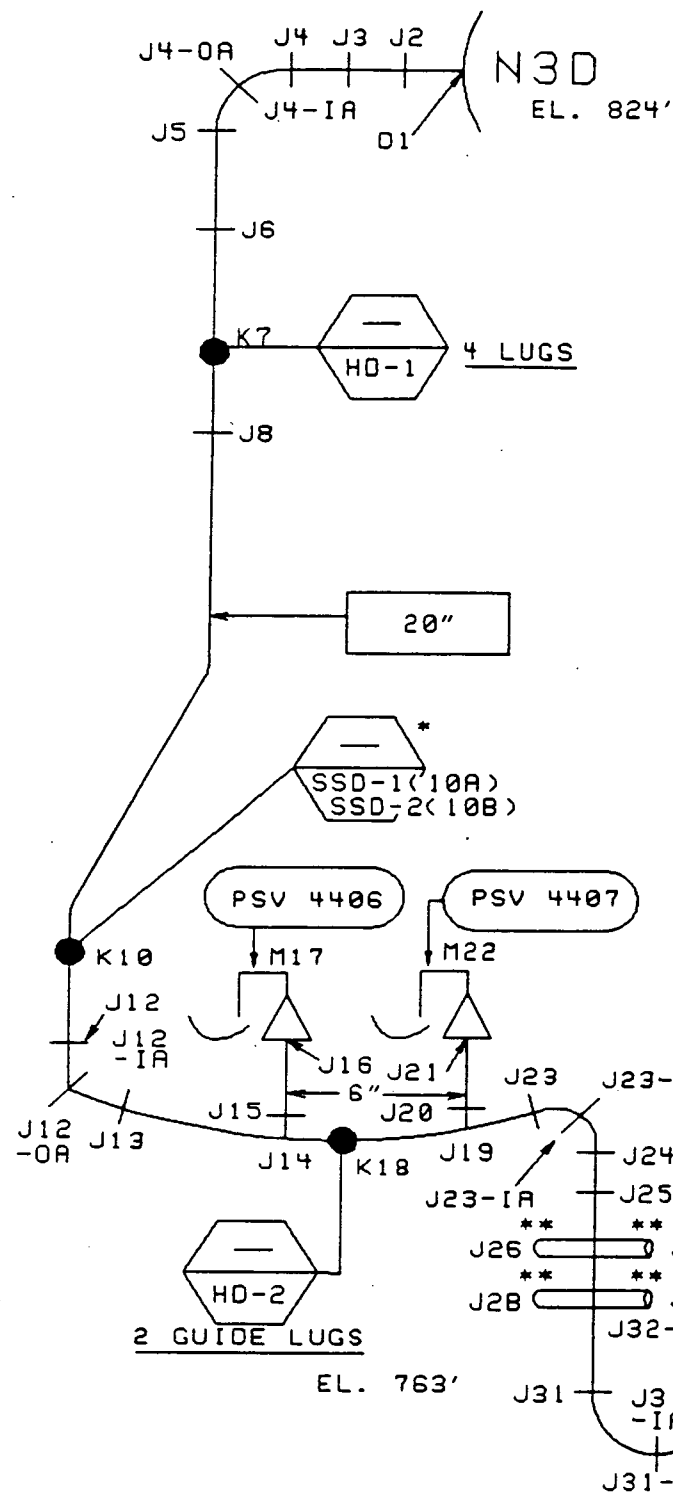
DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-6-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794



DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-7-86	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-89-0754
3	10-3-91	LA	GP	KKM	REMOVED EXTRA WELD NUMBER



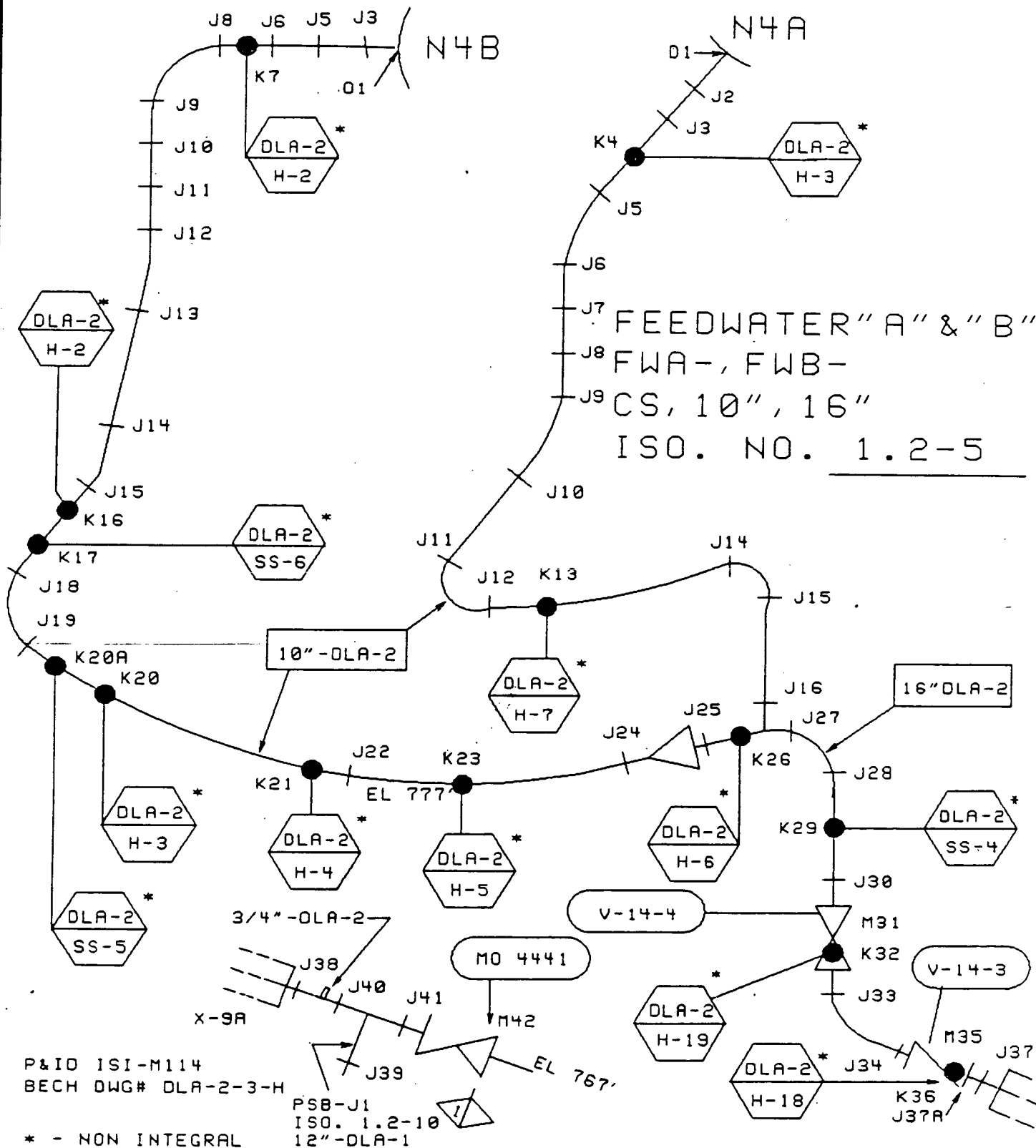
MAIN STEAM "D"
MSD-
CS, 20", 6"
ISO. NO. 1.2-4

P&ID ISI-M114
APEO-B21.7

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

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-7-86	SAL	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794

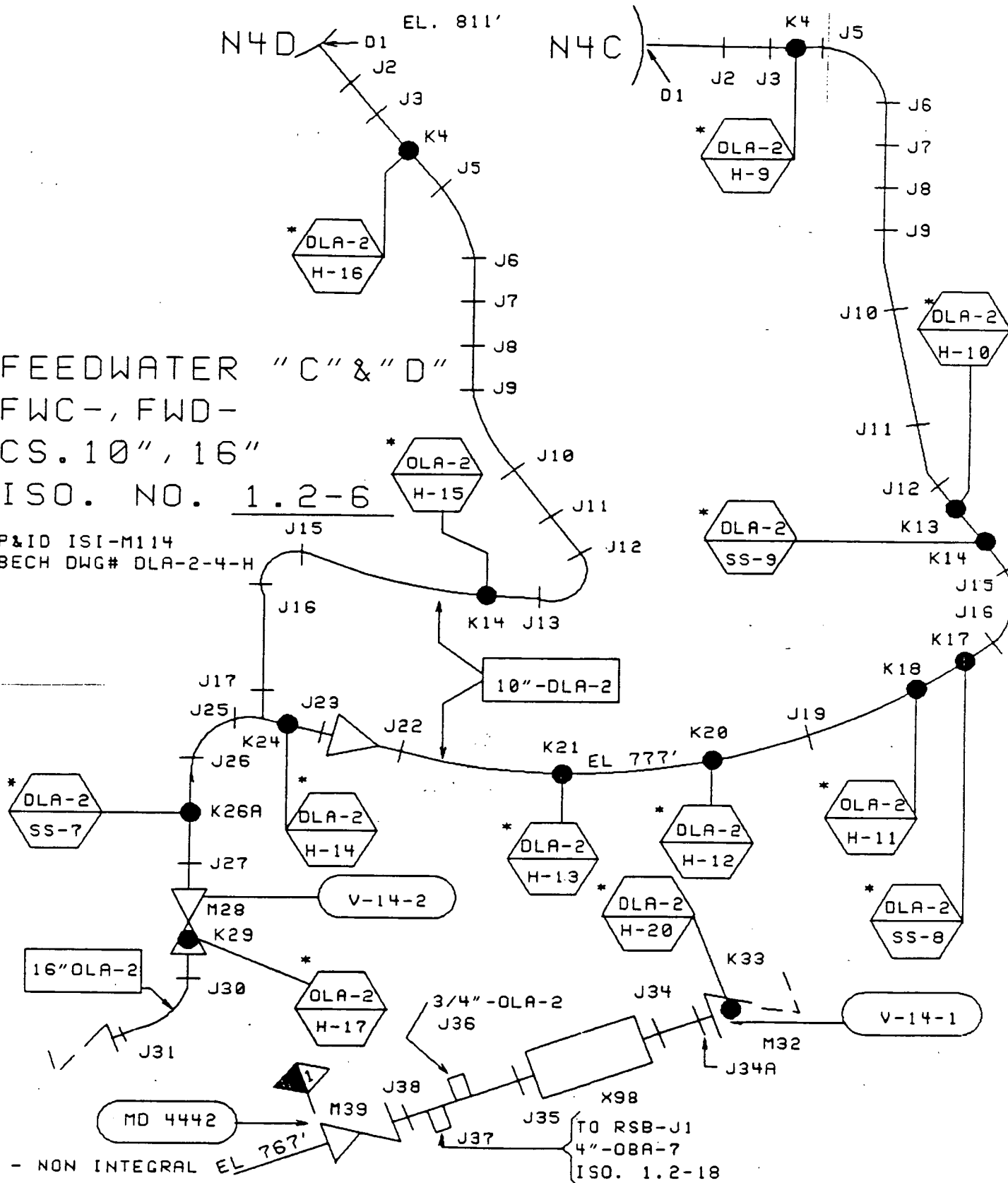


DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-10-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794

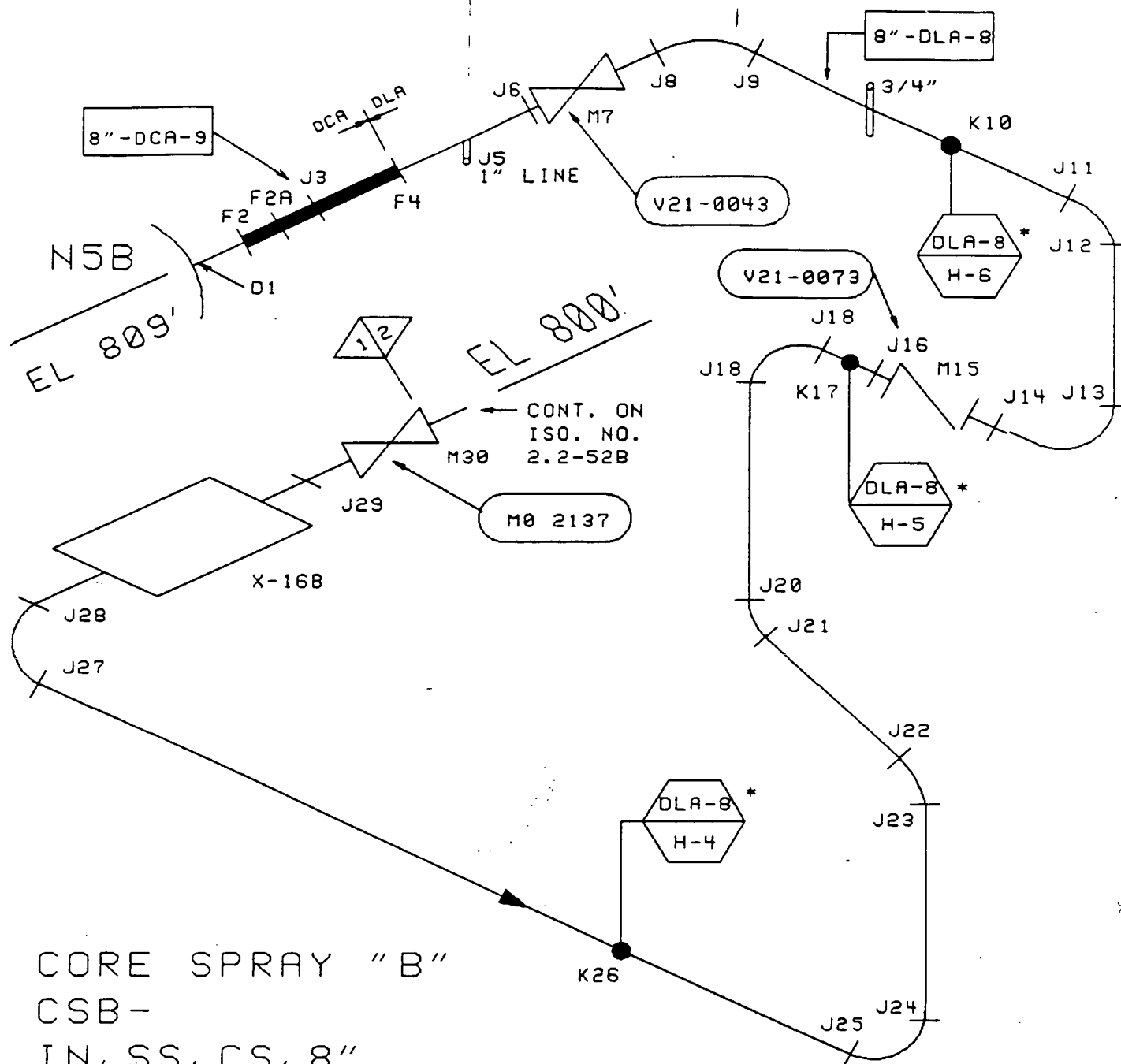
FEEDWATER "C" & "D"
 FWC-, FWD-
 CS. 10", 16"
 ISO. NO. 1.2-6

P&ID ISI-M114
 BECH DWG# DLA-2-4-H



DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-11-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794



CORE SPRAY "B"
CSB-
IN, SS, CS, 8"
ISO. NO. 1.2-8

P&ID ISI-M121
BECH DWG# DLA-8-1-H

* - NON INTEGRAL

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-12-86	SNL	SNL	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NC-89-0794

HIGH PRESSURE COOLANT INJECTION-STEAM

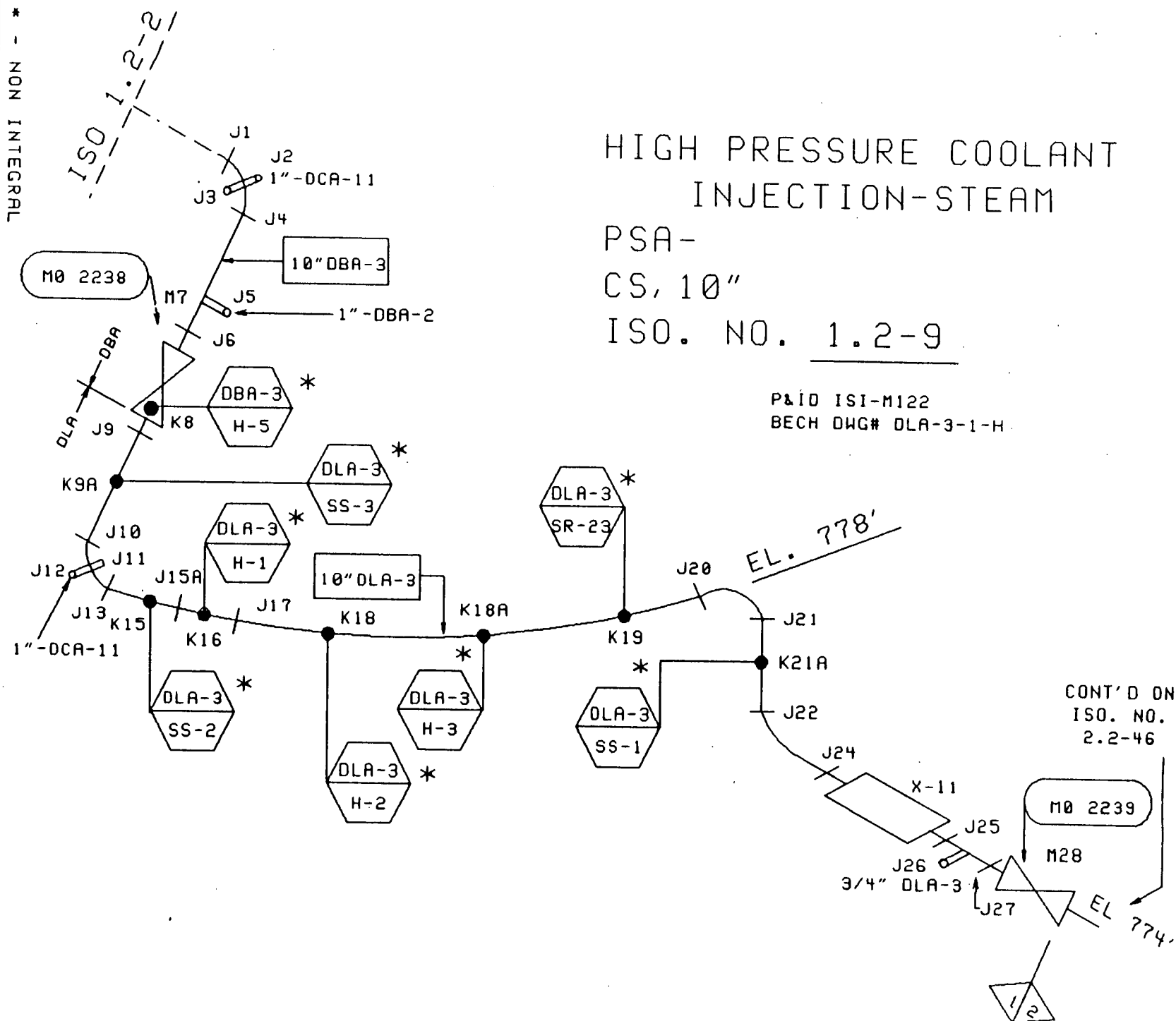
PSA-

CS, 10"

