M05-1071

1NB05BE 1/2

1B21-D002

TOP EL. OF TEMPORARY STANDPIPE AND RESERVOIR 6 ABOVE NOZZLE FLANGE FACE TO BE 23 1/2 ± 1/2

1NB17A 3/4
TEMPORARY STANDPIPE SEE NOTE 3

A1550CP | A605CP

1NB01A 4

4"X2½" RED.

DRYWELL

VENT & HEAD SPRAY SEE M05-1079-2

1NB04A 1

A1550CP
B1550CP
1B21-D0332

1NB04B 3/4

MANHOLE

REFUELING SEAL

1NB01B 2

1NB02A 2

M05-1002 SH.1 C-7

1B13-D003

1H22-P027

1NB04D 1/2

1NB04C 1/2

1B21-F453

1MD-176

1IZL CM337 1H13-P855

1PT CM265 LM

M05-1034 SH.1, B8
1LR-SM016

1CM13AB 1/2
1CM067
1CM056
1CM13AA 3/4

1H22-P027

M10-1072-8

M10-1070-5
TO PT 1E32-N058

M05-1078 SHT. 2 D-6

1RD47BF 3/8

INB 05 BD 1/2

1ICM074
1H22-P027
1ICM075

1ICM21A 1/2

34 x 1/2 (TYP)

1NB18AA 3/4

1NB05BC 1/2
L.O. NOTE 4

1B21-F454B

1NB05BB 3/4

1B21-D328B

1B21-D004B

1MD-129

1NB06AA 1/2

A1550CP
B1550CP

M05-1068 SH.3

1B21-F514

1NB16 BB 1/2

1NB16BA 3/4

1MD-175

1NB18AB 1/2

1NB06BD 1/2

1NB07 BB 1/2

1B21-F467B

1NB06BC 1/2

M05-1068 SH.3

1B21-F455B

1B21-D329B

1B21-F463B

1MD-132

1NB06BA

B1550CP A1550CP

1NB06BB 3/4

C1550CP

B1550CP

1MD-175

1NB07BA 3/4

1NB19AA 3/4

1NB19AB 1/2

1NB08BC 1/2

1NB08BD 1/2

1NB08BE 1/2

1B21-F489 B

1B21-F457B

1B21-F490B

1MD-135

1NB08BA

B1550CP A1550CP

LP DRAIN

1B21-D331B

200° N14

200° N13

200° N12

340° N14

340° N13

340° N12

1NB05DA 1

1NB06DA 1

1NB08DA 1

A1550CP B1550CP

1B21-D004D

1B21-D328D

1MD-131

1B21-F454D

1B21-D329D

1B21-F463D

1MD-78

1B21-F455D

1B21-D331D

1MD-137

1B21-F457D

1NB05DB 3/4

1NB06DB 3/4

1NB08DB 3/4

1NB05DC 1/2

1NB06DC 1/2

1NB08DC 1/2

1NB05DD 1/2

1NB06DD 1/2

1NB08DD 1/2

1NB05DE 1/2

1NB07DB 1/2

1NB07DA 3/4

1B21-F456D

1H22-P026

1H22-P009

1NB20A 3/4

1NB20B 3/4

1B21-F040

1B21-F471

1NB01C 2

1NB10A 2

1RE69A 2

C305CP

D105CP

L.O.

DRYWELL SUMP

M05-1046 SH.4 F-4

M05-1072-3 B7

1B21-F041

1B21-F040

1B21-F514

1B21-F513

1B21-F490A

1B21-F486B

1B21-F485A

1B21-F489A

1B21-F040

1B21-F041

1B21-F471

1B21-F454B

1B21-F454D

1B21-F455B

1B21-F455D

1B21-F456D

1B21-F457B

1B21-F457D

1B21-F490B

1B21-F467B

1B21-F463B

1B21-F455B

1B21-F454B

1B21-F454D

1B21-F455D

1B21-F456D

1B21-F457B

1B21-F457D

1B21-F490B

1B21-F489B

1B21-F485A

1B21-F486B

1B21-F490A

1B21-F513

1B21-F514

REVISION 8
AUGUST 1999

1B33C001A
REACTOR RECIRCULATION
PUMP 1A
K-2801

1B33-D003A
HYDRAULIC POWER UNIT
K-2801

1B13-D003
REACTOR PRESSURE VESSEL
K-2801

MOS-1072

ISOLATION SIGNAL

REACTOR SAMPLE STATION N33-2020

1B33C001A

1B33-D003A

1B13-D003

CONDENSER PRESSURE

CIRC. WATER PUMPS

TO RECIRC. PUMP 1A FLOW CONTROL

DRYWELL EQUIP. SUMP

PUMP A INTERLOCK

NO2 SEAL CAVITY

NO1 SEAL CAVITY

SEAL STAGING LINE

DECON. CONN.

DRYWELL EQUIP SUMP

LEAK DETECTION

REACTOR WTR. CLEAN-UP

CONTROL ROD DRIVE

RWCU PUMPS

DRYWELL EQUIP. SUMP

DRYWELL FLOOR DRAIN

SEAL LEAK DETECTION

H.P. VENT

L.P. DRAIN

1B33D004A ACTUATOR

REACTOR RECIRC. CONTROL

FROM RECIRC. PUMP 1A FLOW CONTROL LOGIC

NOTES:

1. FOR FLANGE SIZE AND RATING SEE G.E. DWG. VPFS206-258
2. CIRCULATION UNIT TO BE MOUNTED AT HIGH POINT OF HYDRAULIC SYSTEM PIPING.
3. FOR SPECIFIC HYDRAULIC EQUIPMENT INSTALLATION AND ROUTING REQUIREMENTS SEE G.E. DOC. 22A4607.

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

NOTE:
THE P&I, B/C &I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9072 UNLESS OTHERWISE NOTED, SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
REACTOR RECIRCULATION
SHEET 67 OF 111

REVISION 8
AUGUST 1999

M05-1072

1B13-D003
REACTOR PRESSURE VESSEL
K-2801

1B33-D003B
HYDRAULIC POWER UNIT 1B
K-2801

1B33C001B
REACTOR RECIRCULATION
PUMP 1B
K-2801

1B13-D005

1B33-D003B

FOR NOTES SEE SHT 1

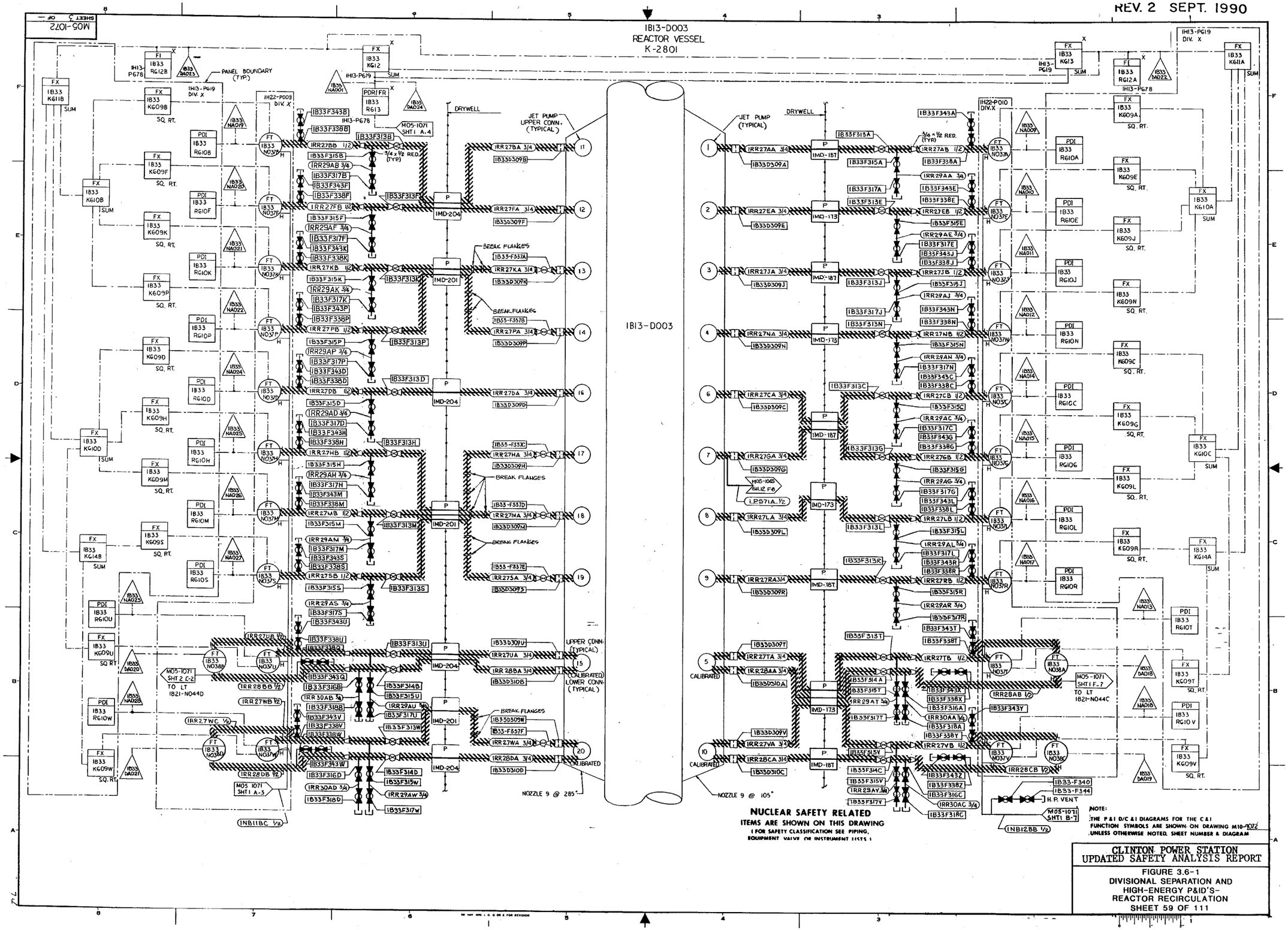
NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTE
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-0172 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM.

CLINTON POWER STATION**
UPDATED SAFETY ANALYSIS REPORT

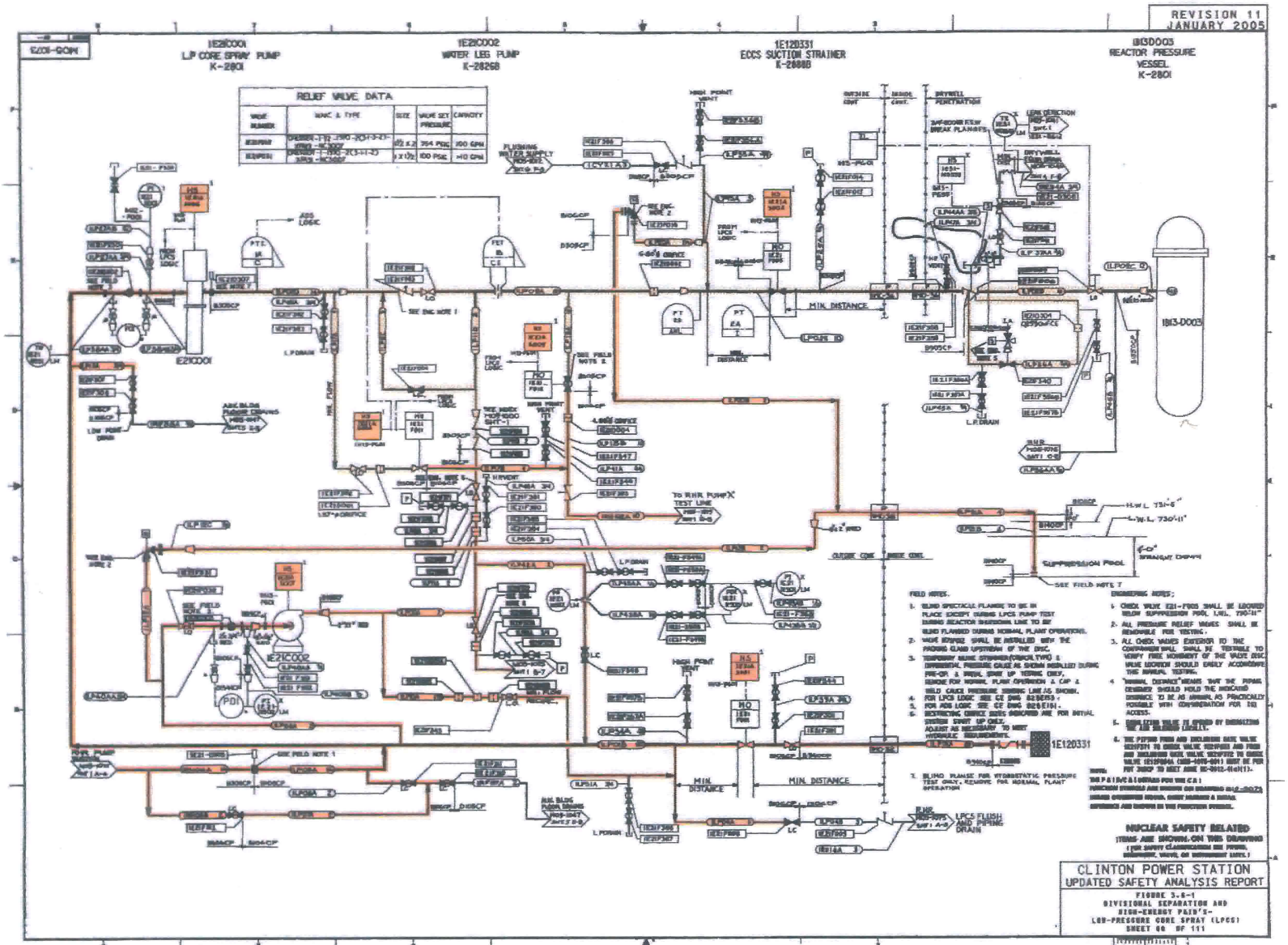
FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
REACTOR RECIRCULATION
SHEET 68 OF 111

