

10 CFR 50.55a

RS-06-182

December 15, 2006

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Clinton Power Station, Unit 1
Facility Operating License No. NPF-62
NRC Docket No. 50-461

Subject: Proposed Alternative to Performance of System Pressure Tests and VT-2 Visual Examination Requirements for all Class 2 Instrument Air (IA) Piping and the Class 3 IA Piping Supplying all SRVs and Both Feedwater Containment Outboard Isolation Check Valves

In accordance with 10 CFR 50.55a, "Codes and standards," paragraph (a)(3)(i), AmerGen Energy Company, LLC (AmerGen), hereby requests NRC approval of the following request for a proposed alternative to the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1989 Edition, no addenda, paragraphs IWC-2500 and IWD-2500 for the remainder of the second ten-year interval of the Inservice Inspection Program for Clinton Power Station (CPS) which ends December 31, 2010.

ASME Section XI, paragraphs IWC-2500 and IWD-2500, state that components shall be examined and pressure tested as specified in Tables IWC-2500-1 and IWD-2500-1. Tables IWC-2500-1 and IWD-2500-1 require performance of VT-2 visual examinations during system pressure tests. As an alternative to the examination requirements of Table IWC-2500-1 and IWD-2500-1, CPS is proposing to perform pressure decay testing on the Class 2 and 3 Instrument Air piping supplying all 16 Safety Relief Valves (SRVs) and both Feedwater containment outboard isolation check valves as required in the surveillance procedures. The proposed alternative testing will provide an equivalent level of quality and safety.

AmerGen requests approval of this request by December 31, 2007.

There are no regulatory commitments contained in this letter.

A047

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Should you have any questions concerning this letter, please contact Mr. Timothy A. Byam at (630) 657-2804.

Respectfully,

A handwritten signature in black ink that reads "Darin M Benyak" followed by a long horizontal flourish.

Darin M. Benyak
Manager – Licensing

Attachments: (1) 10 CFR 50.55a Request Number 4212
(2) Piping & Instrumentation Diagrams (For Information Only)
(3) Acceptance Criteria From Procedure CPS 9061.11 (For Information Only)

ATTACHMENT 1

CLINTON POWER STATION

10 CFR 50.55a Request Number 4212 Proposed Alternate in Accordance with 10 CFR 50.55a(a)(3)(i)

Alternative Provides Acceptable Level of Quality and Safety

1. ASME Code Components Affected

Class 2 Instrument Air (IA) piping and components between containment isolation valves 1IA012A/B and 1IA013A/B and check valves 1IA042A/B. This includes the following lines, valves and components shown on Clinton Power Station (CPS) Piping and Instrumentation Diagram (P&ID) M05-1040 sheet 7 not listed above.

- Lines 1IA71BA/BB-1, 1IA14GA/GB-1, 1IA95A/B-1, 1IA93AA/BA-3/4 and 1IA96AA/BA-3/4.
- Valves 1IA131A/B, 1IA129A/B and the blind flanges on lines 1IA95A/B-1.

Class 3 IA system piping and components requiring inspection. This includes the following IA lines and valves supplying all 16 safety relief valves (SRVs) and both Feedwater containment outboard isolation check valves.

- P&ID M05-1040 sheet 7 lines - 1IA79CA/CB-1, 1IA92AA/BA-3/4, 1IA102BA-1/2, 1IA103BA-1/2, 1IA71AA/AB-1, 1IA87A/B-1/2, 1IA125A/B-1/2, 1IA122A/B-1, 1IA88A/B-1/2, 1IA71CA/CB-1, 1IA71DA/EA/FA/GA-1/2 and 1IA71DB/EB/FB/GB/FC-1/2.
- P&ID M05-1040 sheet 7 valves – 1IA075A/B, 1IA076A/B, 1IA130A/B, 1IA1170A/B, 0IA18MA/B, 1IA044A/B, 1IA1171A/B, 1IA1172A/B, 1IA096C/D and 1IA097A/B. NOTE – Strainers 1IA26FA/FB are not Code components.
- P&ID M10-9002 sheet 1 lines – 1IA71DA/DB/EA/EB/FA/FB/FC-1/2, 1IA85A/B/C/D/E/F/G-1/2, 1MS71CE/DE-1/2, 1MS72AE/BE-1/2, 1MS73BE/CE-1/2, 1MS74CE-1/2, 1MS71CG/DG-3/4, 1MS72AG/BG-3/4, 1MS73BG/CG-3/4, 1MS74CG-3/4, 1MS71CH/DH-1/2, 1MS72AH/BH-1/2, 1MS73BH/CH-1/2, 1MS74CH-1/2, 1MS71CF/DF-3/4, 1MS72AF/BF-3/4, 1MS73BF/CF-3/4, 1MS74CF-3/4, 1MS71CC/DC-2, 1MS72AC/BC-2, 1MS73BC/CC-2, 1MS74CC-2, 1MS71CJ/CK/DJ/DK-1 1/4, 1MS72AJ/AK/BJ/BK-1 1/4, 1MS73BJ/BK/CJ/CK-1 1/4 and 1MS74CJ/CK-1 1/4.
- P&ID M10-9002 sheet 1 valves - 1IA094A/B/C/D/E/F/G, 1B21-F039B/C/D/E/H/K/S, 1B21-F331C/D, 1B21-F332A/B, 1B21-F333B/C, 1B21-F334, valves 'G' on M10-9002-sheet1 and 1B21-F082B/C/D/E/H/K/S.
- P&ID M10-9002 sheet 1 accumulators - 1B21-A003B/C/D/E/H/K/S.
- P&ID M10-9002 sheet 2 lines – 1IA71GA/GB-1/2, 1IA86C/E-1/2, 1MS75AE/BE-1/2, 1MS76CE/DE-1/2, 1MS77AE/CE/DE-1/2, 1MS78BE/CE-1/2, 1MS75AC/BC-2, 1MS76CC/DC-2, 1MS77AC/CC/DC-2, 1MS78BC/CC-2, 1MS75AG/AH/BG/BH-1 1/4, 1MS76CG/CH/DG/DH-1 1/4, 1MS77AG/AH/CG/CH/DG/DH-1 1/4 and 1MS78BG/BH/CG/CH-1 1/4.
- P&ID M10-9002 sheet 2 valves – 1IA095C/E, 1B21-F036 A/F/G/J/L/M/N/P/R and 1B21-F081A/F/G/J/L/M/N/P/R.
- P&ID M10-9002 sheet 2 accumulators - 1B21-A004A/F/G/J/L/M/N/P/R.

