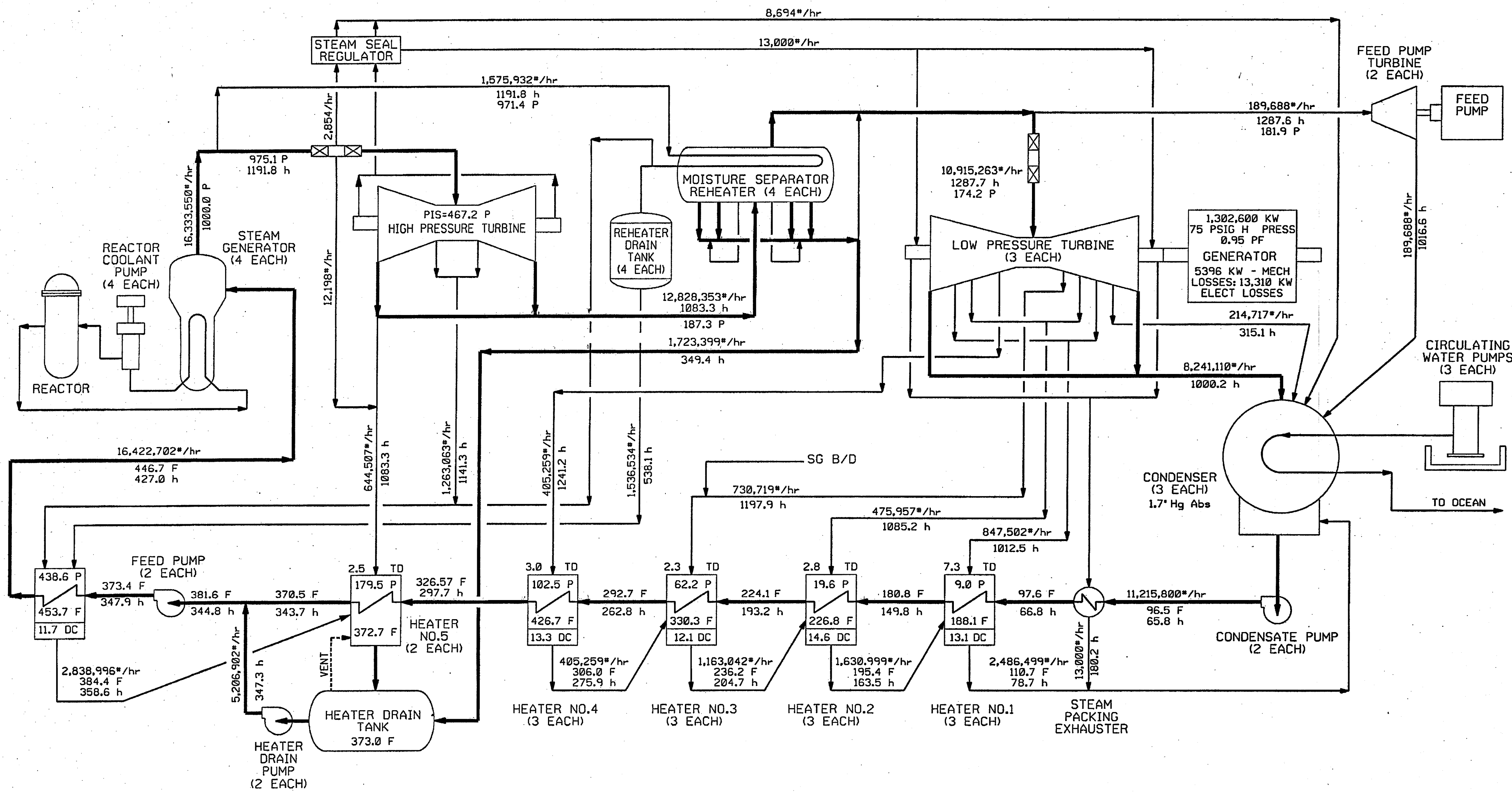


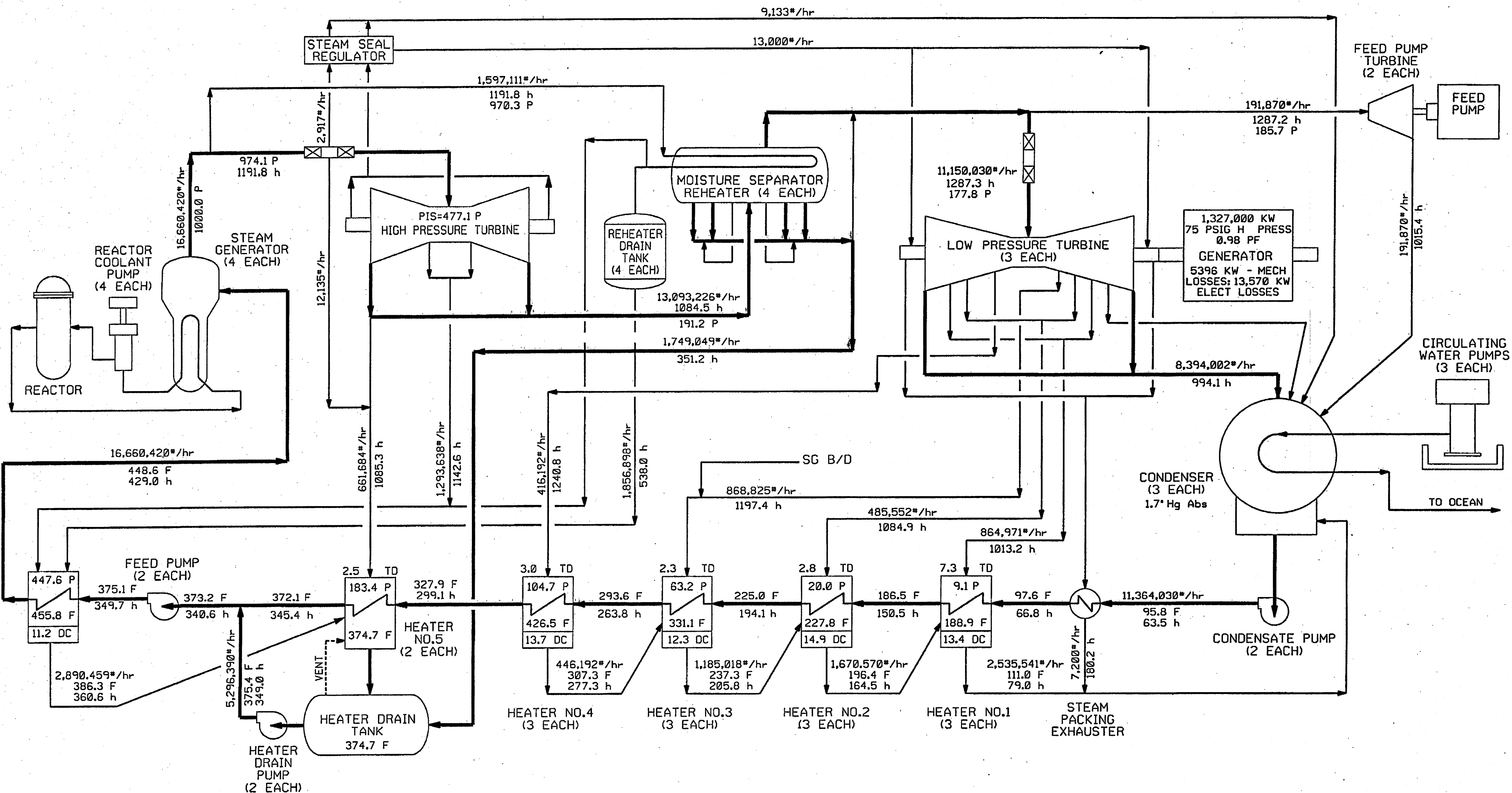
10-24-06



4	10/25/06	KCS	JME	MBL	IAW	REDRAWN FOR MUR	DEC 04-015 DCN 00
3	5/16/05	KCS	JME	MBL	IAW	REDRAWN FOR SPU	DEC 02-003 DCN 00
REV	DATE	DRWN	CHKD	CDE	SES	DESCRIPTION	



**FPL ENERGY** SEABROOK STATION  
**HEAT BALANCE**  
**100 % LOAD**  
**1-NHY-202116**  
\\UPRATE\HEATBALANCE.DGN



2	10/15/06	KCS	JME	MDL	IAW	REDRAWN FOR MUR DEC 05-013 DCM
1	5/16/05	KCS	JME	MDL	IAW	REDRAWN FOR SPU
REV	DATE	DRWN	CHKD	CDE	SES	DESCRIPTION

**FPL ENERGY** SEABROOK STATION

**HEAT BALANCE**  
VALVES WIDE OPEN

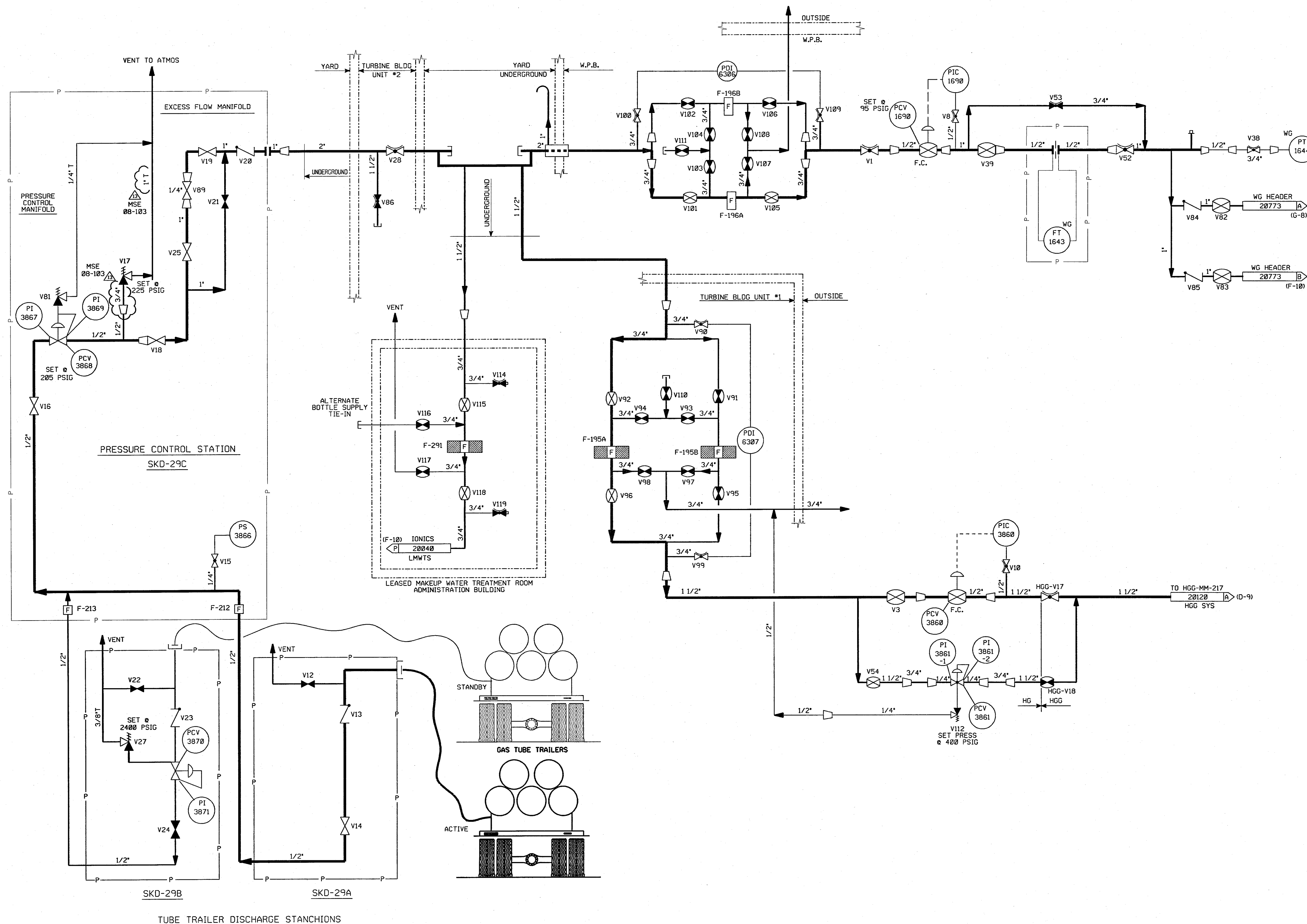
**I-NHY-202115**

SEABROOK STATION

UPRATE\HEATBALANCE.DGN

88802B-9H-1 PID-1-HC-B20888

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

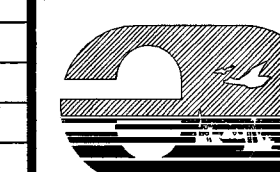


- NOTES:
1. THE HG SYSTEM IS A ONE (1) DRAWING SYSTEM, AN OVERVIEW IS NOT REQUIRED.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX HG UNLESS NOTED.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
  4.  $\Delta$  INDICATES REVISION LEVEL.
  5. DELETED

13	4/27/08	JM	BCS	RRB	INCORP MSE 08-103 REV-00
12	4/17/08	JM	BCS	RRB	PARTIAL INCORP MSE 01-206 REV-00
11	4/27/99	RWS	BCS	VWS	INCORP MMD 98-0564 DCN 00
10	6/02/98	DRL	BCS	VWS	INCORP MMD 97-521 DCN 00
9	6/12/97	MPW	DWS	RRC	INCORP MMD 96-531 DCN 00
8	8/3/94	DWS	BCL	WFZ	INCORP DCR 930031 CA#0, 4 & 7
7	10/9/91	MRB	DSB	RWM	INCORP DCR 86-227 CA#0 AND DCR 89-67 CA01
6	2/15/91	DWS	MRB	RSG	INCORP DCR 86-227 CA#0 EXCEPT CA#6
5	12/20/89	MRB	PAL	IW	INCORP DCR 87-268 CA#0, ADDED: SYS PREFIX PER NOTE 2.
4	2/2/89	MRB	GPM	GM	REVISED: V69 THRU V80 SYMBOL PER ECA 08/113687C, V21 SYMBOL PER UE & C P & ID 9763-F-005938, NOTE 3.
3	12/11/86	MAP	MPW	RRC	ADDED CONT REF LOCATIONS, DELETED NOTE 5, CHANGE ITEM PER ASBUILT CONDITION
2	9/26/86	JDM	MPW	RRC	RESOLVED CHANGE ITEM NO 2 PER ECA 19/118426A.
1	6/19/86	WC	JDM	RRC	INC ECA 08/113687C, DR 34/418A, ADDED CHG. ITEM 2 & 3 RESOLVED CHG. ITEM 1 BY ECA 08/113687C
0	02/06/86	DEE	JDM	EWD	ISSUED FOR OPERATIONS & INCORP. ECA'S 19/107612A & 99/109375A
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