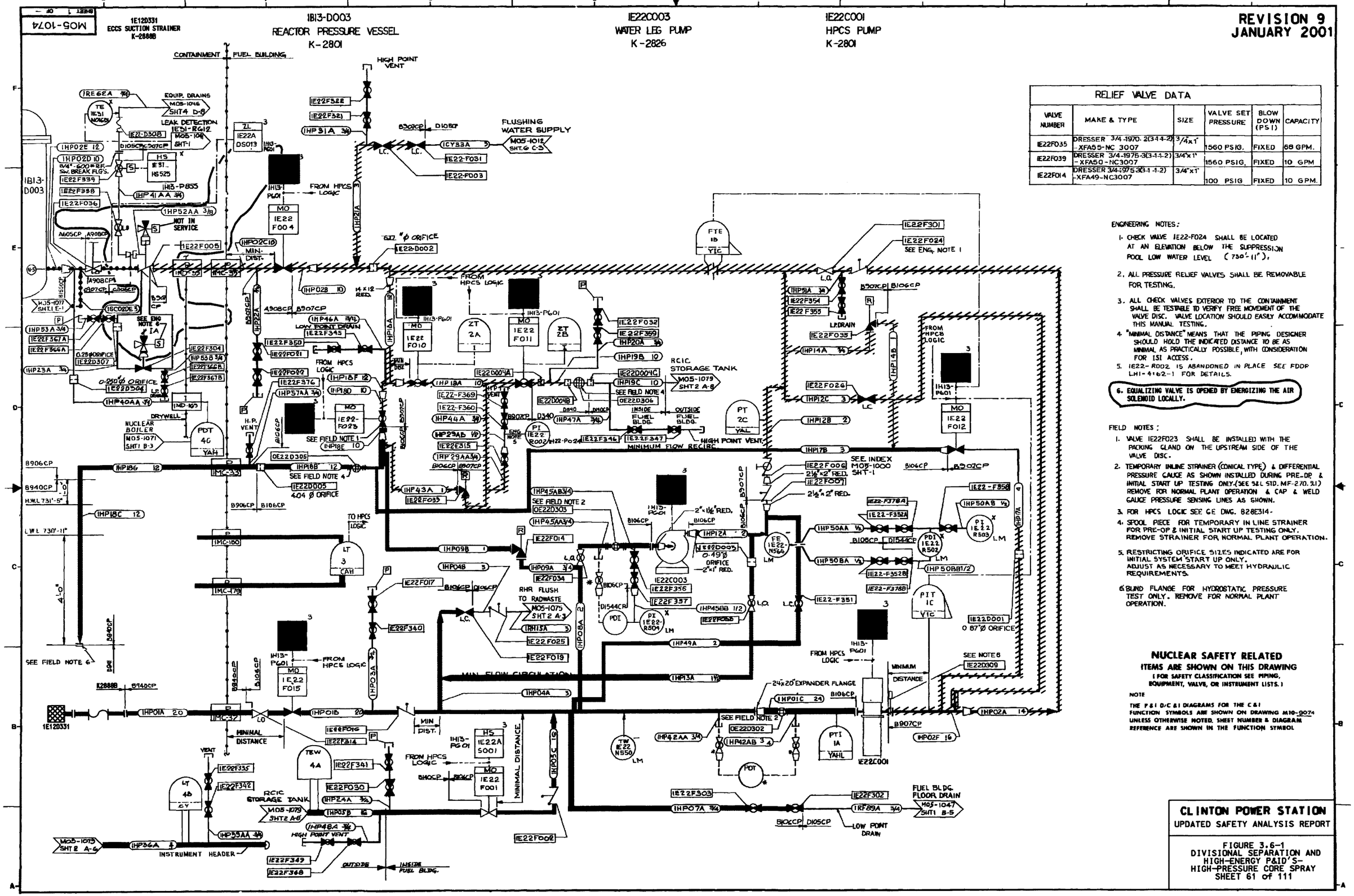
REV. 2 SEPT. 1990



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
REACTOR RECIRCULATION
SHEET 59 OF 111


REVISION 11
JANUARY 2005
1E21C001
LP CORE SPRAY PUMP
K-280I
1E21C002
WATER LEG PUMP
K-282B
1E120331
ECCS SUCTION STRAINER
K-288B
1B13D003
REACTOR PRESSURE
VESSEL
K-280I
RELIEF VALVE DATA
MIN. DISTANCE
SUPPRESSION POOL
1E120331
NUCLEAR SAFETY RELATED
CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT
FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
LOW-PRESSURE CORE SPRAY (LPCS)
SHEET 60 OF 111


M05-1074
1E120331
ECCS SUCTION STRAINER
K-2888B
1B13-D003
REACTOR PRESSURE VESSEL
K-2801
1E22C003
WATER LEG PUMP
K-2826
1E22C001
HPCS PUMP
K-2801
CONTAINMENT
FUEL BUILDING
HIGH POINT VENT
EQUIP. DRAINS
M05-1046 SHT4 D-8
LEAK DETECTION
1E51-RG12
M05-1041 SHT-1
FLUSHING WATER SUPPLY
M05-1012 SHT.G C-3
FROM HPCS LOGIC
NOT IN SERVICE
6.12" ϕ ORIFICE
1E22-D002
MIN. DIST.
14"X12" RED.
RCIC STORAGE TANK
M05-1079 SHT2 A-6
0.25ϕ ORIFICE
0.250ϕ ORIFICE
LOW POINT DRAIN
NUCLEAR BOILER
M05-1071 SHT1 B-3
DRYWELL
H.P. VENT
SEE FIELD NOTE 1
SEE FIELD NOTE 4
4.04 ϕ ORIFICE
SEE FIELD NOTE 2
0.49ϕ ORIFICE
2"x1½" RED.
2"x1" RED.
RHR FLUSH TO RADWASTE
M05-1075 SHT 2 A-3
MIN FLOW CIRCULATION
MINIMUM FLOW RECIRC.
HIGH POINT VENT
OUTSIDE FUEL BLDG.
INSIDE FUEL BLDG.
SEE FIELD NOTE 6
SEE FIELD NOTE 5
SEE INDEX M05-1000 SHT-1
24"x20" EXPANDER FLANGE
MINIMUM DISTANCE
MINIMAL DISTANCE
FUEL BLDG. FLOOR DRAIN
M05-1047 SHT1 B-5
INSTRUMENT HEADER
M05-1075 SHT 2 A-6
TO HPCS LOGIC
FROM HPCS LOGIC
SEE NOTE 6
SEE ENG. NOTE 1
SEE ENG NOTE 1A
SEE ENG NOTE 6
SEE FIELD NOTE 3
SEE FIELD NOTE 6
SEE ENG. NOTE 5
1E22F032
1E22F359
1E22F354
1E22F355
1E22F301
1E22F024
1E22F035
1E22F036
1E22F339
1E22F338
1E22F005
1E22F010
1E22F011
1E22F012
1E22F023
1E22F004
1E22F014
1E22F017
1E22F340
1E22F019
1E22F025
1E22F015
1E22F016
1E22F314
1E22F341
1E22F030
1E22F335
1E22F342
1E22F349
1E22F368
1E22F002
1E22F303
1E22F302
1E22F351
1E22F356
1E22F357
1E22F034
1E22F035
1E22F036
1E22F037
1E22F038
1E22F039
1E22F040
1E22F041
1E22F042
1E22F043
1E22F044
1E22F045
1E22F046
1E22F047
1E22F048
1E22F049
1E22F050
1E22F051
1E22F052
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1E22F058
1E22F059
1E22F060
1E22F061
1E22F062
1E22F063
1E22F064
1E22F065
1E22F066
1E22F067
1E22F068
1E22F069
1E22F070
1E22F071
1E22F072
1E22F073

REVISION 12
1 JANUARY 2007

M05-1075

1E12C002A
RHR PUMP 1A
K2801

1E12D331
ECCS SUCTION STRAINER
K-2888B

1B13D003
REACTOR PRESSURE VESSEL
K-2801

RELIEF VALVE DATA				
VALVE NUMBER	DATA SHT NO	SIZE	VALVE SET PRESSURE	CAPACITY GPM
1E12F025A	RV-004A	1 1/2"x1"	477 PSIG	65 GPM
1E12F017A	RV-003A	1 1/2"x2"	200 PSIG	43 GPM
1E12F005	RV-003C	1 1/2"x2"	178 PSIG	40 GPM

FIELD NOTES:

1. VALVES 1E12F011A & 1E12F011B SHALL BE INSTALLED WITH PACKING GLANDS ON UPSTREAM SIDE OF DISC.
2. TEMPORARY INLINE STRAINER (CONICAL TYPE) & DIFFERENTIAL PRESSURE GAUGE AS SHOWN INSTALLED DURING PRE-OP. & INITIAL START UP TESTING ONLY. REMOVE FOR NORMAL PLANT OPERATION & CAP & WELD GAUGE PRESSURE SENSING LINES AS SHOWN. (SEE S & L STANDARD NF-270.9.1)
3. SPOOL PIECE FOR TEMPORARY INLINE STRAINER FOR PRE-OP & INITIAL START-UP TESTING ONLY. REMOVE STRAINER FOR NORMAL PLANT OPERATION. (REMOVED)
4. FOR RHR LOGIC SEE G.E. DWG. 828E304. FOR NUCLEAR STEAM SUPPLY SHUTOFF SYSTEM (NSSSS) LOGIC SEE G.E. DWG. 828E151.
5. INDICATED ORIFICE SIZES ARE FOR INITIAL-START UP & TESTING ONLY. FOR NORMAL OPERATION ADJUST AS REQUIRED TO MEET THE HYDRAULIC REQUIRMENTS OF THE SYSTEM.
6. BLIND FLANGES FOR HYDROSTATIC PRESSURE TESTING ONLY. REMOVE FOR NORMAL PLANT OPERATION.
7. SEE MECH. DEPT. PIPING SPECIALTY LIST.