ATTACHMENT 1

- P&ID M10-9004 sheet 8 lines – 1FW26BA/BB – 1/2, 1FW27BA/BB-1/2, 1FW26CA/CB-2 and 1FW28AA/AB-3/4.
- P&ID M10-9004 sheet 8 valves – 1B21-F433A/B and 1B21-F492A/B.
- P&ID M10-9004 sheet 8 accumulators – 1B21-A300A/B.

2. Applicable Code Edition and Addenda

American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1989 Edition, no addenda, paragraphs IWC-2500 and IWD-2500.

3. Applicable Code Requirement

ASME Section XI, paragraphs IWC-2500 and IWD-2500, state that components shall be examined and pressure tested as specified in Tables IWC-2500-1 and IWD-2500-1. Tables IWC-2500-1 and IWD-2500-1 require performance of VT-2 visual examinations during system pressure tests.

Examination Categories: Class 2 – C-H, All Pressure Retaining Components.
Class 3 - D-A, Systems in Support of Reactor Shutdown Function.

Item Numbers: Class 2 – C7.30, Piping and Pressure Retaining Components and C7.70, Valves and Pressure Retaining Components.
Class 3 - D1.10, Pressure Retaining Components

4. Reason for Request

Relief is requested from the performance of system pressure tests and VT-2 visual examination requirements specified in Tables IWC-2500-1 and IWD-2500-1 for all Class 2 IA piping and the Class 3 IA piping supplying all SRVs and both Feedwater containment outboard isolation check valves.

5. Proposed Alternative and Basis for Use

As an alternative to the examination requirements of Tables IWC-2500-1 and IWD-2500-1, CPS will perform pressure decay testing on the Class 2 and 3 IA piping supplying all 16 SRVs and both Feedwater containment outboard isolation check valves as required in surveillance procedure CPS 9061.11, "Instrument Air Check Valve Operability and Pipe Pressure Test."

Pursuant to 10 CFR 50.55a(a)(3)(i), relief is requested on the basis that the proposed alternative testing method provides an acceptable level of quality and safety.

ATTACHMENT 1

Surveillance procedure CPS 9061.11, verifies the operability of SRV actuation capability and check valves in the IA supply lines to all 16 SRVs and both Feedwater containment outboard isolation check valves. This surveillance test is performed for each individual SRV and both Feedwater containment outboard isolation check valves as a requirement of the CPS Inservice Testing (IST) program. One specific test this surveillance performs, is a pressure decay test of the SRV and Feedwater containment outboard isolation check valve accumulators, as well as associated piping and valves. The pressure decay test is performed by isolating and pressurizing these accumulators and associated piping to the nominal operating pressure. The decay in pressure is then monitored through calibrated pressure measuring instrumentation. If any pressure decay acceptance criterion (see Attachment 3) is exceeded, the surveillance identifies appropriate troubleshooting steps to perform, including soap-bubble application to locate leakage.

The pressure decay test performed as part of CPS 9061.11 identifies any degradation of the Class 2 and 3 ADS supply piping and the SRV and Feedwater containment outboard isolation check valve accumulators and associated piping. The volume tested by this surveillance encompasses all piping and components requiring testing under ASME Section XI for these portions of the IA system. This surveillance is performed on a greater frequency than that required in Tables IWC-2500-1 or IWD-2500-1 and the test pressure is consistent with the pressure requirements of both tables. Thus, the testing performed during this surveillance will provide the same level of quality and safety as the pressure testing and VT-2 visual examination requirements of Tables IWC-2500-1 and IWD-2500-1.

The VT-2 visual examination described in Tables IWC-2500-1 and IWD-2500-1 and performed once per inspection period, would not provide an increase in safety, system reliability, or structural integrity. In addition, performance of a VT-2 visual examination would require applying a leak detection solution to a large amount of piping and components, many of which are in elevated dose rate areas with limited access. VT-2 inspections would result in additional radiation exposure (estimated 2 Rem) and industrial safety challenges without any added benefit in the level of quality and safety. These inspections would not be consistent with As Low As Reasonably Achievable (ALARA) practices.

Relief is requested from the performance of system pressure tests and VT-2 visual examination requirements specified in Tables IWC-2500-1 and IWD-2500-1 for the Class 2 and 3 IA system piping and components identified in this request on the basis that an existing CPS surveillance provides an acceptable level of quality and safety.

6. Duration of Proposed Alternative

Relief is requested for the remainder of the second ten-year interval of the Inservice Inspection Program for CPS, Unit 1 which ends December 31, 2010.

7. Precedents

ATTACHMENT 1

A similar request was made by Exelon Generation Company, LLC for the LaSalle County Station (Reference 1) and subsequently approved by the NRC (Reference 2).