ISO. NO. 1.2-9

P&ID ISI-M122

BECH DWG# DLA-3-1-H



* - NON INTEGRAL

DRAWING RELEASE RECORD

REV DATE PREPARED REVIEWED APPROVED

PURPOSE

1 3-12-86

SML

9ML

RCM

ISO'S FOR 2nd 10 YEAR PLAN

2 9-24-90

DLA

K2m

ISO'S TO CAD FORMAT AS PER NG-89-0794

FWB ISO. NO. 1.2-5
16"x16"x12"T

J1

HIGH PRESSURE COOLANT INJECTION - WATER

PSB-

CS, 12"

ISO. NO. 1.2-10

12" DLA-1

K1A

DLA-1*
SR-10

P&ID ISI-M123
BECH DWG# DLA-1-1-H

J2

J3

M4

V23-0049

J5

K6

3/4" DLA-1

J8

MO 2312

M9

EL. 759'

P&ID BECH-M123
BECH DWG# DLA-1-1-H

CONT'D ON
ISO. NO.
2.2-45

* - NON INTEGRAL

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-12-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794

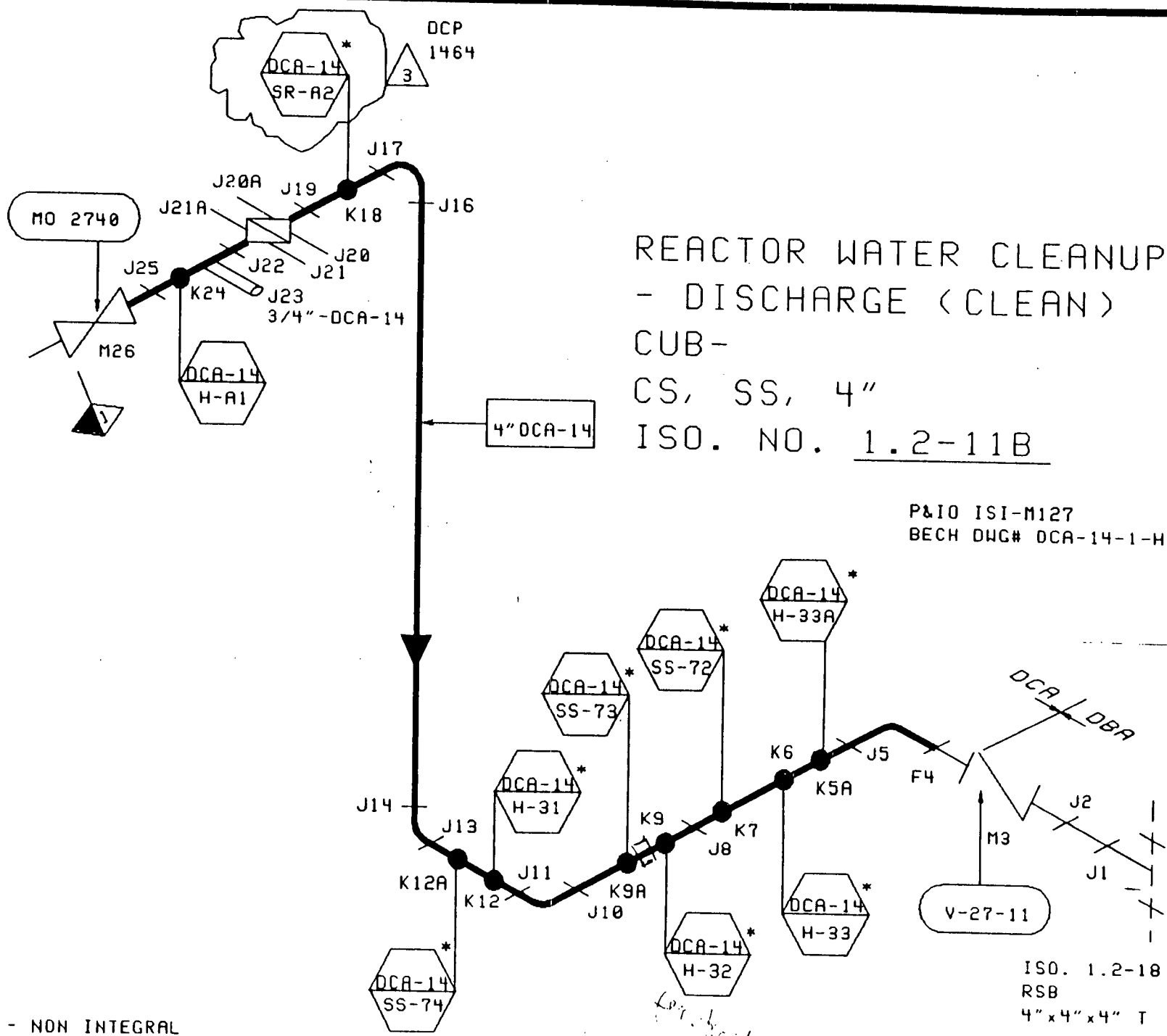
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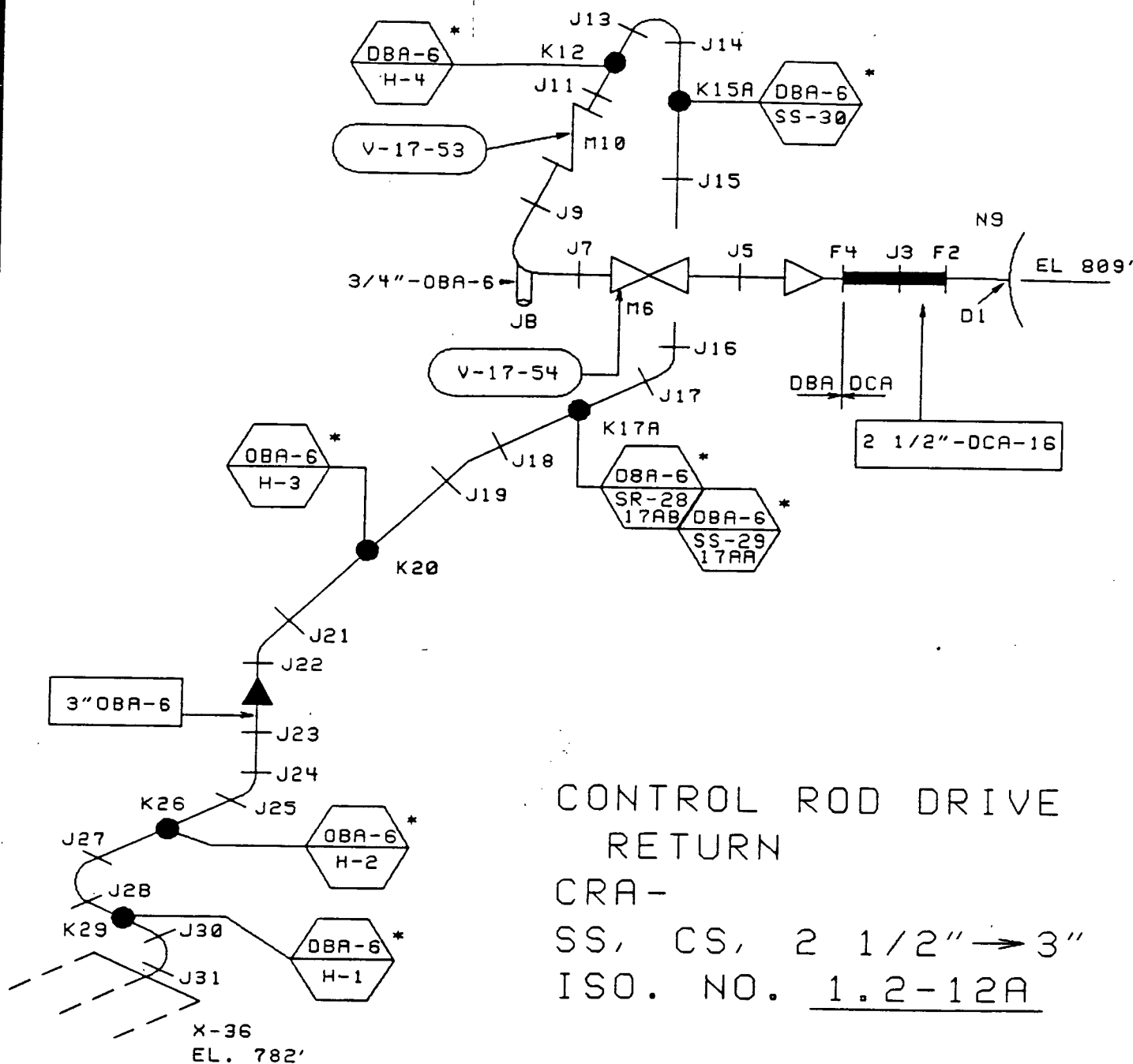
DRAWING RELEASE RECORD

DRAWING RELEASE RECORD					
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-13-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-13-86	STL	STL	RCH	ISO'S FOR 2nd 10 YEAR PLAN
2	4-24-90	STL	STL	RCH	ISO'S TO CAD FORMAT AS PER NG-89-0794
3	4-24-90	STL	STL	RCH	DCP 1464, RUCU NONCLASS REPLACEMENT





CONTROL ROD DRIVE RETURN

CRA-

SS, CS, 2 1/2" → 3"

ISO. NO. 1.2-12A

CONT. ON
ISO. NO. 1.2-12B

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

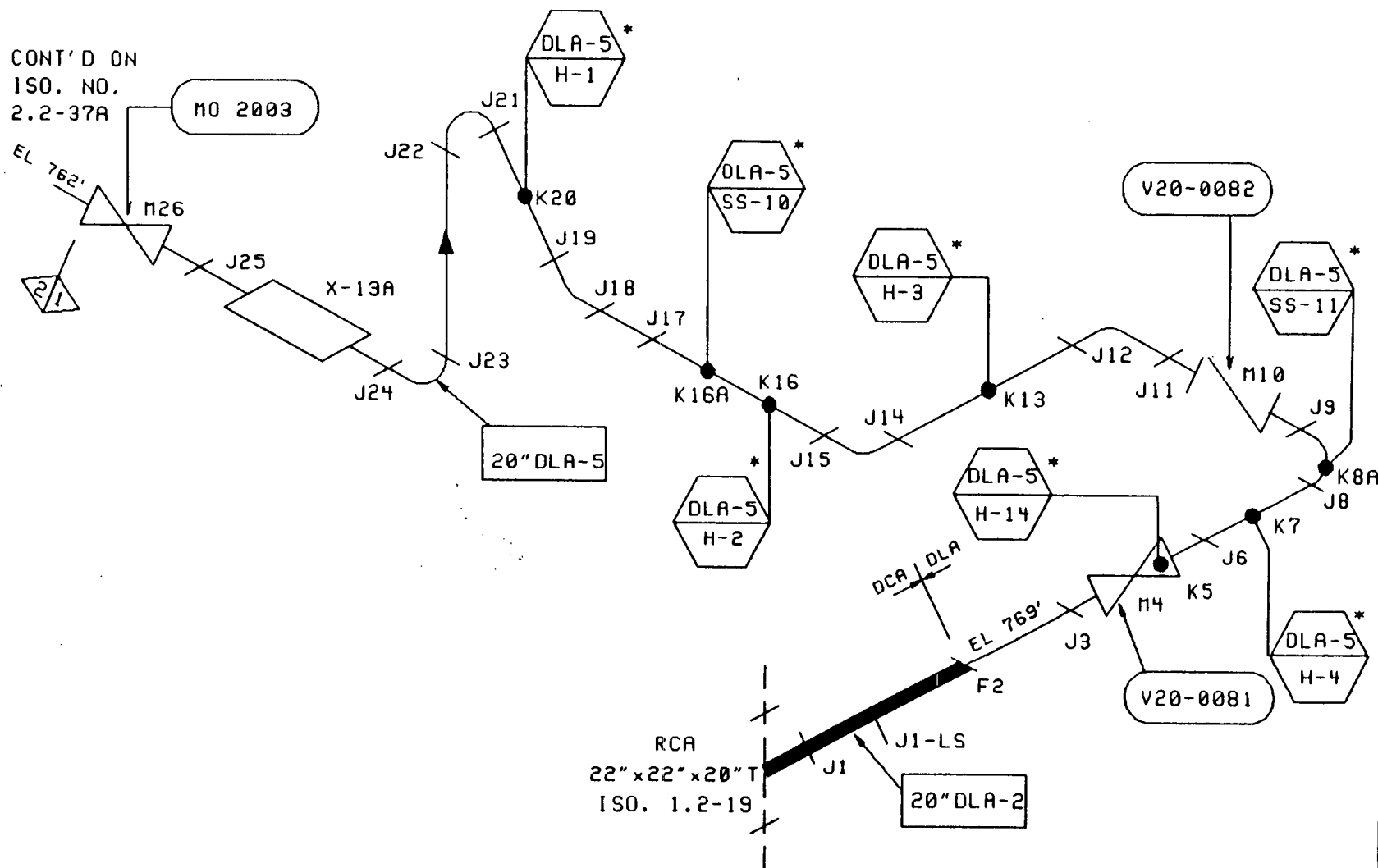
DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-13-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-17-86	SHL	SHL	RCH	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	(D)	(S)	RCH	ISO'S TO CAD FORMAT AS PER NC-83-0794

DRAWING RELEASE RECORD

CONT'D ON
ISO. NO.
2.2-37A



RESIDUAL HEAT REMOVAL-20A
RHC-
SS, CS, 20"
ISO. NO. 1.2-15

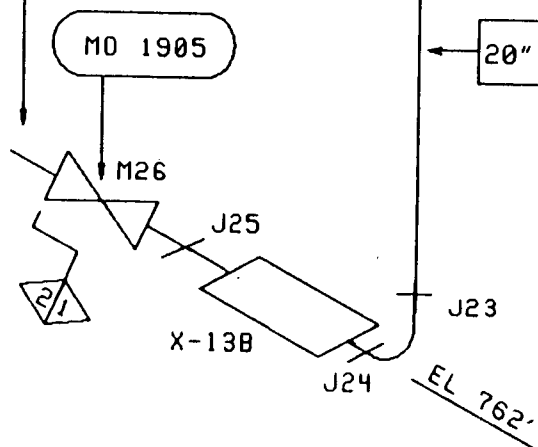
* - NON INTEGRAL

P&ID BECH-M120
BECH DWG# DLA-5-1-H

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-18-86	SNL	SNL	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	SNL	SNL	RCM	ISO'S TO CAD FORMAT AS PER NC-89-0794