ENGINEERING NOTES:

1. CHECK VALVES 1E12F031A & 1E12F031B & 1E12F031C SHALL BE LOCATED AT ELEVATION BELOW THE SUPPRESSION POOL LOW WATER LEVEL (730'-11")
2. ALL PRESSURE RELIEF VALVES SHALL BE REMOVABLE FOR TESTING.
3. ALL CHECK VALVES EXTERIOR TO THE CONTAINMENT SHALL BE TESTABLE TO VERIFY FREE MOVEMENT OF THE VALVE DISC. VALVE LOCATION SHOULD EASILY ACCOMODATE THIS MANUAL TESTING.
4. "MINIMAL DISTANCE" MEANS THAT THE PIPING DESIGNER SHOULD HOLD THE INDICATED DISTANCE TO BE AS MINIMAL AS PRACTICALLY POSSIBLE WITH CONSIDERATION GIVEN FOR ISI ACCESS.
5. DISCHARGE LINES FROM RELIEF VALVES 1E12F055A & 1E12-F055B SHALL NOT SLOPE UPWARD SUCH THAT WATER POCKETS EXIST.
6. STEAM INLET PIPING SHOULD SLOPE DOWNWARD CONTINUOUSLY FROM VALVES 1E12F052A & 1E12F052B TO HEAT EXCHANGERS.
7. # FURNISHED WITH ASSOCIATED EQUIPMENT.
8. ALL HIGH POINT VENTS SHALL BE TAPPED AT THE TOP OF THE PROCESS PIPE. ALL LOW POINT DRAINS SHALL BE TAPPED AT THE BOTTOM OF THE PROCESS PIPE.
9. SOCKET WELD CONNECTION TO BE PROVIDED FOR 1 1/2" MALE PIPE END OF DOUBLE BLOCK VALVE.
10. EQUALIZING VALVES ARE OPENED BY ENERGIZING THE AIR SOLENOID LOCALLY.
11. THE PIPING FROM AND INCLUDING GATE VALVE 1E12F531 TO CHECK VALVE 1E12F084B, FROM AND INCLUDING GATE VALVE 1E12F532 TO CHECK VALVE 1E12F084C, AND FROM AND INCLUDING GATE VALVE 1E12F372 (M05-1075, SHT.1) TO CHECK VALVE 1E12F084A MUST BE PER PDT 305CP TO MEET ASME NC-3612.4(a)(1) WHEN THE GATE VALVE IS CLOSED.

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

NOTE:
THE P&I D/C &I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9075 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT
FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
RESIDUAL HEAT REMOVAL
SHEET 62 OF 111

...\USAR\rev 12\FIG3 6-1-62.dgn 13/03/2006 09:22:32 AM

Revision 12
January 2007

IB13-D003
REACTOR PRESSURE VESSEL
K-2801

IE12C002B
RHR PUMP 1B
K-2801

PROCESS SAMPLE PANEL 1PL33J
M05-1045 SHT. 7 E-4
PT:1C9

RADWASTE SURGE TANK M05-1078 SHT. 4 F-4

(8) L.P. DRAINS (TYP.)

CONTAINMENT SPRAY SPARGERS

FUEL POOL COOLING AND CLEAN-UP
M15-1037 SHT-1 A-8

(3) L.P. DRAINS (TYP.)

DRYWELL HEAD

UPPER CONTAINMENT POOL DRYWELL

IB13-D003

EQUIP. DRAINS M05-1048 SHT 4 E-8

LEAK DETECTION M05-1041-1 TABLE 1

3/8"-600# R.F.S.W. BREAK FLGS.

FLUSHING WATER SUPPLY M05-1012 SHT. 6 E-5

CONTAINMENT HIGH POINT VENT

REACTOR WATER CLEAN-UP M05-1076 SHT. 4 D5

1E12D0003 ECCS SUCTION STRAINER K-2800

FEEDWATER M05-1004 Sh 5

FROM RHR LOGIC

HIGH POINT VENT

MIN. DISTANCE

12"x10" RED.

9.52" ϕ ORIFICE SEE FIELD NOTE 5

14"x12" RED.

MIN. DIST.

SEE ENG NOTE 10

SEE FIELD NOTE 3

BLIND CPLG

2"x1½" RED.

5.38"ϕ ORIFICE

HYDRO CONN.

SEE FIELD NOTE 1

SUPPRESSION POOL

RCIC M05-1079 SHT 2 F-7

FLUSHING WATER SUPPLY M05-1012 SHT 6 B-8

M05-1004 SH. 1 B-6

M05-1004 SH. 1 A-6

M05-1004 SHT. 4

M05-1068 SHT. 4

M05-1075 SHT. 4, D-8

M05-1075 SHT. 3 C-8

M05-1075 SHT. 4 B-8

M05-1075 SHT. 4 D-8

M05-1075 SHT. 4 B-7

M05-1075 SHT. 3 C-1

M05-1075 SHT. 3 A-2

M05-1075 SHT. 3 F-1

M05-1075 SHT. 4C-8

M05-1075 SHT. 3 B-8

M05-1079 SHT-1 A-4

M05-1047 SHT. 6 E-3

M05-1047 SHT. 6 E-8

M05-1045 SHT. 12 F-8

M05-1041-1 TABLE 1

HPCS M05-1074 SHT.1 C-5

M10-9075

M10-1201 SHT. 11, FIG. 8

NOTE:
THE P & I D/C & J DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9075 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S RESIDUAL HEAT REMOVAL SHEET 63 OF 111

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Revision 12
January 2007

RELIEF VALVE DATA				
VALVE NUMBER	MAKE & TYPE	SIZE	VALVE SET PRESSURE	CAPACITY GPM
1E12F025C	DRESSER-1-1970-2(3-1-1-2) XFA32-NC3007	1½ X 1	484 PSIG	66 GPM
1E12F101	DRESSER-1-1970-2(3-1-1-2) XFA31-NC3007	1½ X 1	100 PSIG	30 GPM

1B13-D003
REACTOR PRESSURE VESSEL
K-2801

1E12C003
WATER LEG PUMP
K-2826

1E12C002C
RHR PUMP 1C
K-2801

1E120331
ECCS SUCTION STRAINER
K-2888B

UPPER CONTAINMENT POOL
DRYWELL
CONTAINMENT
DRYWELL HEAD
1B13-D003
SUPPRESSION POOL
EL. 731'-5" H.W.L.
LWL. 730'-11"
4'-0"
SLOPE DN
EQUIP. DRAINS M05-1074B SHT. 4 E-8
LEAK DETECTION M05-0417B TABLE 1 E9-R212
3/4"-600# R.F.S.W. BREAK FLG'S.
NOT IN SERVICE
SEE ENG NOTE 10
0.25"ø ORIFICE
FLUSHING WATER SUPPLY M05-1012 SHT. 6 C-3
FROM RHR LOGIC
H.P. VENT
MIN DISTANCE
6.10"ø ORIFICE SEE FIELD NOTE 5
4-.51"ø ORIFICE SEE FIELD NOTE 5
SPACER PLATE-FULL BORE
SEE ENGINEERING NOTE 1
L.P. DRAIN
HIGH POINT VENT
SEE FIELD NOTE 3
.838"ø ORIFICE
SEE FIELD NOTE 2
1.71"ø ORIFICE SEE FIELD NOTE 5
AUX. BLDG. FL. DRAIN SUMP. M05-1041 SHT 9 E-6
SEE FIELD NOTE 6
FOR ENGINEERING & FIELD NOTES SEE SHT. 1

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-RESIDUAL HEAT REMOVAL
SHEET 64 OF 111

REVISION 12
JANUARY 2007

1E12B001B
RHR HEAT EXCHANGER
K-2801

1E12B001A
RHR HEAT EXCHANGER
K-2801

SHUT DOWN SERVICE WATER
M05-1052 SHT. 2 E-1

SUPPRESSION POOL
M05-1075 SHT. 2 B-6

RCIC TURB. EXHAUST VACUUM BREAKER
M05-1079 SHT. 1 C-6

AUX. BLDG. FL. & EQUIP. DRAIN SUMP
M05-1047 SHT. 6 F-2

FROM RHR LOGIC
M05-1068 SHT. 4

M05-1075 SHT. 2 C3

M05-1075 SHT. 2 D1

M05-1075 SHT. 2 C1

M05-1075 SHT. 1 D8

M05-1075 SHT. 1 C-8

M05-1075 SHT. 1 C-5

M05-1075 SHT. 1 B-4

M05-1075 SHT. 1 C6

M05-1045 SHT. 7 E-4

M05-1045 SHT. 7 E-5

M05-1047 SHT. 5 C-5

M05-1066 SHT. 1

M05-1068 SHT. 1

SEE ENGINEERING NOTE 5

SEE ENG. NOTE 6

SEE FIELD NOTE 1

12 SIMILAR LINES 1RH67BN 3/4 TO 1RH67BZ 3/4 (BO EXCLUDED)

12 SIMILAR LINES 1RH67BA 3/4 TO 1RH67BM 3/4 (B1 EXCLUDED)

12 SIMILAR LINES 1RH67AA 3/4 TO 1RH67AM 3/4 (A1 EXCLUDED)

12 SIMILAR LINES 1RH67AN 3/4 TO 1RH67AZ 3/4 (AO EXCLUDED)

RELIEF VALVE DATA				
VALVE NUMBER	MAKE & TYPE	SIZE (IN.)	VALVE SET PRESSURE	CAPACITY
1E12F055A	CROSBY DS-C-64332	12 X 8	**	
1E12F055B	CROSBY DS-C-64332	12 X 8	**	
1E12F036	DRESSER 4-19101-1(1-1-3-2) -10XC3007	6 X 4	68 PSIG	374 GPM
1E12F112A	----------	1 X 2	474 PSIG	>6 GPM
1E12F112B	----------	1 X 2	474 PSIG	>6 GPM

** SHUT BY RAISING RELIEF SETPOINT

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

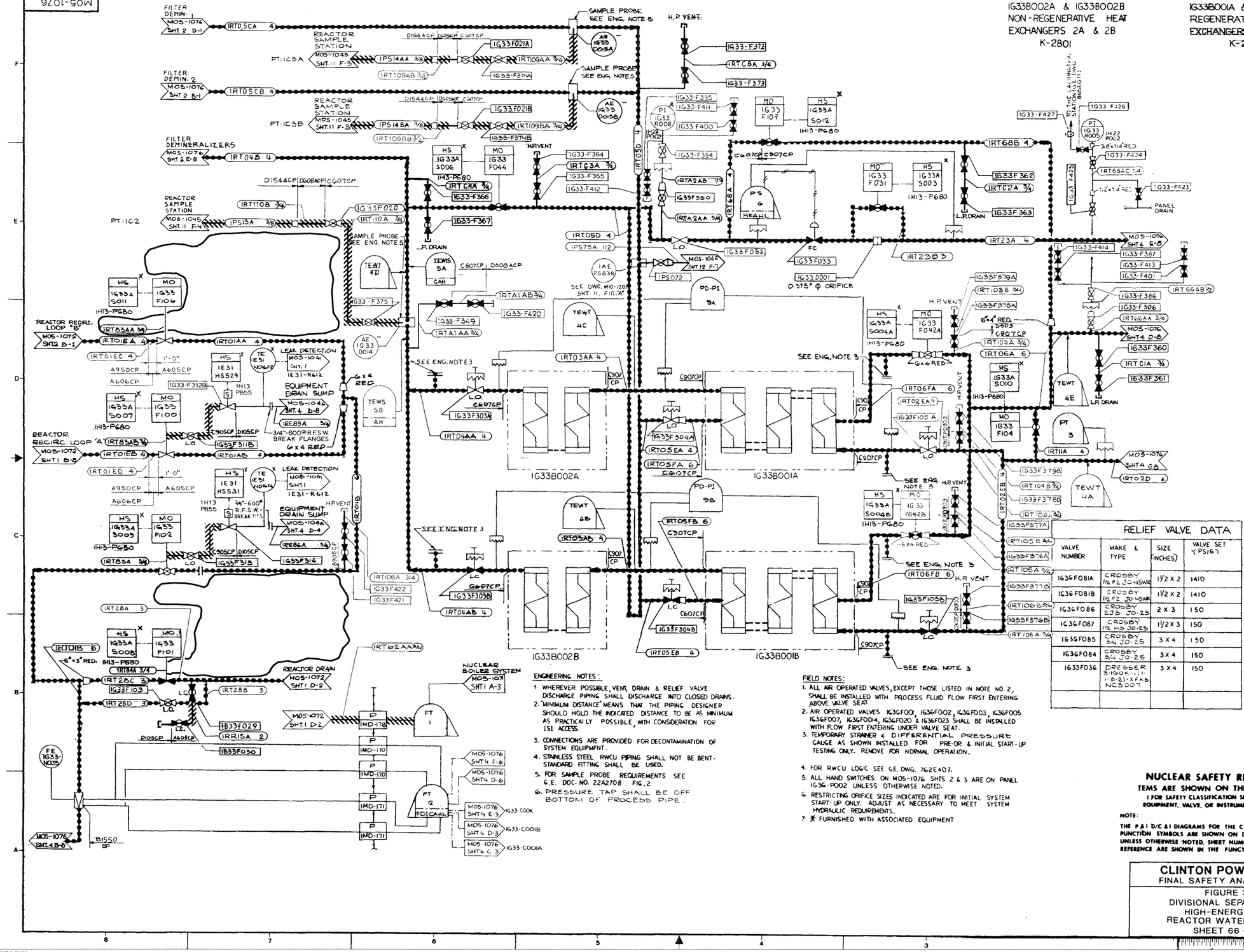
FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH ENERGY P & ID'S - RESIDUAL HEAT REMOVAL
(SHEET 65 OF 111)