8. References

1. Letter from Mr. C. G. Pardee (Exelon Generation Company, LLC) to the U. S. NRC, "LaSalle County Station Relief Requests PR-08 and PR-10, Alternates to the Examination Requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1989 Edition, Table IWC-2500-1," dated December 21, 2001
2. Letter from U. S. NRC to Mr. J. L. Skolds (Exelon Generation Company, LLC), "LaSalle County Station, Units 1 and 2 – Relief Requests PR-08 and PR-10 (TAC Nos. MB3780 and MB3781)," dated June 28, 2002
3. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1989 Edition, No Addenda, Subsection Tables IWC-2500-1 and IWD-2500-1

ATTACHMENT 2

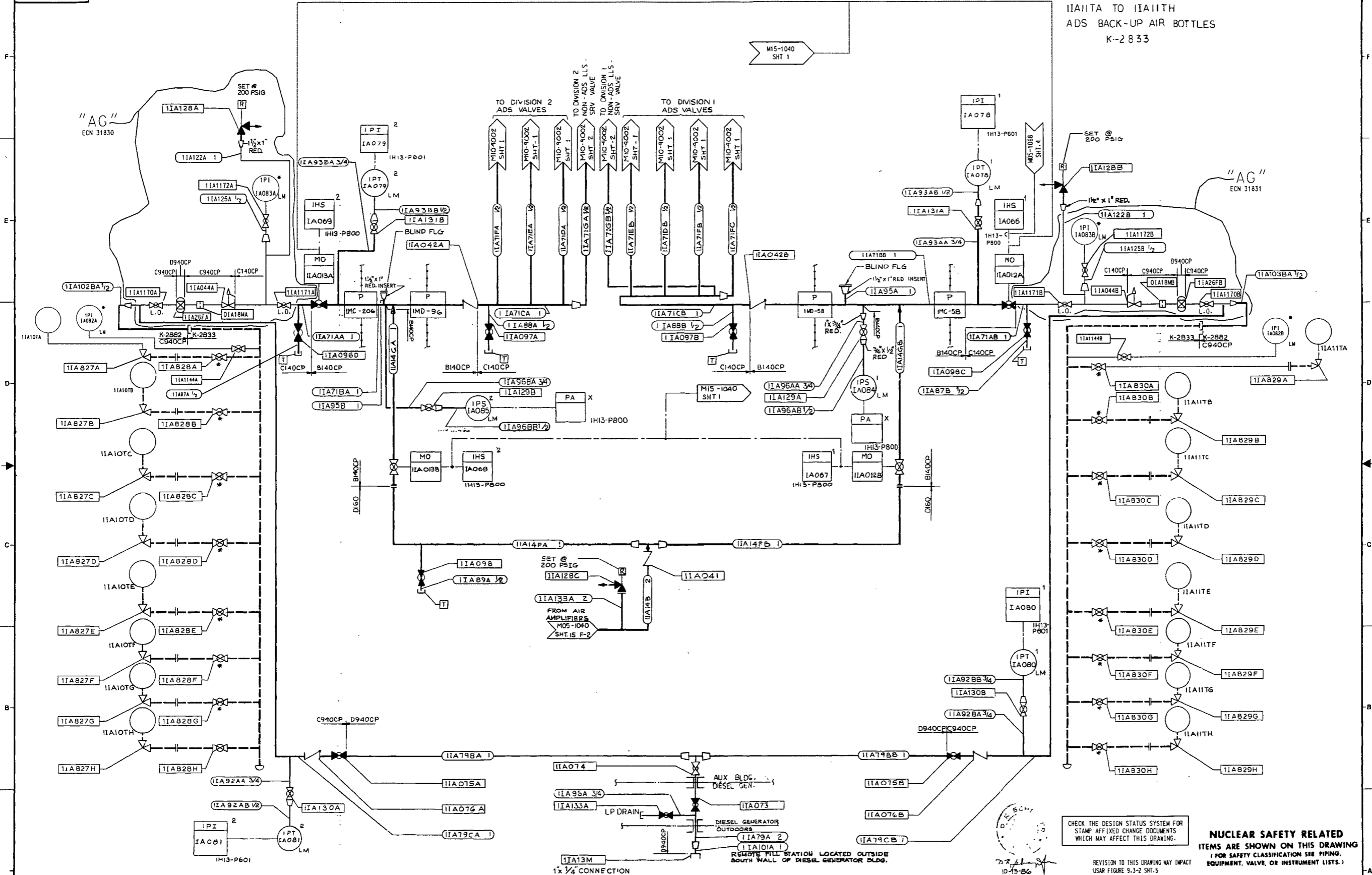
**Piping & Instrumentation Diagrams:
(For Information Only)**

M05-1040, Sheet 7

M10-9002, sheets 1 and 2

M10-9004, sheet 8

IIA10TA TO IIA10TH
IIA11TA TO IIA11TH
ADS BACK-UP AIR BOTTLES
K-2833



CHECK THE DESIGN STATUS SYSTEM FOR STAMP AFFIXED CHANGE DOCUMENTS WHICH MAY AFFECT THIS DRAWING.

REVISION TO THIS DRAWING MAY IMPACT USAR FIGURE 9.3-2 SHT.5

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING (FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

REV.	DATE	RELD.	PREPARED	REVIEWED	APPROVED	PURPOSE	FILM
AB	1-06-95		MEC/KRB	VS BARLOW	EDM	REVISED TO INCORP. ECN 28896 & CLEAN UP SCAN FILE.	
AC	5-5-96		K.B. TOOTHILL/LM	VS BARLOW	J.D. FUNSTON	REVISED TO INCORP. ECN 28855	
AD	8/27/98		F. HUMBERTSON/KC	J. HUBBELL/DORRIS	J.A. CLEW	REVISED TO INCORPORATE D46 07662	
AE	2/2/99		F. HUMBERTSON	K.E. CROUCH	K.E. CROUCH	REVISED TO INCORPORATE ECN 30668 A.D. 43 PROCEDURE.	
AF	10-5-99		R. KRKEL	J.A. ZUMBAHLEN	J.A. ZUMBAHLEN	REVISED TO INCORPORATE D46 07963.	
AG	6-29-01		R. KRKEL	K. LOWE	K. LOWE	REVISED TO INCORPORATE ECN 31830 & ECN 31831	
Y	1-26-05		K. P. G. G.	K. P. G. G.	HP. H. H. G. G.	INCORPORATED BY IPE TO UPDATE MD RECORDS	

SCALE: NONE

PROJECT NUMBER: 4536

DRAWING NO.: 7886

P&ID INSTRUMENT AIR (IA) FUEL, AUX, DRYWELL & CONTAINMENT BLDG.