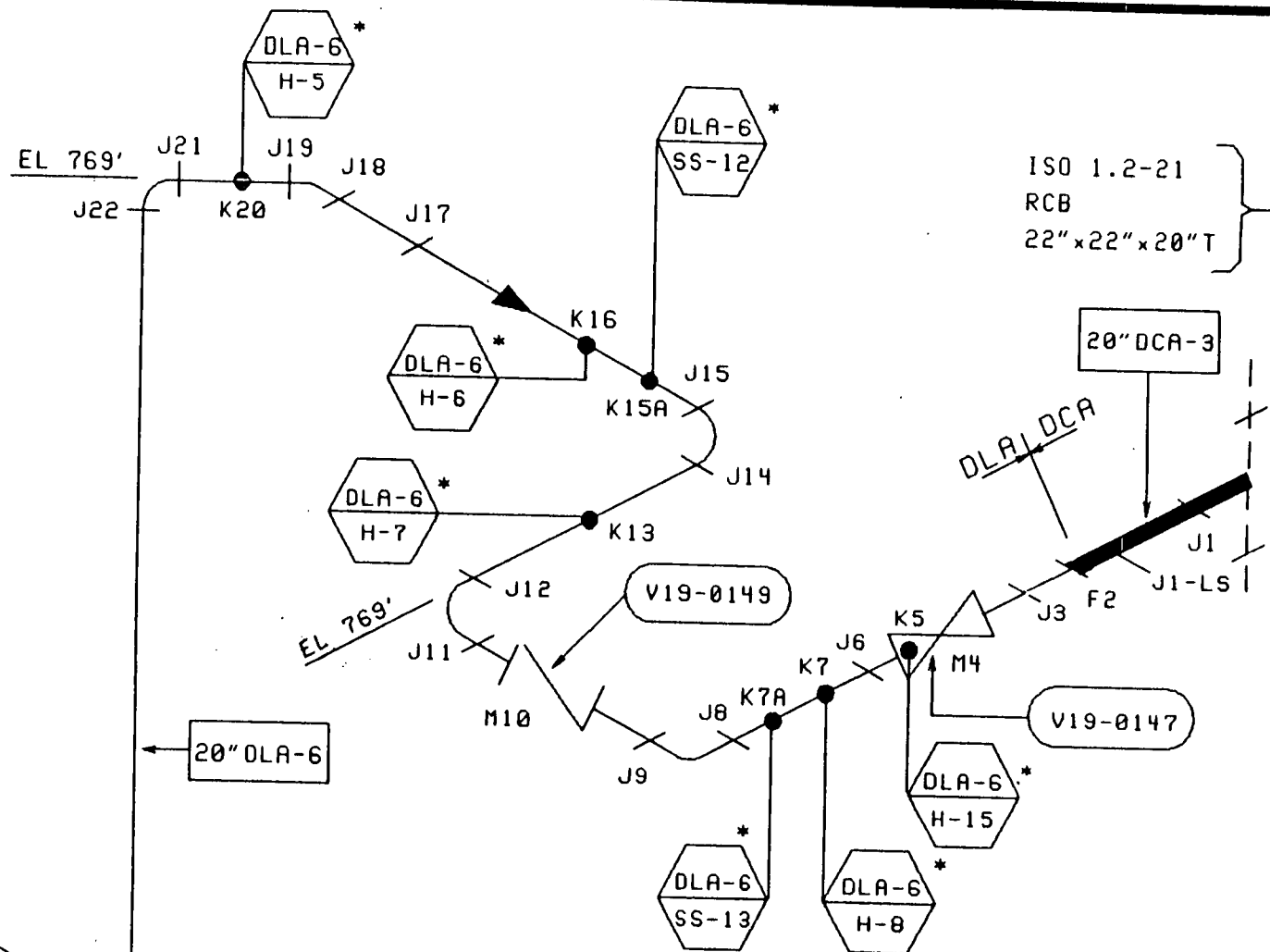
DRAWING RELEASE RECORD

CONT'D ON
ISO. NO.
2.2-40

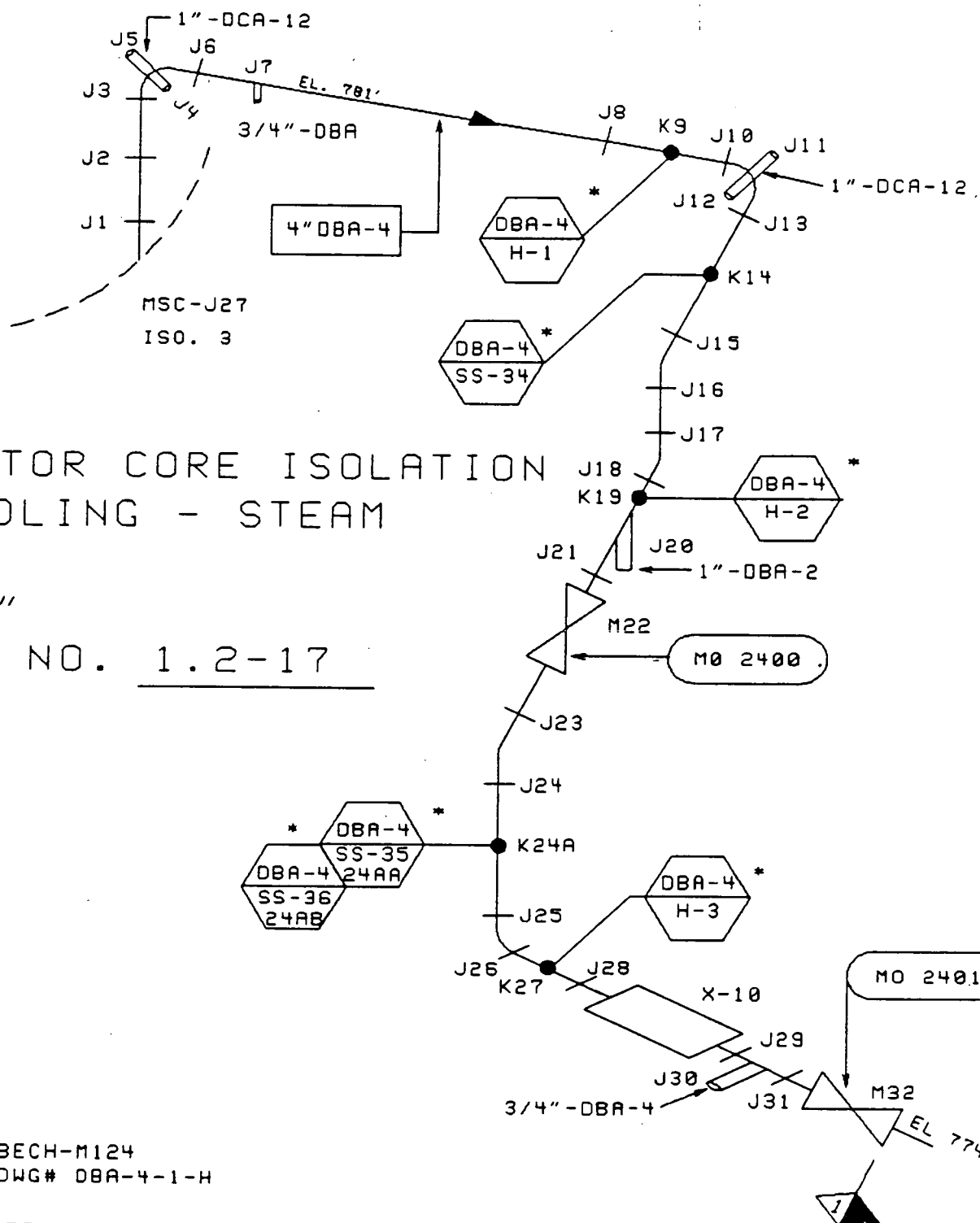


P&ID BECH-M119
BECH DWG# DLA-6-1-H

* - NON INTEGRAL



RESIDUAL HEAT REMOVAL-20B
RHD-
SS, CS, 20"
ISO. NO. 1.2-16



REACTOR CORE ISOLATION
COOLING - STEAM
RSA-
CS, 4"
ISO. NO. 1.2-17

P&ID BECH-M124
BECH DWG# DBA-4-1-H

* - NON INTEGRAL

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-18-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>KRM</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794

EL 767' FWC-J37
ISO. 1.2-6
(16"-DLA-2)

REACTOR CORE ISOLATION COOLING - WATER

RSB-

CS, 4"

ISO. NO. 1.2-18

ISO-1.2-11B
4"-DBA-8

CUB-J1

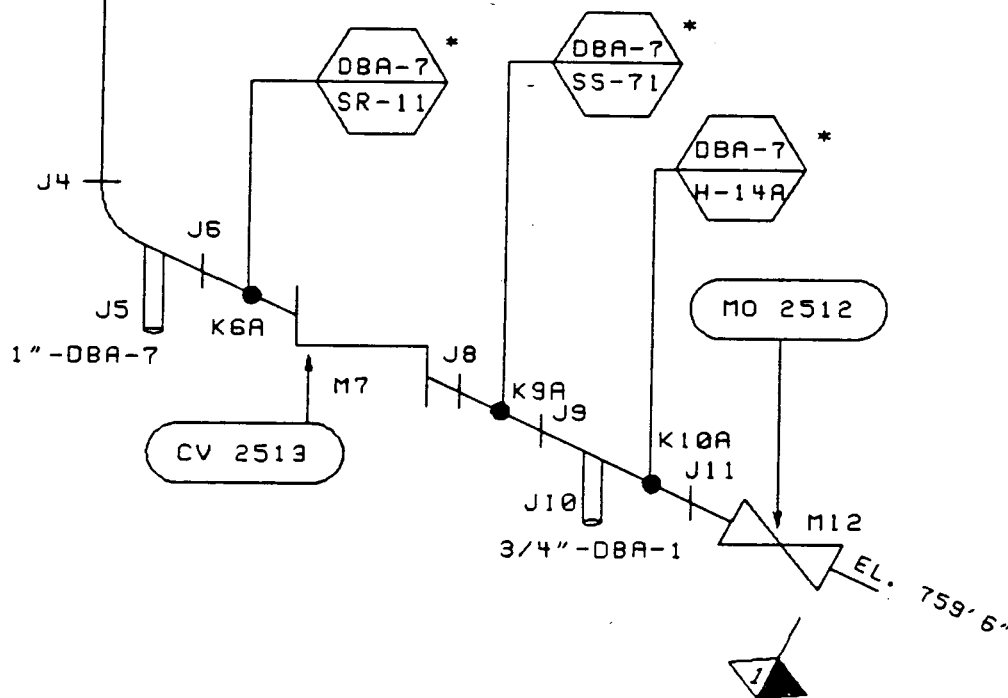
J1

J2

J3

4"-DBA-7

P&ID BECH-M125
BECH DWG# DBA-7-1-H



* - NON INTEGRAL

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-19-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-85-0794

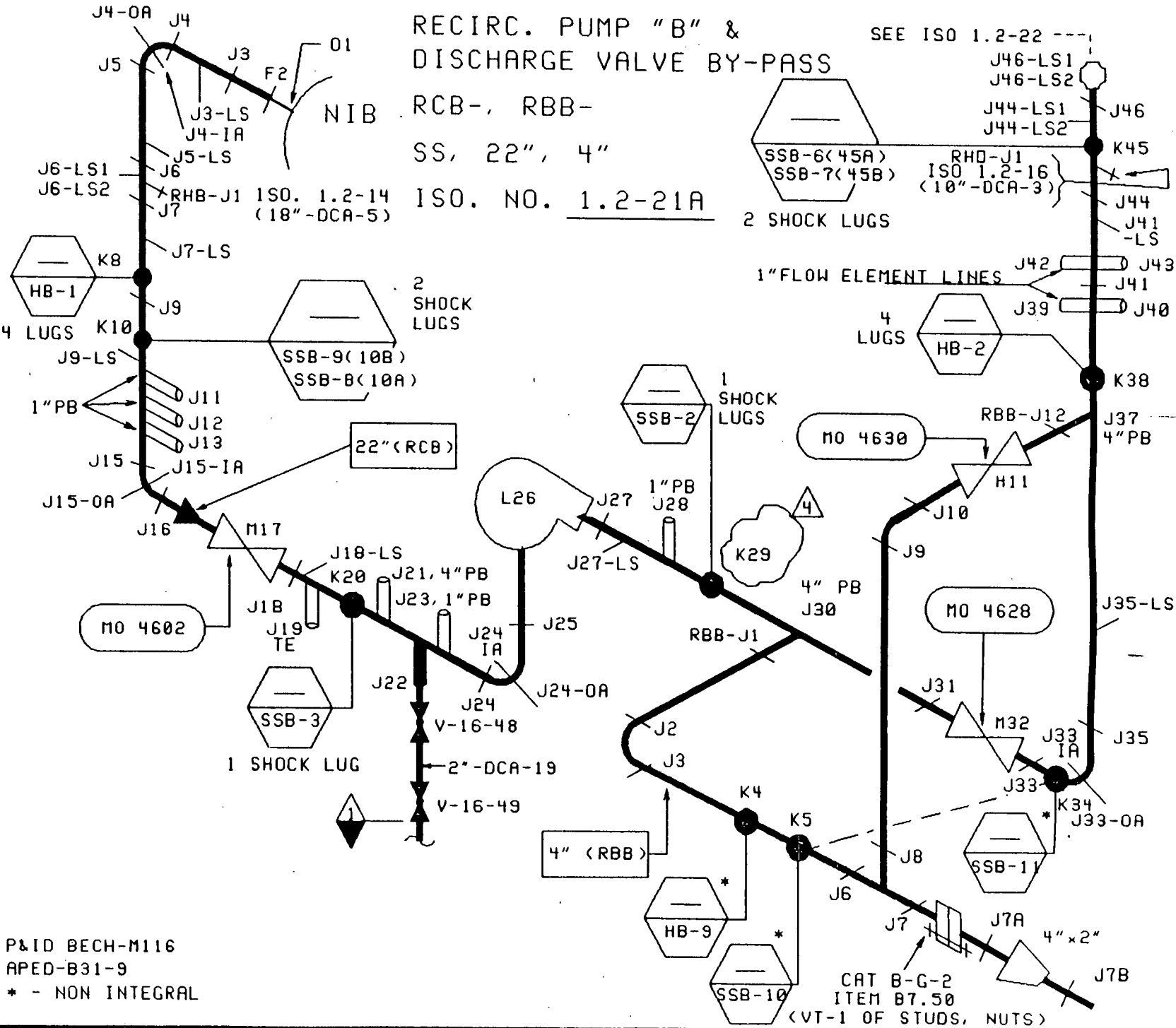
RECIRC. PUMP "B" & DISCHARGE VALVE BY-PASS

RCB-, RBB-

SS, 22", 4"

ISO. NO. 1.2-21A

SEE ISO 1.2-22

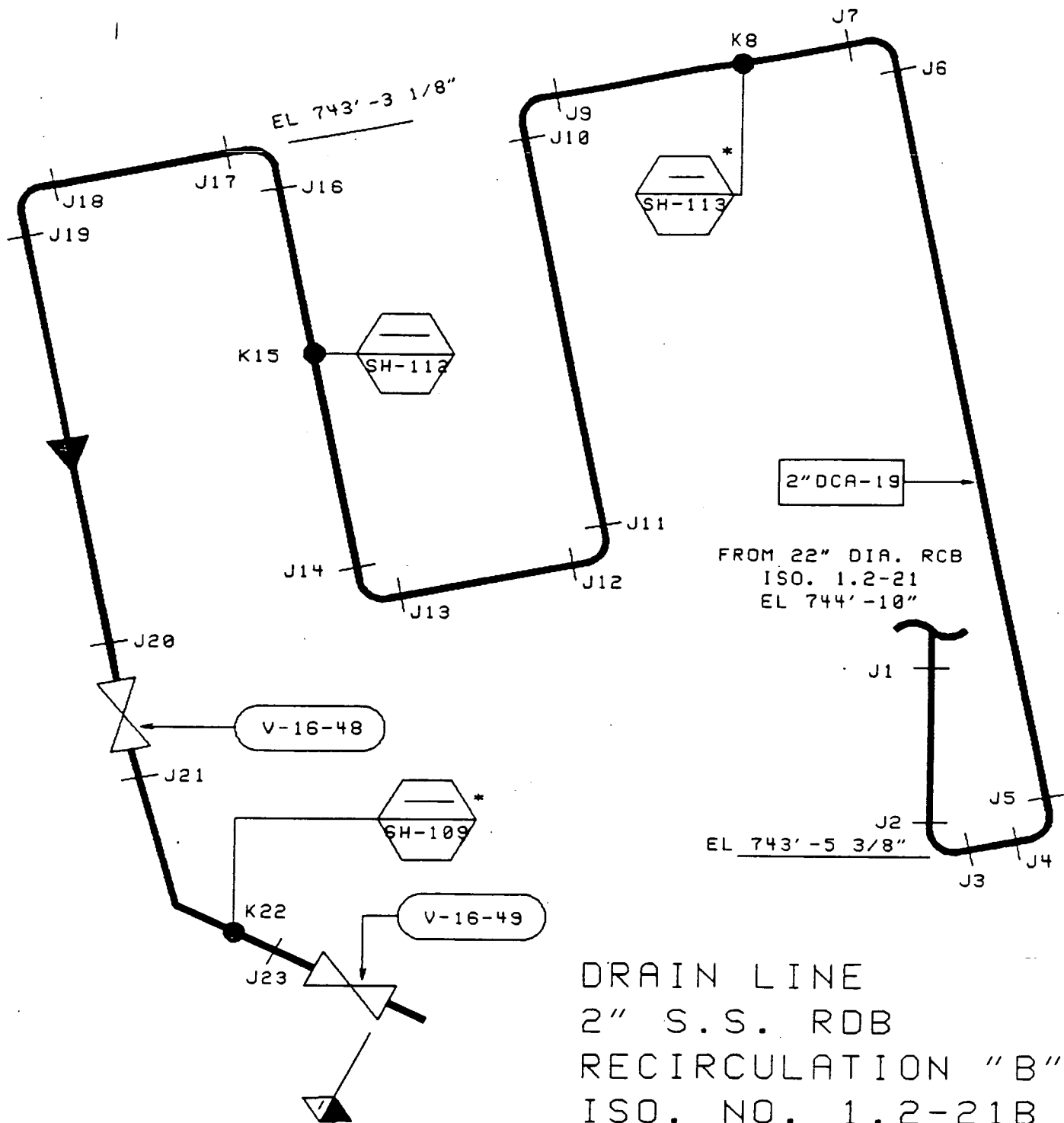


P&ID BECH-M116
APED-B31-9
* - NON INTEGRAL

REV DATE PREPARED REVIEWED APPROVED

PURPOSE

1	3-21-86	SNL	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	3-2-89	GCP	KCM	ADDED HYDROGEN MONITOR, DCP1434
3	9-24-90	GCP	KCM	ISO'S TO CAD FORMAT AS PER NG-89-0794
4	10-3-91	GCP	KCM	ADDDING MISSING IDENTIFICATION



DRAIN LINE
2" S.S. RDB
RECIRCULATION "B"
ISO. NO. 1.2-21B

P&ID BECH-M116
FSK-04169

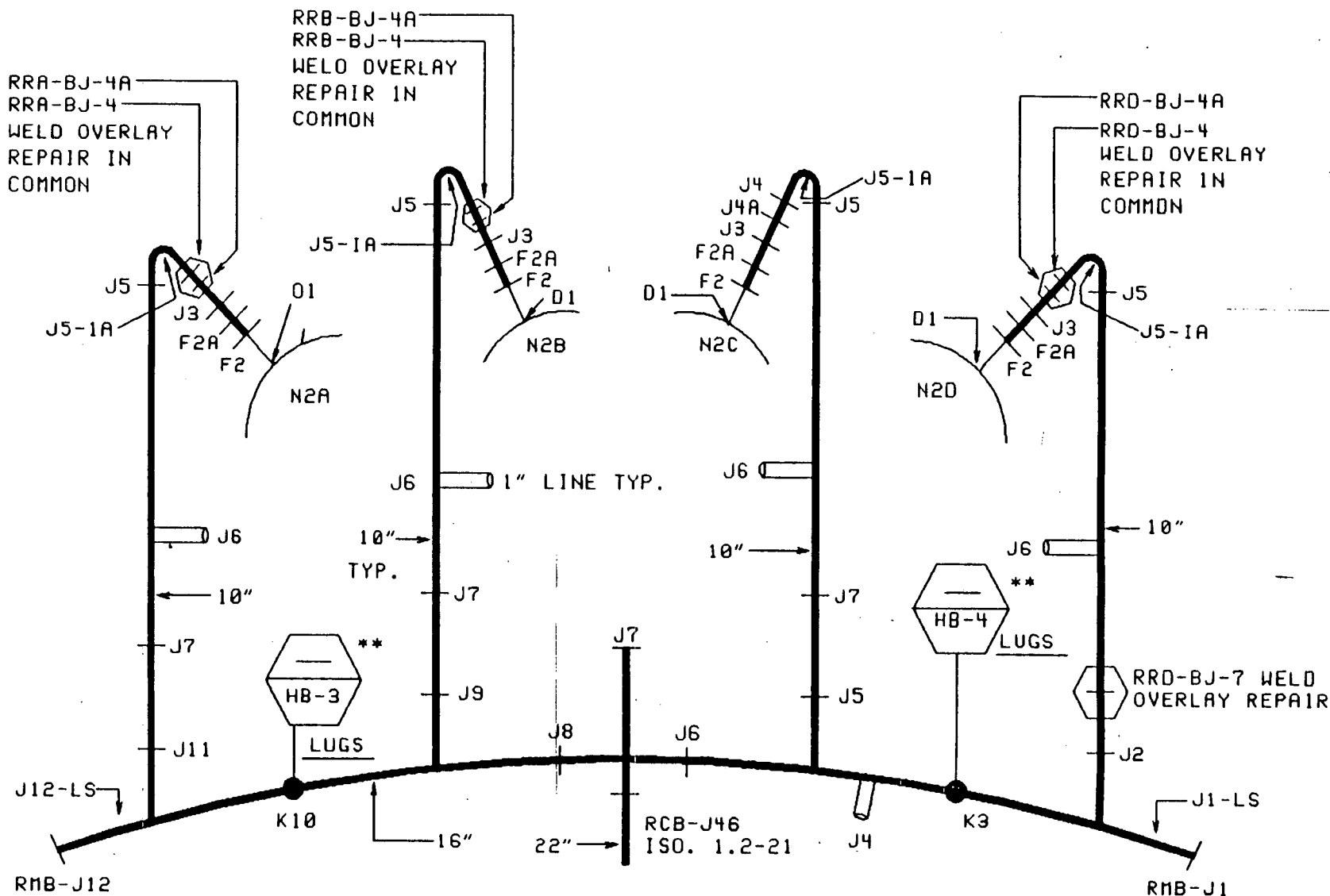
* - NON INTEGRAL

DRAWING RELEASE RECORD

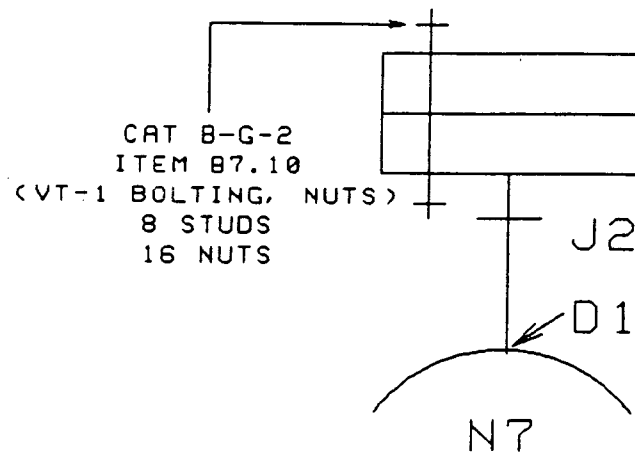
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-21-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	(Signature)	(Signature)	RCM	ISO'S TO CAD FORMAT AS PER NG-89-0794