REVISION 11
JANUARY 2005

M05-1076

IG33B002A & IG33B002B
NON-REGENERATIVE HEAT
EXCHANGERS 2A & 2B
K-2801

IG33B001A & IG33B001B
REGENERATIVE HEAT
EXCHANGERS 1A & 1B
K-2801


FILTER DEMIN. M05-1076 SHT 2 D-1
IRT05CA 4
REACTOR SAMPLE STATION M05-1045 SHT. 11 F-3
PT:1C3A
IPS14AA 3/8
IRT109AA 3/4
IRT109AB 3/4
IG33F021A
IG33F374A
SAMPLE PROBE SEE ENG. NOTE 5
AE IG33 D015A
FILTER DEMIN. 2 M05-1076 SHT 2 B-1
IRT05CB 4
PT:1C3B
IPS14BA 3/8
IRT109BA 3/4
IRT109BB 3/4
IG33F021B
IG33F374B
AE IG33 D015B
FILTER DEMINERALIZERS M05-1076 SHT 2 E-8
IRT04B 4
REACTOR SAMPLE STATION M05-1045 SHT. 11 F-4
PT:1C2
IPS15A 3/8
IRT110B 3/4
IRT110A 3/4
IG33F070
D15440P D608ACP C607CP
SAMPLE PROBE SEE ENG. NOTE 5
H.P. VENT
IG33-F372
IRT C8A 3/4
IG33-F373
IG33-F335
IG33-F411
IG33-F400
IG33-F384
IG33F350
IRTA2AA 3/4
IRTA2AB 3/4
IRT68A 4
IRT05D 4
IRT05D 4
IPS75A 1 1/2
IPS072
IRT68B 4
IRT23A 4
IRT23B 3
IRT66AC 1/2
IRT66AB 1/2
IRT66AA 3/4
IRT C1A 3/4
IRT02A 3/4
IRT02EA 4
IRT02EB 4
IRT105A 3/4
IRT105B 3/4
IRT106A 3/4
IRT106B 3/4
IRT02D 6
IRT11A 4
IRT11B 4
IRT103A 3/4
IRT103B 3/4
IRT06A 6
IRT06FA 6
IRT06FB 6
IRT05FA 6
IRT05FB 6
IRT05EA 4
IRT05EB 4
IRT04AA 4
IRT04AB 4
IRT03AA 4
IRT03AB 4
IRT01AA 4
IRT01AB 4
IRT01EA 4
IRT01EB 4
IRT01EC 4
IRT01ED 4
IRT01A 4
IRT01B 4
IRT83AA 3/4
IRT83AB 3/4
IRT84A 3/4
IRT84B 3/4
IRT28A 3
IRT28B 3
IRT28C 3
IRT28D 3
IRT01B 6
IRT08A 3/4
IRT08B 3/4
IRT10A 3/4
IRT10B 3/4
IRT62AA 3/4
IRT62AB 3/4
IRT69A 3/4
IRT69B 3/4
IRT89A 3/4
IRT89B 3/4
IRT86A 3/4
IRT86B 3/4
IG33F364
IRT C3A 3/4
IG33-F365
IG33-F412
IG33-F366
IG33-F367
IG33F052
IG33F033
IG33D001
0.375" ϕ ORIFICE
IG33-F414
IG33-F387
IG33-F413
IG33-F401
IG33-F386
IG33-F306
IG33F360
IG33F361
IG33-F426
IG33-F427
IG33-F434
IG33-F425
IG33-F423
PANEL DRAIN
L.P. DRAIN
IG33F362
IRT C2A 3/4
IG33F363
IG33F379A
IG33F378A
IG33F377A
IG33F376A
IG33F376B
IG33F377B
IG33F378B
IG33F379B
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IG33F414
IG33F415
IG33F416
IG33F417
IG33F418
IG33F419

REV. 2 SEPT. 1990

MO5-1076

IG36C001A & IG36C001B
REACTOR WATER CLEAN-UP
HOLDING PUMPS 1A & 1B
K-2801

IG36D001 & IG36D002
CLEAN-UP FILTER
DEMINERALIZERS
K-2801

IG36C001A

IG36C001B

IG36D001

IG36D002

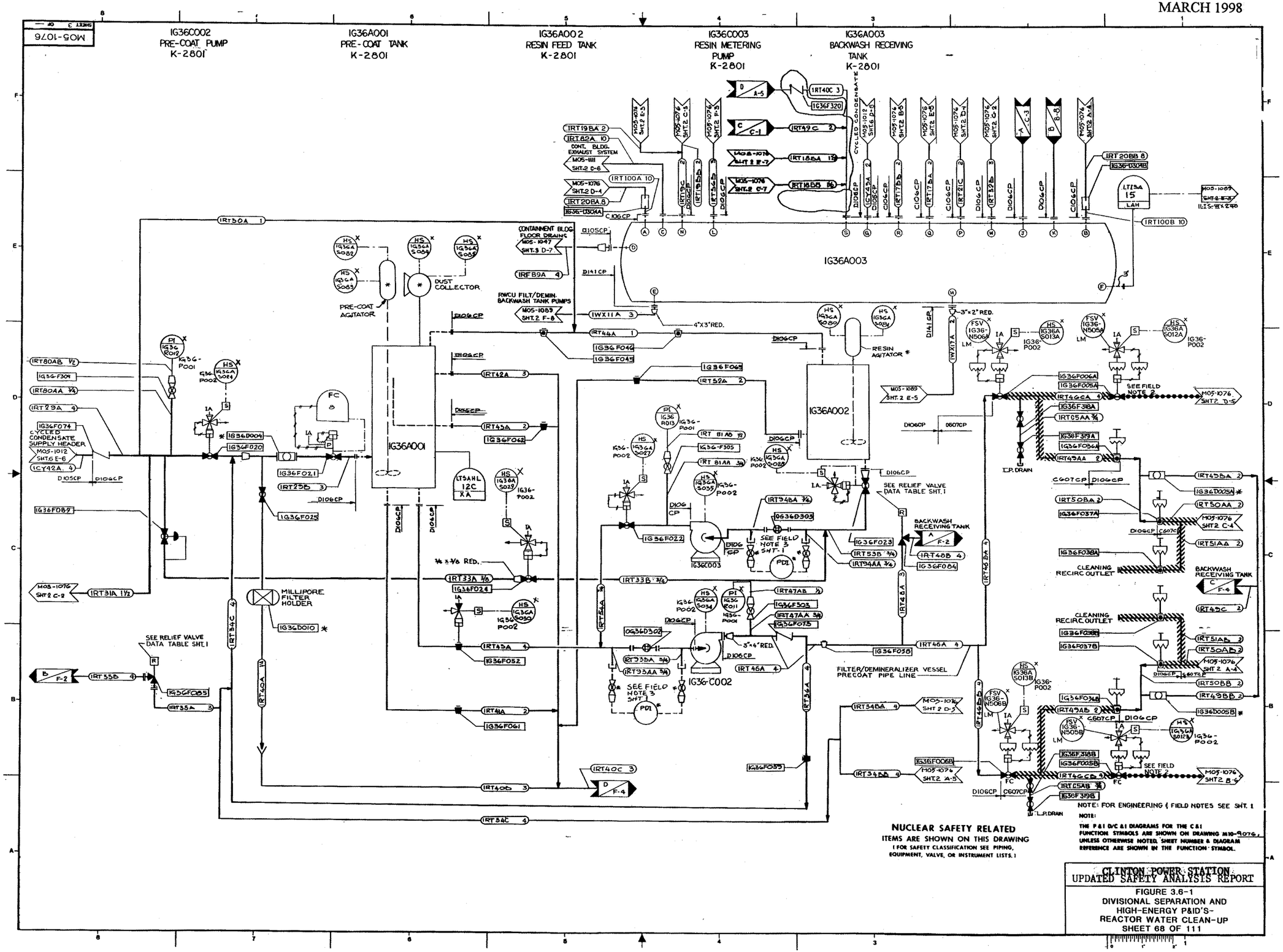
NOTE: FOR ENGINEERING & FIELD NOTES SEE SHT. 1.

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

NOTE
THE P&I D/C &I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-1076 UNLESS NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
REACTOR WATER CLEAN-UP
SHEET 67 OF 111



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
REACTOR WATER CLEAN-UP
SHEET 68 OF 111

REVISION 12
JANUARY 2007

IG33C001A, IG33C001B & IG33C001C
CLEAN-UP RECIRC. PUMPS 1A, 1B & 1C
K-280!

MO5-1076

SEE RELIEF VALVE DATA TABLE SHT 1

DRAIN TO WASTE SURGE TANK MO5-1088 SHT. 1 F-1

AUX. BLDG. CONTROL BLDG.

DIRECT TO MAIN CONDENSER MO5-1011 SHT 1 C-5

RWCU LOGIC

MINIMUM DISTANCE

SEE ENGINEERING NOTE 6

SEE ENG. NOTE 3

SEE ENG. NOTES

HP VENT MO5-1047 SHT 7 C-7

AUX. BLDG. FLOOR DRAINS MO5-1047 SHT 7 C-8

1500 # MODIFIED BLIND FLANGE

RHR MO5-1075 SHT 2 E-5

RHR MO5-1075 SHT 1 D-5

5X 4 RED.

SEISMIC GUIDE

GUARD PIPE

EXPANSION BELLOWS

DRYWELL WALL

DRYWELL WALL GUIDE

L.P. DRAIN

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

NOTE: FOR ENGINEERING & FIELD NOTES SEE SHT. 1

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
REACTOR WATER CLEAN-UP
SHEET 69 OF 111

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M05-1077

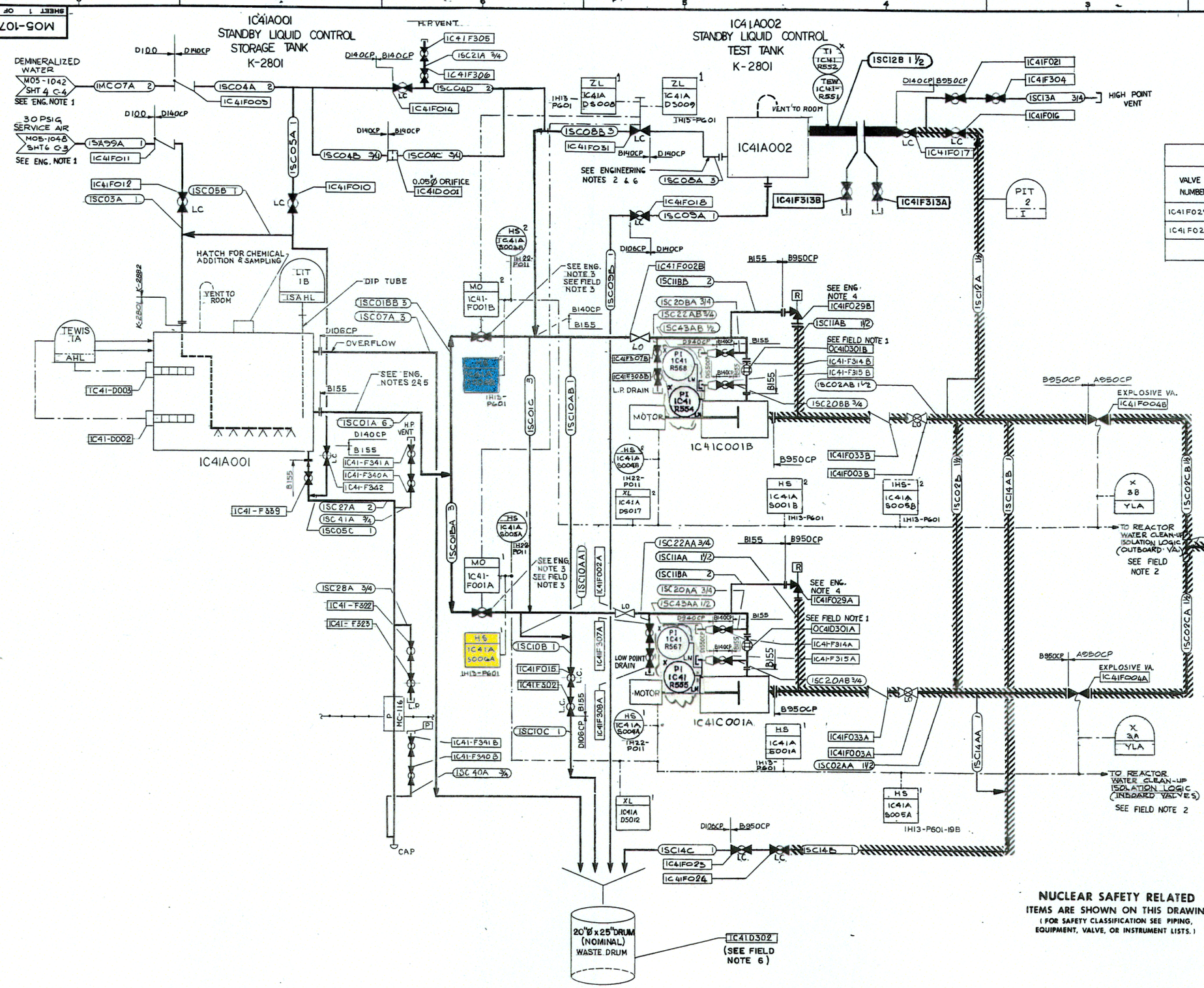
SHEET 1 OF 1

IC41A001 STANDBY LIQUID CONTROL STORAGE TANK K-2801

IC41A002 STANDBY LIQUID CONTROL TEST TANK K-2801

IC41C001A & IC41C001B
STANDBY LIQUID CONTROL
(PISTON TYPE)
PUMPS 1A & 1B
K-2801

**REVISION 7
JANUARY 1997**



RELIEF VALVE DATA

VALVE NUMBER	MAKE & TYPE	SIZE INCHES	VALVE SET (PSIG) OPEN	% BLOW DOWN	CAPACITY GPM
IC41F029A	DRESSER MODEL 1970-XFA1B	1 1/2" x 2"	1400	10	43
IC41F029B	DRESSER MODEL 1970-XFA1B	1 1/2" x 2"	1400	10	43