CLINTON POWER STATION UNIT 1

CLINTON, ILLINOIS

SARGENT & LUNDY
ENGINEERS
CHICAGO

DRAWING NO. REV. MO5-1040 AG

SHEET 7 OF 24

VALVE LIST

DIAGRAM NUMBER	V1	V2	V3	V4	V5
1A	1B21-F041B	1B21-F332B	1B21-F082B	1A094A	1B21-F039B
1B	1B21-F047A	1B21-F332A	1B21-F082H	1A094B	1B21-F039H
1C	1B21-F041C	1B21-F331C	1B21-F082C	1A094C	1B21-F039C
1D	1B21-F051G	1B21-F334	1B21-F082S	1A094D	1B21-F039S
1E	1B21-F047C	1B21-F333C	1B21-F082K	1A094E	1B21-F039K
1F	1B21-F041D	1B21-F331D	1B21-F082D	1A094F	1B21-F039D
1G	1B21-F041F	1B21-F333B	1B21-F082E	1A094G	1B21-F039E

INSTRUMENT LIST

DIAG. NO.	SUB-SYSTEM COD	MAIN SYM. LINE NO.	PROCESS LINE NO.	PR. VLV. ASSY. LINE NO'S.	'HS'	'TE'	ACCUMULATOR NO.	INSTR. AIR LINE NO.	'PS'	FLEX HOSE	INSTR. LINE NO.	INSTR. LINE NO'S.	INSTR. DRAIN LINE	BUSTER INSTR. AIR LINE NO.	INSTR. TAP LINE NO.
1A	1M571	'B'	1M515CB 10	1M572BK 1 1/2 1M572BK 1 1/4 1M572BK 1 1/4	1B21-SU19A 1B21-SU19B 1B21-SU19B	1B21-N004B	1B21-A003B	1M572BE 1/2	1B21-N542B	1B21-0312A	1M572BC 2	1M572BC 3/4 1M572BC 1/2 1M572BC 3/4	1M572BF 3/4	11A71FA 1/2	11A85A 1/2
1B	1M570	'A'	1M515CA 10	1M572BK 1 1/2 1M572BK 1 1/4 1M572BK 1 1/4	1B21-SU23A 1B21-SU23B 1B21-SU23A	1B21-N004H	1B21-A003H	1M572AE 1/2	1B21-N542H	1B21-0312B	1M572AC 2	1M572AC 3/4 1M572AC 1/2 1M572AC 3/4	1M572AF 3/4	11A71DB 1/2	11A85B 1/2
1C	1M568	'C'	1M514CC 10	1M571CK 1 1/2 1M571CK 1 1/4 1M571CK 1 1/4	1B21-SU24A 1B21-SU24B 1B21-SU24A	1B21-N004C	1B21-A003C	1M571CE 1/2	1B21-N542C	1B21-0312C	1M571CC 2	1M571CC 3/4 1M571CC 1/2 1M571CC 3/4	1M571CF 3/4	11A71FC 1/2	11A85C 1/2
1D	1M574	'C'	1M519CC 10	1M574CK 1 1/2 1M574CK 1 1/4 1M574CK 1 1/4	1B21-SU26A 1B21-SU26B 1B21-SU26A	1B21-N004S	1B21-A003S	1M574CE 1/2	1B21-N542S	1B21-0312D	1M574CC 2	1M574CC 3/4 1M574CC 1/2 1M574CC 3/4	1M574CF 3/4	11A71EB 1/2	11A85D 1/2
1E	1M573	'C'	1M517CC 10	1M573CK 1 1/2 1M573CK 1 1/4 1M573CK 1 1/4	1B21-SU28A 1B21-SU28B 1B21-SU28A	1B21-N004K	1B21-A003K	1M573CE 1/2	1B21-N542K	1B21-0312E	1M573CC 2	1M573CC 3/4 1M573CC 1/2 1M573CC 3/4	1M573CF 3/4	11A71FB 1/2	11A85E 1/2
1F	1M569	'D'	1M514CD 10	1M571DK 1 1/2 1M571DK 1 1/4 1M571DK 1 1/4	1B21-SU20A 1B21-SU20B 1B21-SU20A	1B21-N004D	1B21-A003D	1M571DE 1/2	1B21-N542D	1B21-0312F	1M571DC 2	1M571DC 3/4 1M571DC 1/2 1M571DC 3/4	1M571DF 3/4	11A71DA 1/2	11A85F 1/2
1G	1M572	'B'	1M517CB 10	1M572BK 1 1/2 1M572BK 1 1/4 1M572BK 1 1/4	1B21-SU27A 1B21-SU27B 1B21-SU27B	1B21-N004E	1B21-A003E	1M573BE 1/2	1B21-N542E	1B21-0312G	1M573BC 2	1M573BC 3/4 1M573BC 1/2 1M573BC 3/4	1M573BF 3/4	11A71EA 1/2	11A85G 1/2