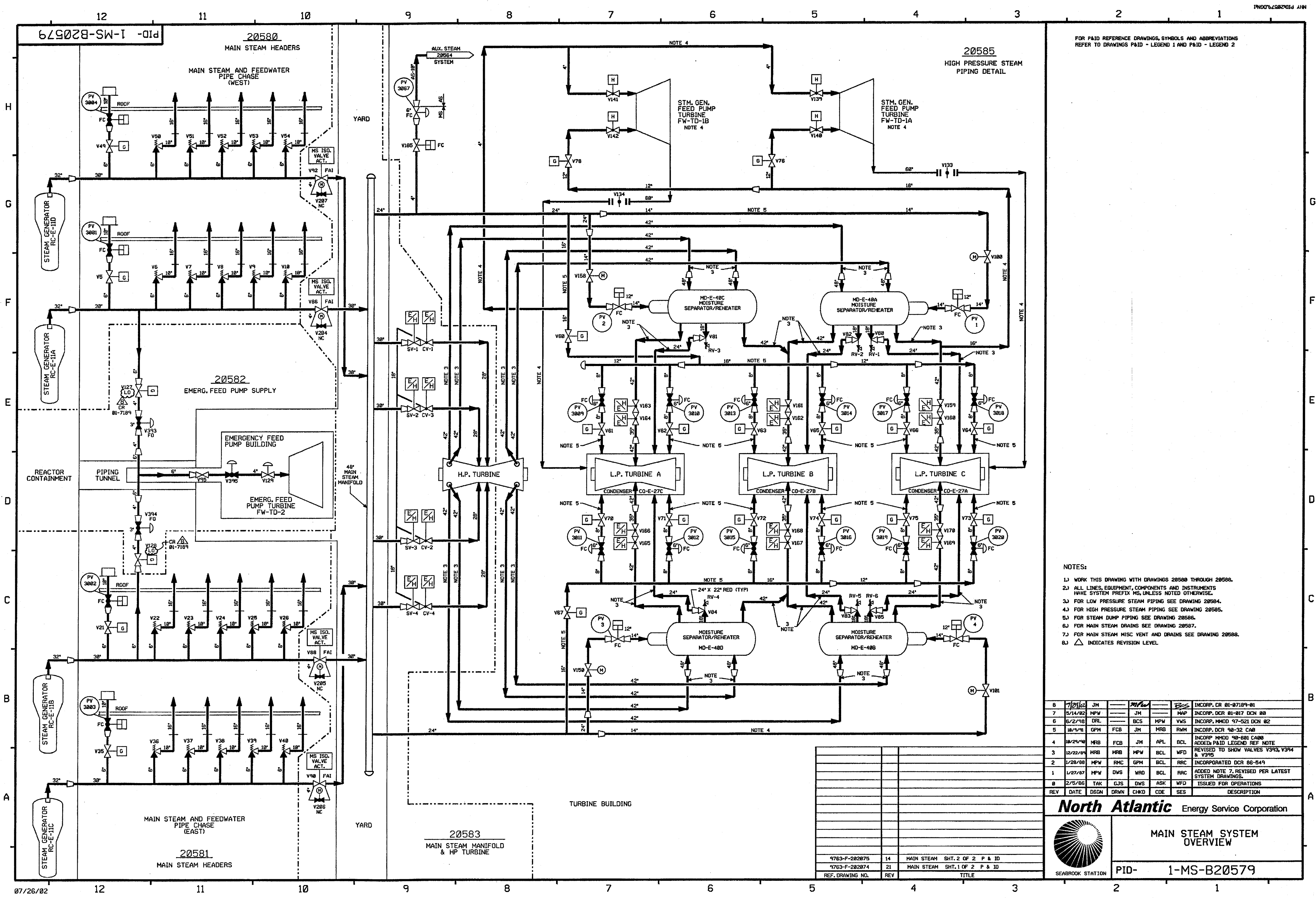
9763-F-615024	8	ADMIN. & SERV. BLDG. FIRST FLR. SHT 3
9763-F-615031	5	ADMIN. & SERV. BLDG. PLUMBING-GAS
FP-56242	2	HYD. PRESS. RED. & FLOW CONTROL STATION
9763-F-005612	12	RADIOACTIVE GAS WASTE SYS. P&ID.
9763-F-005038	4	GAS SERVICE SYS. HYDROGEN P&ID.
REF. DRAWING NO.	REV	TITLE

**FPL ENERGY** Seabrook Station

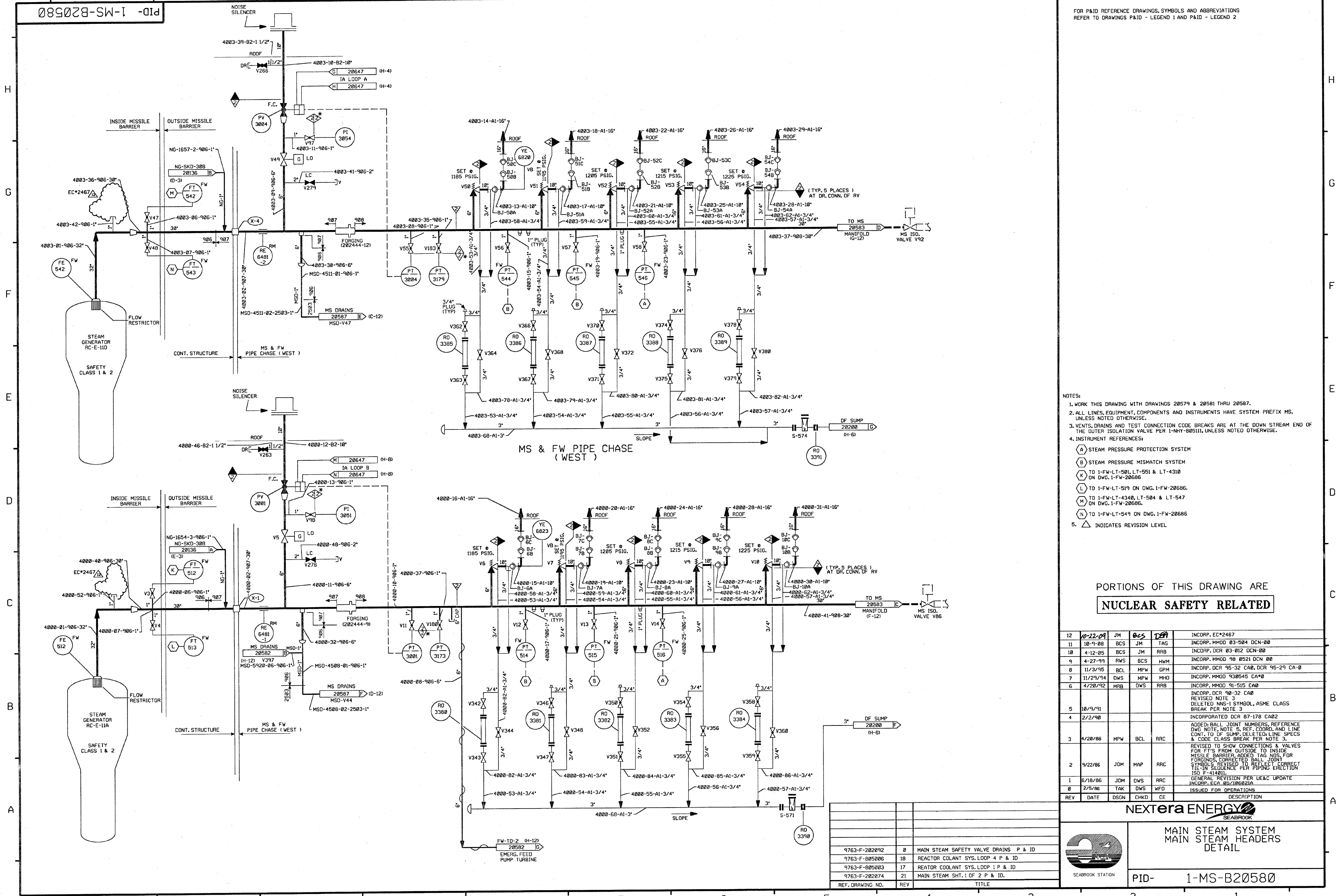


HYDROGEN GAS SYSTEM


PID- 1-HG-B20888







FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20579 & 20581 THRU 20587.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX MS, UNLESS NOTED OTHERWISE.
  3. VENTS, DRAINS AND TEST CONNECTION CODE BREAKS ARE AT THE DOWN STREAM END OF THE OUTER ISOLATION VALVE PER I-NHY-805111, UNLESS NOTED OTHERWISE.
  4. INSTRUMENT REFERENCES:
    - (A) STEAM PRESSURE PROTECTION SYSTEM
    - (B) STEAM PRESSURE MISMATCH SYSTEM
    - (K) TO 1-FW-LT-501, LT-551 & LT-4310  
ON DWG. 1-FW-20668
    - (L) TO 1-FW-LT-519 ON DWG. 1-FW-20686.
    - (M) TO 1-FW-LT-4340, LT-584 & LT-547  
ON DWG. 1-FW-20668.
    - (N) TO 1-FW-LT-549 ON DWG. 1-FW-20686
  5.  INDICATES REVISION LEVEL

PORTIONS OF THIS DRAWING ARE  
**NUCLEAR SAFETY RELATED**

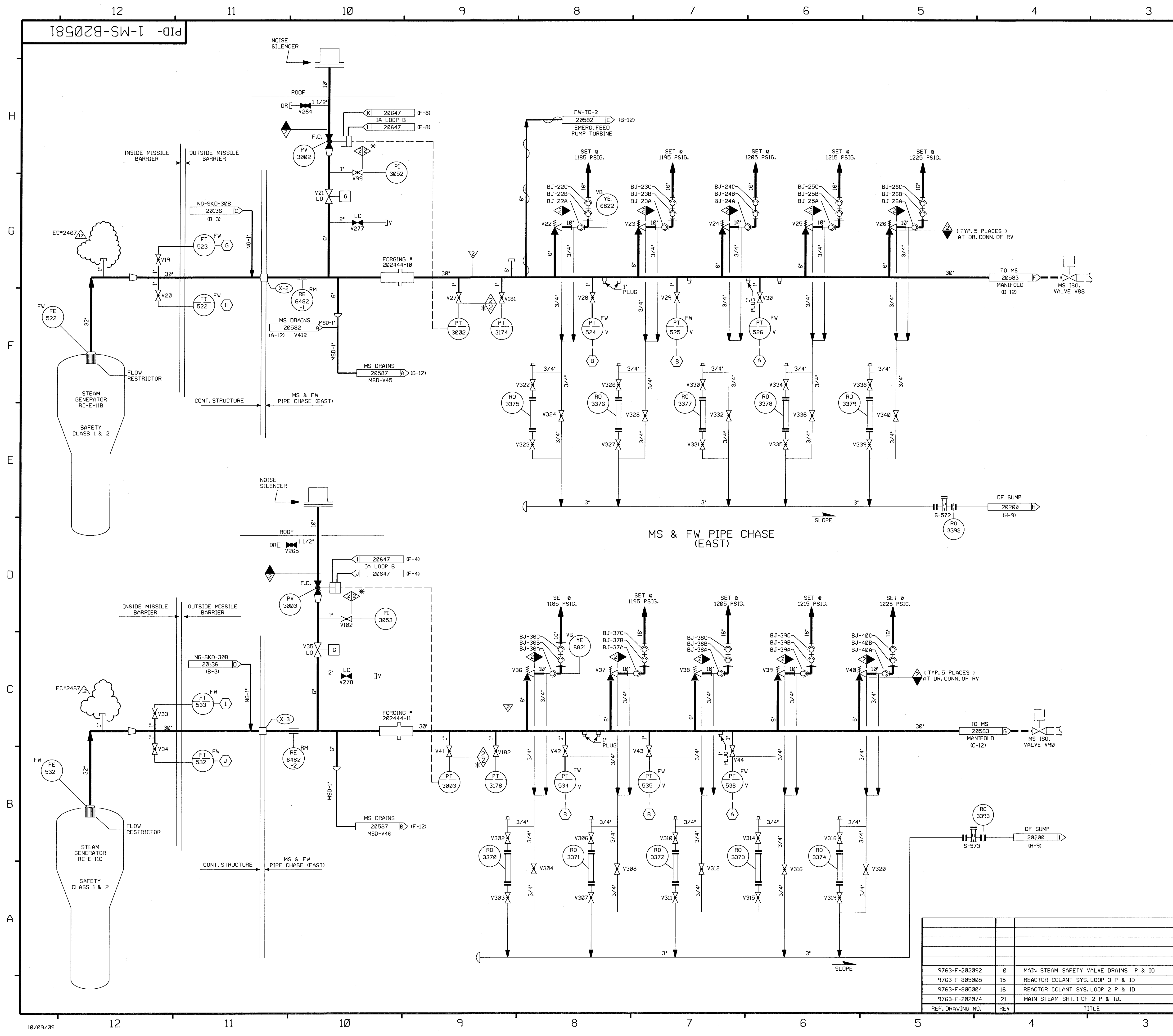
12	10-22-09	JM	BES	DBA	INCORP. EC*2467
11	10-9-08	BGS	JM	TAS	INCORP. MMOD 03-054 DCN-00
10	4-12-05	BGS	JM	RRB	INCORP. DCR 03-012 DCN-00
9	4-27-99	RWL	BGS	HWM	INCORP. MMOD 98 0521 DCN 00
8	11/3/95	BCL	MPW	GPW	INCORP. DCR 95-32 CA0, DCR 95-29 CA-0
7	11/29/94	DWS	MPW	MHO	INCORP. MMOD 930545 CA*0
6	4/20/92	MRB	DWS	RRB	INCORP. MMOD 91-515 CA0
5	18/9/91				INCORP. DCR 90-32 CA0 REVISED NOTE 3
4	2/2/90				DELETED NMS-1 SYMBOL, ASME CLASS BREAK PER NOTE 3
3	4/20/88	MPW	BCL	RRC	INCORPORATED DCR 87-178 CA02 ADDED: BALL JOINT NUMBERS, REFERENCE DWG NOTE, NOTE 5, REF. EGDRO, AND LINE CONT. TO UP SURF. DELETED LINE SPECS & CODE CLASS BREAK PER NOTE 3.
2	9/22/86	JDM	MAP	RRC	REVISED TO SHOW CONNECTIONS & VALVES FOR FTS FROM OUTSIDE TO INSIDE MISSED BARRIER, ADDED TAP NOS. FOR FORCINGS, CORRECTED BALL JOINT SYMBOLS, REVISED TO REFLECT CORRECT LINE IN QUANTITY PER PIPING SECTION ISO F-414011.
1	6/18/86	JDM	DWS	RRC	GENERAL REVISION PER US&C UPDATE INCORP. ECR 89/186921A
0	2/5/86	TAJ	DWS	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