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

ENGINEERING NOTES :

1. THE ELEVATION OF THE DEMINERALIZED WATER & SERVICE AIR SUPPLY LINES SHALL BE ABOVE THE TOP OF THE STORAGE TANK (IC41A001).
2. SUCTION PIPING FROM THE STORAGE TANK & TEST TANK SHALL SLOPE CONTINOUSLY DOWNWARD TO THE PUMPS TO ENSURE PROPER VENT CAPABILITY.
3. THE MOTOR OPERATED PUMP SUCTION VALVES (IC41F001A & IC41F001B) SHALL BE LOCATED AS CLOSE AS PRACTICAL TO THE STORAGE TANK.
4. ALL RELIEF VALVE END CONNECTIONS SHALL BE FLANGED TO FACILITATE REMOVAL FOR BENCH TESTING.
5. ACTUAL LENGTH OF SUCTION PIPING BETWEEN STORAGE TANK OUTLET & EITHER PUMP INLET SHALL NOT EXCEED 12 FEET.
6. ACTUAL LENGTH OF SUCTION PIPING BETWEEN TEST TANK OUTLET & EITHER PUMP INLET SHALL NOT EXCEED 12 FEET.

FIELD NOTES :

1. TEMPORARY INLINE STRAINER (CONICAL TYPE) & DIFFERENTIAL PRESSURE GAUGE AS SHOWN INSTALLED DURING PRE-OP. & INITIAL START-UP TESTING ONLY. REMOVE FOR NORMAL PLANT OPERATION & CAP & WELD GAUGE PRESSURE SENSING LINES.
2. FOR SLC LOGIC SEE G.E. DWG. 762E434.
   FOR RWCU LOGIC SEE G.E. DWG 828E151.
3. VALVES IC41F001A & IC41F001B SHALL BE INSTALLED SO THAT THEIR STEM PACKINGS ARE NOT EXPOSED TO SODIUM PENTABORATE SOLUTION WHEN VALVES ARE IN NORMALLY CLOSED POSITION.
4. * FURNISHED WITH ASSOCIATED EQUIPMENT.
5. TEMPORARY INLINE STRAINER (CONICAL TYPE) INSTALLED DURING PRE-OP AND TESTING ONLY REPLACE WITH A PIPING SPOOL PIECE.
6. **AFTER EACH USE THE SLC WASTE DRUM SHALL BE DRAINED.**

NOTE:
THE P&I D/C & I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9077 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
STANDBY LIQUID CONTROL
SHEET 70 OF 111

3.8

2-CC 1

DO NOT USE 1, 0, 9 OR X FOR REVISION

REVISION 7
MAY 1997

M05-1078 SHEET 1 OF —

IC11D010A & IC11D010B
PUMP SUCTION FILTER
K-2801

IC11C001A & IC11C001B
DRIVE WATER PUMP
K-2801

IC11C300
RECIRCULATION PUMP
SEAL INJECTION PUMP
K-2882

IC11D003A & IC11D003B
DRIVE WATER FILTER
K-2801

CYCLED CONDENSATE STORAGE TANK
M05-1012 SHT 1 C-4

IC11C300

IC11C001A

IC11C001B

IC11D003A

IC11D003B

IC11D010A

IC11D010B

PDIS 1A AH

PDIS 1B HS-AL

PDIS 2A AH

PDIS 1C HS-AL

H.P. VENT

L.P. DRAIN

SEAL LEAKAGE

SEE FIELD NOTE 1

SEE ENGINEERING NOTE 4 (TYP.)

TURB BLDG

AUX BLDG

L.P DRAIN

MIN. DISTANCE TO IMC-63 PENETRATION

M05-1078 SHT. 3, G-2

M05-1078 SHT. 2, C-16

MIN. DIST.

CONTAINMENT

IMC-63

TYPICAL DETAIL SCRAM DISCHARGE VOLUME FLUSH

HOSE COUPLING

DRIVEWATER HEADER QUAD I

DRIVEWATER HEADER QUAD III

M05-1071 SHT.1 E-1 DIV. I

M05-1071 SHT.2 E-8 DIV. II

TO 1H22-P004 PANEL LT-1B21N095A (L)

TO 1H22-P027 PANEL LT-1B21N095B (L)

TEST CONN.

FIELD NOTES:

1. TEMPORARY IN-LINE STRAINER (CONICAL TYPE) AS SHOWN INSTALLED DURING PRE-OP AND INITIAL START-UP TESTING ONLY. REMOVE FOR NORMAL PLANT OPERATION.

ENGINEERING NOTES:

1. ALL PRESSURE RELIEF VALVES SHALL BE REMOVABLE FOR TESTING.
2. "MINIMAL DISTANCE" MEANS THAT THE PIPING DESIGNER SHOULD HOLD THE INDICATED DISTANCE TO BE AS MINIMAL AS PRACTICALLY POSSIBLE.
3. * MARKED ITEM IS FURNISHED WITH ASSOCIATED EQUIPMENT
4. USE MATCHING FLANGES IN ACCORDANCE WITH D1503CP.

RELIEF VALVE DATA

VALVE NUMBER	MAKE & TYPE	SIZE	VALVE SET PRESSURE	CAPACITY
IC11F001A	DRESSER-1-1970-2(3-1-1-2)-XFA30-NC3007	1"x1½"	150 PSIG	37 GPM
IC11F001B	DRESSER-1-1970-2(3-1-1-2)-XFA30-NC3007	1"x1½"	150 PSIG	37GPM
IC11F025A	CROSBY-JR-WR-S	¾"x¾"	1250 PSIG	10 GPM
IC11F025B	CROSBY-JR-WR-S	¾"x¾"	1250PSIG	10 GPM
IC11F351	DRESSER	¾"x1"	150 PSIG	10GPM
IC11F352	DRESSER	¾"x1"	1790PSIG	15 GPM

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

NOTE:
THE P&I D/C&I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9078 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
CONTROL ROD DRIVES
SHEET 71 OF 111

M05-1079

Revision 12
January 2007

IE51C002
RCIC STEAM TURBINE
ASSEMBLY
K-2801

DRYWELL

MAIN STEAM M05-1002 SHT 1 C-7

FROM RCIC INITIATION LOGIC

SEE ENG NOTE 4

LP DRAIN

EXPANSION BELLOWS IE51D508

SLOPE DN

SEE ENG. NOTE 10

1E510310 SEISMIC GUIDE
1E510306 GUARD PIPE
1E510312 DRYWELL GUIDE

FROM RCIC LOGIC

8" BLIND FLANGE

6"x4" ECC. RED.

3/4" 600# RFSW BREAK FLANGE

LEAK DETECTION M05-1041

EQUIP. DRAINS M05-1046 SHT 4 F-G

VENT TO ROOM

SEE ENG. NOTE 6

SET @ 150 PSIG
IE51D002
IE51D008 0.1565" ORIFICE

SET @ 150 PSIG
IE51D001

IN22-P017

N.P. VENT

SEE ENG. NOTE 8

TO RCIC LOGIC

GOVERNING VALVE

TRIP THROTTLE VALVE

TRIP THROTTLE VALVE SEAL AIR INJECTION

IE51D010A 0.158" ORIFICE

IE51D010B 0.158" ORIFICE

GOVERNING VALVE SEAL AIR INJECTION

FROM TURBINE SPEED CONTROL

TO TURB. SPEED CONTROL LOGIC

(LUBE OIL FILTER)

REF: VPF 3622-342
050
024
030
FOR INSTRUMENTATION DETAILS

SEE ENG. NOTES 6&7

MAIN CONDENSER M05-1011 SHT.1 E-5

FROM RCIC LOGIC

SEE ENG. NOTE 5

MIN DISC.

HIGH POINT VENT

SEE ENG. NOTE 9

TO RCIC LOGIC

VIN DISTANCE

SUPPRESSION POOL

H.W.L. EL 791'-5"
L.W.L. EL 780'-11"
7'-8 7/8"
3"

TURBINE EXHAUST SPARGER, FOR SPECIAL REQUIREMENTS BELOW LOW WATER LEVEL SEE DWG M06-1079 SHT. 7

GLAND SEAL SYSTEM *
REF: VPF 3622-344
345
FOR INSTRUMENTATION DETAILS

(GLAND SEAL AIR)

RCIC TURB. AREA FLOOR & EQUIP DRAIN SUMP M05-1047 SHT 6 D-2

1/32" ORIFICE IE51D004

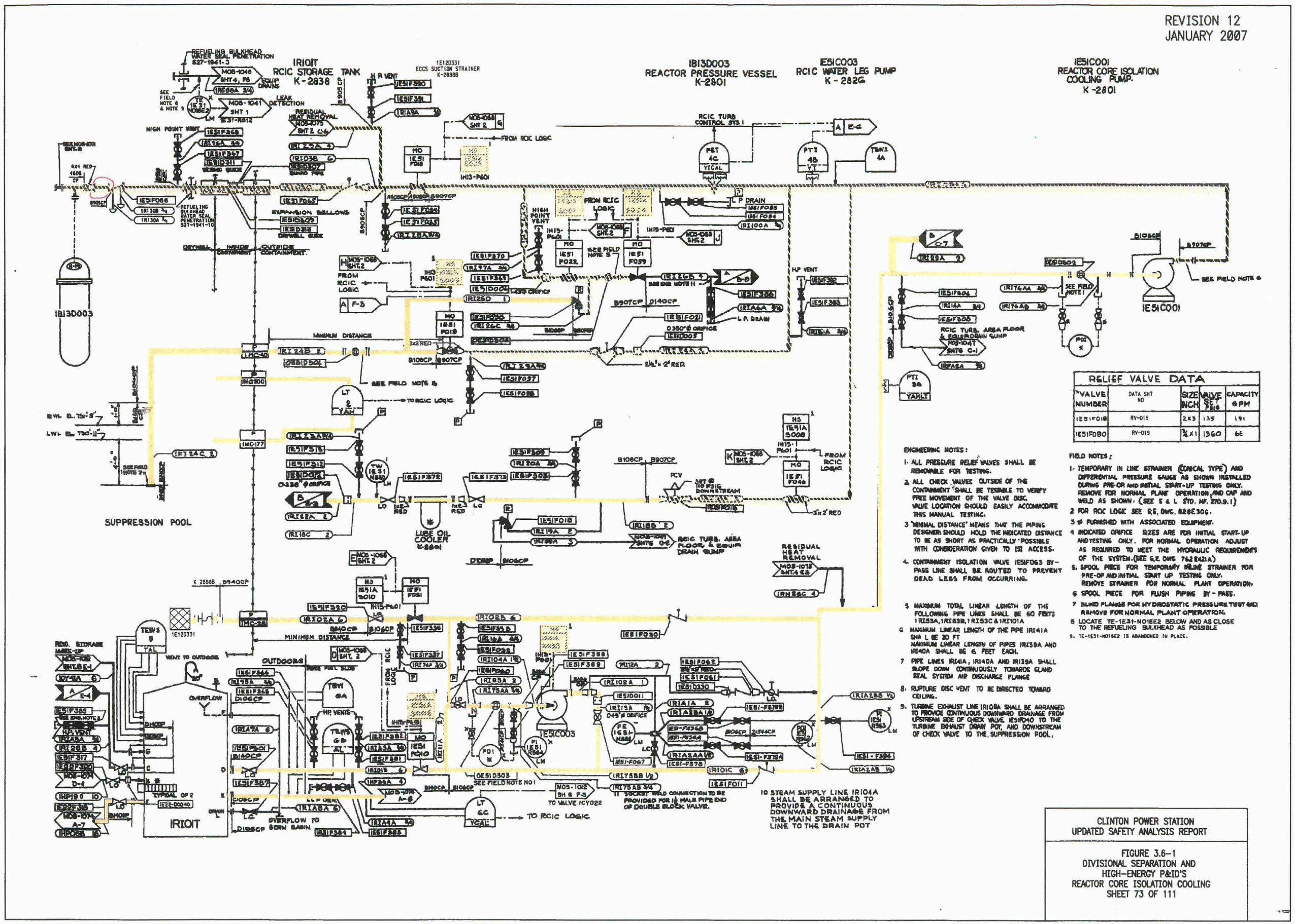
NOTE.
FOR ENGINEERING & FIELD NOTES SEE SHT 2