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-20-86	STL	STL	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	4-24-90	STL	STL	KYM	ISO'S TO CAD FORMAT AS PER NG-89-0794

DRAWING RELEASE RECORD



P&ID BECH-M116
APED B31-9
** - LUG EXEMPT <5/8"



HEAD VENT

HVA-

CS, 4"

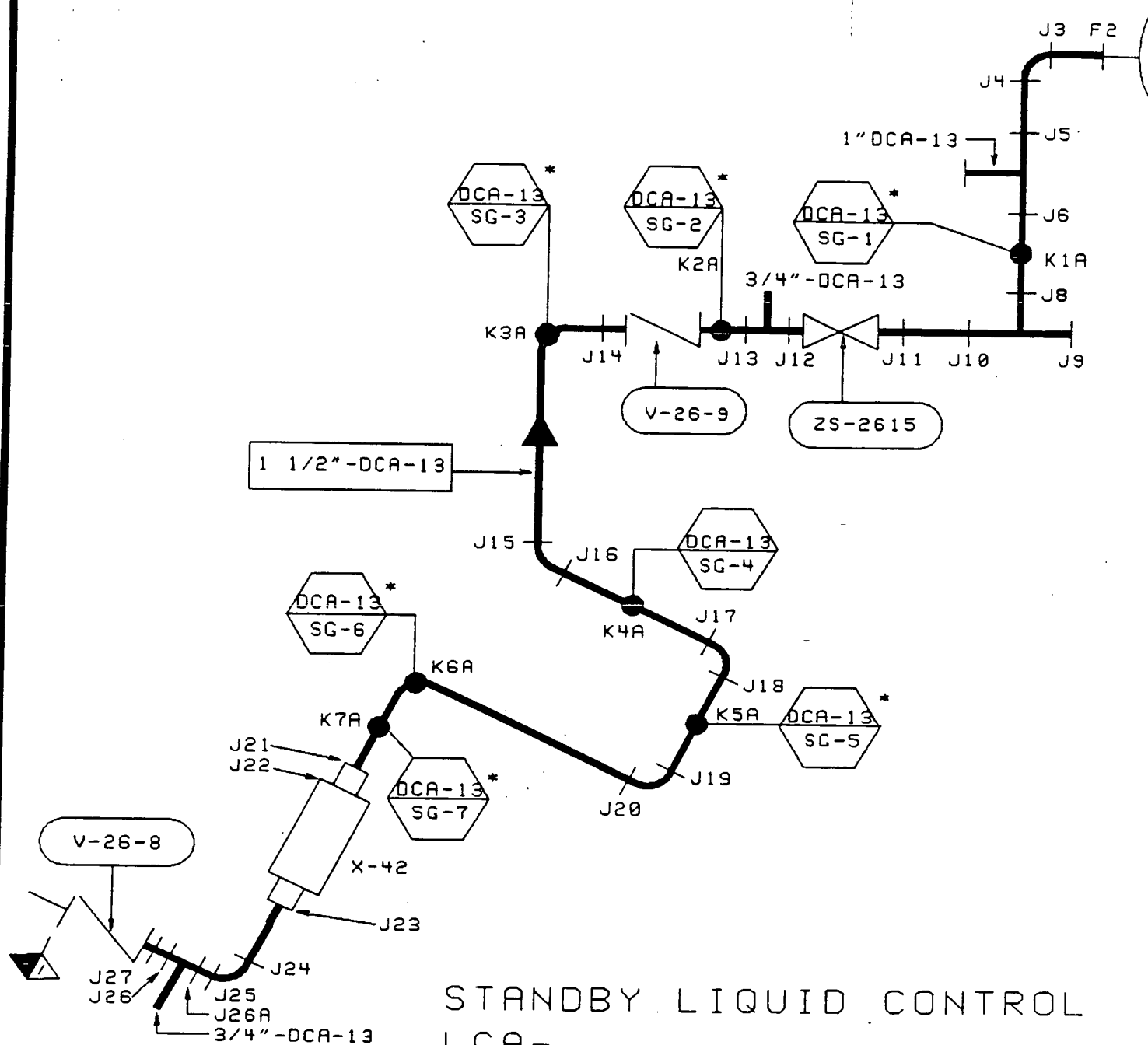
ISO. NO. 1.2-24

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

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-26-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	ISO'S TO CAD FORMAT AS PER NG-99-0794

N10



STANDBY LIQUID CONTROL
LCA-

SS, 1 1/2", 2", 4"

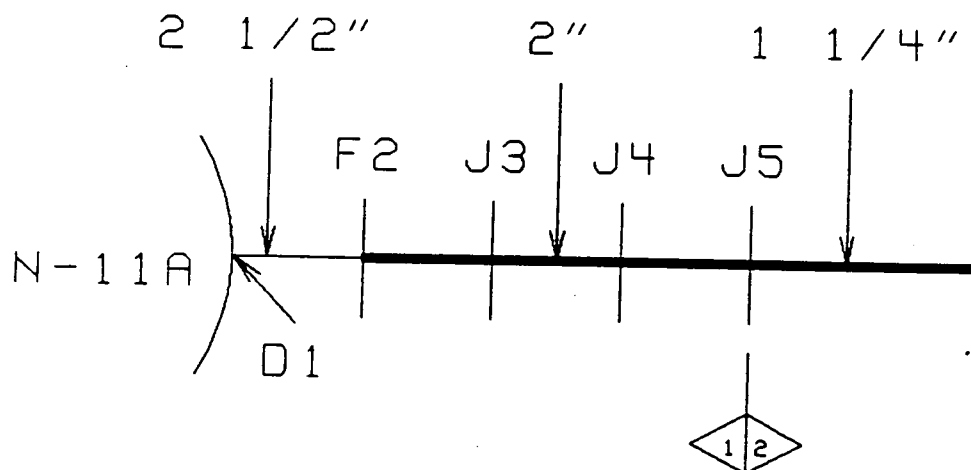
ISO. NO. 1.2-27

P&ID ISI M126
FSK-03734 & 03992

* - NON INTEGRAL

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-26-86	SAL	SAL	RCM	ISO'S FDR 2nd 10 YEAR PLAN
2	9-24-90				ISO'S TO CAD FORMAT AS PER NG-89-0794

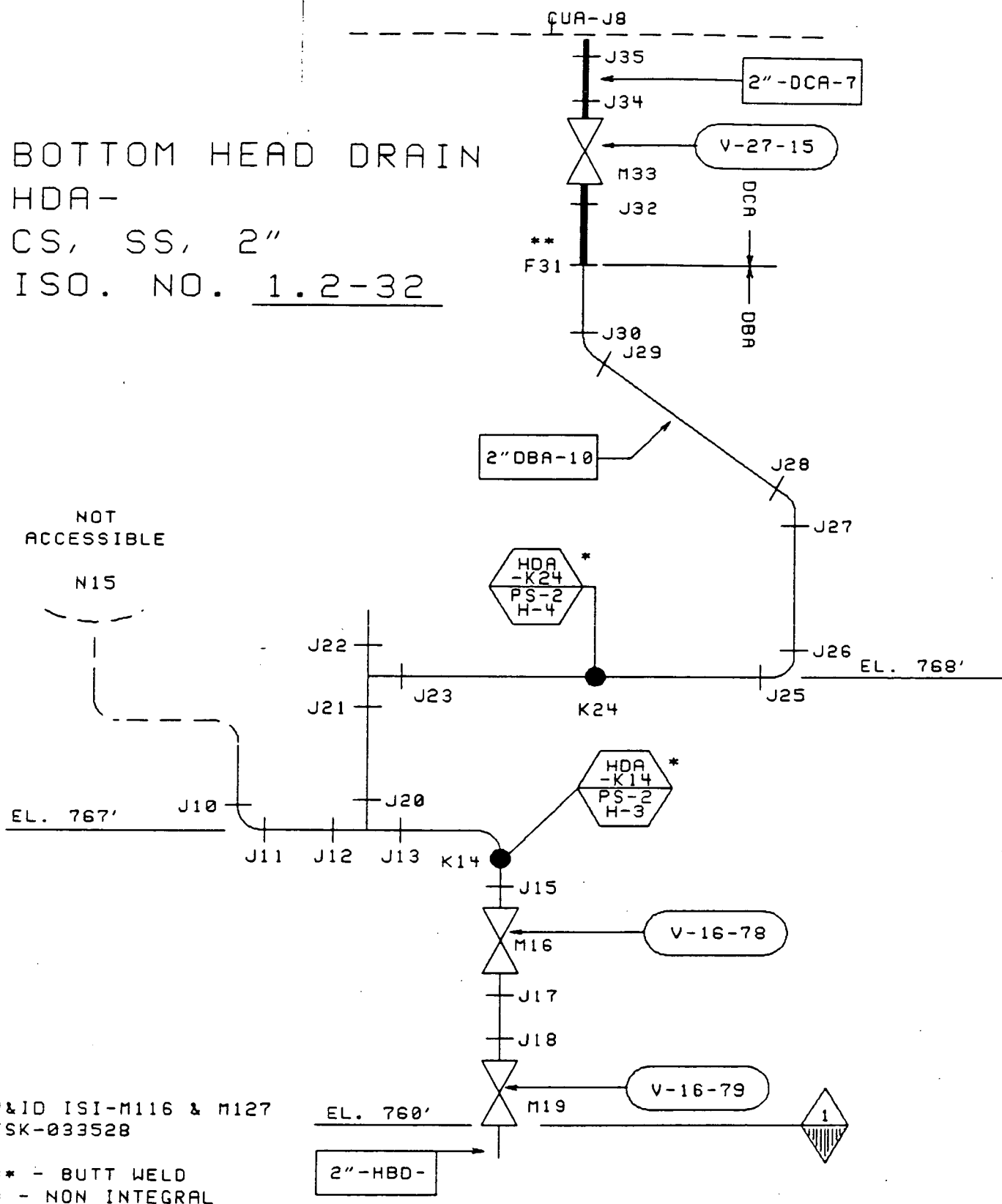


VESSEL INSTRUMENTATION N-11A
 VIA-
 SS, 1 1/4", 2", 2 1/2"
 ISO. NO. 1.2-28

P&ID BECH-M115
 FSK-5560

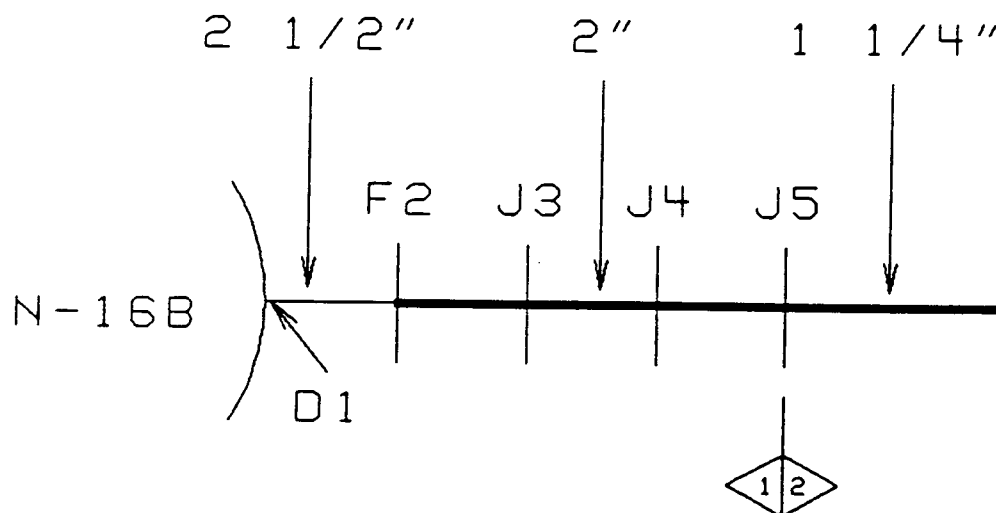
DRAWING RELEASE RECORD					
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-27-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0784

BOTTOM HEAD DRAIN
HDA-
CS, SS, 2"
ISO. NO. 1.2-32



DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-27-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	4-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-88-0794

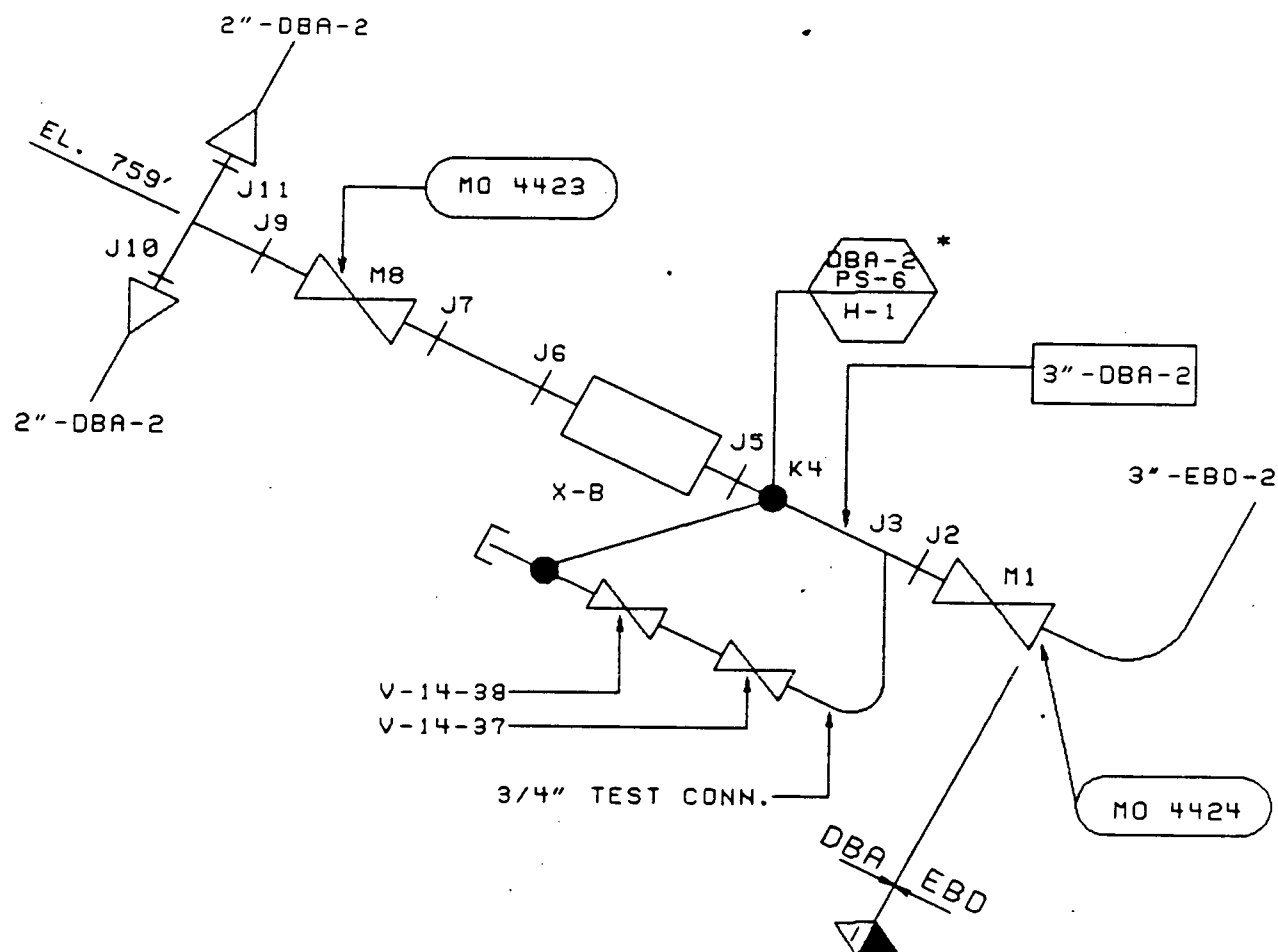


VESSEL INSTRUMENTATION N-16B
 VIF-
 SS, 1 1/4", 2", 2 1/2"
 ISO. NO. 1.2-34

P&ID BECH-M115
 FSK-5556

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-28-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794



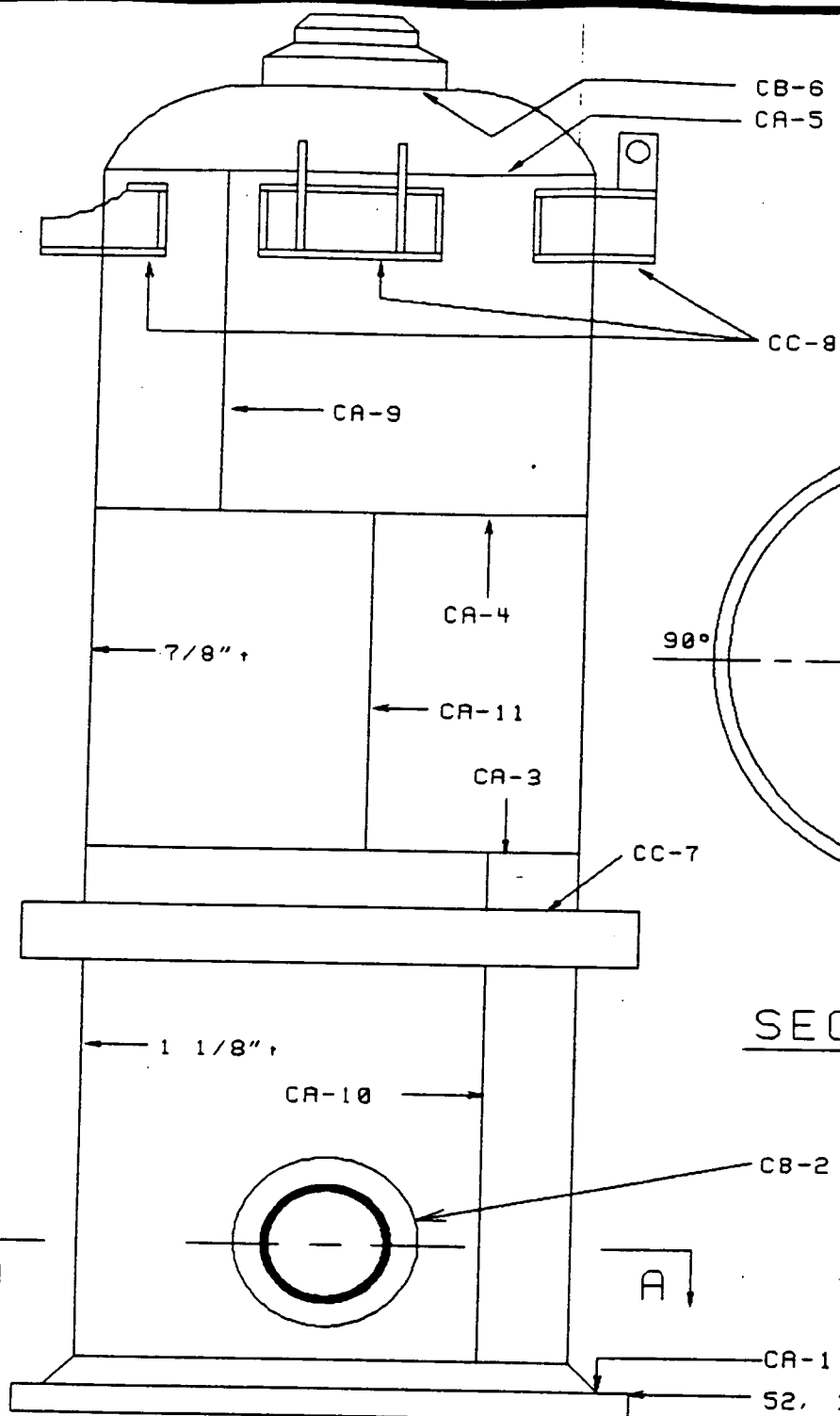
MAIN STEAM DRAIN-COMMON
 MDR-
 CS, 3"
 ISO. NO. 1.2-35