USGN	CHRD	CE	DESCRIPTION
NEXTera ENERGY			
			SEABROOK

MAIN STEAM SYSTEM  
MAIN STEAM HEADERS  
DETAIL

PID-	1-MS-B20580
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9763-F-202092	0	MAIN STEAM SAFETY VALVE DRAINS P & ID
9763-F-805006	18	REACTOR COLANT SYS.LOOP 4 P & ID
9763-F-805003	17	REATOR COOLANT SYS.LOOP 1 P & ID
9763-F-202074	21	MAIN STEAM SHT.1 OF 2 P & ID.
REF. DRAWING NO.	REV	TITLE

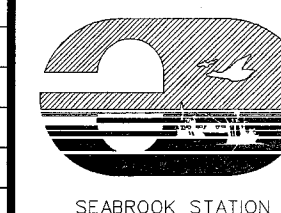


FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20579, 20580, 20582 THRU 20587.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX MS, UNLESS NOTED OTHERWISE.
  3. VENTS, DRAINS AND TEST CONNECTION CODE BREAKS ARE AT THE DOWN STREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-805111 UNLESS NOTED OTHERWISE.
  4. INSTRUMENT REFERENCES:
    - (A) STEAM PRESSURE PROTECTION SYSTEM
    - (B) STEAM PRESSURE MISMATCH SYSTEM
    - (G) TO 1-FW-LT-552, LT-502 & LT-4320 ON DWG. 1-FW-20686
    - (H) TO 1-FW-LT-529 ON DWG. 1-FW-20686.
    - (I) TO 1-FW-LT-4330, LT-538 & LT-503 ON DWG. 1-FW-20686.
    - (J) TO 1-FW-LT-539, LT-4330 ON DWG. 1-FW-20686
  5. Δ INDICATES REVISION LEVEL.

PORTIONS OF THIS DRAWING ARE  
**NUCLEAR SAFETY RELATED**


12	10-22-09	JM	BCS	DBA	INCORP. EC*2467
11	7/31/06	BCS	JM	RRB	INCORP. MMDD 03-504 DCN-00
10	4-12-05	BCS	JM	RRB	INCORP. DCR 03-12 DCN-00
9	4-27-99	RWS	JM	HWM	INCORP. MMDD 98 0521 DCN 00
8	7/30/97	MPW	BCS	VMS	INCORP. MMDD 967-550 DCN 01
7	11/3/95	BCL	MPW	GRM	INCORP. DCR 95-32 CA0, DCR 95-29 CA-0
6	11/29/94	DWS	MPW	MHO	INCORP. MMDD 930545 CA*0
5	4/14/92	MRB	DWS	JEV	INCORP. MMDD 91-515 CA0
4	10/9/91	GPM	JM	RWM	INCORP. DCR 90-32 CA0
3	2/12/90	MRB	APL	IV	REVISED NOTE 3 INCORP. DCR 87-178 CA 02.
2	9/8/88	MPW	GPM	RRR	REVISION NOTE 3 ADDED: P&ID LEGEND NOTE, BALL JOINT NUMBERS PER UE & C.P. & ID 202074, NOTE 5, REF. CONT. COORD. AND CONT. OF DRAIN LINES TO DF SUMP. DELETED: CL BREAK
1	9/26/86	MRJ	BCL	RRR	INCORP. ECA 19/3783A, 08/113712B & 02/687C, REVISED BUILDING BOUNDARY, CONTINUATION REFERENCES & ADDED FORGING TAG NUMBERS.
0	2/5/86	TAK	DWS	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION



**NEXTERA ENERGY**  
SEABROOK  
MAIN STEAM SYSTEM  
MAIN STEAM HEADERS  
DETAIL  
PID- 1-MS-B20581

9763-F-202092	0	MAIN STEAM SAFETY VALVE DRAINS P & ID
9763-F-805005	15	REACTOR COLANT SYS. LOOP 3 P & ID
9763-F-805004	16	REACTOR COLANT SYS. LOOP 2 P & ID
9763-F-202074	21	MAIN STEAM SHT. 1 OF 2 P & ID.
REF. DRAWING NO.	REV	TITLE

NOTES:

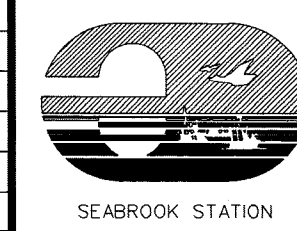
1. WORK THIS DRAWING WITH DRAWINGS 20579, 20580, 20581 & 20583 THROUGH 20587.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "MS", UNLESS NOTED OTHERWISE.
3. VENTS, DRAINS AND TEST CONNECTION COE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER I-HWY-805111, UNLESS NOTED OTHERWISE.
4. DELETED
5. CHECK VALVES V417, V418, V401, V400, V404, & V405 ARE TO BE INSTALLED OPPOSITE FROM DIRECTION OF FLOW IN VERTICAL RUN OF PIPE SUCH THAT THEY HANG OPEN AND ALLOW DRAINAGE WHEN SYSTEM IS DEPRESSURIZED, THUS ENSURING CONDENSATE DRAINAGE & PREVENTING WATER HAMMER.
6. VALVES V299 & V300 ARE THROTTLED ¼ OPEN FROM FULL CLOSED POSITION.
7. THE INTERNALS FROM VALVES V267 & V268 HAVE BEEN REMOVED.
8.  INDICATES ANSI SAFETY CLASS 3, NOT ASME COE CLASS 3. (MANUFACTURE'S STANDARDS)
9. FOR INSTRUMENT AIR DETAILS SEE PID 1A-B20647.
10. FOR INSTRUMENT AIR DETAILS SEE PID 1A-B20644.
11. EPF TURBINE VENT & DRAIN LINES ARE CONTAINED IN A HEATED ENCLOSURE PER MMOD 03-505.

PORTIONS OF THIS DRAWING ARE

<b>NUCLEAR SAFETY RELATED</b>
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20	4/7/11	GFS	JM	D&A	INCOMP. EC-2569
17	7/31/06	BCS	JM	RRB	INCOMP. MMOD 03-504 DCN 00
18	10/8/03	BCS	MPW	MAP	INCOMP. DCR 00-021 DCN 00
17	9/10/03	JM	BCS	MAP	INCOMP. MMOD 03-0505 DCN 00
16	10/22/02	JM	MPW	BCS	INCOMP. CR 01-05172 REV 00
15	5/14/02	MPW	JM	MAP	INCOMP. DCR 01-017 DCN 00
14	11/22/00	BCS	MPW	DJM	REINCOMP. MMOD 98-599 DCN-00
13	6/3/98	BCS	MPW	RRB	INCOMP. MMOD 98-599 DCN-00
12	6/3/98	BCS	MPW	VWS	REINCOMP. MMOD 96-550 DCN 02
11	8/18/97	MPW	BCS	VWS	REINCOMP. MMOD 96-550 DCN 02
10	6/20/97	DWS	MPW	BAW	INCOMP. DCR 970004 DCN#00
9	11/29/95	MPW	BCS	GRM	INCOMP. DCR 94-43 CA0
8	10/29/92	BCL	MRB	RRB	INCOMP. MMOD 92-502 CA0,02
7	4/20/92	MRB	BCL	RSG	INCOMP. MMOD 91-515 CA0
6	10/9/91	GRM	JM	RWM	INCOMP. DCR 90-32 CA0
5	6/4/90	MPW	JM	GRM	REVISED: NOTE 3 ADDED: CONT COORD DELETED: ASME CLASS BREAK PER NOTE 3
4	2/9/90	MRB	APL	RRC	INCORPORATED MMOD 90-530 CA0
3	6/1/87	MRJ	DS	RRC	INCOMP. DCR 89-41 CA12 REVISED NOTE 3
2	9/22/86	MRJ	MAP	RLC	IDENT. SUMP LOCATIONS, ADDED SYSTEM & CLASS BREAKS, INCOMP'D DCR 87-212 REVISED BLDG. LOCATIONS, ADDED CONTINUATION REFS. V293 WAS DATE VLV, INCOMP. ECA 08/680259B, REV'D PER LATEST U&E& P&ID.
1	7/2/86	OPD II	BCL	RRC	REVISED PER ECA 08/113712B AND 08/117428A
0	2/5/86	TAK	DWS	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**NEXTERA ENERGY**   
SEABROOK

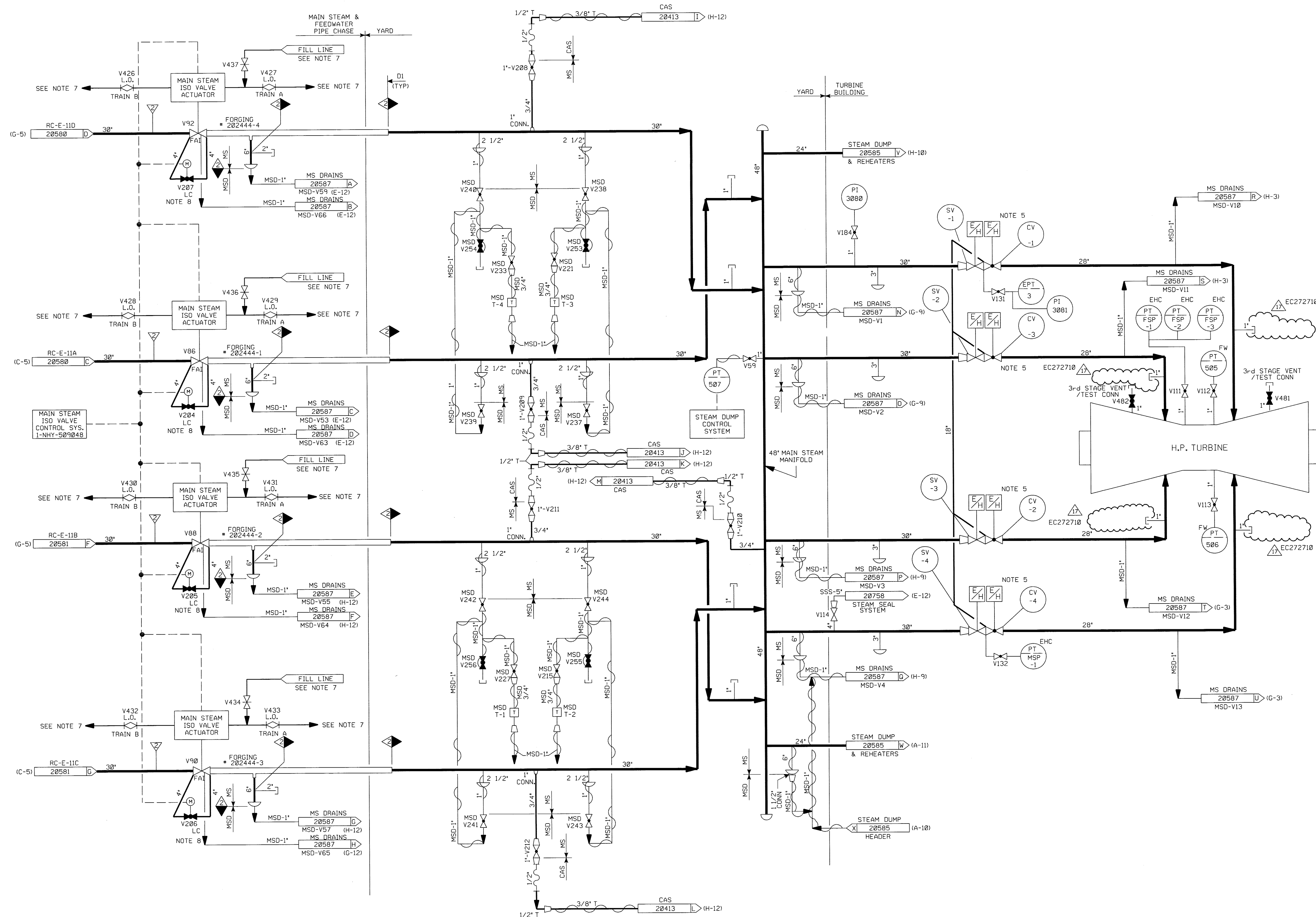


MAIN STEAM SYSTEM  
EMERGENCY FEEDWATER  
PUMP SUPPLY  
DETAIL

PID-	1-MS-B20582
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FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID-LEGEND 1 AND P&ID-LEGEND 2.