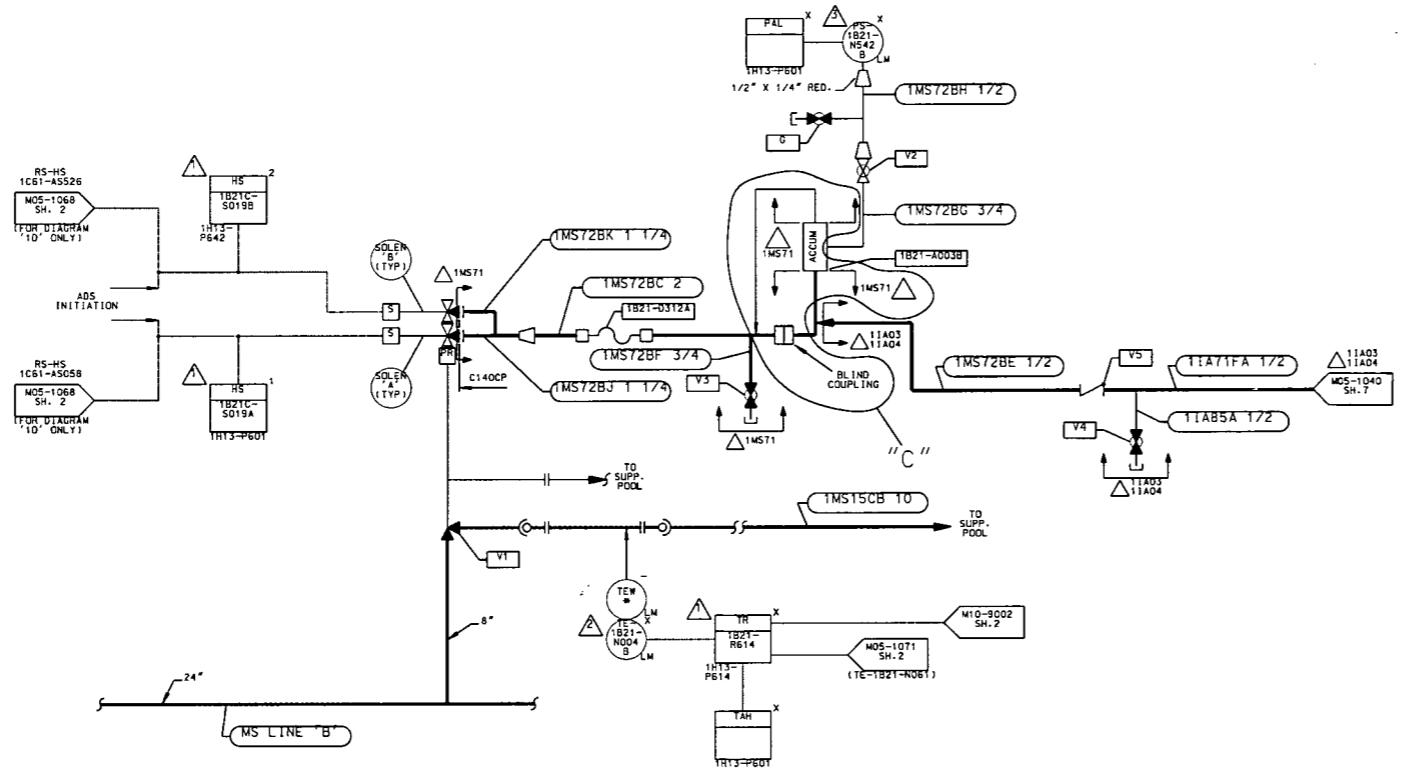


DIAGRAM 1A SHOWN
DIAGRAM 1B THRU 1G SIMILAR
FOR ADS VALVES

NOTES:
1. COMPUTER DRAWING-DO NOT REVISE MANUALLY.
RETURN TO I.P. HOOTRS. IGS.
2. Δ = SUBSYSTEM COD
3. INSTRUMENT VALVES IDENTIFIED BY GENERIC NAMING CONVENTION. REFERENCE M10-9000 SH.1

REFERENCE DRAWINGS:
1. M05-1002 SR.1 P&ID MAIN STEAM (MS)
2. E02-1N899 SH.102 SCHEMATIC DIAGRAM NUCLEAR BOILER SYSTEM (NB) AUTOMATIC DEPRESSURIZATION SYSTEM (NSPS) (1B21-10601).
3. E02-1N899 SH.123 SCHEMATIC DIAGRAM NUCLEAR BOILER SYSTEM (MS) AUTOMATIC DEPRESSURIZATION SYSTEM
4. E02-1M599 SH.10 SCHEM. DIAG. MAIN STEAM SYSTEM (MS) MAIN STEAM LEAD LOW POINT DRN. VALVES 1B21-SPOV-214, RFTT. 1A & 1B LP STEAM CHECK VALVES 1B21-F311A & B