P&ID ISI-M114
 FSK-042208

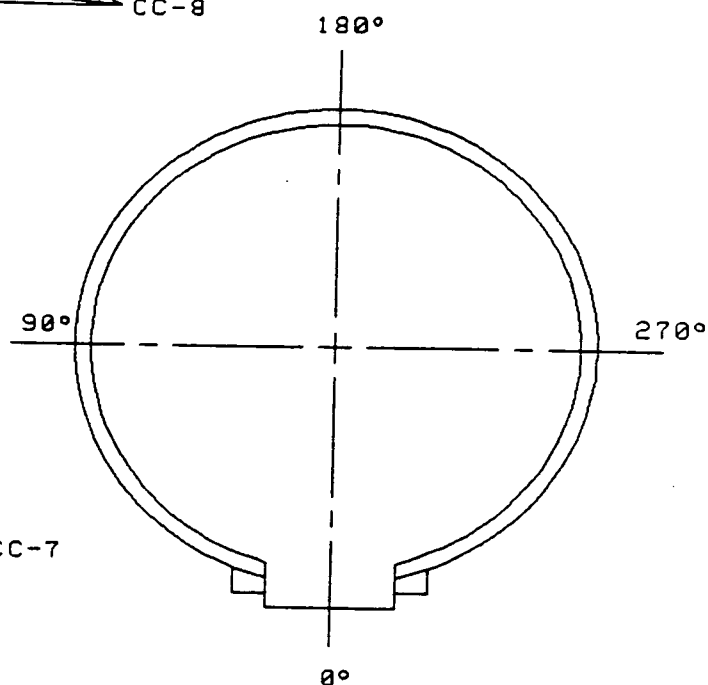
* - NON INTEGRAL

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	3-28-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-24-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794



CC-8(01) - 0°
 CC-8(02) - 90°
 CC-8(03) - 180°
 CC-8(04) - 270°



SECTION A-A

SHELL - REACTOR WATER
 TUBE - COOLING WATER

RHR HEAT EXCH A & B
 HEA-, HEB-
 FIGURE NO. 2.1-1

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	4-26-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-18-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794

RHR HEAT EXCH STEAM SUPPLY WELD PREFIX RHD CS, 6" & 10" ISO. NO. 2.2-35

P&ID ISI-M119, M120, 122
BECH. DWG# M-723-H

DRAWING RELEASE RECORD

PURPOSE

REV DATE PREPARED REVIEWED APPROVED

1 5-2-86 SML

2 9-18-90 DA

3 9-18-90 DA

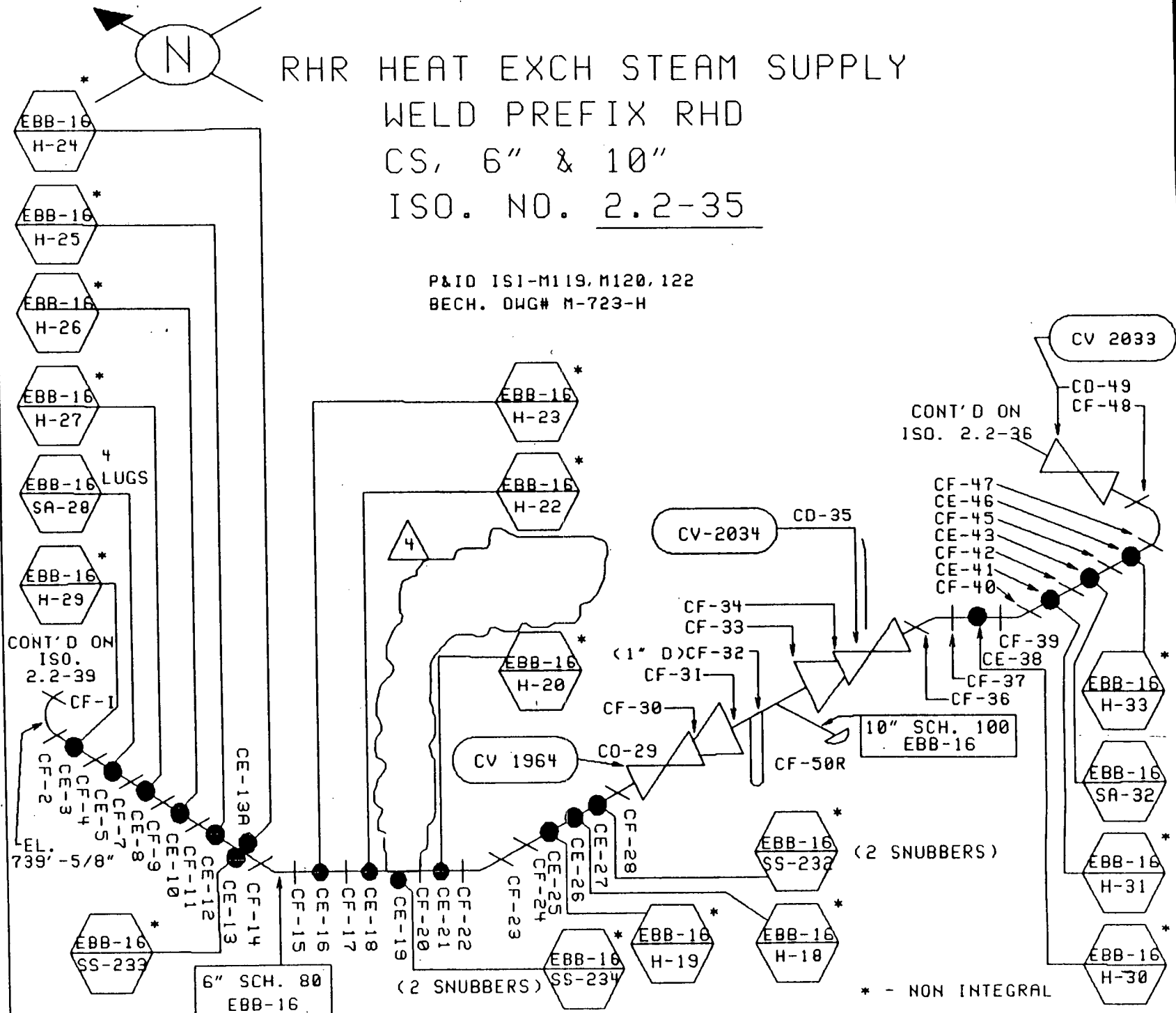
4 10-3-91

ISO'S FOR 2nd 10 YEAR PLAN

ISO'S TO CNO FORMAT AS PER NG-89-0794

DCP 1499, REMOVAL OF CROSS TIE TO HPC1 LINE

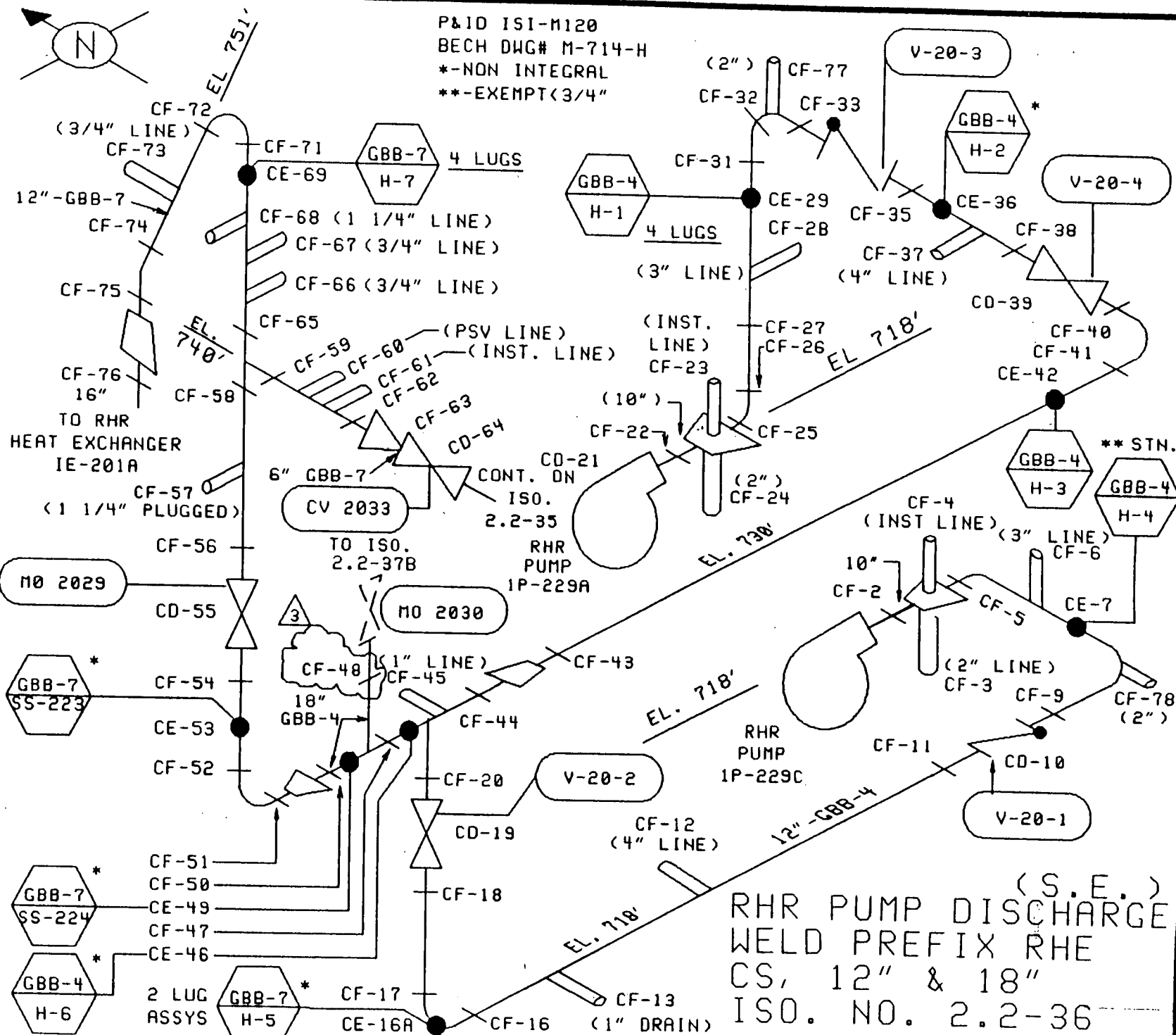
SUPPORT REMOVED PER DCP 1323



* - NON INTEGRAL

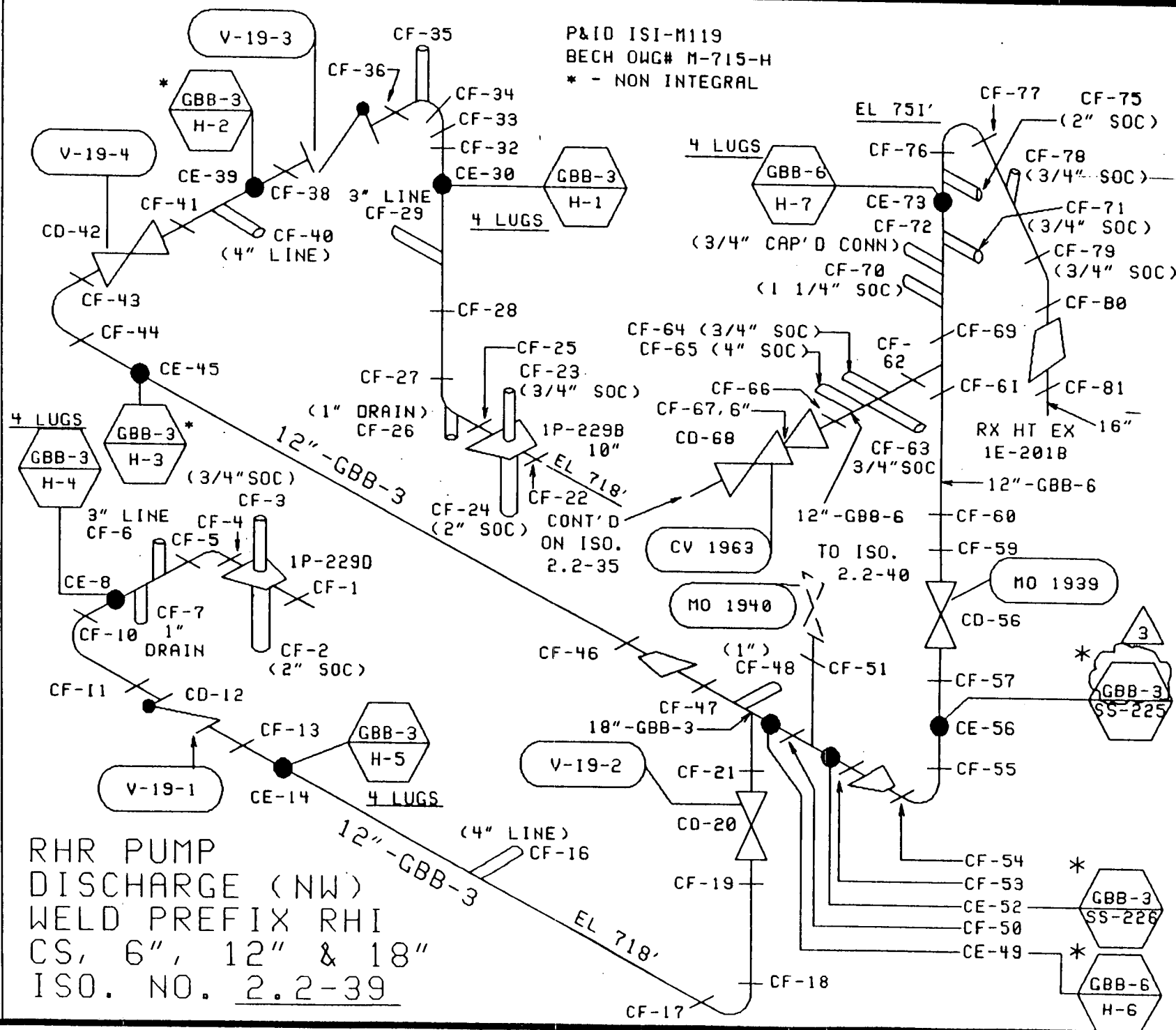
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	5-2-86	STL	STL	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-18-90	DR	GP	KKH	ISO'S TO CAD FORMAT AS PER NG-89-0794
3	5-13-91	DR	GP	KKH	PCN 8 ADDED WELD CF-48, OMITTED ON REV. 2

DRAWING RELEASE RECORD



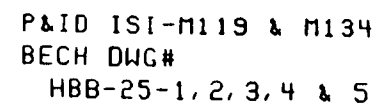
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	6-18-86	SNL	SNL	RCH	ISO'S FOR 2nd 10 YEAR PLAN
2	9-18-90	BA	GP	KKH	ISO'S TO CAD FORMAT AS PER NG-89-0794
3	10-3-91	BA	GP	KKH	REVISION PER DDC 798

DRAWING RELEASE RECORD

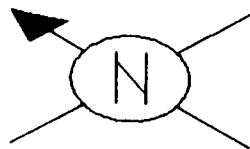


DRAINING RELEASE RECORD

* - NON INTEGRAL
** - EXEMPT < 3/4"



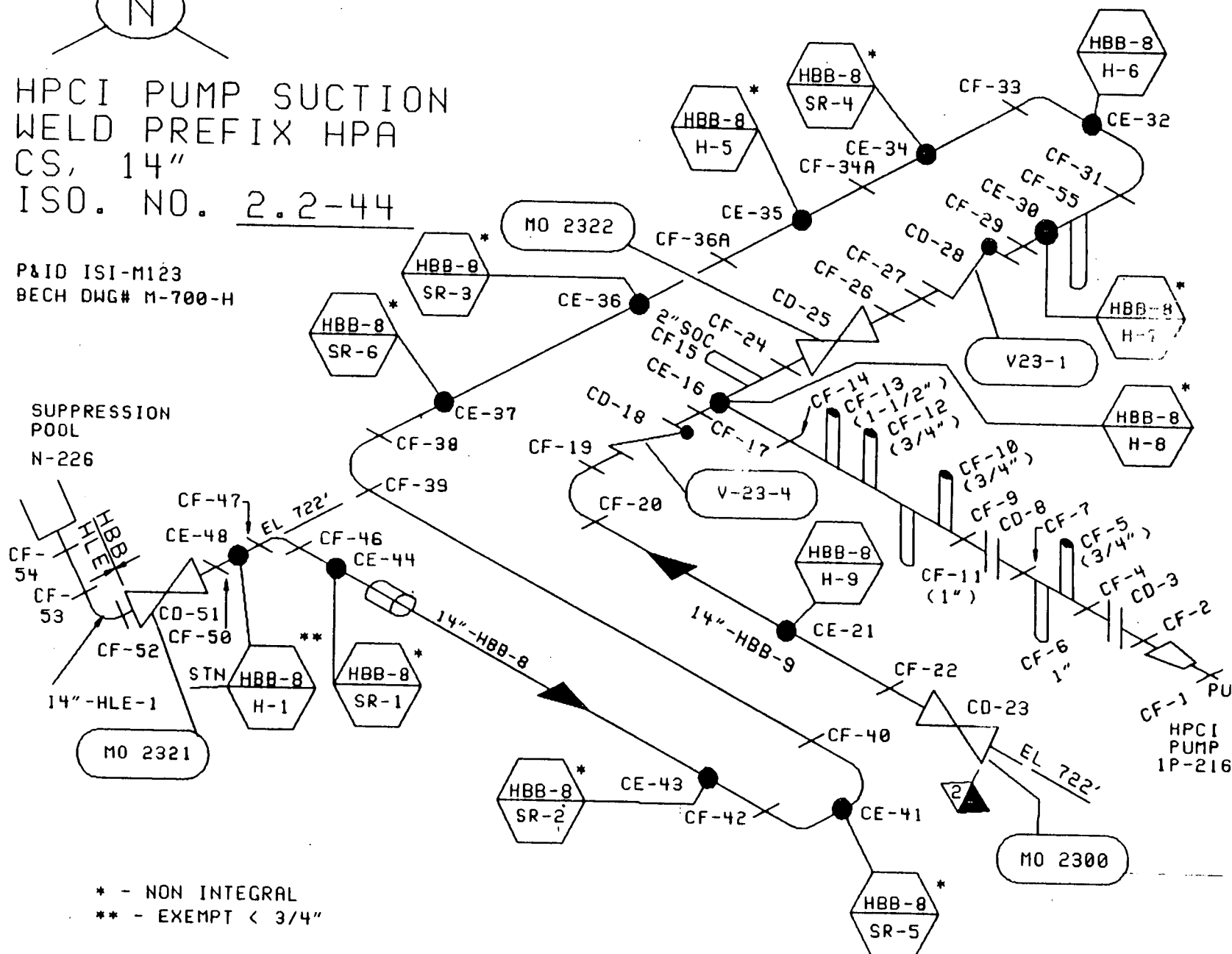
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	7-3-86	SNL	SNL	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-18-90	SNL	SNL	RCM	ISO'S TO CNO FORMAT AS PER NG-89-079+