PORTIONS OF THIS DRAWING ARE  
**NUCLEAR SAFETY RELATED**

NOTES:

1. WORK THIS DRAWING WITH DRAWINGS 20579 THRU 20582 & 20584 THRU 20587.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX MS, UNLESS NOTED OTHERWISE.
3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
4. DELETED
5. ABOVE SEAT DRAINS ON BOTH TURBINE STOP VALVES & TURBINE CONTROL VALVES ARE SHOWN ON DRAWING B20587.
6.  INDICATES REVISION LEVEL
7. TO HYDRAULIC SYSTEM SEE FP23003 SHT 9 & 13 ITEMS 2-31.3-31 & 2-7.
8. VALVE MAY BE OPEN DURING PLANT START-UP OR SURVEILLANCE TESTING. (REF. OCR 07-002)

17	6/5/11	JM	JM	BB	INCORP EC 272710
16	10/10/09	BGS	JM	BBB	INCORP EC12635
15	8/14/08	BCS	DJM	RRB	INCORP DCR 07-003 DCR-02
14	10-11-86	BGS	JM	RRB	INCORP DCR 04-015 DCR-00, 01
13	12-23-04	JM	BGS	RRB	INCORP CR 04-12622 REV. 0
12	9/7/04	JM	BGS	RRB	INCORP MSE 03-111, REV.0
11	6/22/98	DRL	BCS	VWS	INCORP MM0D 97-521 DCR 02
10	8/18/97	MPW	BCS	VWS	INCORP MM0D 96-950 DCR 01
9	11/19/95	BCL	MPW	MPW	INCORP MM0D 95-523 CA0
8	1/21/92	MRB	BCL	RRC	INCORP MM0D 91-511 CA01 INCORP MM0D 90-633 CA01
7	10/29/90	MRB	DSB	BCL	INCORP MM0D 90-601 CA00
6	6/18/90	MRB	HP	IW	INCORP MM0D 90-609 CA 0
5	1/28/88	MPW	GPM	RRC	INCORP DCR 87-714 & DCR 86-549 REVISED: NOTE 3
4	5/8/87	GPM	DWS	VWS	ADDED HYDRAULIC SHUT OFF VALVES & NOTE 7 PER FP23003.
3	4/22/87	GPM	DWS	VWS	ADDED CONTROL LINE TO MSIV CONTROL SYSTEM PER UE&C CONTROL LOOP DIAGRAMS, REVISED PIPING TO REFLECT AS-INSTALLED CONDITIONS.
2	10/9/86	MRJ	MAP	RRC	INCORP ECA 19/1099999A, & 08/116467A AND 19/109357A, ADDED CONTROL REF. COLOR LEG. NOTE 6 AND LEGEND NOTE 1. DELETED NOTE 4, ADDED VALVE SIZES PER UE&C P&ID & P.P. REV. 11. REF. BLDDK.
1	6/23/86	GPO	JDM- VWK	RRC	ADDED SYSTEM DESIGN TO 2 MSID LINES INCORPORATED ECA 19/11303A
0	2/5/86	TAK	DWS	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CD	DESCRIPTION

**NEXTERA ENERGY**  
SEABROOK

MAIN STEAM SYSTEM  
MAIN STEAM MANIFOLD  
& H.P. TURBINE PIPING  
DETAIL

PID- 1-MS-B20583

[illegible]

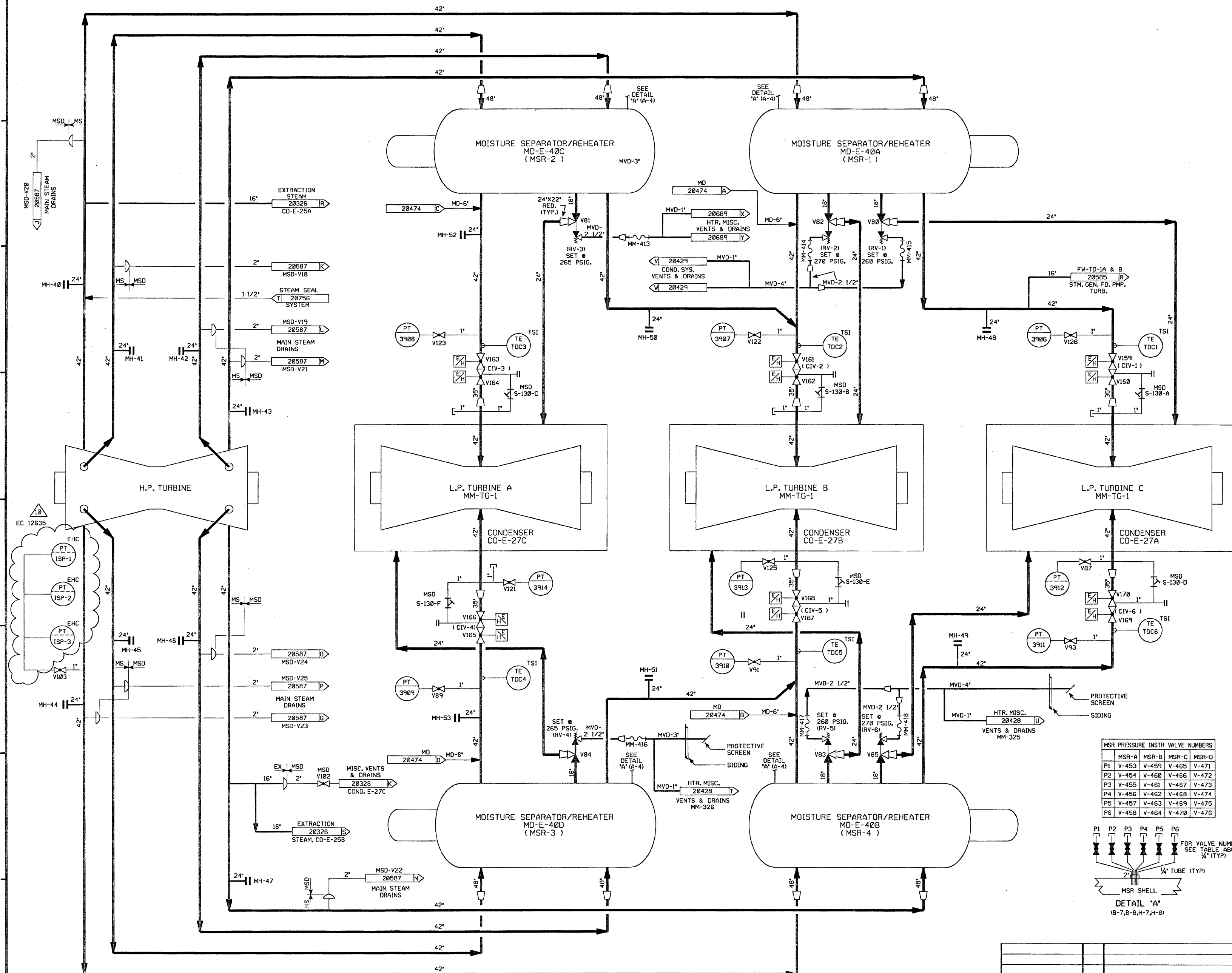


PID-1-MS-B20584

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

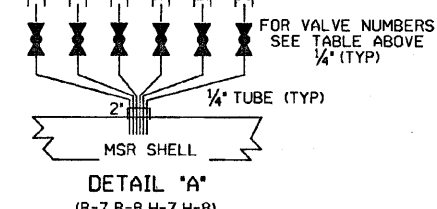
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G  
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H  
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A



- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20579 THRU 20583 & 20585 THRU 20587.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX MS, UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NWS, NON-SEISMIC, CATEGORY I UNLESS NOTED OTHERWISE.
  4.  $\Delta$  INDICATES REVISION LEVEL.

MSR	MSR-A	MSR-B	MSR-C	MSR-D
P1	V-453	V-459	V-465	V-471
P2	V-454	V-460	V-466	V-472
P3	V-455	V-461	V-467	V-473
P4	V-456	V-462	V-468	V-474
P5	V-457	V-463	V-469	V-475
P6	V-458	V-464	V-470	V-476



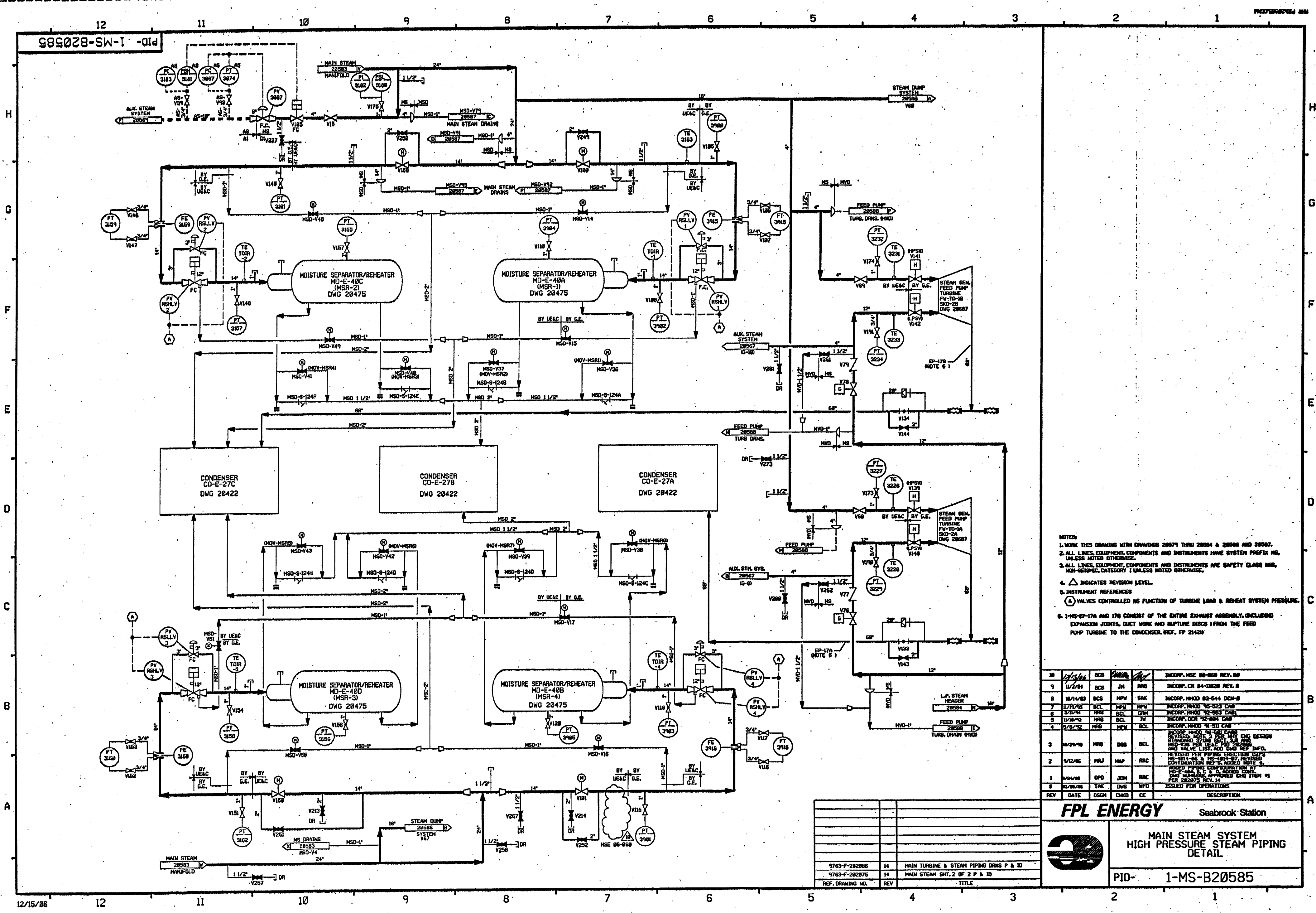
REV	DATE	DSN	CHKD	CE	DESCRIPTION
10	10/10/07	BCS	JM	RRB	INCORP EC 12635
9	10/16/08	BCS	JM	RRB	INCORP CR 08-03527 REV 00
8	4/13/05	BCS	JM	RRB	INCORP MMDO 04-510 DCN-00, DCR 03-010 DCN-00, 02
7	2/23/03	BCS	JM	RRB	ADD CH LEGEND, REF. NOTE
6	1/7/03	JM	MPW	BCS	INCORP CR 04-09401 REV 00
5	5/3/99	DWS	BCS	SD	INCORP MMDO 970619 DCN-00
4	3/21/95	MRB	BCL	DAS	INCORP DCR 92-004 C&B
3	5/8/92	MRB	MPW	BCL	INCORP MMDO 91-511 C&B, CAI
2	9/17/86	PAL	MAP	RRC	REVISED TO INCORP FP 21702 & 20166 (DETAILS OF GE CROSS AROUND PIPING)
1	6/18/86	BLI	DWS	RRC	ADDED CONTINUATION REF. ADDED NOTE 4
0	2/5/86	TAK	DWS	WFD	ISSUED FOR OPERATIONS

**NEXTERA ENERGY**  
SEABROOK

**MAIN STEAM SYSTEM  
LOW PRESSURE STEAM PIPING  
DETAIL**

PID- 1-MS-B20584


REF. DRAWING NO.	REV	TITLE
FP 20166		CROSS-AROUND PIPING OUTLINE SHT. 1
9763-F-202001	7	MOISTURE SEP. DRAINS & VENT SYS. P & ID
9763-F-202075	14	MAIN STEAM SHT. 2 OF 2 P & ID



- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28579 THRU 28584 AND 28586 AND 28587.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX MS, UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS MS, NON-SEISMIC, CATEGORY I UNLESS NOTED OTHERWISE.
  4.  $\Delta$  INDICATES REVISION LEVEL.
  5. INSTRUMENT REFERENCES
  6.  $\Delta$  VALVES CONTROLLED AS FUNCTION OF TURBINE LOAD & HEAT SYSTEM PRESSURE.
  7. 1-MS-EP-17A AND 17B CONSIST OF THE ENTIRE EXHAUST ASSEMBLY, INCLUDING EXPANSION JOINTS, DUCT WORK AND RUPTURE DISCS FROM THE FEED PUMP TURBINE TO THE CONDENSER, REF. PP 21420.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
18	12/15/86	BCS	JN	RFB	INCORP. HSE 84-008 REV. 00
9	11/2/84	BCS	JN	RFB	INCORP. CR 84-11828 REV. 0
8	10/14/83	BCS	MPV	SAK	INCORP. HMD 82-544 DCM-9
7	11/19/82	BCL	MPV	MPV	INCORP. HMD 82-523 CMI
6	3/11/81	HRS	BCL	GRH	INCORP. HMD 82-523 CMI
5	1/18/80	HRS	BCL	IM	INCORP. DCM 82-584 CMI
4	5/8/82	HRS	MPV	BCL	INCORP. HMD 82-523 CMI
3	8/29/78	HRS	DSB	BCL	INCORP. HMD 82-523 CMI REVISED NOTE 3 PER HAY ENG DESIGN STANDARD 27-1000 1.0 AND MSD-124H, 124I, 124J, 124K, 124L, 124M, 124N, 124O, 124P, 124Q, 124R, 124S, 124T, 124U, 124V, 124W, 124X, 124Y, 124Z, 124AA, 124AB, 124AC, 124AD, 124AE, 124AF, 124AG, 124AH, 124AI, 124AJ, 124AK, 124AL, 124AM, 124AN, 124AO, 124AP, 124AQ, 124AR, 124AS, 124AT, 124AU, 124AV, 124AW, 124AX, 124AY, 124AZ, 124BA, 124BB, 124BC, 124BD, 124BE, 124BF, 124BG, 124BH, 124BI, 124BJ, 124BK, 124BL, 124BM, 124BN, 124BO, 124BP, 124BQ, 124BR, 124BS, 124BT, 124BU, 124BV, 124BW, 124BX, 124BY, 124BZ, 124CA, 124CB, 124CC, 124CD, 124CE, 124CF, 124CG, 124CH, 124CI, 124CJ, 124CK, 124CL, 124CM, 124CN, 124CO, 124CP, 124CQ, 124CR, 124CS, 124CT, 124CU, 124CV, 124CW, 124CX, 124CY, 124CZ, 124DA, 124DB, 124DC, 124DD, 124DE, 124DF, 124DG, 124DH, 124DI, 124DJ, 124DK, 124DL, 124DM, 124DN, 124DO, 124DP, 124DQ, 124DR, 124DS, 124DT, 124DU, 124DV, 124DW, 124DX, 124DY, 124DZ, 124EA, 124EB, 124EC, 124ED, 124EE, 124EF, 124EG, 124EH, 124EI, 124EJ, 124EK, 124EL, 124EM, 124EN, 124EO, 124EP, 124EQ, 124ER, 124ES, 124ET, 124EU, 124EV, 124EW, 124EX, 124EY, 124EZ, 124FA, 124FB, 124FC, 124FD, 124FE, 124FF, 124FG, 124FH, 124FI, 124FJ, 124FK, 124FL, 124FM, 124FN, 124FO, 124FP, 124FQ, 124FR, 124FS, 124FT, 124FU, 124FV, 124FW, 124FX, 124FY, 124FZ, 124GA, 124GB, 124GC, 124GD, 124GE, 124GF, 124GG, 124GH, 124GI, 124GJ, 124GK, 124GL, 124GM, 124GN, 124GO, 124GP, 124GQ, 124GR, 124GS, 124GT, 124GU, 124GV, 124GW, 124GX, 124GY, 124GZ, 124HA, 124HB, 124HC, 124HD, 124HE, 124HF, 124HG, 124HH, 124HI, 124HJ, 124HK, 124HL, 124HM, 124HN, 124HO, 124HP, 124HQ, 124HR, 124HS, 124HT, 124HU, 124HV, 124HW, 124HX, 124HY, 124HZ, 124IA, 124IB, 124IC, 124ID, 124IE, 124IF, 124IG, 124IH, 124II, 124IJ, 124IK, 124IL, 124IM, 124IN, 124IO, 124IP, 124IQ, 124IR, 124IS, 124IT, 124IU, 124IV, 124IW, 124IX, 124IY, 124IZ, 124JA, 124JB, 124JC, 124JD, 124JE, 124JF, 124JG, 124JH, 124JI, 124JJ, 124JK, 124JL, 124JM, 124JN, 124JO, 124JP, 124JQ, 124JR, 124JS, 124JT, 124JU, 124JV, 124JW, 124JX, 124JY, 124JZ, 124KA, 124KB, 124KC, 124KD, 124KE, 124KF, 124KG, 124KH, 124KI, 124KJ, 124KK, 124KL, 124KM, 124KN, 124KO, 124KP, 124KQ, 124KR, 124KS, 124KT, 124KU, 124KV, 124KW, 124KX, 124KY, 124KZ, 124LA, 124LB, 124LC, 124LD, 124LE, 124LF, 124LG, 124LH, 124LI, 124LJ, 124LK, 124LL, 124LM, 124LN, 124LO, 124LP, 124LQ, 124LR, 124LS, 124LT, 124LU, 124LV, 124LW, 124LX, 124LY, 124LZ, 124MA, 124MB, 124MC, 124MD, 124ME, 124MF, 124MG, 124MH, 124MI, 124MJ, 124MK, 124ML, 124MM, 124MN, 124MO, 124MP, 124MQ, 124MR, 124MS, 124MT, 124MU, 124MV, 124MW, 124MX, 124MY, 124MZ, 124NA, 124NB, 124NC, 124ND, 124NE, 124NF, 124NG, 124NH, 124NI, 124NJ, 124NK, 124NL, 124NM, 124NN, 124NO, 124NP, 124NQ, 124NR, 124NS, 124NT, 124NU, 124NV, 124NW, 124NX, 124NY, 124NZ, 124OA, 124OB, 124OC, 124OD, 124OE, 124OF, 124OG, 124OH, 124OI, 124OJ, 124OK, 124OL, 124OM, 124ON, 124OO, 124OP, 124OQ, 124OR, 124OS, 124OT, 124OU, 124OV, 124OW, 124OX, 124OY, 124OZ, 124PA, 124PB, 124PC, 124PD, 124PE, 124PF, 124PG, 124PH, 124PI, 124PJ, 124PK, 124PL, 124PM, 124PN, 124PO, 124PP, 124PQ, 124PR, 124PS, 124PT, 124PU, 124PV, 124PW, 124PX, 124PY, 124PZ, 124QA, 124QB, 124QC, 124QD, 124QE, 124QF, 124QG, 124QH, 124QI, 124QJ, 124QK, 124QL, 124QM, 124QN, 124QO, 124QP, 124QQ, 124QR, 124QS, 124QT, 124QU, 124QV, 124QW, 124QX, 124QY, 124QZ, 124RA, 124RB, 124RC, 124RD, 124RE, 124RF, 124RG, 124RH, 124RI, 124RJ, 124RK, 124RL, 124RM, 124RN, 124RO, 124RP, 124RQ, 124RR, 124RS, 124RT, 124RU, 124RV, 124RW, 124RX, 124RY, 124RZ, 124SA, 124SB, 124SC, 124SD, 124SE, 124SF, 124SG, 124SH, 124SI, 124SJ, 124SK, 124SL, 124SM, 124SN, 124SO, 124SP, 124SQ, 124SR, 124SS, 124ST, 124SU, 124SV, 124SW, 124SX, 124SY, 124SZ, 124TA, 124TB, 124TC, 124TD, 124TE, 124TF, 124TG, 124TH, 124TI, 124TJ, 124TK, 124TL, 124TM, 124TN, 124TO, 124TP, 124TQ, 124TR, 124TS, 124TT, 124TU, 124TV, 124TW, 124TX, 124TY, 124TZ, 124UA, 124UB, 124UC, 124UD, 124UE, 124UF, 124UG, 124UH, 124UI, 124UJ, 124UK, 124UL, 124UM, 124UN, 124UO, 124UP, 124UQ, 124UR, 124US, 124UT, 124UU, 124UV, 124UW, 124UX, 124UY, 124UZ, 124VA, 124VB, 124VC, 124VD, 124VE, 124VF, 124VG, 124VH, 124VI, 124VJ, 124VK, 124VL, 124VM, 124VN, 124VO, 124VP, 124VQ, 124VR, 124VS, 124VT, 124VU, 124VV, 124VW, 124VX, 124VY, 124VZ, 124WA, 124WB, 124WC, 124WD, 124WE, 124WF, 124WG, 124WH, 124WI, 124WJ, 124WK, 124WL, 124WM, 124WN, 124WO, 124WP, 124WQ, 124WR, 124WS, 124WT, 124WU, 124WV, 124WW, 124WX, 124WY, 124WZ, 124XA, 124XB, 124XC, 124XD, 124XE, 124XF, 124XG, 124XH, 124XI, 124XJ, 124XK, 124XL, 124XM, 124XN, 124XO, 124XP, 124XQ, 124XR, 124XS, 124XT, 124XU, 124XV, 124XW, 124XX, 124XY, 124XZ, 124YA, 124YB, 124YC, 124YD, 124YE, 124YF, 124YG, 124YH, 124YI, 124YJ, 124YK, 124YL, 124YM, 124YN, 124YO, 124YP, 124YQ, 124YR, 124YS, 124YT, 124YU, 124YV, 124YW, 124YX, 124YY, 124YZ, 124ZA, 124ZB, 124ZC, 124ZD, 124ZE, 124ZF, 124ZG, 124ZH, 124ZI, 124ZJ, 124ZK, 124ZL, 124ZM, 124ZN, 124ZO, 124ZP, 124ZQ, 124ZR, 124ZS, 124ZT, 124ZU, 124ZV, 124ZW, 124ZX, 124ZY, 124ZZ

**FPL ENERGY** Seabrook Station



MAIN TURBINE & STEAM PIPING DWS P & ID  
MAIN STEAM SHUT, 2 OF 2 P & ID

MAIN STEAM SYSTEM  
HIGH PRESSURE STEAM PIPING  
DETAIL

PID- 1-MS-B20585

[illegible]

4	12/14/80	MPV	---	BSG	PLB	XXM	INCOMP. WHEN 45-523 CMB
3	3/14/75	BCL	---	MPV	MPB	MPV	INCOMP. WHEN 45-523 CMB
							INCOMP. WHEN 45-514 CMB
							REVISOR NOTE 3 PER ENG OSGH S/D
							37782 S/D 3A, LINE STYLE PER PAID
							LEDGING 3
2	2/26/74	GPH	FCB	JM	MPB	TV	REVISOR NOTE 45 REF. LINE SIZES
							AND PLIN REFERENCE NOTE
1	1/12/68	HLJ	WES	HAP	BCL	ARC	REVISOR NOTE LINE SIZES
							MODIFY WFO
0	2/5/80	TAK	OWS	ASH	WFO		REVISOR NOTE 10, 11, 12, 13, 14
							MODIFY PLIN REFERENCE
REV	DATE	DSGN	DRWN	CHKD	CODE	SFD	DESCRIPTION



PID- 1-MS-B20586

12/04/95 12 11 10 9 8 7 6 5 4 3 2 1

PID-1-MS-B20587

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

PORTIONS OF THIS DRAWING ARE  
**NUCLEAR SAFETY RELATED**

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20579 THRU 20586.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX MSD, UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
  4. MAIN STEAM CONTROL & STOP VALVES ARE SHOWN ON DRAWING 20583.
  5.  $\Delta$  INDICATES REVISION LEVEL

17	11-14-86	BCS	MRB	MAP	INCORP MSE 06-231 REV. 00
16	5/24/85	JM	RRB	MAP	INCORP MSE 05-103 REV. 00
15	11/12/83	BCS	MPW	SD	INCORP MMD 02-544 REV. 0
14	11/15/80	MPW	BCS	SD	INCORP DCR 99-32 DCM 00
13	5/25/80	BCS	MPW	S.O.A.S	INCORP DCR 980832 CA-11
12	5/21/79	BCS	DWS	MKC	INCORP MMD 980511 DCM*00
11	4/22/79	DWS	BCS	MKC	PARTIAL INCORP MMD 980511 DCM*00
10	6/2/78	DRL	MPW	VWS	INCORP MMD 97-521 DCM 00 & 02
9	1/21/78	MRB	JEV	RRR	INCORP MMD'S 98-633 CA01 AND 97-515 CA02
8	9/23/76	GPM	MRB	RSQ	INCORP DCR'S 98-30 CA10 & 98-32 CA0
7	5/21/76	MRB	BCL	IV	RE-INCORPORATED MMD 98-577 CA 0
6	5/15/76	MRB	APL	RSH	INCORPORATED MMD 98-577 CA 0
5	2/5/76	MRB	RSQ	IV	INCORPORATED DCR 89-34, CA0
4	2/24/76	MRB	APL	WFD	INCORPORATED DCR 88-94, CA0
3	1/28/76	MPW	GPM	RRR	ADDED LINE SIZES, NOTE 5, P & ID LEGEND NOTE & REF. COORDINATES. REVISED DUPLICATE VALVE NO. PER UE & C. P & ID F-282118 DELETED PIPE SPECS. INCORP. DCR 88-714 AND REV'D NOTE 3 & 4
2	6/26/77	JDM	BCL	RRR	REVISED TIE-IN PER F-414017
1	5/12/76	MRJ	BCL	RRR	ADDED CONTINUATION REF. V-9 WAS GATE VALVE. V-9 WAS VBL. ADDED TIE-INS FROM MD-E-48A, B, C & D TO CO-E-27B. ADDED REF. DWS. ADDED T-5, T-6, T-7, T-8 & ASSOCIATED PIPING PER DWS F-414456 & F-414457.
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY**