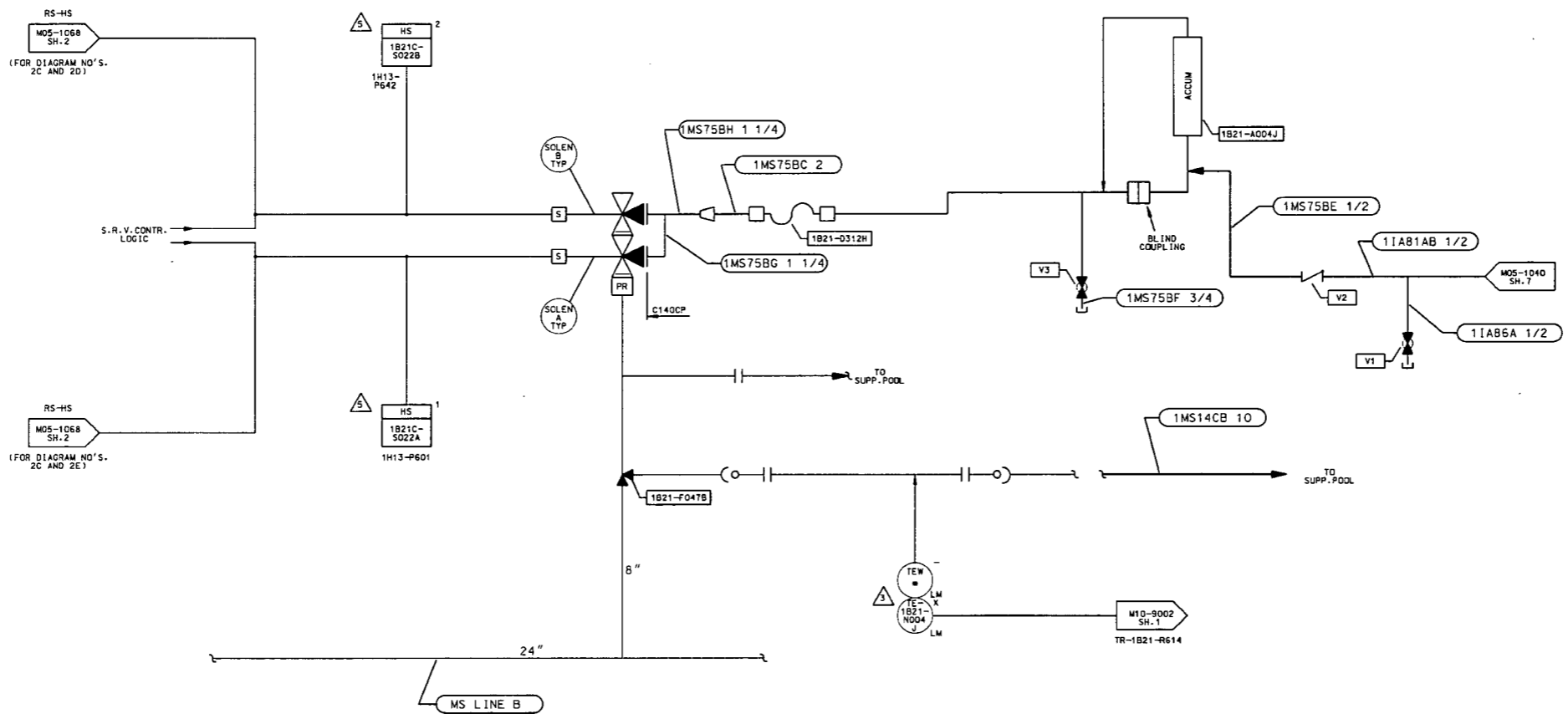
NUCLEAR SAFETY RELATED

REDRAWN/SUPERSEDES S & L M10-1002 SHEET 1 OF 25 REV.K

DRAWING RELEASE RECORD					DRAWING RELEASE RECORD					SCALE	PROJECT NUMBER	ILLINOIS POWER COMPANY NUCLEAR STATION ENGINEERING DEPARTMENT DRAWING NO. M10-9002 SHEET 1 OF 25
REV	DATE	REL'D	PREPARED	APPROVED	REV	DATE	REL'D	PREPARED	APPROVED			
					A	11-26-86	DR	FWE	RWH	CONSTRUCTION STATUS/SUPERSEDES S & L M10-1002 SH. 1 OF 25 REV.K	P&ID/C&I DIAGRAM MAIN STEAM SYSTEM (MS) CLINTON POWER STATION UNIT 1 ILLINOIS POWER COMPANY CLINTON, ILLINOIS	C
					B	07-09-90	EAD/J.W. SENDZIK	W.J. ZYCHLEWICZ	J.C. HUNSTICKER	REVISE PER D.46 TO INCORPORATE DRAFTING ID 06507		
					C	03-22-91	EAD/J.W. SENDZIK	J.F. KACZMAREK	ED HALVERSON	REVISED TO INCORPORATE ECN 9471		

DIAGRAM NUMBER	V1	V2	V3
2A	11A095A	1B21-F036J	1B21-F081J
2B	11A095B	1B21-F036H	1B21-F081H
2C	11A095C	1B21-F036P	1B21-F081P
2D	11A095D	1B21-F036A	1B21-F081A
2E	11A095E	1B21-F036R	1B21-F081R
2F	11A095F	1B21-F036G	1B21-F081G
2G	11A095G	1B21-F036L	1B21-F081L
2H	11A095H	1B21-F036M	1B21-F081M
2J	11A095J	1B21-F036F	1B21-F081F