THE P&I D/C&I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-3079 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN BY THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
REACTOR CORE ISOLATION COOLING (RCIC)
SHEET 72 OF 111

REVISION 12
JANUARY 2007



RELIEF VALVE DATA				
VALVE NUMBER	DATA SHT NO	SIZE INCH	VALVE SET PRESS	CAPACITY GPM
1E51F018	RV-015	2X3	135	191
1E51F080	RV-019	¾X1	1360	66

ENGINEERING NOTES:

1. ALL PRESSURE RELIEF VALVES SHALL BE REMOVABLE FOR TESTING.
2. ALL CHECK VALVES OUTSIDE OF THE CONTAINMENT SHALL BE TESTABLE TO VERIFY FREE MOVEMENT OF THE VALVE DISC. VALVE LOCATION SHOULD EASILY ACCOMMODATE THIS MANUAL TESTING.
3. 'MINIMAL DISTANCE' MEANS THAT THE PIPING DESIGNER SHOULD HOLD THE INDICATED DISTANCE TO BE AS SHORT AS PRACTICALLY POSSIBLE WITH CONSIDERATION GIVEN TO ISI ACCESS.
4. CONTAINMENT ISOLATION VALVE 1E51F063 BY-PASS LINE SHALL BE ROUTED TO PREVENT DEAD LEGS FROM OCCURRING.
5. MAXIMUM TOTAL LINEAR LENGTH OF THE FOLLOWING PIPE LINES SHALL BE 60 FEET: 1R133A, 1RE83B, 1R183C & 1RI101A
6. MAXIMUM LINEAR LENGTH OF THE PIPE 1RI41A SHALL BE 30 FT MAXIMUM LINEAR LENGTH OF PIPES 1RI39A AND 1RI40A SHALL BE 6 FEET EACH.
7. PIPE LINES 1RI41A, 1RI40A AND 1RI39A SHALL SLOPE DOWN CONTINUOUSLY TOWARDS GLAND SEAL SYSTEM AIR DISCHARGE FLANGE
8. RUPTURE DISC VENT TO BE DIRECTED TOWARD CEILING.
9. TURBINE EXHAUST LINE 1RI08A SHALL BE ARRANGED TO PROVIDE CONTINUOUS DOWNWARD DRAINAGE FROM UPSTREAM SIDE OF CHECK VALVE 1E51F040 TO THE TURBINE EXHAUST DRAIN POT, AND DOWNSTREAM OF CHECK VALVE TO THE SUPPRESSION POOL.
10. STEAM SUPPLY LINE 1RI04A SHALL BE ARRANGED TO PROVIDE A CONTINUOUS DOWNWARD DRAINAGE FROM THE MAIN STEAM SUPPLY LINE TO THE DRAIN POT

FIELD NOTES:

1. TEMPORARY IN LINE STRAINER (CONICAL TYPE) AND DIFFERENTIAL PRESSURE GAUGE AS SHOWN INSTALLED DURING PRE-OP AND INITIAL START-UP TESTING ONLY. REMOVE FOR NORMAL PLANT OPERATION, AND CAP AND WELD AS SHOWN. (SEE S & L STD. MP. 270.9.1)
2. FOR RCIC LOGIC SEE G.E. DWG. 828E306.
3. # FURNISHED WITH ASSOCIATED EQUIPMENT.
4. INDICATED ORIFICE SIZES ARE FOR INITIAL START-UP AND TESTING ONLY. FOR NORMAL OPERATION ADJUST AS REQUIRED TO MEET THE HYDRAULIC REQUIREMENTS OF THE SYSTEM. (SEE G.E. DWG 762E421A)
5. SPOOL PIECE FOR TEMPORARY INLINE STRAINER FOR PRE-OP AND INITIAL START UP TESTING ONLY. REMOVE STRAINER FOR NORMAL PLANT OPERATION.
6. SPOOL PIECE FOR FLUSH PIPING BY-PASS.
7. BLIND FLANGE FOR HYDROSTATIC PRESSURE TEST ONLY REMOVE FOR NORMAL PLANT OPERATION.
8. LOCATE TE-1E31-N016E2 BELOW AND AS CLOSE TO THE REFUELING BULKHEAD AS POSSIBLE
9. TE-1E31-N016E2 IS ABANDONED IN PLACE.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S
REACTOR CORE ISOLATION COOLING
SHEET 73 OF 111

REVISION 12
JANUARY 2007

IN66D005A & IN66D005B
RECOMBINERS
K-2801

IN66B010A & IN66B010B
COOLER CONDENSERS 1A & 1B
K-2801

M05-1084

GLYCOL COOLER REFRIGERATION MACHINES

PROCESS RAD. MONITORING SYSTEM

GLYCOL TANK

GLYCOL PUMPS

MAIN CONDENSER

STEAM JET AIR EJECTOR

FROM SJAE SUCTION VALVE

2 STEAM JET AIR EJECTOR

AUGMENTED OFF GAS PIPING

NOTES:

1. VALVE IN66F016A TO BE LOCATED PHYSICALLY CLOSE TO MAIN CONDENSER TO MINIMIZE THE EFFECT OF FLASHING.
2. PRE-RAD INDICATOR IN66-R043 TO BE LOCATED PHYSICALLY CLOSE TO ROTAMETER IN66R040.
3. TT THERMOSTATIC TRAP NOT TO BE CONFUSED WITH S&L STANDARD TRAP ARRANGEMENT.
4. OFF GAS AUTO SEQUENCE CAN BE FOUND ON GE DWG. 651E334.
5. NOZZLES FOR RELIEF VALVES ON COOLER CONDENSER & RECOMBINER ARE FLANGED TYPE.
6. SEE NOTE 1, M05-1084-3.
7. REACH RODS.
8. NOZZLE NOT PROVIDED.

THE P&I B/C & I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-7084 UNLESS OTHERWISE NOTED. SHEET NUMBERS & DRAWING REFERENCES ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
OFF - GAS
SHEET 74 OF 111

M05-1084

IN66Z003A & IN66Z003B DESICCANT DRYER K-2801

IN66D035A & IN66D035B DESICCANT VESSEL K-2801

IN66Z004 REGENERATOR K-2801

IN66B015A & IN66B015B REGENERATOR HEATER K-2801

IN66B013A & IN66B013B REGENERATOR BLOWER K-2801

IN66B014A & IN66B014B REGENERATOR CHILLER K-2801

IN66A001 CAL. GAS CYLINDER K-2801

IN66A002 ZERO GAS CYLINDER K-2801

RELIEF VALVE CAPACITIES

VALVE NUMBER	MAKE & TYPE	SIZE INLET	SIZE OUTLET	VALVE SET PSIG OPEN	CAPACITY LB/HR	CAPACITY SCFM
IN66F037A	150# RF. FLG.	1.00	1.00	100	750	
IN66F037B	150# RF. FLG.	1.00	1.00	100	750	
IN66F040A	150# RF. FLG.	1.00	1.00	50		915
IN66F040B	150# RF. FLG.	1.00	1.00	50		915

LOOP "A"

LOOP "B"

AUGMENTED "D" PIPING
(PIPE CLASS "P1")
AND COMPONENTS ARE CONTAINED ON THIS DRAWING. SEE THE VALVE, INC. EQUIPMENT AND SPECIALTY LISTS FOR PROPER CLASSIFICATION. ALSO SEE SPEC. K-3882, PAR. 2.01.7A.

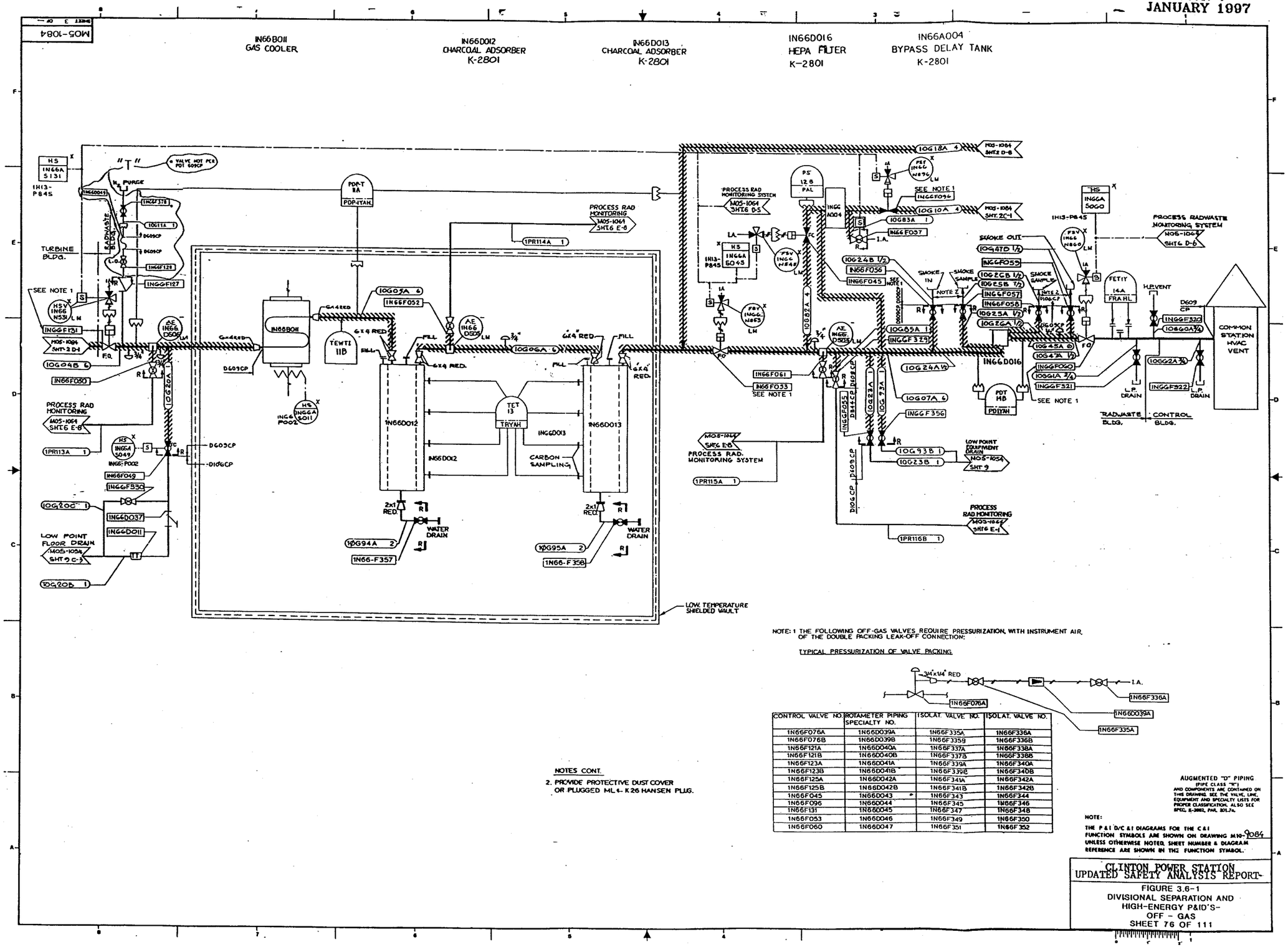
NOTES:
1. REGENERATOR CHILLER "A" AND DESICCANT DRYER "B" SHOWN IN REGENERATION MODE.
4. SEE NOTE 1 ON M05-1084-3

NOTE:
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-3044 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

This drawing turned over to ILLINOIS POWER

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
OFF - GAS
SHEET 75 OF 111



NOTE: 1 THE FOLLOWING OFF-GAS VALVES REQUIRE PRESSURIZATION, WITH INSTRUMENT AIR, OF THE DOUBLE PACKING LEAK-OFF CONNECTION:

TYPICAL PRESSURIZATION OF VALVE PACKING

CONTROL VALVE NO.	ROTAMETER PIPING SPECIALTY NO.	ISOLAT. VALVE NO.	ISOLAT. VALVE NO.
1N66F076A	1N66D039A	1N66F335A	1N66F336A
1N66F076B	1N66D039B	1N66F335B	1N66F336B
1N66F121A	1N66D040A	1N66F337A	1N66F338A
1N66F121B	1N66D040B	1N66F337B	1N66F338B
1N66F123A	1N66D041A	1N66F339A	1N66F340A
1N66F123B	1N66D041B	1N66F339B	1N66F340B
1N66F125A	1N66D042A	1N66F341A	1N66F342A
1N66F125B	1N66D042B	1N66F341B	1N66F342B
1N66F045	1N66D043	1N66F343	1N66F344
1N66F096	1N66D044	1N66F345	1N66F346
1N66F131	1N66D045	1N66F347	1N66F348
1N66F053	1N66D046	1N66F349	1N66F350
1N66F060	1N66D047	1N66F351	1N66F352

NOTES CONT.