Seabrook Station

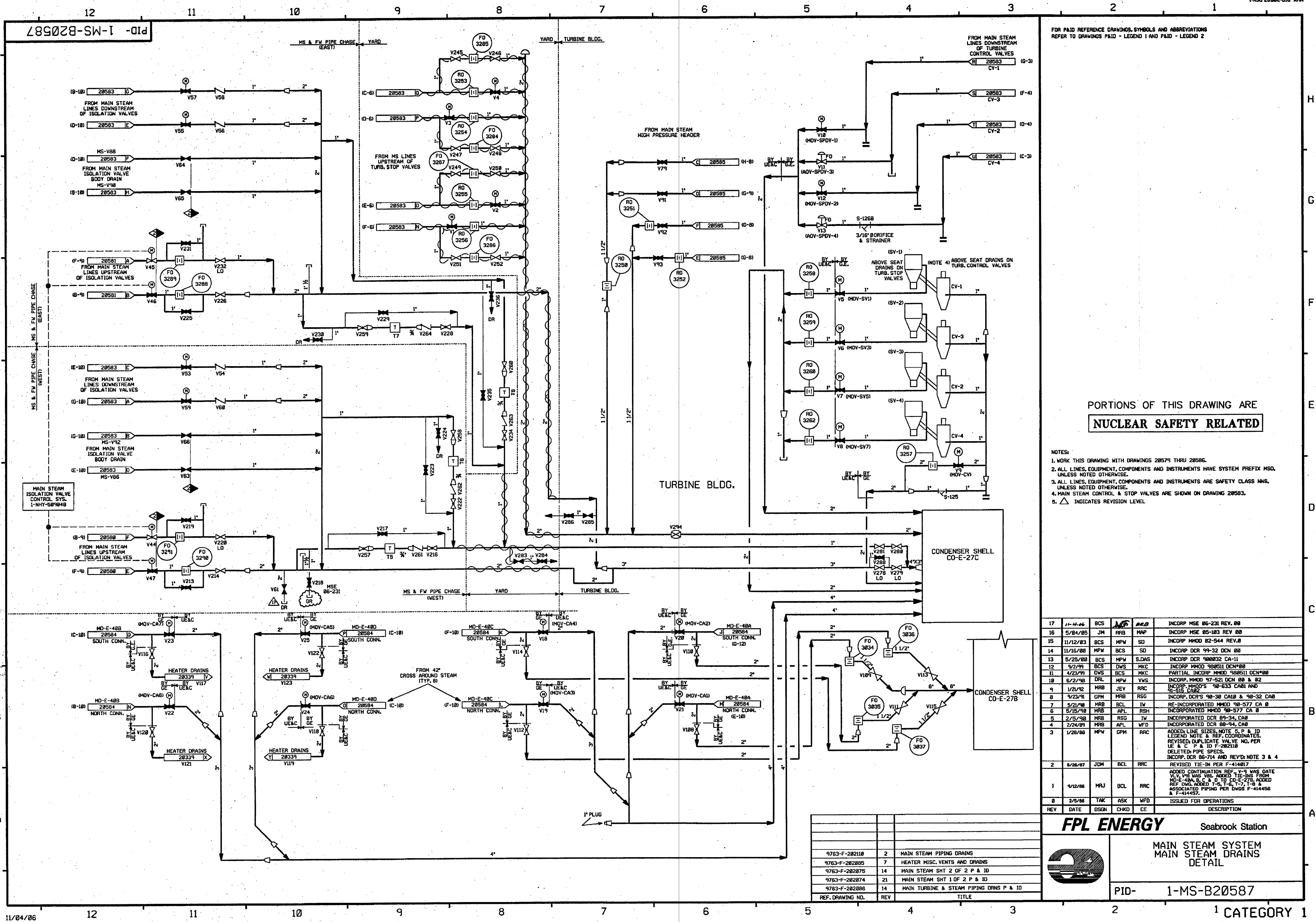


MAIN STEAM SYSTEM  
MAIN STEAM DRAINS  
DETAIL

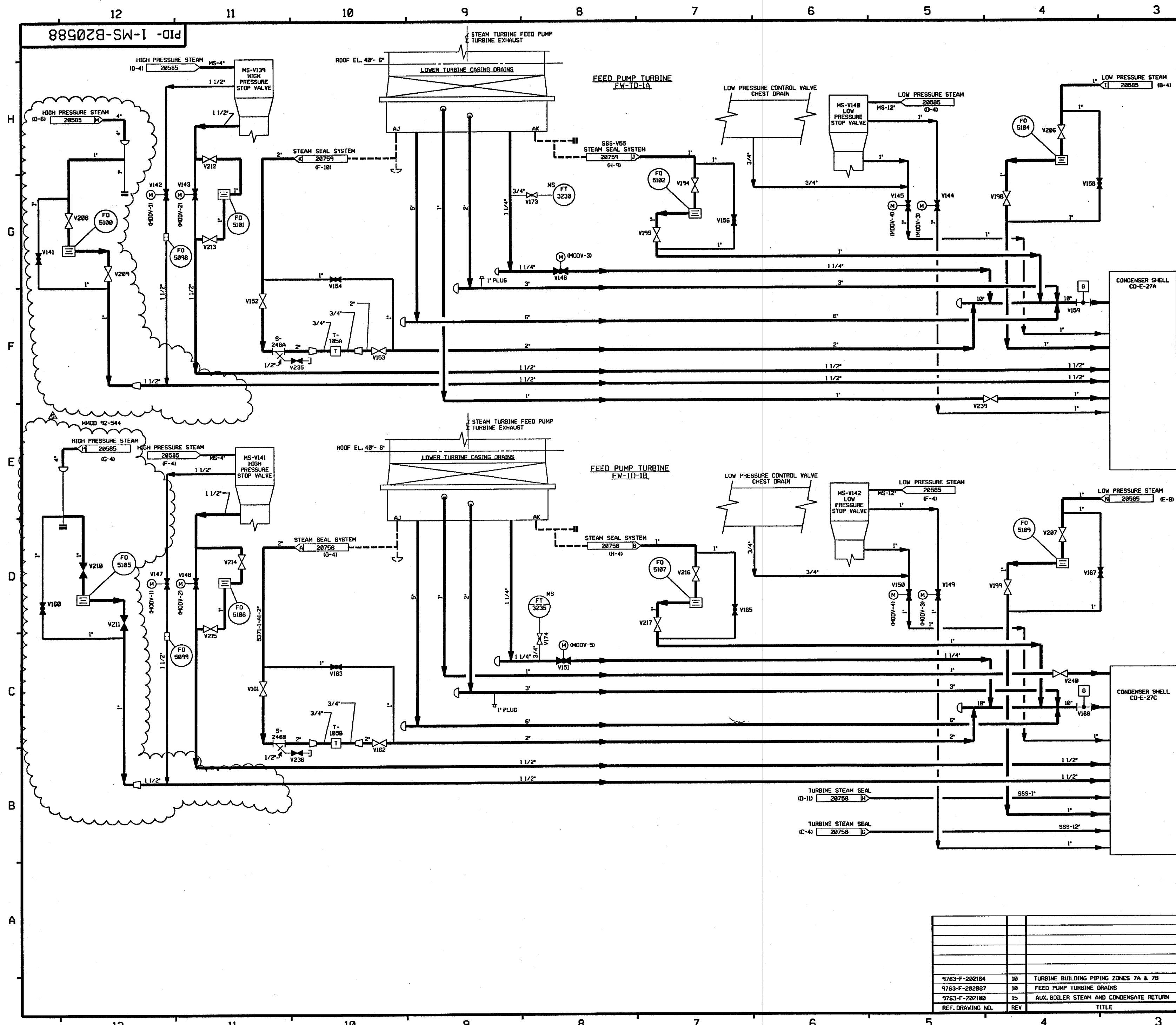
PID- 1-MS-B20587

1 CATEGORY 1

REF. DRAWING NO.	REV	TITLE
9763-F-282118	2	MAIN STEAM PIPING DRAINS
9763-F-282095	7	HEATER MISC. VENTS AND DRAINS
9763-F-282075	14	MAIN STEAM SHT 2 OF 2 P & ID
9763-F-282074	21	MAIN STEAM SHT 1 OF 2 P & ID
9763-F-282086	14	MAIN TURBINE & STEAM PIPING DRAINS P & ID







FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

- NOTES:
- 1.) WORK THIS DRAWING WITH DRAWINGS 20579 THRU 20587.
  - 2.) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX MVD, UNLESS NOTED OTHERWISE.
  - 3.) MAIN STEAM CONTROL AND STOP VALVES ARE SHOWN ON DRAWING 20583.
  - 4.) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS MNS UNLESS NOTED OTHERWISE.
  - 5.)  $\Delta$  INDICATES REVISION LEVEL.

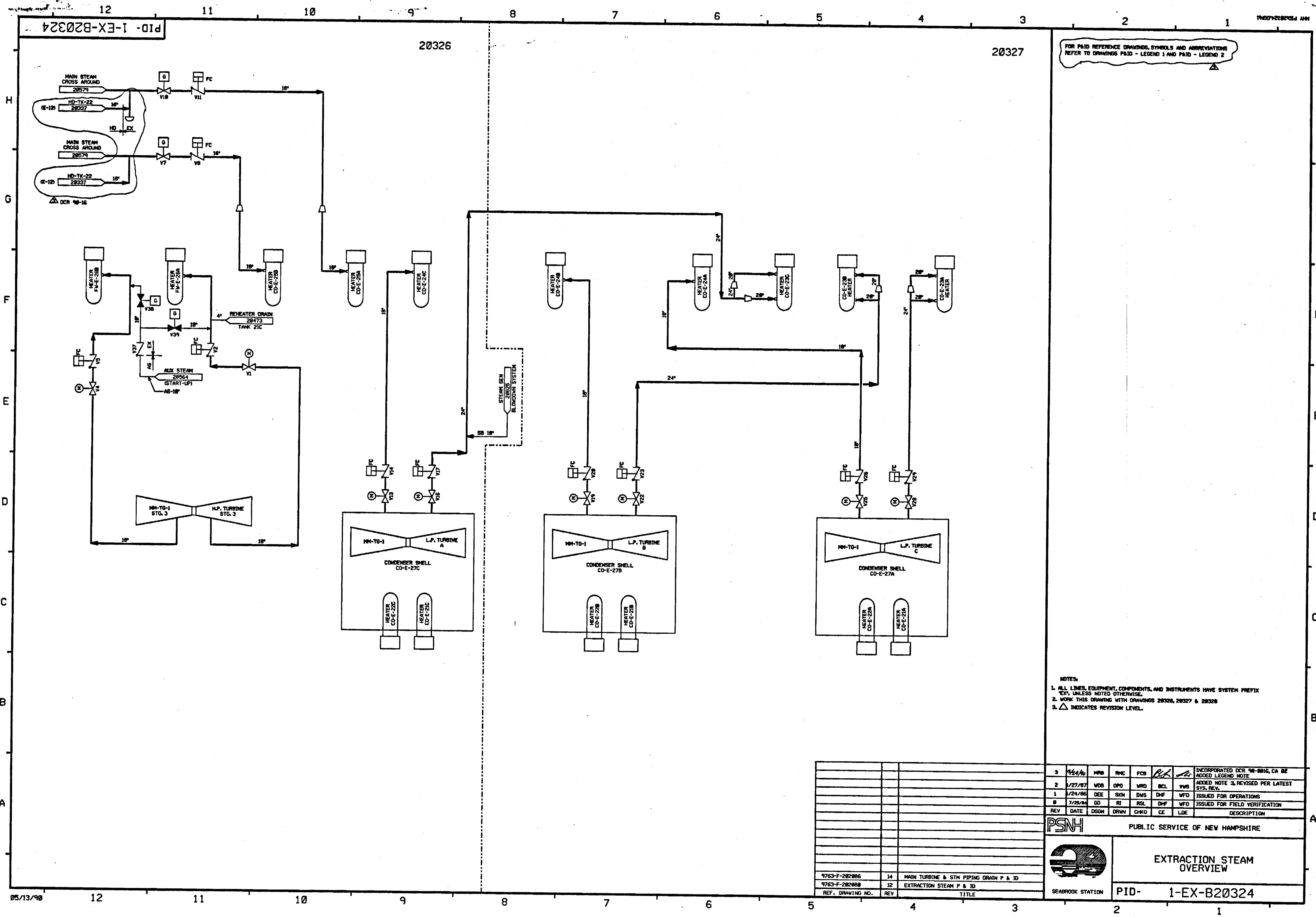
5	10-11-03	BCL	MB	RFB	INCORP. M400 02-544 DCN 00 & 01
4	5/25/92	MRB	BCL	RRB	INCORP. M400 91-515 CAB
3	5/23/90	MRB	APL	DJM	INCORP. M400 90-577 CAB
2	5/5/89	MRB	GPM	GRM	REVISED NOTE 4 AND PIPING TO CLARIFY DUPLICATION OF SYSTEM & INTERFACES. ADDITION LEGEND REFERENCE NOTE. CONTINUATION COORDINATES NOTE 5 DELETED. NUCLEAR SFTY. RELATED STAMP
1	9/17/86	MRJ	MAP	RRR	REV TO ADD RACK MOUNTED DESIGNATION TO FW-3235 FROM LOCAL MOUNT IN ERROR
0	6/5/86	OPD	DWS	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY** Seabrook Station

**MAIN STEAM SYSTEM  
MISC. VENTS AND DRAINS  
DETAIL**

PID- 1-MS-B20588

REF. DRAWING NO.	REV	TITLE
9763-F-202164	10	TURBINE BUILDING PIPING ZONES 7A & 7B
9763-F-202087	10	FEED PUMP TURBINE DRAINS
9763-F-202100	15	AUX. BOILER STEAM AND CONDENSATE RETURN



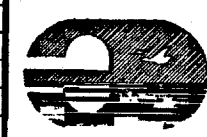
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
- 1. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX
  - 2. EX, UNLESS NOTED OTHERWISE.
  - 3. WORK THIS DRAWING WITH DRAWINGS 20326, 20327 & 20328
  - 4. Δ INDICATES REVISION LEVEL.

3	7/24/06	WDS	OPD	WFD	BCL	WVS	INCORPORATED DCR 90-0816, CA 02 ADDED LEGEND NOTE
2	1/27/07	WDS	OPD	WFD	BCL	WVS	ADDED NOTE 3, REVISED PER LATEST SYS. REV.
1	1/24/06	DEE	SKN	DWS	DWF	WFD	ISSUED FOR OPERATIONS
0	7/25/04	GD	RI	RSL	DWF	WFD	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION

PSNH

PUBLIC SERVICE OF NEW HAMPSHIRE



EXTRACTION STEAM  
OVERVIEW

9763-F-202006	14	MAIN TURBINE & STM PIPING DRAIN P & ID
9763-F-202008	12	EXTRACTION STEAM P & ID
REF. DRAWING NO.	REV	TITLE

PID- 1-EX-B20324

1700782032800012270000

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. MAIN TURBINE & STEAM PIPING DRAINS, WHICH INTERFACE WITH EXTRACTION STEAM ARE SHOWN ON THIS DNG.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEMS PREFIX MSD UNLESS NOTED OTHERWISE.
  3. WORK THIS DRAWING WITH DRAWINGS 28324, 28326 & 28327.
  4.  $\Delta$  INDICATES REVISION LEVEL.