DIAGRAM NUMBER	MAIN STM. LINE	PR VALVE NO.	PROCESS LINE NO.	PR. VLV. ASSY LINE NO'S.	HS	RS-HS	TE	ACCUMULATOR NO.	FLEX HOSE	INSTR. LINE NO.	INSTR. AIR LINE NO.	BOOSTER IA LINE NO.	INSTR. DRAIN LINE NO.	INSTR. TAP LINE NO.
2A	B	1B21-F047B	1MS14CB 10	1MS75BC 1 1/4 1MS75BH 1 1/4 1MS77AG 1 1/4 1MS77AH 1 1/4	1B21C-S022A 1B21C-S022B 1B21C-S029A 1B21C-S029B		1B21-N004J	1B21-A004J	1B21-D312H	1MS75BC 2	1MS75BE 1/2	11A81AB 1/2	1MS75BF 3/4	11A86A 1/2
2B	B	1B21-F051B	1MS16CB 10	1MS75AG 1 1/4 1MS75AH 1 1/4	1B21C-S029A 1B21C-S029B		1B21-N004H	1B21-A004H	1B21-D312J	1MS77AC 2	1MS77AE 1/2	11A81CA 1/2	1MS77AF 3/4	11A86B 1/2
2C	C	1B21-F051C	1MS15CC 10	1MS75CC 1 1/4 1MS75CH 1 1/4	1B21C-S032A 1B21C-S032B	1C61-AS048	1B21-N004P	1B21-A004P	1B21-D312K	1MS76CC 2	1MS76CE 1/2	11A71GB 1/2	1MS76CF 3/4	11A86C 1/2
2D	A	1B21-F041A	1MS14CA 10	1MS75AG 1 1/4 1MS75AH 1 1/4	1B21C-S016A 1B21C-S016B		1B21-N004A	1B21-A004A	1B21-D312L	1MS75AC 2	1MS75AE 1/2	11A81AA 1/2	1MS75AF 3/4	11A86D 1/2
2E	D	1B21-F051D	1MS16CD 10	1MS77GD 1 1/4 1MS77GH 1 1/4	1B21C-S010A 1B21C-S010B	1C61-AS049	1B21-N004R	1B21-A004R	1B21-D312M	1MS77DC 2	1MS77DE 1/2	11A71GA 1/2	1MS77DF 3/4	11A86E 1/2
2F	C	1B21-F041L	1MS18CC 10	1MS78CG 1 1/4 1MS78CH 1 1/4	1B21C-S017A 1B21C-S017B		1B21-N004G	1B21-A004G	1B21-D312N	1MS78CC 2	1MS78CE 1/2	11A81DB 1/2	1MS78CF 3/4	11A86F 1/2
2G	D	1B21-F047D	1MS15CD 10	1MS75GD 1 1/4 1MS75GH 1 1/4	1B21C-S025A 1B21C-S025B		1B21-N004L	1B21-A004L	1B21-D312P	1MS76CC 2	1MS76CE 1/2	11A81BB 1/2	1MS76CF 3/4	11A86G 1/2
2H	B	1B21-F047F	1MS18CB 10	1MS78BG 1 1/4 1MS78BH 1 1/4	1B21C-S026A 1B21C-S026B		1B21-N004M	1B21-A004M	1B21-D312R	1MS78CC 2	1MS78CE 1/2	11A81DA 1/2	1MS78CF 3/4	11A86H 1/2
2J	C	1B21-F041G	1MS16CC 10	1MS77GD 1 1/4 1MS77GH 1 1/4	1B21C-S050A 1B21C-S050B		1B21-N004F	1B21-A004F	1B21-D312S	1MS77CC 2	1MS77CE 1/2	11A81CB 1/2	1MS77CF 3/4	11A86J 1/2



NOTES:
1. COMPUTER DRAWING-DO NOT REVISE MANUALLY.
RETURN TO I.P. NGOTRS. 1G5.

- REFERENCE DRAWINGS:
- 1. MDS-1002 SH.1 P&ID MAIN STREAM (MS)
 - 2. MDS-1068 SH.2 P&ID SHUTDOWN SYSTEMS (RS)
 - 3. E02-1N899 SH.123 SCHEMATIC DIAGRAM NUCLEAR BOILER SYSTEM (NB) - AUTOMATIC DEPRESSURIZATION SYSTEM (NSPS) (1B21-1050)
 - 4. MDS-1040 SH.14 P&ID INSTRUMENT AIR DRYWELL (IA)
 - 5. E02-1N899 SH.103 SCHEMATIC DIAGRAM NUCLEAR BOILER SYSTEM (NB)
 - 6. MDS-1040 SH.7 P&ID INSTRUMENT AIR (IA) FUEL AUX. DRYWELL AND CONTAINMENT BUILDING
 - 7. E02-1R589 SH.102 SCHEMATIC DIAGRAM REMOTE SHUTDOWN SYSTEM (RS); REMOTE SHUTDOWN SYSTEM (1C61-1050)
 - 8. E02-1N899 SH.203 SCHEMATIC DIAGRAM NUCLEAR BOILER SYSTEM (NB)

DIAGRAM 2A SHOWN
DIAGRAM 2B THRU 2J SIMILAR

NUCLEAR SAFETY RELATED

REDRAWN/SUPERSEDES S & L M10-1002 SHEET 2 OF 25 REV. G

DRAWING RELEASE RECORD										DRAWING RELEASE RECORD									
REV	DATE	REL'D	PREPARED	REVIEWED	APPROVED	PURPOSE	FILM	REV	DATE	REL'D	PREPARED	REVIEWED	APPROVED	PURPOSE	FILM				
								A	11-12-86	EAD	FWE	RWH		CONSTRUCTION STATUS/SUPERSEDES S & L M10-1002 SH.2 OF 25 REV.G					
								B	07-09-90	EAD/J.W.SENZIK	W.J.ZYCHLEWICZ	J.C.HUNSICKER		REVISE PER D.46 TO INCORPORATE DRAFTING ID 06507					
								C	03-20-91	EAD/J.W.SENZIK	JF.KACZMAREK	ED.HALVERSON		REVISED TO INCORPORATE ECN 9471					
								D	03-12-92	EAD/J.W.SENZIK	W.SHURLOW	JW.EMBERT		REVISED TO INCORPORATE ECN 9678					