2. PROVIDE PROTECTIVE DUST COVER OR PLUGGED MIL-K-26 HANSEN PLUG.

AUGMENTED "D" PIPING
(PIPE CLASS "K")
AND COMPONENTS ARE CONTAINED ON THIS DRAWING. SEE THE VALVE, LINE, EQUIPMENT AND SPECIALTY LISTS FOR PROPER CLASSIFICATION. ALSO SEE SPEC. K-3882, PARA. 301.7.4.

NOTE:
THE P&I D/C&I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9084 UNLESS OTHERWISE NOTED, SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
OFF - GAS
SHEET 76 OF 111

M05-1086

IWF13A HEATER VENT GAS COOLER K-2859

IWF07A HEATER K-2859

IWF06P RECIRC. PUMP K-2859

IWF08D VAPOR BODY K-2859

IWF12PA & IWF12PB & 1 FLOOR DRAIN EVAPORATOR BOTTOMS PUMP K-2859

NOTE:

1. SUPPLIED BY K-2859 AND INSTALLED BY K-2882
2. DENOTES "CAMFLEX" VALVE WITH DIAPHRAGM OPERATOR
3. DENOTES RAM TYPE VALVE FOR DETAIL OF THE OPERATOR ASSEMBLY SEE M05-1085 SHT. 1.

4 CAPS SHOULD BE INSTALLED A MAX. OF 2 IN. FROM VALVE OR LINE.

RETIRED IN PLACE

IWF08D

IWF07A

IWF12PA

IWF12PB

SEE NOTE 1

SEE NOTE

AUGMENTED "D" PIPING (PIPE CLASS "DE") AND BOMPONENTS ARE CONTAINED ON THIS DRAWING. SEE THE VALVE, LINE, EQUIPMENT AND SPECIALTY LISTS FOR PROPER CLASSIFICATION. ALSO SEE SPEC. K-2082, PAR. 301.7a.

NOTE:

THE P&I D/C &I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-1086 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
FLOOR DRAIN RADWASTE PROCESS
SHEET 77 OF 111

REV. 2 SEPT. 1990

M05-1086

IWF09D ENTRAINMENT SEPARATOR K-2859

IWF05PA DISTILLATE PUMP K-2859

IWF17T CONDENSER DRAIN POT K-2859

IWF10A CONDENSER K-2859

IWF14A CONDENSER VENT GAS COOLER K-2859

IWF05PB DISTILLATE PUMP K-2859

IWF11A SUBCOOLER K-2859

IWF15J

IKSV WF046

IHS WF046

IKC WF046A

IKC WF046B

OPL51JB

IWF127

IWF128

IWF129

OCY 26U 1

M05-1012 SHT 3 F-2

CYCLED CONDENSATE

IWF95A 1

IWF95C 1

IWF131

D105CP

D141CP

D100GP

IWF95D 1

IWF130D

IWF95E 1

IWF130C

IWF95BC 1

IWF130B

IWF95BB 1

IWF130A

IWF96BA 3/4

IWF96CA 1/4

IWF96BB 1/4

IWF96CB 1/4

VENT TO ROOM

IWF133

IWF57A 3/4

IWF96A V2

IWF132

OCY 26T V2

1/2"x1/4" RED. (TYP.)

SIGHT GLASSES

PDTIAH 9A

IWF09D

SEE NOTE 2

UNIT 1 FLOOR DRAIN EVAP. VAPOR BODY M05-1086 SHT.3 E-3

IWF215

4'-0"

ITF25A 2

ITF028

ITF26A 3/4

ITEW WF048

ITE WF048

ITA WF004

OPL51JB

M05-1031-3 FROM ITE-WF026 FROM ITE-WF017 ITE-WF018 ITE-WF011 ITE-WF004

M05-1086-3

M05-1086-4 FROM ITE-WF052 ITE-WF062A

IWF17T

LTCAH 10A

A

IWF99CB V2

IWF149

IWF99CA 3/4

IWF99B 1/2

IWF98A 2

IWF98AA 1/2

IWF98AB 1/2

M05-1054 SHT.19-D-5

IWF136A

IWF135A

1½" x 1" RED.

2" x 1½" RED.

IHS WF057

OPL51JB

IWF05PA

IWF06MA

SEE NOTE 1

IWF134A

IWF98BA 2

IWF82AA 3/4

RADWASTE BLDG. EQUIP. DRAIN TANK

M05-1053 SHT.8 B-5

IWF163A

ITE77AA 3/4

IWF136B

IWF135B

1½" x 1" RED.

2" x 1½" RED.

IWF06MB

SEE NOTE 1

IHS WF058

OPL51JB

IWF05PB

IWF134B

IWF98BB 2

IWF82AB 3/4

RADWASTE BLDG. EQUIP. DRAIN TANK

M05-1053 SHT.8 B-5

IWF163B

ITE77AB 3/4

IWF156

ITI WF069

ITEW WF069

2" x ¾" RED. IWF14A

D141CP

M05-1086 SHT.3 F-4

IWF100A 3/4

IWF102A 3/4

IWF101A 1

D105CP

M05-1114 SHT.2 C-3 HVAC RETURN DUCT

IWF150

IWFA8A 1

M05-1089 SHT.4 F-5 CONCENTRATE WASTE TANK

IWF125

ITF 27A 1

M05-1054 SHT.19 F-4 CHEM. WASTE COLL. TANK

IWFA9A 1

TO ITI-WF010 M05-1086-3

TO ITR-WF004 M05-1086-4

ITE WF068

ITEW WF068

IWFA7B 3/4

IWFA6B 3/4

IWFA6A 3/4

IWF141

IWF147

IWFA7AA 3/4

IWF142B

IWFB2A 3/4

IWF148

IWFB3A 3/4

IWFA5A 3/4

IWF139

IWF138

IWF110A V2

IWF110

IWF109A 3/4

IWF142A

IWF10A

141CP

TO ITI-WF010 M05-1086-3

ITE WF060

ITEW WF060

3"x1½" RED.

3"x1" RED.

IWF11A

IPI WF059

IWFB7B 1

IWFB6A 1½

IWFE3A 3/4

D140CP

IWF189

IPS34A 3/8

PROCESS SAMPLE PANEL OPL33JA M05-1045 SHT.1 F-5 PT:1R16

CEIS 10B

FITX 11A

ILSV WF056A

OWF15J

IWF152A

IWF153A

IWFB6BA 1½

IWF154A

IWFB6CA 1

IWF151A

IHS WF088

H.P.VENT

OPL51JB

IWF220

IWF115A 3/4

UNIT 1 FLOOR DRAIN EVAPORATOR MONITOR TANK M05-1086 SHT.5 F-7

IWFB6BA 1½

IWFB6CA 1

IWF151A

IWF221

IWF116A 3/4

UNIT 1 FLOOR DR. SURGE TANK M05-1086 SHT 1 F-1

IWFB6BB 1½

IWFB6CB 1

IWF151B

IFE WF061

1½"x1" RED.

IHS WF089

H.P.VENT

OPL51JB

ITEW WF062

ITE WF062A

ITE WF062B

ITSH WF062B

TO ITR WF004 M05-1086-4

IWFB6BB 1½

IWF153B

IWF152B

IWF154B

IWF155

NOTE:
1. REFER TO NOTE 4 ON M05-1086 SHT.1
2. REFER TO NOTE 1 ON M05-1086 SHT.3

AUGMENTED "D" PIPING (PIPE CLASS "B") AND COMPONENTS ARE CONTAINED ON THIS DRAWING. SEE THE VALVE, LINE, EQUIPMENT AND SPECIALTY LISTS FOR PROPER CLASSIFICATION. ALSO SEE SPEC. E-2882, PARL 202.7h.

NOTE:
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9086 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
FLOOR DRAIN RADWASTE PROCESS
SHEET 20 OF 44

0WZ13A
HEATER VENT
GAS COOLER
K-2859

0WZ07A
HEATER
K-2859

0WZ06P
RECIRC. PUMP
K-2859

NOTE:
1. SUPPLIED BY K-2859 AND INSTALLED BY K-2882.
2. D DENOTES "CAMFLEX" VALVE
3. DENOTES RAM TYPE VALVE. FOR DETAIL OF THE OPERATOR ASSEMBLY SEE M05-1085 SHT. 1

HVAC RETURN DUCT M05-1087 SHT.3 F-2

0WZ100A ¾

0WZ090

OTI WZ072 LM

OTEW WZ072

2"x ¾" RED.

D105CP

0WZ13A

1"x ¾" RED.

2"x 1" RED.

RAD. WASTE EQUIP. DRAIN TANK M05-1053 SHT.6 E-5

0WZ78A 1

OTE 70A 1

D100CP

0WZ088

OTI-WZ010 M05-1087 SHT.4 D-4

OTE WZ071

OTEW WZ071

0WZ087

0WZ124

0WZ94A ¾

0WZ086

0WZ03H

0WZ76A 1

D105CP

0WZ07A

PITR M10-1031 12 B

0WZ110B

0CY47P ¾

CYCLED CONDENSATE M05-1012 SHT.5 C-6

0WZ106B

0WZ105B

0AS25AB ¾

AUX. STEAM M05-1031 SHT.4 F-5

0WZ83BB ¾

0WZ83AB ¾

D100CP

D105CP

D105CP

I.A.

FIP

TF

M05-1087 SHT.4 D-8

0WZ144

0WZF5A 1

0WZ107B

0WZ83C ¾

0WZ108B

1"x ½" RED.

DETR 5A

0WZD3AA ½

0WZC3A 1

0WZ146

0WZD3BA ½

0WZC3B ¾

0WZ145

D105CP

0WZ143

D105CP

SEE NOTE 1

M05-1087 SHT.4 C-7

0WZ81H 1½

0WZ101

0WZ81F 1

S

0WZ100

0WZ099

1½"x 1" RED.

1½"x 1" RED.

0WZC5A ¾

0WZ160

0WZ81G 1½

0WZ81D 1½

0WZ816A 1½

FITC 3

FICSHLA 11C

0WZ102

CEI 9

OHS WZ001

OPL51JA

DASH WZ001

0WZ15J

I.A.

OZL WZ001

OPL-08J

OFE WZ003

1½" x 1" REDS.