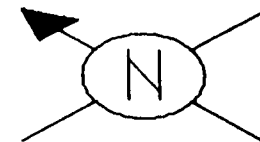
HPCI PUMP SUCTION
WELD PREFIX HPA
CS, 14"
ISO. NO. 2.2-44

P&ID ISI-M123
BECH DWG# M-700-H

SUPPRESSION
POOL
N-226

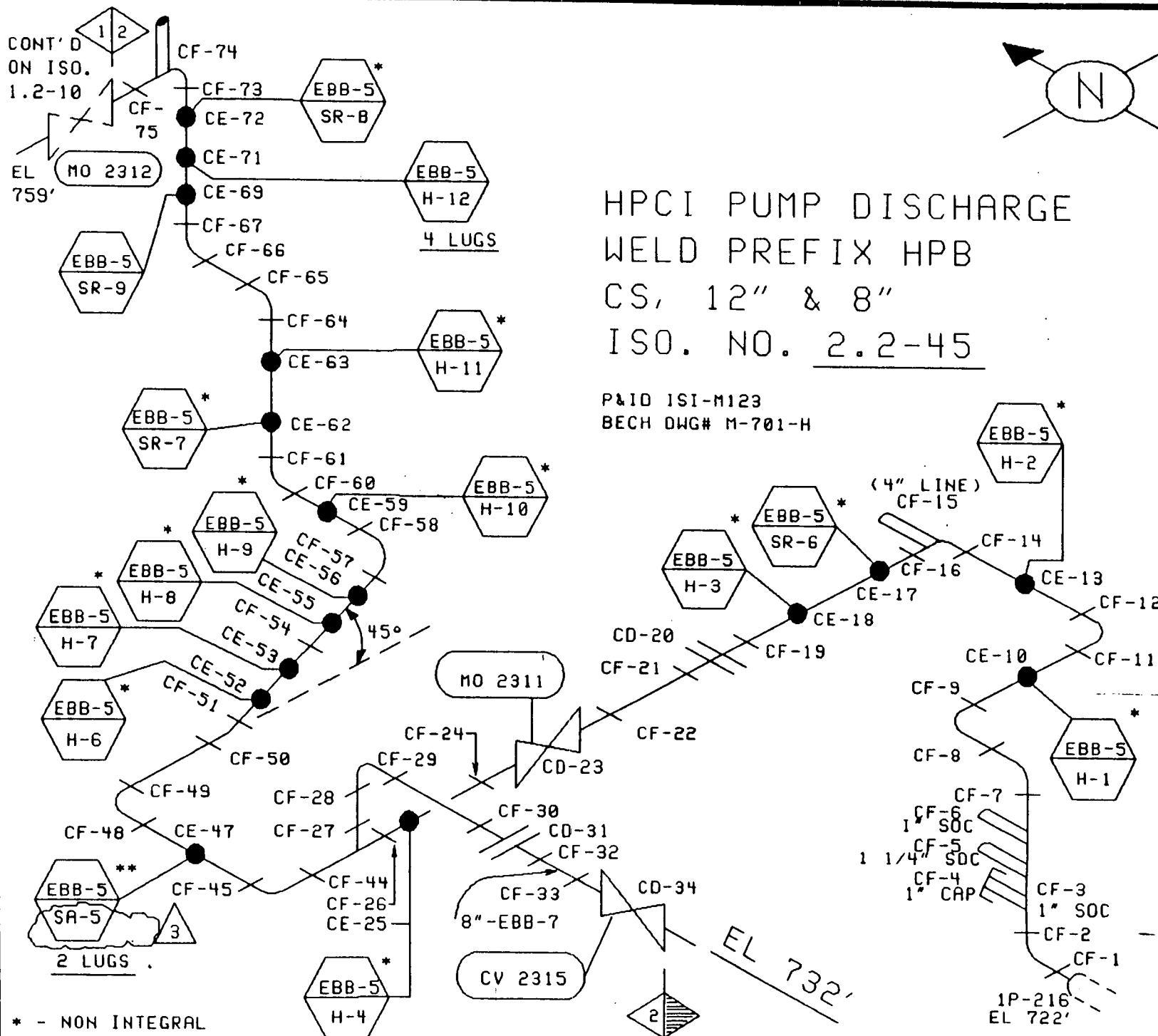


* - NON INTEGRAL
** - EXEMPT < 3/4"



HPCI PUMP DISCHARGE WELD PREFIX HPB CS, 12" & 8" ISO. NO. 2.2-45

P&ID ISI-M123
BECH DWG# M-701-H



* - NON INTEGRAL
** - EXEMPT < 3/4"

DRAWING RELEASE RECORD

PURPOSE

REV DATE

PREPARED

REVIEWED

APPROVED

1 7-9-86

SHL

SHL

RCH

ISO'S FOR 2nd 10 YEAR PLAN

2 9-18-90

DR

DR

KRM

ISO'S TO CAD FORMAT AS PER NG-89-079+

3 10-3-91

DR

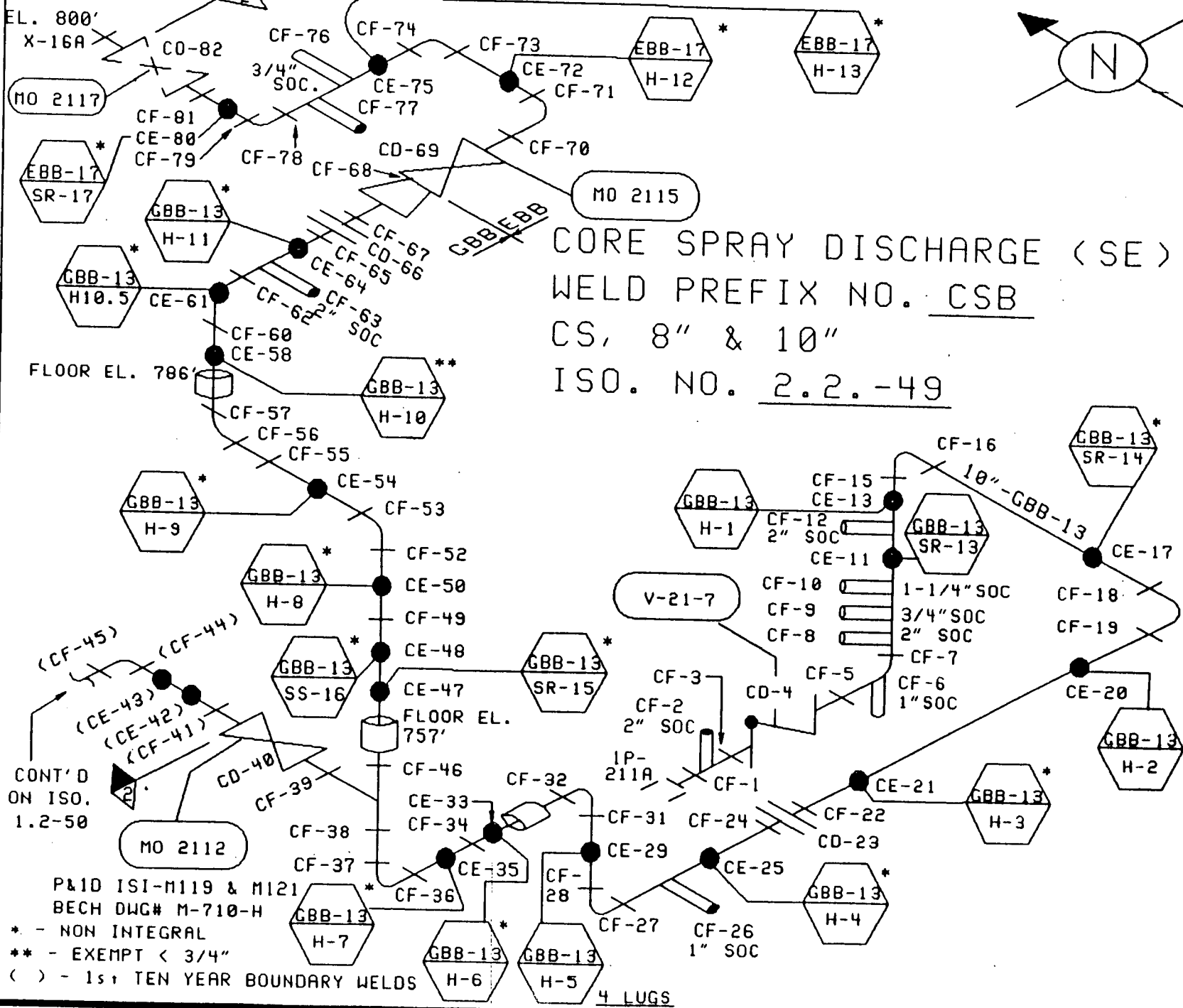
DR

KRM

CORRECTING HANGER IDENTIFICATION

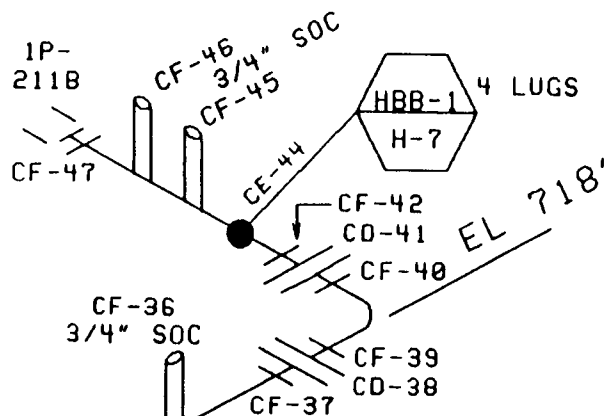
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	7-11-86	SMC	SMC	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-18-90	(Signature)	(Signature)	(Signature)	ISO'S TO CNO FORMAT AS PER NG-89-0794

CONT'D ON
ISO. 1.2-7



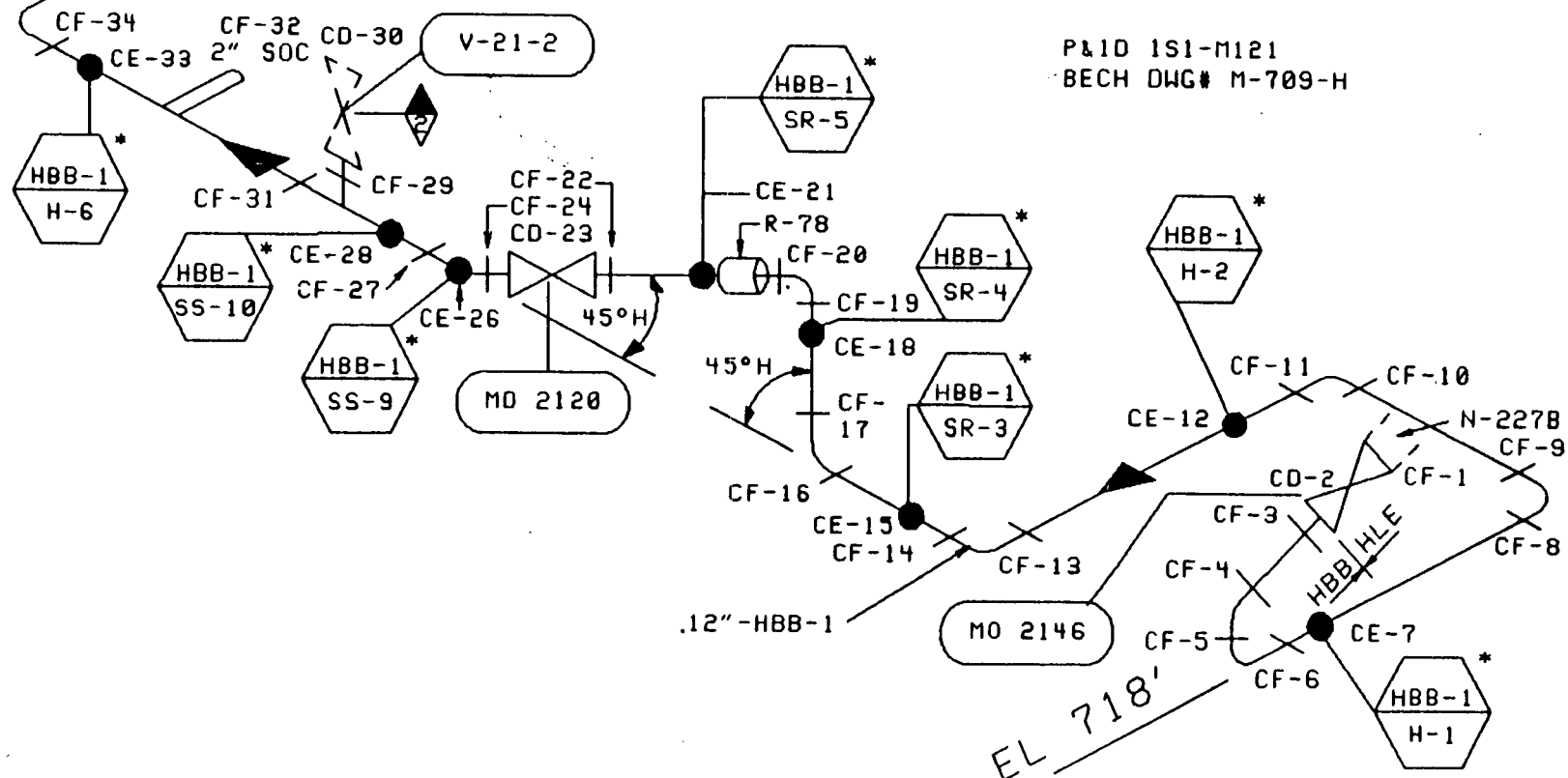
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	7-11-86	SNL	SNL	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-18-90	SNL	SNL	RCM	ISO'S TO CAD FORMAT AS PER NG-89-0794

DRAWING RELEASE RECORD

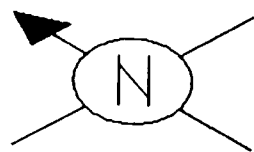


CORE SPRAY SUCTION (NW)
WELD PREFIX CSD
CS, 12"
ISO. NO. 2.2-51

P&ID ISI-M121
BECH DWG# M-709-H

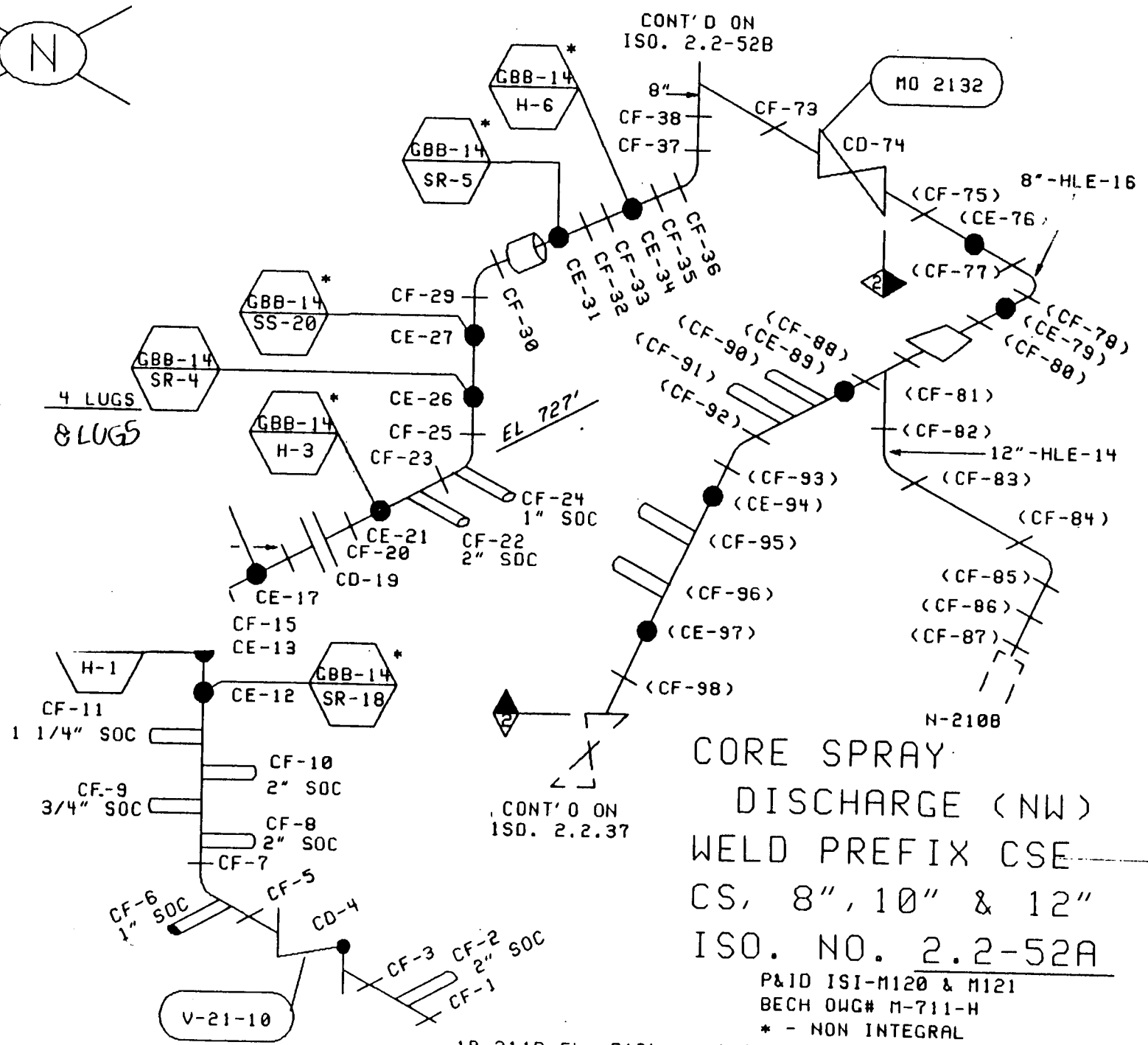


* - NON INTEGRAL
** - EXEMPT < 3/4"



REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	7-14-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-18-90	(Signature)	(Signature)	(Signature)	ISO'S TO CNO FORMAT AS PER NG-89-8794