SCALE: NONE

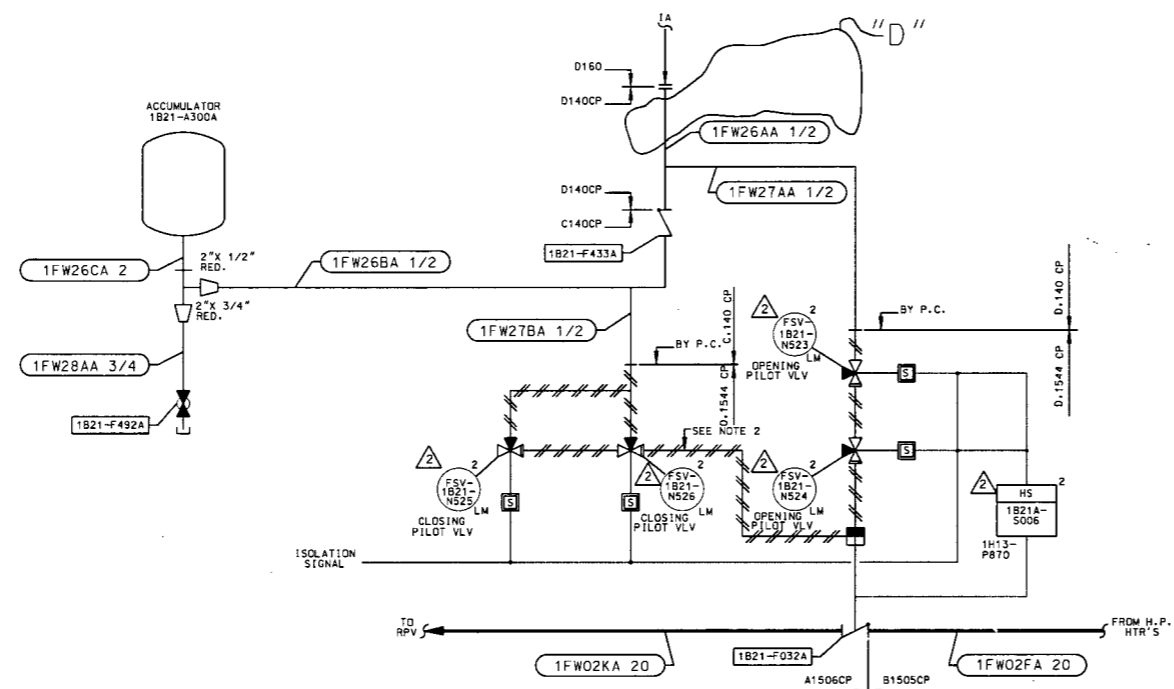
PROJECT NUMBER:

P&ID/C&I DIAGRAM
MAIN STEAM SYSTEM (MS)
CLINTON POWER STATION
UNIT 1
ILLINOIS POWER COMPANY
CLINTON, ILLINOIS

ILLINOIS POWER COMPANY
NUCLEAR ENGINEERING DEPARTMENT
DRAWING NO. M10-9002
REV. D

PLOTTED 05-17-92
SHEET 2 OF 25

DIAG NO	PROCESS LINE NO'S	CHECK VLV NO	HAND SW HS	OPENING PILOT VLV'S	CLOSING PILOT VLV'S	INSTRUM LINE NO'S	INSTRUM CHECK VLV	INSTRUM LINE NO	ACCUMULATOR NO	INSTRUMENT LINE NO'S	INSTR DRAIN LINE NO	INSTRUM DRAIN VLV	SEP DIV
8A	1FW02FA 20	1B21-F032A	1B21A-S006	1B21-N523	1B21-N525	1FW26AA 1/2	1B21-F433A	1FW26CA 2	1B21-A300A	1FW27AA 1/2	1FW28AA 3/4	1B21-F492A	2
	1FW02KA 20			1B21-N524	1B21-N526	1FW26BA 1/2				1FW27BA 1/2			
8B	1FW02FB 20	1B21-F032B	1B21A-S007	1B21-N527	1B21-N529	1FW26AB 1/2	1B21-F433B	1FW26CB 2	1B21-A300B	1FW27AB 1/2	1FW28AB 3/4	1B21-F492B	2
	1FW02KB 20			1B21-N528	1B21-N530	1FW26BB 1/2				1FW27BB 1/2			



NOTES:
 1. COMPUTER DRAWING-DO NOT REVISE MANUALLY. RETURN TO I.P. HDQTRS. IGS.
 2. PNEUMATIC LINES INSTALLED BY SUPPLIER.

DIAGRAM 8A SHOWN
 DIAGRAM 8B SIMILAR

(FW CONTAINMENT ISOLATION CHECK VALVE)

REFERENCE DRAWINGS:

- M05-1004 SH.1 P&ID REACTOR FEEDWATER (FW)
- M15-1004 SH.4 LOGIC DIAGRAM FEEDWATER (FW)
- E02-1FW99 SH.23 SCHEMATIC DIAGRAM FEEDWATER SYSTEM (FW) FEEDWATER SHUT-OFF VALVES 1B21-F032A & B
- E02-1FW99 SH.24 SCHEMATIC DIAGRAM FEEDWATER SYSTEM (FW) FEEDWATER CONTAINMENT ISOLATION CHECK VALVES 1B21-F032A & 1B21-F032B

NUCLEAR SAFETY RELATED

REV	DATE	REL'D	PREPARED	REVIEWED	APPROVED	PURPOSE	FILM
A	7-10-86			FWE	RWH	CONSTRUCTION STATUS/SUPERSEDES S & L M10-1004 SH. 8 OF 8 REV. C	
B	9-30-86		D LOCK	FWE	RWH	REVISED PER S&L M10-1004 SH.8 REV.C	
C	5-1-87		D LOCK	JPC	W. SHURLOW	REVISED PER FCN 15468 & 15162	
D	4-7-98		R KREKEL/KDL/KC	P. CAMPOS	DEAN W. ROBINSON	REVISED TO INCORPORATE ECN 30103	

SCALE	NONE
PROJECT NUMBER	
P&ID/C&I DIAGRAM REACTOR FEEDWATER SYSTEM (FW) CLINTON POWER STATION UNIT 1 ILLINOIS POWER COMPANY CLINTON, ILLINOIS	

ILLINOIS POWER COMPANY NUCLEAR STATION ENGINEERING DEPARTMENT	
DRAWING NO.	REV
M10-9004	D
SHEET 8 OF 8	

ATTACHMENT 3

Acceptance Criteria From Procedure CPS 9061.11

(For Information Only)

Component	Leakage Criterion	Pressure Drop Test Duration	Comments
Accumulator Headers for all SRVs except 1B21-F051C and D	≤ 1.5 psig	≥ 108 minutes	
Accumulator Headers for 1B21-F051C and D	≤ 1.5 psig	≥ 31 minutes	Smaller volume than other SRVs
Accumulator Header for Feedwater Check Valve	≤ 1.5 psig	≥ 26 minutes	Smaller volume than SRVs
ADS Supply Header to Accumulator Headers	≤ 22 psig	≥ 60 minutes	This inspection tests over 200 feet of piping and components.