0WZ092

0WZ01A 1½

RADWASTE EVAP. HEADER M05-J086 SHT. 2: A-4

0WZC4A ¾

0WZ159

OTF80A ¾

CHEM. WASTE COLL. TANK M05-1087 SH.3 C-4

0WZ095

0WZ81C 1

0WZ094

0WZ093

AIT 2

OHS WZ036

OPL51JA

OTEW WZ004

OTE WZ004

OTR-WZ004 M05-1087 SHT.3 C-5

0WZ06P

OTR-WZ004 M05-1087 SHT.3 C-5

OTE WZ018

OTEW WZ018

OTR-WZ004

OTEW WZ017

OTE WZ017

0WZ103AA

0WZ211B

0WZ104AA

0WZ211A

SEE NOTE 1

M05-1087 SHT.4 D-8

0WZ103B ½

OPI WZ020

0WZ15J

OPI WZ019

0WZ15J

0WZ104B ½

0WZ73AA 2

0WZ74A 1½

0WZ084

0CY47M 1½

CYCLED CONDENSATE M05-1012 SHT. 5 C-6

D105CP

D151CP

D150CP

CHEM. WASTE COLL. TANK M05-1054 SHT.19 C-8

1TF33A 2

0WZ083

0WZ73B 2

0WZ082B

0WZ082A

0WZ73AB 2

0WZ137

OHSV WZ035B

0WZ-19J

D105CP

FIP

OHSV WZ035

0WZ-19J

I.A.

I.A.

OHS WZ035

OPL51JA

MO

AIR

X3/8" RED.

OHSV WZ154A

0WZ19J

IA

OHS-WZ154 M05-1045 SHT. 1

IA

OHSV WZ154B

0WZ19J

CHEM. WASTE COLL. TANK M05-1054 SHT.19 C-8

1TF34A 1½

FLUSH LINE M05-1093 SHT. 1

0PS22A

PROCESS SAMPLE PANEL OPL33JA M05-1045 SHT. P-3

0PS42A

PT. OR12

AUGMENTED "D" PIPING
(PIPE CLASS "R")
AND COMPONENTS ARE CONTAINED ON THIS DRAWING. SEE THE VALVE, LINE, EQUIPMENT AND SPECIALTY LISTS FOR PROPER CLASSIFICATION. ALSO SEE SPEC. N-2882, PAR. 201.7.n.

NOTE
THE P&I D/C&I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-1087 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL

CLINTON POWER STATION
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FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
CHEM. RAD. REPROCESSING & DISP. RAD. EVAP.
SHEET 79 OF 111

M05-1087

OWZ09D ENTRAINMENT SEPARATOR K-2859

OWZ05PA DISTILLATE PUMP K-2859

OWZ17T CONDENSER DRAIN POT K-2859

OWZ10A CONDENSER K-2859

OWZ14A CONDENSER VENT GAS COOLER K-2859

OWZ05PB DISTILLATE PUMP K-2859

OWZ11A SUBCOOLER K-2859

CYCLED CONDENSATE

CHEMICAL WASTE EVAP. VAPOR BODY

SEE NOTE 2

SIGHT GLASSES

SEE NOTE 1

RADWASTE BLDG. EQUIP. DRAIN TANK

TO OTR-WZ004 M05-1087 SHT 3

TO OTI-WZ010 M05-1087-4

TO OTR-WZ004 M05-1087-3

FROM M05-1031-3, M05-1087-2, M05-1087-2, M05-1087-4, M05-1087-2, M05-1087-3 OTE-WZ026, OTE-WZ017, OTE-WZ018, OTE-WZ011, OTE-WZ004, OTE-WZ052, OTE-WZ062A

HVAC RETURN DUCT

CONCENTRATE WASTE TANK

CHEM. WASTE COLL. TANK

PROCESS SAMPLE PANEL OPL933C

EVAPORATOR MONITOR TANK

CHEM. WASTE COLLECTOR TANK

NOTES:
1. REFER TO NOTE 3 ON M05-1087 SHT. 1
2. REFER TO NOTE 1 ON M05-1087 SHT. 2

AUGMENTED "D" PIPING
(PIPE CLASS "R"; AND COMPONENTS ARE CONTAINED ON THIS DRAWING. SEE THE VALVE, LINE, EQUIPMENT AND SPECIALTY LISTS FOR PROPER CLASSIFICATION. ALSO SEE SPEC. K-2882, PAR. 201.7n.

NOTE:
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9087 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
CHEM. RAD. REPROCESSING & DISP. RAD. EVAP.
SHEET 80 OF 111

M05-1087 SHEET 4 OF —

OWZ12PA & OWZ12PB
CHEM. WASTE BOTTOMS PUMP
— K-2859

OWZ08D
VAPOR BODY
K-2859

OWZ93A 2
OWZ072
OWZ07M
SET @ 30 PSIG
OTR-WZ004
M05-1087 SHT. 5 C-5
OTE WZ011
OTEW WZ011
OWZ157
OWZ84A 1
OWZG1A 1½
D15ICP
LESH 4
RETIRED IN PLACE
OHS WZ012
OHSV WZ012
OWZ15J
OPL-5JA
I.A.
OWZ111
OWZ073
OCY47D 1
CYCLED CONDENSATE
M05-1012 SHT.5 C-3
FIR
D14ICP D10SCP
ENTRAINMENT SEPARATOR
M05-1087 SHT.5 D-8
SEE NOTE 1
PITAH 10
OWZ828A ¾
OWZ82A ½
OWZ103
½" x ¼" RED.
CYCLED CONDENSATE
M05-1012 SHT.5 C-4
OCY47F ½
D10SCP D14ICP
SIGHT GLASS
SIGHT GLASS
OWZ828B ¾
LE 7IC 4
OWZ08D
OTEW WZ010
OTE WZ010
OTI WZ010
OPLSIJA
FROM OTE-WZ071, M05-1087-2
FROM OTE-WZ054, M05-1087-3
FROM OTE-WZ060, M05-1087-3
FROM OTE-WZ068, M05-1087-3
M05-1087 SHT.2 C-8
SEE NOTE 1
OHS WZ013
M05-1087 SHT.2 D-4
OAE25AE ¾
AUX. STEAM M05-1031 SHT.4 F-4
OWZ105A
OWZ107A
OWZ106A
OWZ83BA ¾
D10CCP D10SCP
D10SCP D15ICP
OWZ108A
OWZ116B
3/4" x 3/8" RED.
FIP
D15ICP
OWZ116A
FIP
OHSV WZ038 B
OWZ18J
I.A.
M.R. AIR
DETS 58
OHSV WZ038 A
OWZ18J
OHS WZ036
OPLSIJA
OWZ85A ¾
OWZ113
OHSV WZ098 A
OWZ18J
OHS WZ096
OPLSIJA
OWZ86BB 1
OWZ86BA 1
OHS WZ039
OPLSIJA
OHS WZ094
OPLSIJA
OHSV WZ039
OWZ15J
OHSV WZ094
OWZ15J
CYCLED CONDENSATE
M05-1012 SHT.5 C-4
OWZ115A
OCY47GA 1½
D10SCP D15ICP
OWZ 114 A
OWZ 114 B
OWZ115B
OCY47GB 1½
D15ICP D10SCP
CYCLED CONDENSATE
M05-1012 SHT.5 B-4
OWZ86AA 1½
OWZ86AB 1½
CYCLED CONDENSATE
M05-1012 SHT.5 C-5
OCY47E ¾
OWZ88AA 2
OWZ88AB 2
OWZX2A 1½
D15ICP
CONCENTRATE WASTE TANK
M05-1089 SHT.4 E-8
OWZ104A
OWZ120
OWZ89B 1½
OWZ118A
OCY47LA ¾
OWZ119A
OWZ90AA ¾
CYCLED CONDENSATE
M05-1012 SHT.5 C-7
D15ICP D10SCP
OWZ89AA 1½
2"x 1½" RED.
FICSHLA 11A
OHS WZ043
3"x 2" ECC RED.(FQB) OPLSIJA
OWZ12PA
OTF79AA ¾
OWZ112A
OWZ92AA ¾
CHEM. WASTE COLL. TANK
M05-1054 SHT.19 C-6
OWZ117A
OWX26O
H.P.VENT
OWXI35A ¾
OWX52AE 1½
ABANDON IN PLACE
WASTE MIXING TANK
M05-1089 SHT.6 E-7
OWZ104B
NOTE 4
OWZ89AB 1½
OWZ118B
OCY47LB ¾
OWZ119B
OWZ90AB ¾
CYCLED CONDENSATE
M05-1012 SHT.5 C-8
D15ICP D10SCP
D15ICP
2"x 1½" RED.
FICSHLA 11B
OHS WZ042
3"x 2" ECC RED.(FQB) OPLSIJA
OWZ12PB
OTF79AB ¾
OWZ112B
OWZ92AB ¾
CHEM. WASTE COLL. TANK
M05-1054 SHT.19 C-7
OWZ117B

NOTE:
1. SUPPLIED BY K-2859 AND INSTALLED BY K-2882.
2. ◇ DENOTES "CAMFLEX" VALVE
3. DENOTES RAM TYPE VALVE. FOR DETAIL OF THE OPERATOR ASSEMBLY SEE M05-1085 SHT. 1
4. CAPS SHOULD BE INSTALLED A MAX. OF 2 IN. FROM VALVE OR LINE.

AUGMENTED "D" PIPING (PIPE CLASS "R") AND COMPONENTS ARE CONTAINED ON THIS DRAWING. SEE THE VALVE, LINE, EQUIPMENT AND SPECIALTY LISTS FOR PROPER CLASSIFICATION. ALSO SEE SPEC. K-2882, PAR. 201.7a.

NOTE
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-4097 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
CHEM. RAD. REPROCESSING & DISP. RAD. EVAP.
SHEET 81 OF 111

M05-1089

OWX36SA & OWX36SB CONCENTRATE WASTE TANK AGITATOR MOTOR K-2882

OWX01TA CONCENTRATE WASTE TANK 5000 GAL. K-2839

OWX01PA CONCENTRATE WASTE TANK PUMP 75 GPM K-2825

OWX01D CONCENTRATE WASTE TANK VENT COOLER K-2859

OWX01TB CONCENTRATE WASTE TANK 5000 GAL K-2839

OWX01PB CONCENTRATE WASTE TANK PUMP 75 GPM K-2825

REVISION 8
JULY 1998

RETIRE IN PLACE

*2 FL. DR. EVAP. COND. VENT GAS COOLER DRAIN — M05-2086 SHT.4 E-3 — 2WFA8A 1"

CHEM. WASTE EVAP. COND. VENT GAS COOLER DRAIN — M05-1087 SHT.5 E-3 — OWZ48A 1"

*1 FL. DR. EVAP. COND. VENT GAS COOLER DRAIN — M05-1086 SHT.4 F-3 — 1WFA8A 1"

D105CP D141CP

OWXC3A 1½"

OWXG1A 3"

SLOPE

HVAC SYSTEM M05-1114 SH2 A-3

3" X 2" RED.

OWX187

OWXA4AB 1½"

OWX99AB 1½"

OWXA2A 1½"

OWXC4C 2"

OWXA1A 1½"

OWXG0A 1½"

OWXC4B 2"

OWX144B

OWXC4AB 2"

OWX01D

1½"X3/4" RED.

OWXC4AA 2"

OWXC5AA 1½"

OWXC5AB 1½"

OWX145B

OWX145A

OWX01TA

OWX01TB

OWX01PA

OWX01PB

TANK SELECTOR

WX LOGIC

MOBILE SOLIDIFICATION STATION

ABANDON IN PLACE WASTE MIXING TANK

SEE NOTE 4

SEE NOTE 3

CYCLED CONDENSATE

TO CHEM. WASTE COLLECTOR TANK M05-1054 SHT.19 F-3

OTF83AA 3"

OTF83AB 3"

OWX057A

OWX057B

OWX052A

OWX052B

OWX054A

OWX054B

OWX055A

OWX055B

OWX058A

OWX058B

OWX148A

OWX148B

OWX204A

OWX204B

OWX205A

OWX205B

OPI-WX2601

OPI-WX2600

OPI-WX2602

OPI WX260 LM

OPI-WX2771

OPI-WX2770

OPI-WX2772

OPI WX277 LM

1/2"x1/4" RED.

1/2"x3/8" RED.

2"x1½" ECC. RED

AUGMENTED "D" PIPING (PIPE CLASS "P") AND COMPONENTS ARE CONTAINED ON THIS DRAWING. SEE THE VALVE, LINE, EQUIPMENT AND SPECIALTY LISTS FOR PROPER CLASSIFICATION. ALSO SEE SPEC. K-2882, PAR. 201.7a.

ENGINEERING NOTES:

2. FOR PLUG VALVE OPERATOR ASSEMBLY DETAIL SEE M05-1085 SHEET 1
3. PIPE CAP SHOULD BE INSTALLED WITH MINIMUM DISTANCE TO SHIELDWALL
4. CAPS SHOULD BE INSTALLED A MAXIMUM OF 2 IN. FROM VALVE OR LINE.

NOTE:
THE P & I, D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9089 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-RADWASTE SLUDGE PROCESS CONCENTRATE TANK
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