6	8/1/77	MPW	---	WUS	PK	---	INCORP HMOO 95-514 CA B2
5	11/12/78	BCL	---	MPW	MKD	RSB	INCORP HMOO 95-514 CAB
4	7/27/79	DWS	---	BCL	MPW	PEB	INCORP HMOO 94-524 CAB - CA B1
3	8/14/82	MRS	---	DWS	BCL	JEV	INCORP HMOO 91-515 CAB
2	12/3/86	HAP	TAK	WRD	BCL	RRC	ADDED PORTION OF MAIN STEAM PIPING VALVE DESIGNATION PER DESIG PIPING DNG. ADDED DRA LOCATION CODES & NOTE 4, REVISED P&ID REVISIONS IN REF B.022.
1	8/28/88	DWS	DPO	DWS	JHS	---	CORRECTED DESIGN FW TO CO, B
0	1/24/96	DEE	SKN	DWS	DHF	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

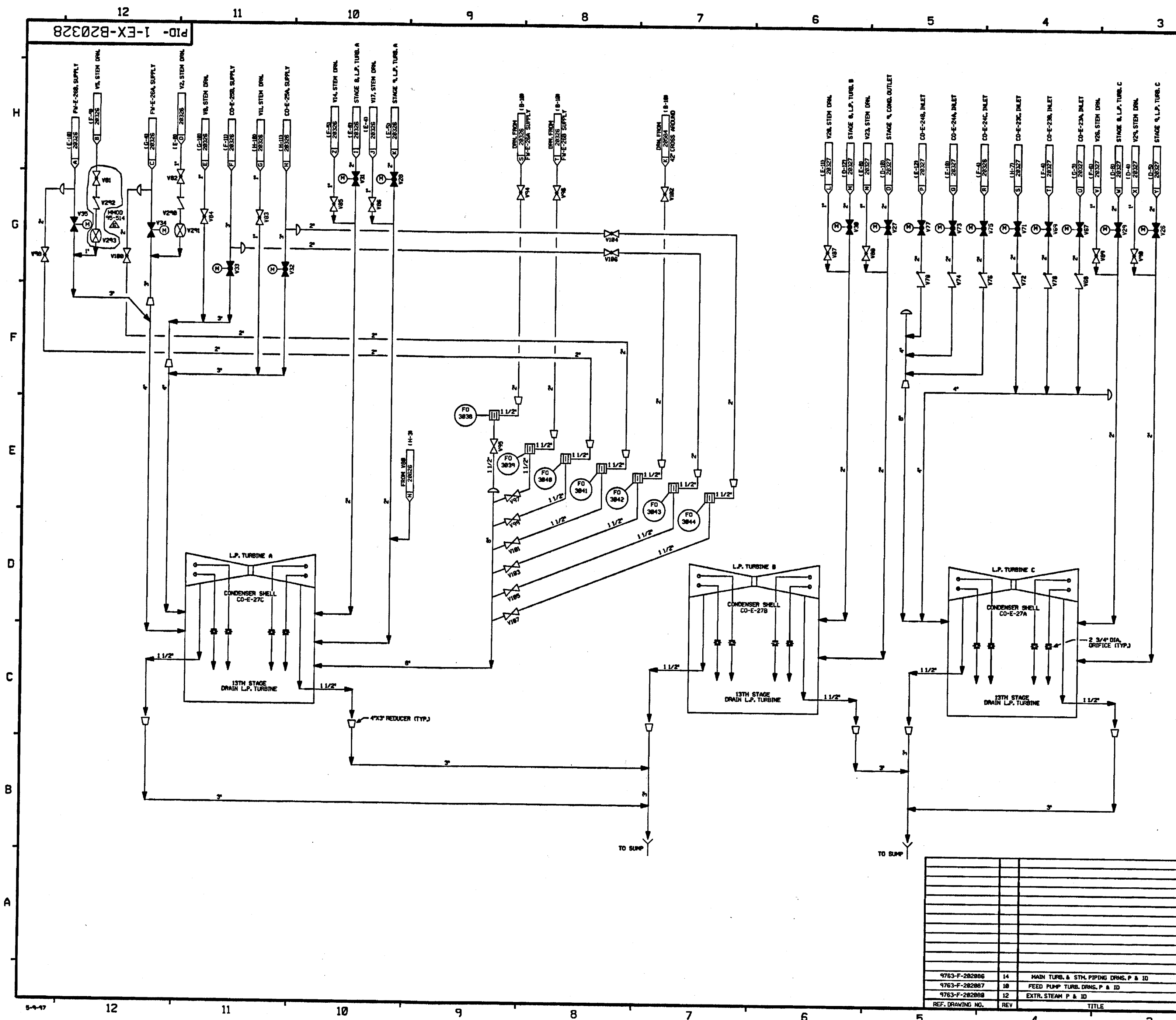
North Atlantic Energy Service Corporation



EXTRACTION STEAM  
MAIN TURBINE & STEAM  
PIPING DRAINS  
(MSD)

PID- 1-EX-B20328

9763-F-282886	14	MAIN TURB. & STL PIPING DNGS. P & ID
9763-F-282887	10	FEED PUMP TURB. DNGS. P & ID
9763-F-282888	12	EXTR. STEAM P & ID
REF. DRAWING NO.	REV	TITLE



PID-1-AR-B20744

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. AR IS A SINGLE DRAWING SYSTEM, AN OVERVIEW IS NOT REQUIRED.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX AR, UNLESS NOTED OTHERWISE.
  3. REFER TO PP 20606 AND 20607 FOR DETAILS.
  4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
  5.  $\Delta$  INDICATES REVISION LEVEL.
  6. FOR DEMINERALIZED WATER SUPPLY DETAILS TO MOISTURE SEPARATORS AR-MM-22A, 22B, 22C, 55A & 55B, SEE DWG 1-DM-28349

GENERAL REFERENCES:  
LOGIC DIAGRAM M-503140  
SD-2, CONDENSER AIR EVACUATION SYSTEM DESIGN DESCRIPTION.  
LOOP DIAGRAM M-506849

24	10/12/03	BCS	JWB	TAS	INCORP EC 12635
23	11/12/03	JM	MPW		INCORP MSE 01-193 REV 00 & 01
22	3/5/03	BCS	JM	MPW	INCORP MSE 01-149 REV 00, 01
21	2/5/03	MPW	BCS	JM	INCORP CR 02-16149
20	2/14/02	MPW	BCS	RSG	PARTIAL INCORP MSE 01-149 REV 00, 01
19	1/3/02	BCS		DJM	INCORP CR 01-09109
18	12/06/01	BCS	JM	SPF	INCORP MMOD 99-623 DCM-02
17	11/2/01	MPW	JM	MRB	PARTIAL INCORP MSE 01-193 REV 00, 01
16	9/20/01	BCS	MPW	RSG	PARTIAL INCORP MSE 01-193 REV 01
15	9/14/01	MPW	MRB	ICW	PARTIAL INCORP MSE 01-193 REV 00
14	1/26/01	BCS	DWS	JCM	INCORP MSE 01-0001 REV 0
13	9/5/00	DWS	BCS	RSG	INCORP DCR 990014 DCM*00, 01, 02 & 03
12	6/2/98	DRL	BCS	VWS	INCORP MMOD 97-521 DCM*00
11	6/13/97	DWS	MPW	GC	INCORP MMOD 960521 DCM*00 & 01
10	11/27/95	MPW	BCS	RRC	INCORP DCR 94-36 CA-0
9	6/7/95	BCL	DWS	GRM	INCORP DCR 94-36 CA-03
8	5/31/95	BCL	BCL	RSG	INCORP DCR 92-31 CA-0 & PARTIAL
7	12/15/94	MPW	MPW	MRB	INCORP DCR 94-20 CA-0
6	3/11/94	MRB	BCL	GMD	INCORP MMOD 93-545 CA0
5	11/24/93	MRB	BCL	BAW	INCORP MMOD 92-553 CA01
4	10/20/92	MRB	DWS	WDS	INCORP DCR 91-45 CA03
3	5/8/92	MRB	MPW	BCL	INCORP MMOD 90-627 CA0
2	4/20/88	PAL	BCL	RRC	INCORP MMOD 91-511 CA03 & 91-522 CA0 REVISED NOTES 2 & 3, DELETED FLTG'S & SPEC. BREAKS FOR FOR DG. ENHANCEMENT
1	10/30/86	JDM	WRD	RRC	CORRECTED NOTE 3, ADDED LINE SIZE & REDUCER REF SYS SHOWN IN PHANTOM DELETED DUPLICATED VALVE SA-V204, ADDED REF DWG COORD, DELETED LINE TO MM22A, B, C PER PP-20606, REVISED CONTROL BOX NO PER PP-20606, ADDED SUPPLY LINE FOR LCA-200 IN PLANT, UPDATE REF DWG REVS & REV DWG ACCORDINGLY, UPDATED CONTINUATIONS, ADDED NOTES 586.
0	10/18/85	GSN	DWS	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION



CONDENSER AIR EVACUATION SYSTEM P&ID

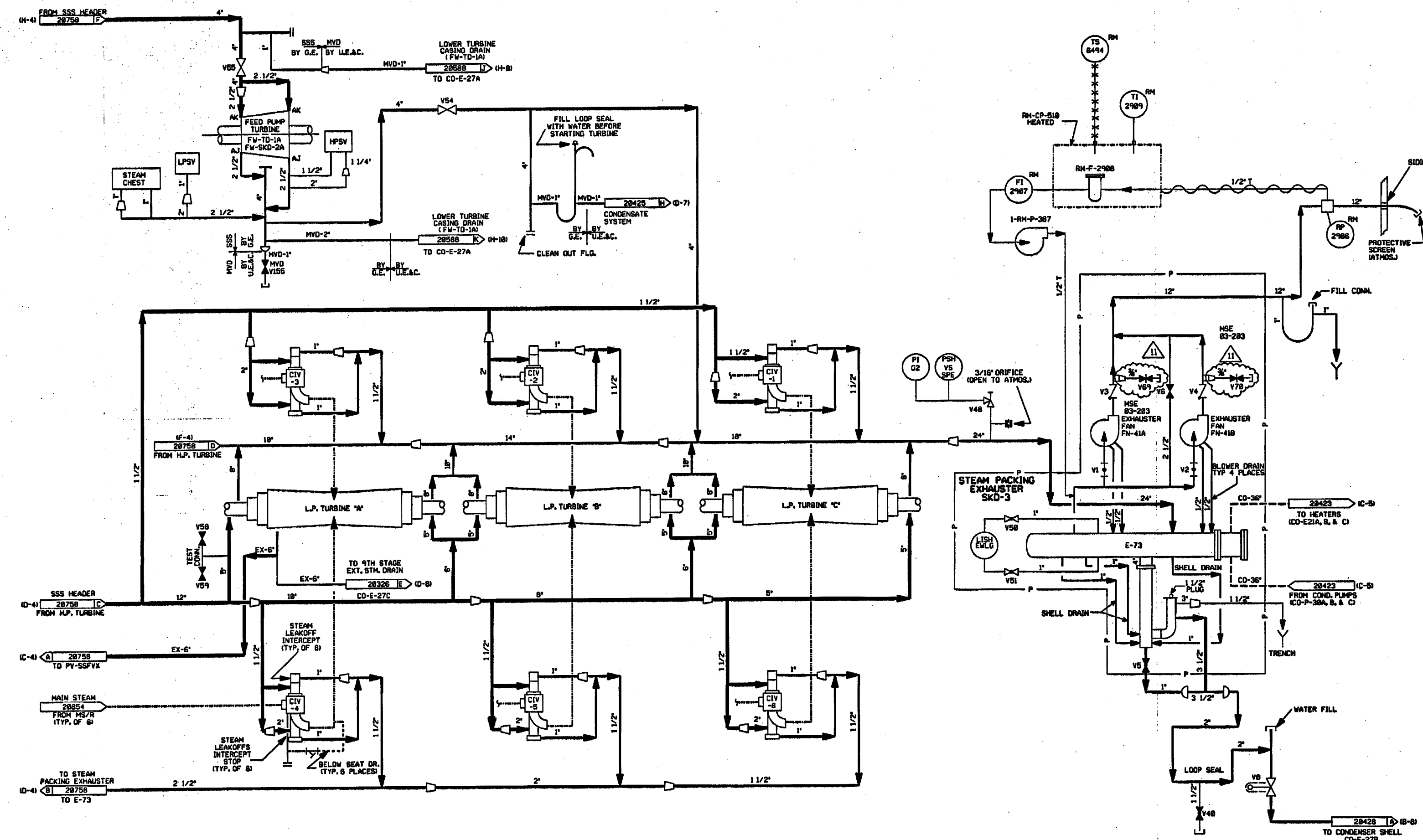
PID-1-AR-B20744

9763-F-202004	14	HEATER MISC. VENTS AND DRAINS P&ID
FP-20445	15	CONDENSER PENETRATIONS
9763-F-202093	10	COND. AIR EVAC. SYSTEM P&ID
REF. DRAWING NO.	REV	TITLE



PID-1-SSS-B20759

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28756 & 28758.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX 1-SSS, UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS "MS" UNLESS NOTED OTHERWISE.
  4.  $\Delta$  INDICATES REVISION LEVEL.
  5. DELETED
  6. DOTTED & DASHED LINES DENOTE MAIN STEAM PIPING.