DRAWING RELEASE RECORD



CORE SPRAY
DISCHARGE (NW)
WELD PREFIX CSE
CS, 8", 10" & 12"
ISO. NO. 2.2-52A

P&ID ISI-M120 & M121
BECH DWG# M-711-H

* - NON INTEGRAL

() - 1st TEN YEAR BOUNDARY WELDS

ORAC INSERVICE INSPECTION ASME SECTION XI ISOMETRIC

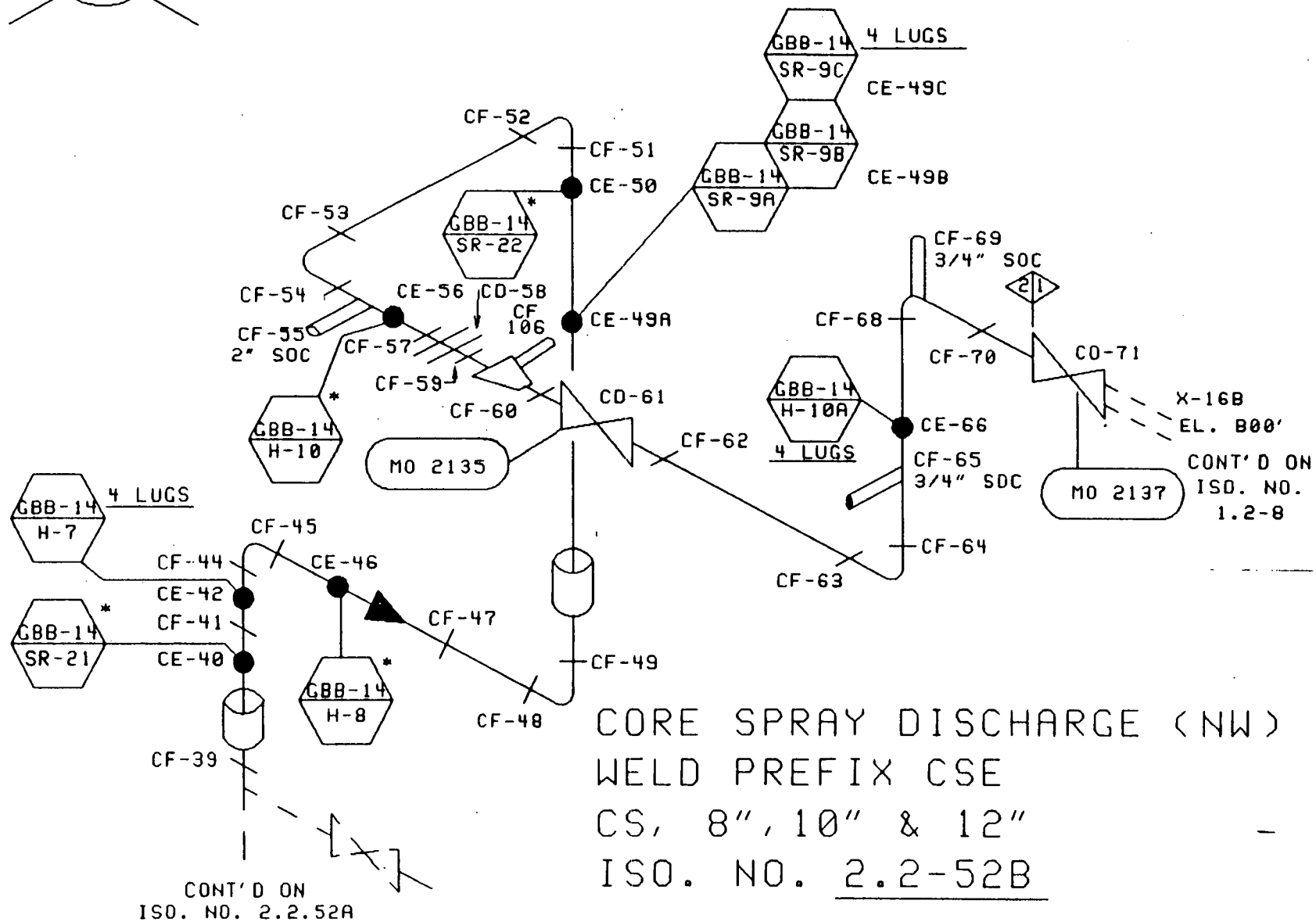
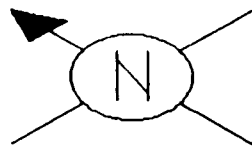
REV 1
DATE 7-14-86
PREPARED BY SFL
9-18-90

REVIEWED BY SFL
9-18-90

APPROVED BY SFL
9-18-90

PURPOSE RCH
ISO'S FOR 2nd 10 YEAR PLAN
ISO'S TO CNO FORMAT AS PER NG-89-0794

DRAWING RELEASE RECORD



CORE SPRAY DISCHARGE (NW)
WELD PREFIX CSE
CS, 8", 10" & 12"
ISO. NO. 2.2-52B

P&ID ISI-M120 & M121
BECH DWG# M-711-H

* - NON INTEGRAL

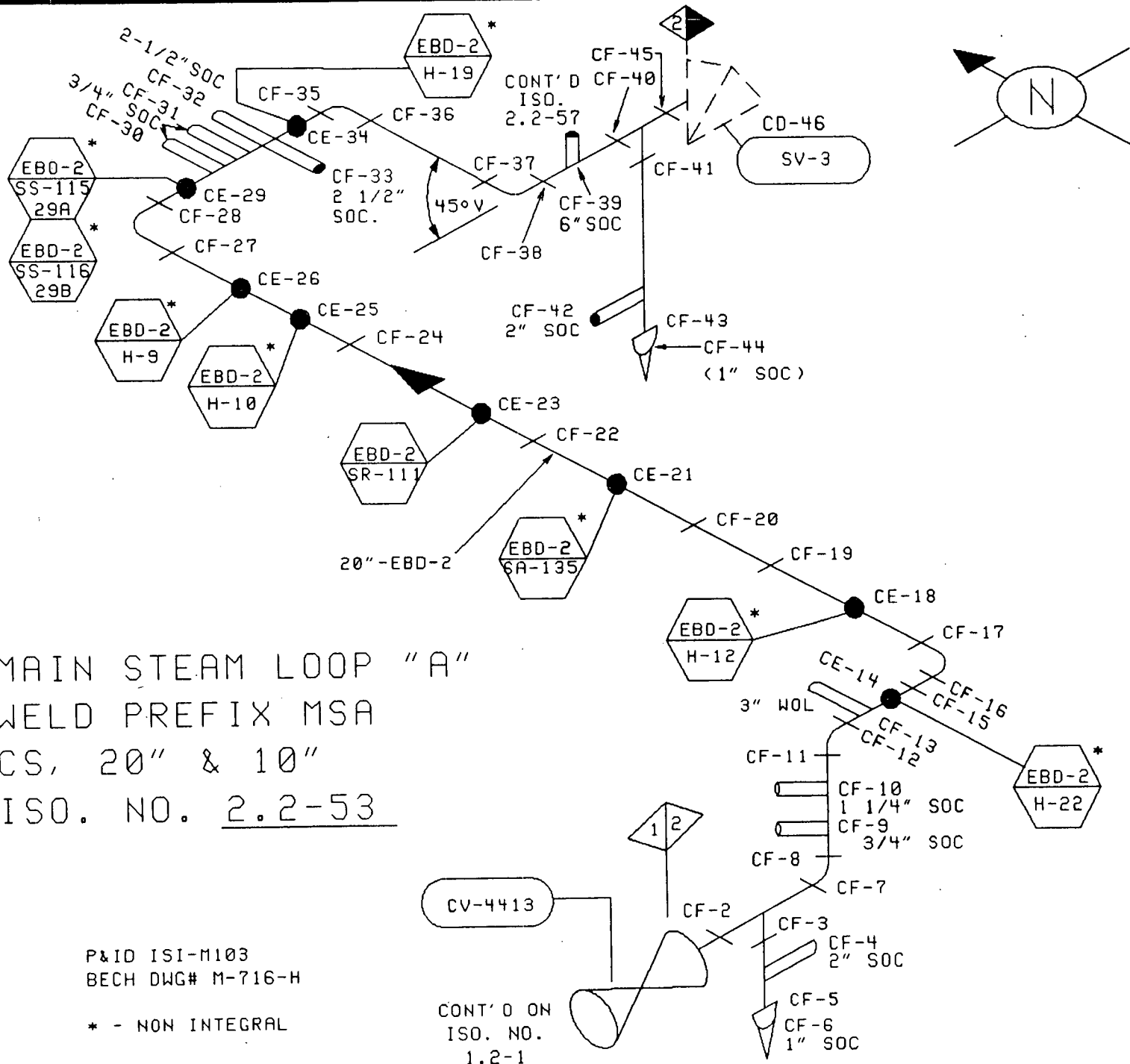
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	7-14-86	SAL	SPL	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-18-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CNO FORMAT AS PER NG-89-0794

DRAWING RELEASE RECORD

MAIN STEAM LOOP "A"
WELD PREFIX MSA
CS, 20" & 10"
ISO. NO. 2.2-53

P&ID ISI-M103
BECH DWG# M-716-H

* - NON INTEGRAL



CONT'D ON
ISO. NO.
1.2-1

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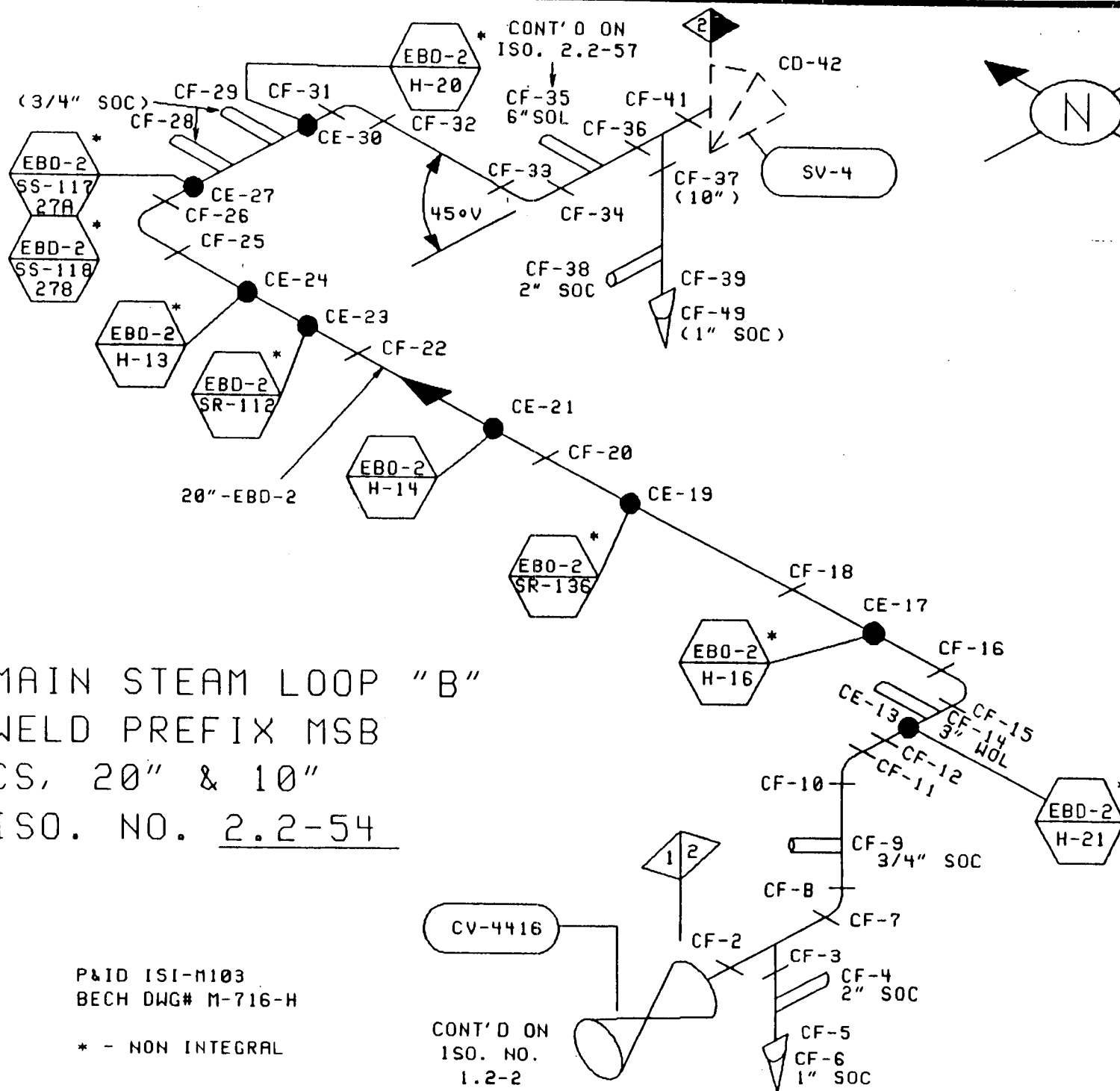
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	7-15-86	STL	STL	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9/8-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794

DRAWING RELEASE RECORD

MAIN STEAM LOOP "B"
WELD PREFIX MSB
CS, 20" & 10"
ISO. NO. 2.2-54

P&ID ISI-M103
BECH DWG# M-716-H

* - NON INTEGRAL



REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	7-16-86	SNL	SNL	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-18-90	<i>(Signature)</i>	<i>(Signature)</i>	<i>(Signature)</i>	ISO'S TO CAD FORMAT AS PER NC-89-879*

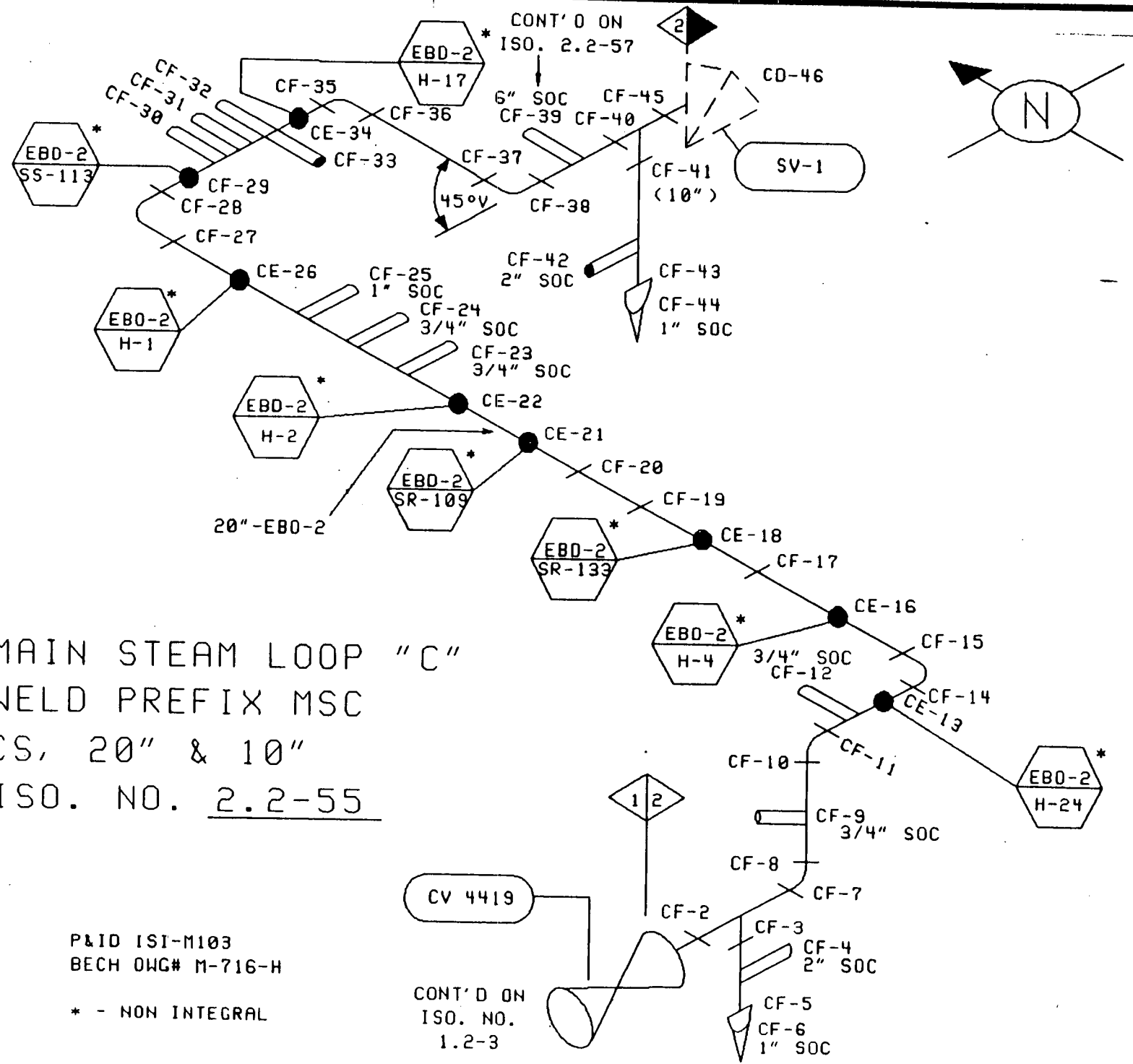
DRAWING RELEASE RECORD

MAIN STEAM LOOP "C"
WELD PREFIX MSC
CS, 20" & 10"
ISO. NO. 2.2-55

P&ID ISI-M103
BECH DWG# M-716-H

* - NON INTEGRAL

CONT'D ON
ISO. NO.
1.2-3



REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	7-16-86	SM	SM	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	9-18-10	SM	SM	RCM	ISO'S TO CAD FORMAT AS PER NG-89-079+

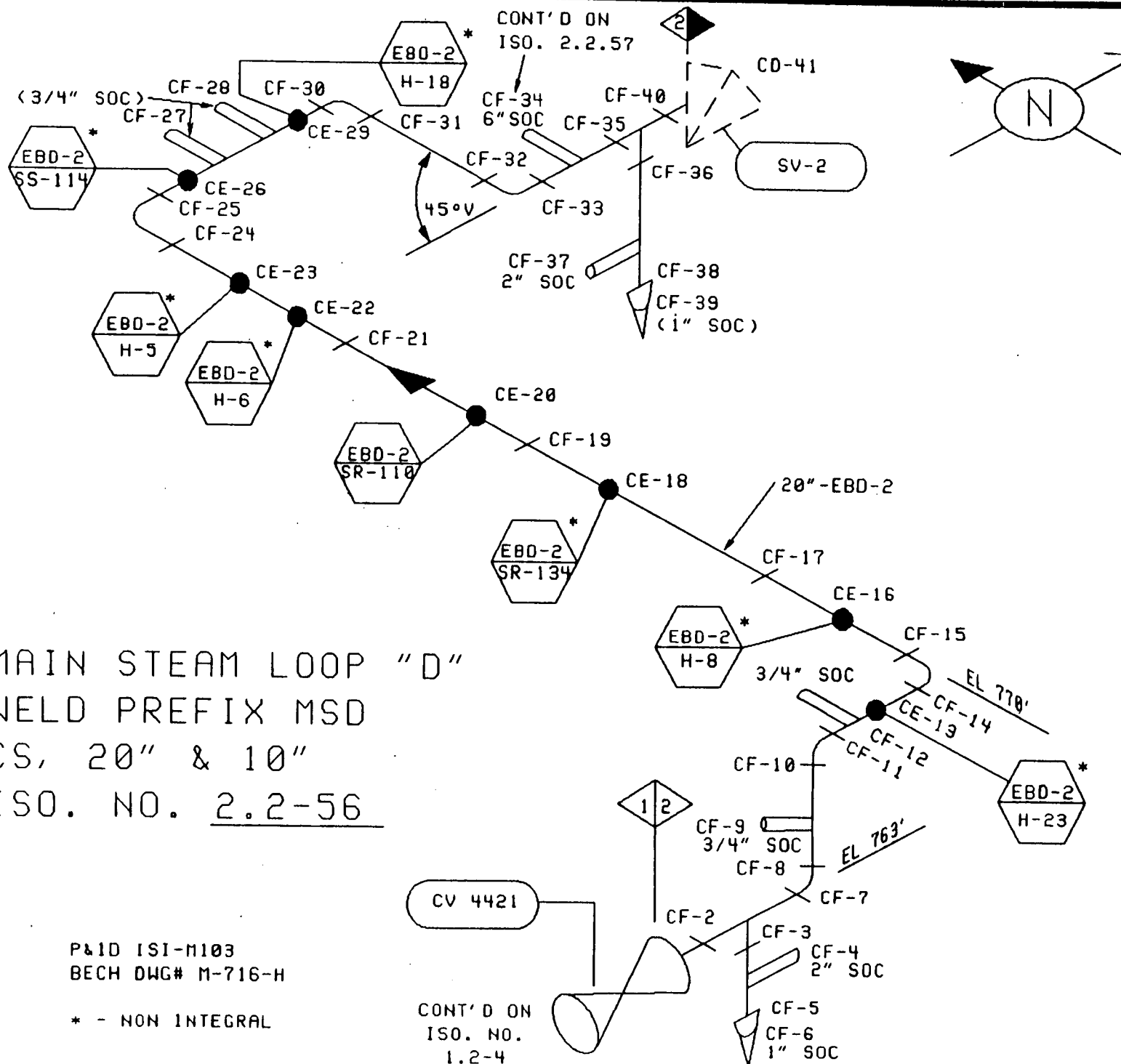
DRAWING RELEASE RECORD

MAIN STEAM LOOP "D"
WELD PREFIX MSD
CS, 20" & 10"
ISO. NO. 2.2-56

P&ID ISI-M103
BECH DWG# M-716-H

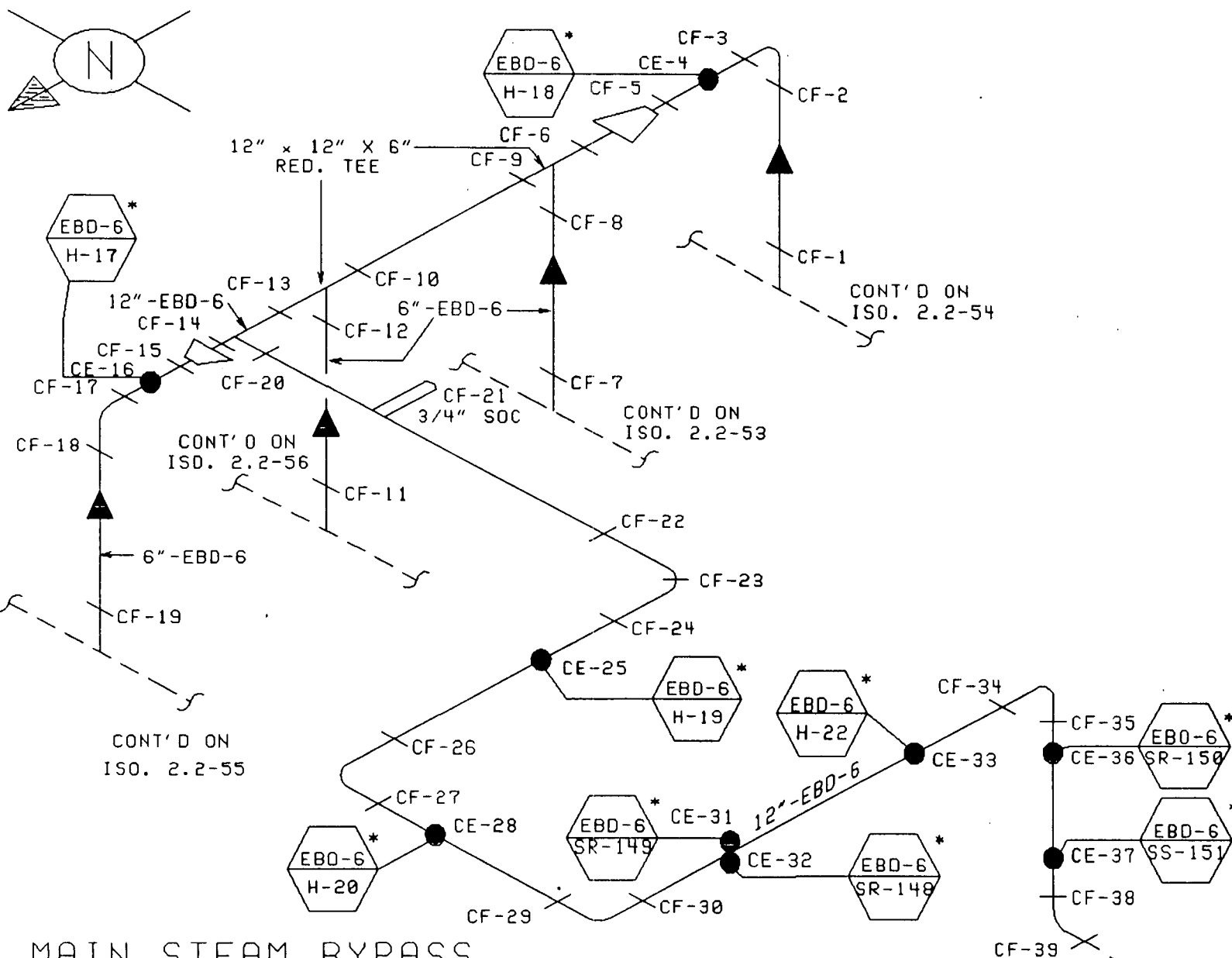
* - NON INTEGRAL

CONT'D ON
ISO. NO.
1.2-4



REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	7-16-86	SM	SM	RCH	ISO'S FOR 2nd 10 YEAR PLAN
2	4-18-90	SM	SM	RCH	ISO'S TO CAD FORMAT AS PER NG-89-0794

DRAWING RELEASE RECORD



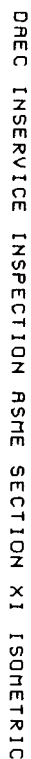
MAIN STEAM BYPASS
WELD PREFIX MSE
CS, 12" & 6"
ISO. NO. 2.2-57

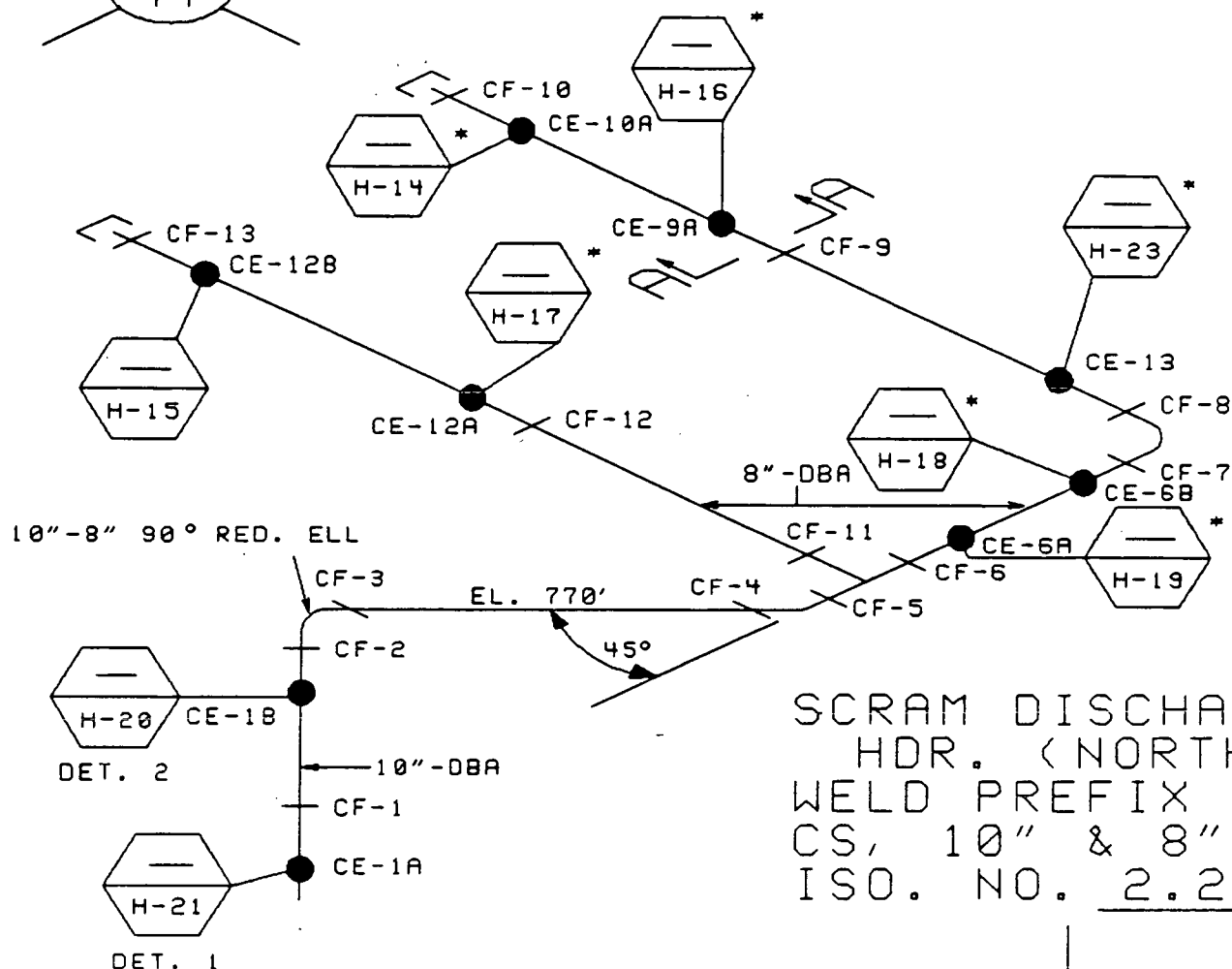
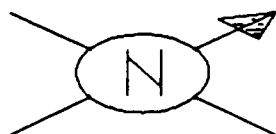
P&ID ISI-M103
BECH DWG# EBD-6-1H & 2H

* - NON INTEGRAL

DRAINING RELEASE RECORD

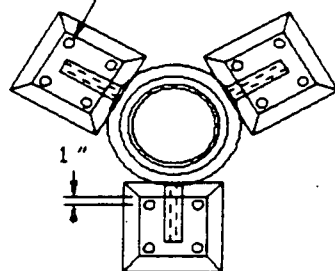
P&ID ISI-M103
BECH DWG# EBD-6-3-H





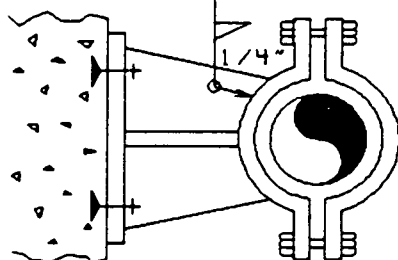
SCRAM DISCHARGE
HDR. (NORTH)
WELD PREFIX SDN
CS, 10" & 8"
ISO. NO. 2.2-61

3/4" BOLTS
TYP OF 4

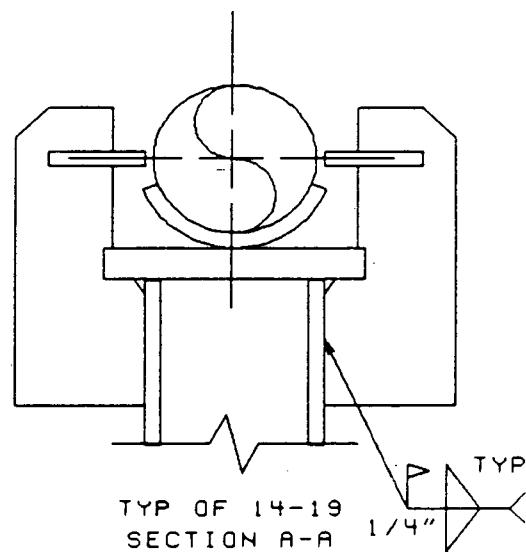


DETAIL 1

TYP.



DETAIL 2



TYP OF 14-19
SECTION A-A

DRAWING RELEASE RECORD

REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
1	7-16-86	SML	SML	RCM	ISO'S FOR 2nd 10 YEAR PLAN
2	10-26-87	JPM	RCM	REL	MODIFICATION OF SUPPORTS, FCN 1323; SEQ 5
3	9-18-90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	ISO'S TO CAD FORMAT AS PER NG-89-0794

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

PART J pages 1 of 6

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 1

<u>Item No.</u>	<u>Total #</u>	<u>Period 1</u>	<u>Period 2</u>	<u>Remarks</u>
B1.11	1	0%	0%	Permissible
B1.12	1	0%	0%	Permissible
B1.21B	1	0%	0%	Permissible
B1.21T	1	33%	66%	1/3 each period
B1.22B	1	0%	0%	Permissible
B1.22T	1	33%	66%	1/3 each period
B1.30	1	33%	66%	1/3 each period
B1.40	1	33%	66%	1/3 each period
B3.90	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%	Permissible
B6.20	60	0%	66%	Permissible
B6.40	60	0%	66%	Permissible
B6.50	60	0%	66%	Permissible
B6.180	2	0%	100%	16 per pump
B6.190	2	0%	100%	
B6.200	2	0%	100%	16 per pump

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

PART J pages 2 of 6

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GROSS GENERATING CAPACITY: 565 MWE

STATUS OF WORK FOR SECOND INTERVAL

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CLASS 1 (cont.)

<u>Item No.</u>	<u>Total #</u>	<u>Period 1</u>	<u>Period 2</u>	<u>Remarks</u>
B7.10	3	66%	66%	
B7.50	2	0%	50%	
B7.60	2	0%	66%	
B7.70	40	N/A	N/A	Relief Request NDE-002 (when disassembled) See Note 4
B7.80	89	N/A	N/A	
B8.10	9	18%	64%	
B9.11	131	38%	68%	Minimum for interval 125
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 NDE-002
B13.10	*	*	*	
B13.20	*	*	*	
B13.21	*	*	*	*Accessible areas during refueling outages.
B13.22	*	*	*	Permissible
B14.10	28	0%	0%	Permissible

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

PART J pages 3 of 6

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6) National Board Number of Unit: N/A

GROSS GENERATING CAPACITY: 565 MWE

STATUS OF WORK FOR SECOND INTERVAL

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CLASS 1 (cont.)

<u>Item No.</u>	<u>Total #</u>	<u>Period 1</u>	<u>Period 2</u>	<u>Remarks</u>
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

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

PART J pages 4 of 6

1) Owners: Iowa Electric Light and Power Company
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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

<u>Item No.</u>	<u>Total #</u>	<u>Period 1</u>	<u>Period 2</u>	<u>Remarks</u>
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	12	N/A	N/A	Once per period
C7.80	12	N/A	N/A	Once per interval

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

PART J pages 5 of 6

1) Owners: Iowa Electric Light and Power Company
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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).

SUPPORTS

CLASS 1

<u>Item No.</u>	<u>Total #</u>	<u>Period 1</u>	<u>Period 2</u>	<u>Remarks</u>
F2.00	15	20%	60%	
F3.00	166	35%	67%	

CLASS 2

<u>Item No.</u>	<u>Total #</u>	<u>16%-34% Period 1</u>	<u>50% min 67% max Period 2</u>	<u>Remarks</u>
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.

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

PART J pages 6 of 6

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- 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 ≤ 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.

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

PART K pages 1 of 1

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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.

<u>Relief Request #</u>	<u>Description</u>
NDE-002	All Valves under Category B-M-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 Bolting under Category B-G-2
NDE-008	MSC-K038 and MSD-K034, Surface examination of integral attachments.

AUGMENTED INSPECTIONS RESULTS

APPENDIX 2

NG-92-3268

Page 1 of 6

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

AUGMENTED INSPECTIONS RESULTS

R

System or Component Description	A C C	R E J	Inspection Requirement	Weld or Component Description	UT Report Number	PT Report Number	Visual Report Number	ISI ISO/Fig. Number	Comments
RPV Interior	X		J	Steam Dryer Drain Channel			*	None	Drain Channel #4 Indication (NCR 90-069)
	X		G	Steam Dryer Exterior			*	None	
	X		N	Vessel Head			*	None	
	X		O	Top Guide			*	None	
Feedwater B	X		B	Feedwater B Thermal Sleeve	91-131A 91-131B			1.1.6	
Feedwater C	X		B	Feedwater C Thermal Sleeve	92-061A 92-061B			1.1.6	
Feedwater D	X		B	Feedwater D Thermal Sleeve	92-062A 92-062B			1.1.6	
Core Spray B	X		A,K	CSB-F002	91-166			1.2.8	
	X		A	CSB-F002A	91-167			1.2.8	
	X		A	CSB-F004	91-169			1.2.8	
	X		A	CSB-J003	91-170			1.2.8	
Reactor Water Cleanup Suction	X		A	CUA-J001	91-178			1.2.11A	
	X		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	
	X		A	CUA-J008	91-183			1.2.11A	
	X		A	CUA-J009	91-184			1.2.11A	

AUGMENTED INSPECTIONS RESULTS

RFO-11

Page 3 of 6

System or Component Description	A C C	R E J	Inspection Requirement	Weld or Component Description	UT Report Number	PT Report Number	Visual Report Number	ISI ISO/Fig. Number	Comments
RWCU (cont.)	X		A	CUA-J010	91-185			1.2.11A	
	X		A	CUA-J012	91-186			1.2.11A	
	X		A	CUA-J013	91-189			1.2.11A	
	X		A	CUA-J014	91-190			1.2.11	
	X		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	
	X		A	CUA-J019	91-194			1.2.11A	
	X		A	CUA-J020	91-195			1.2.11A	
	X		A	CUA-J021	91-196			1.2.11A	
	X		A	CUA-J023	91-197			1.2.11A	
	X		A	CUA-J024	91-198			1.2.11A	
Control Rod Drive Return	X		B	CRA-F002	91-200			1.2.12A	
	X		B	CRA-F004	91-202			1.2.12A	
	X		B	CRA-J003	91-203			1.2.12A	
Residual Heat Removal - 18B	X		A	RHB-J001-OVL	91-204			1.2.14	
Residual Heat Removal 20A	X		A	RHC-F002	91-205			1.2-15	

AUGMENTED INSPECTIONS RESULTS

RF

Page 4 of 6

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

AUGMENTED INSPECTIONS RESULTS

RFO 11

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

11

Key Code

	ACC	Accept
REJ	Reject	

* Examination of augmented reactor pressure vessel (RPV) interior is in the GE Refuel Outage #11, In-vessel Visual Inspection (IVVI) Report