11	6-8-84	BCS	JM	KBB	INCOMP. MSE 83-283 REV-02
10	12/18/83	BCS	JM	PCB	REVISED PER CR 99-18734 REV. 8
9	5/7/82	HPM	JM	BCS	REVISED PER FFP-8 28416, 28428 & 150'S
8	1/5/81	BCS	DWS	JCM	INCOMP. MSE 880831 REV. 8
7	12/4/76	HPM	BCS	DJM	INCOMP. MWD 95-584 CMB
6	4/28/72	MWB	DWS	JEV	INCOMP. MWD 91-535 CMB
5	2/2/70	MWB	RPL	IV	RE-INCORPORATED DCR 88-197 CA-BI
4	5/5/69	MWB	GPH	GRM	INCORPORATED DCR 88-197 CA-BI, REVISED NOTE 3, CONT. TAG DESCRIPTIONS, ADDED CONTINUITY COORDINATES
3	11/26/66	MWB	WRD	RRC	ADDED NOTE FOR PAID LEGEND DMS, CONT. COORDS, DELETED NOTE 5 AND CHANGE ITEM 3, REVISED DRAFTING ERRORS AND REF DMS REV. 5
2	8/28/66	DWS	JDM	RRC	ADDED CO CONFID. & CO-E-27C DESIGN, REMOVED CHANGE ITEMS 1 & 2, ADDED CHANGE ITEM 3
1	10/18/65	TAK	DWS	WFD	ISSUED FOR OPERATIONS, GENERAL REVISION
0	8/7/64	CB	BSL	WFD	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	SES	DESCRIPTION

**FPL ENERGY**

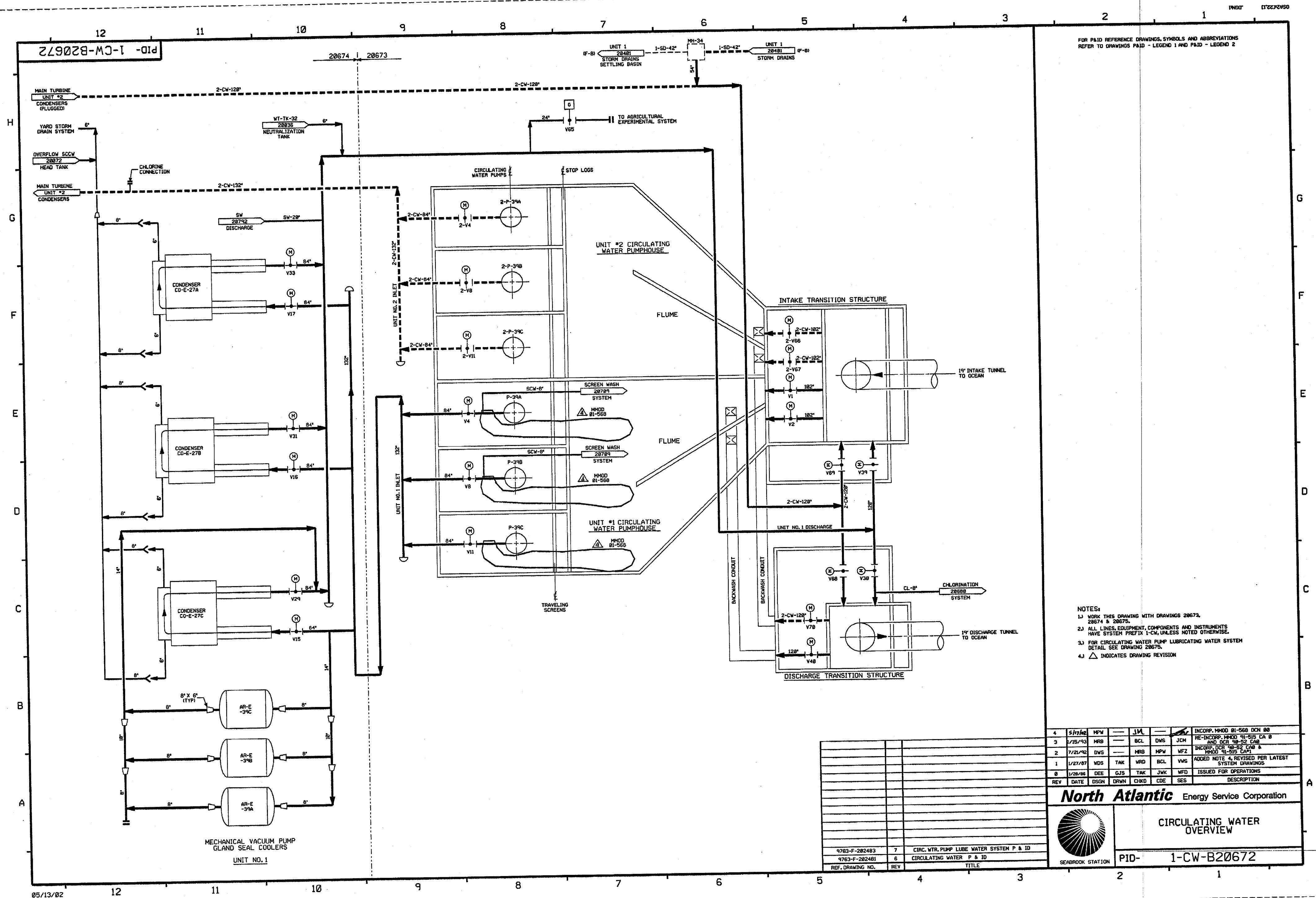
Seabrook Station



**TURBINE STEAM SEAL SYSTEM  
DETAIL**

PID- 1-SSS-B20759

REF. DRAWING NO.	REV	TITLE
9763-FP-28735	8	FEED PUMP TURBINE
9763-FP-28416	1	STEAM PACKING EXHAUSTER
9763-FP-28415	10	T-G STEAM SEAL SYSTEM DIAGRAM
9763-F-282888	11	EXTRACTION STEAM-P & I DIAGRAM
9763-F-282877	15	CONDENSATE SYSTEM-P & I DIAGRAM
9763-F-282884	14	HEATER MIST, VENTS & DR-P & I DIAGRAMS
9763-F-282887	8	FEED PUMP TURBINE DRAINS-P & I DIAGRAMS
9763-F-282875	14	MAIN STEAM SHT 2 OF 2 PAID
9763-F-282870	5	STEAM SEAL SYSTEM-P & I DIAGRAMS



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28673, 28674 & 28675.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX 1-CW, UNLESS NOTED OTHERWISE.
  3. FOR CIRCULATING WATER PUMP LUBRICATING WATER SYSTEM DETAIL SEE DRAWING 28675.
  4. △ INDICATES DRAWING REVISION

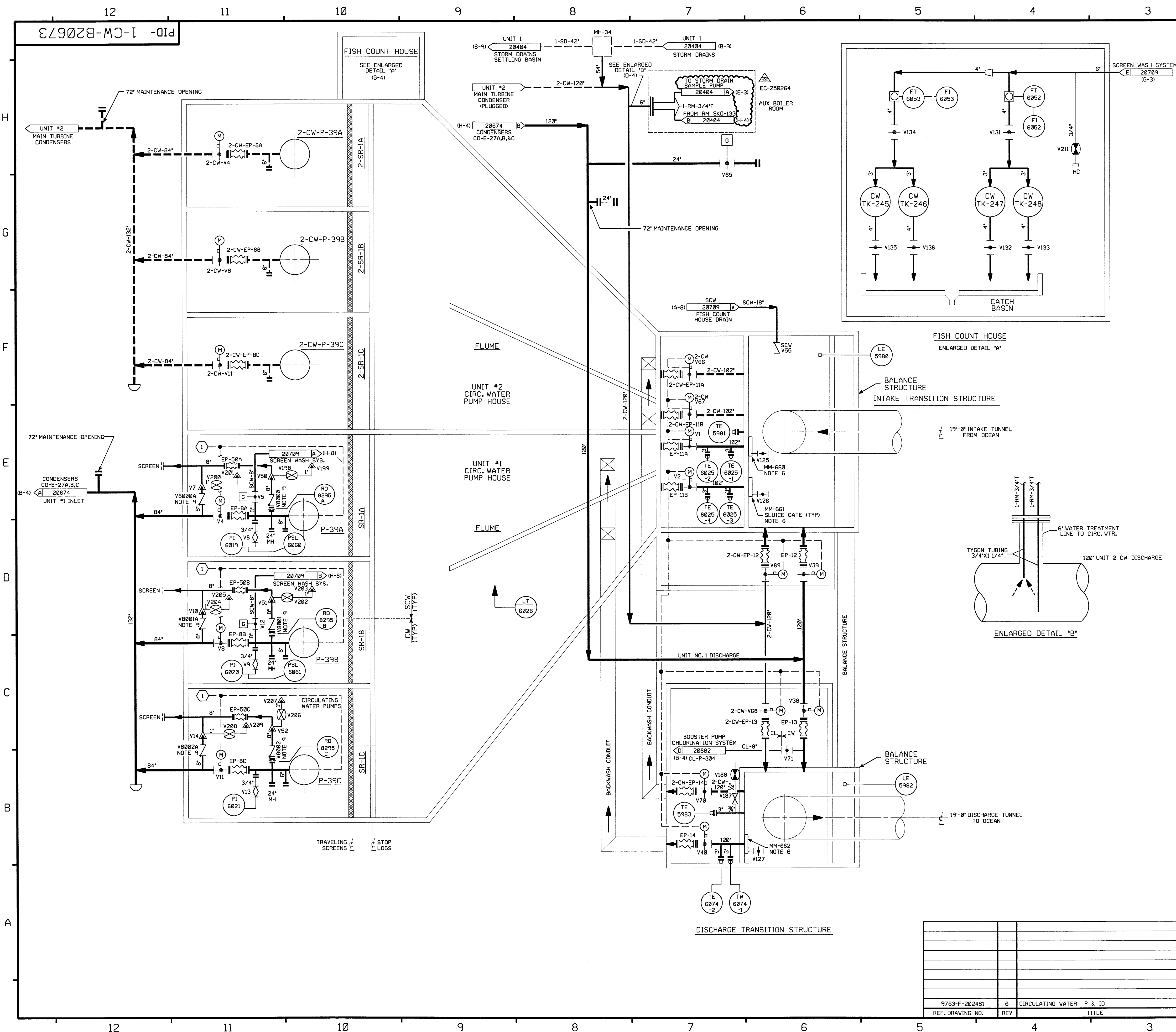
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
4	5/15/93	MRB	---	JM	---	---	INCORP. M400 01-568 DCH 00
3	1/15/93	MRB	---	BCL	DWS	JCH	RE-INCORP. M400 01-515 CA 0
2	7/21/92	DWS	---	MRB	MPW	WFZ	INCORP. DCR 38-52 CAB & M400 01-515 CAP
1	1/27/87	WDS	TAK	WRD	BCL	VHS	ADDED NOTE 4, REVISED PER LATEST SYSTEM DRAWINGS
0	1/28/86	DEE	GJS	TAK	JWK	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

**North Atlantic** Energy Service Corporation

**CIRCULATING WATER OVERVIEW**

PID- 1-CW-B20672

SEABROOK STATION



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
- 1) WORK THIS DRAWING WITH DRAWINGS 20672, 20674 & 20675.
  - 2) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX 1-CW, UNLESS NOTED OTHERWISE.
  - 3) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
  - 4) DELETED.
  - 5) ① LUBE WATER FLOW NORMAL, SCREEN DIFFERENTIAL NORMAL AND CONDENSER WATER BOX VACUUM BREAKER VALVES CLOSED.
  - 6) SLUICE GATES ARE DESIGNED TO BE USED INTERCHANGEABLY IN ANY SET OF GUIDES OF THE SPECIFIED SIZE.
  - 7) DASH LINES DESIGNATE UNIT #2 PIPING.
  - 8) △ - INDICATES REVISION LEVEL.
  - 9) THE DUAL FUNCTION OF THESE SURGE CHECK VALVES IS TO LET AIR BE RELEASED FREELY FROM THE CW SYSTEM THROUGH THE VENT, BUT CLOSE WHEN SEAWATER RAPIDLY ENTERS THE VALVE AFTER VENTING IS COMPLETE.
  - 10) VALVE V187 IS ON A COUPLING WELDED TO THE THERMOWELL SLEEVE. REF. SPEC. 252-B SH. 41.

22	4/12/12	GPS	JM	RRB	INCORP. EC-250264
21	10/13/04	BCS	JM	RRB	INCORP. CR 04-06277 REV. 0
20	4/3/03	JM	BCS	MPW	INCORP. CR 00-08723 REV 00 & CR 02-14663 REV 00
19	1/6/03	JM	MPW	BCS	INCORP. CR 02-01414 REV 00 & CR 02-08274 REV 00
18	5/17/02	MPW	JM	IW	INCORP. MMOD 01-568 DCN 00, 06
17	10/15/01	BCS	JM	JMS	INCORP. MSE 99-0219 REV. 0
16	4/13/00	MPW	DWS	RPN	INCORP. MMOD 93-562 DCN 00
15	11/17/98	MPW	BCS	RSG	INCORP. MMOD 98-639 DCN 00
14	11/16/97	DWS	MPW	JCM	INCORP. DCR 950011 CA*0
13	6/27/96	BCS	MPW	HWM	INCORP. DCR 91-26 CA-05
12	12/4/94	MPW	BCL	MHO	INCORP. MMOD 93-545 CA0
11	7/27/92	DWS	MPW	IW	INCORP. DCR 870237 CA*0 & 1
10	7/21/92	DWS	MRB	WFZ	REINCORP. DCR 90-52
9	6/19/92	MRB	BCL	IW	RE-INCORP. MMOD 91-515 CA01
8	2/6/92	MRB	BCL	RSG	INCORP. MMOD 91-515 CA01
7	2/5/92	MRB	BCL	WFZ	INCORP. DCR'S 91-01 CA0 & 90-52 CA0 REV. CONTINUATIONS TO REFLECT CORRES. PIDS
6	3/11/91	MRB	APL	IW	INCORP. DCR 89-65 CA03
5	5/1/90	MRB	APL	IW	INCORPORATED DCR 86-433 CA29
4	4/25/89	GPM	MRB	PEB	REVISED: NOTE 3 ADDED VALVE NO'S V8000-0803, 2-CW PREFIX FOR UNIT 2 REFS AND REF COORD'S TO FLAGS. DELETED NOTE 9 AND N/A REF. DNG.
3	11/21/86	PAL	PAL	RRC	INCORP. ECA 19/117262A
2	9/22/86	MAP	BCL	RRC	CHGO V58 TO V38 PER UE&C P&ID VALVES V800V51 & V52 ARE DUAL ACTION VALVES. HENCE VALVE NO'S V8000-0803 ARE NOT REQUIRED.
1	6/28/86	BLL	BCL	RRC	ISSUED FOR OPERATIONS
0	01/28/86	DEE	TAK	WFD	
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**NEXTERA ENERGY**  
SEABROOK

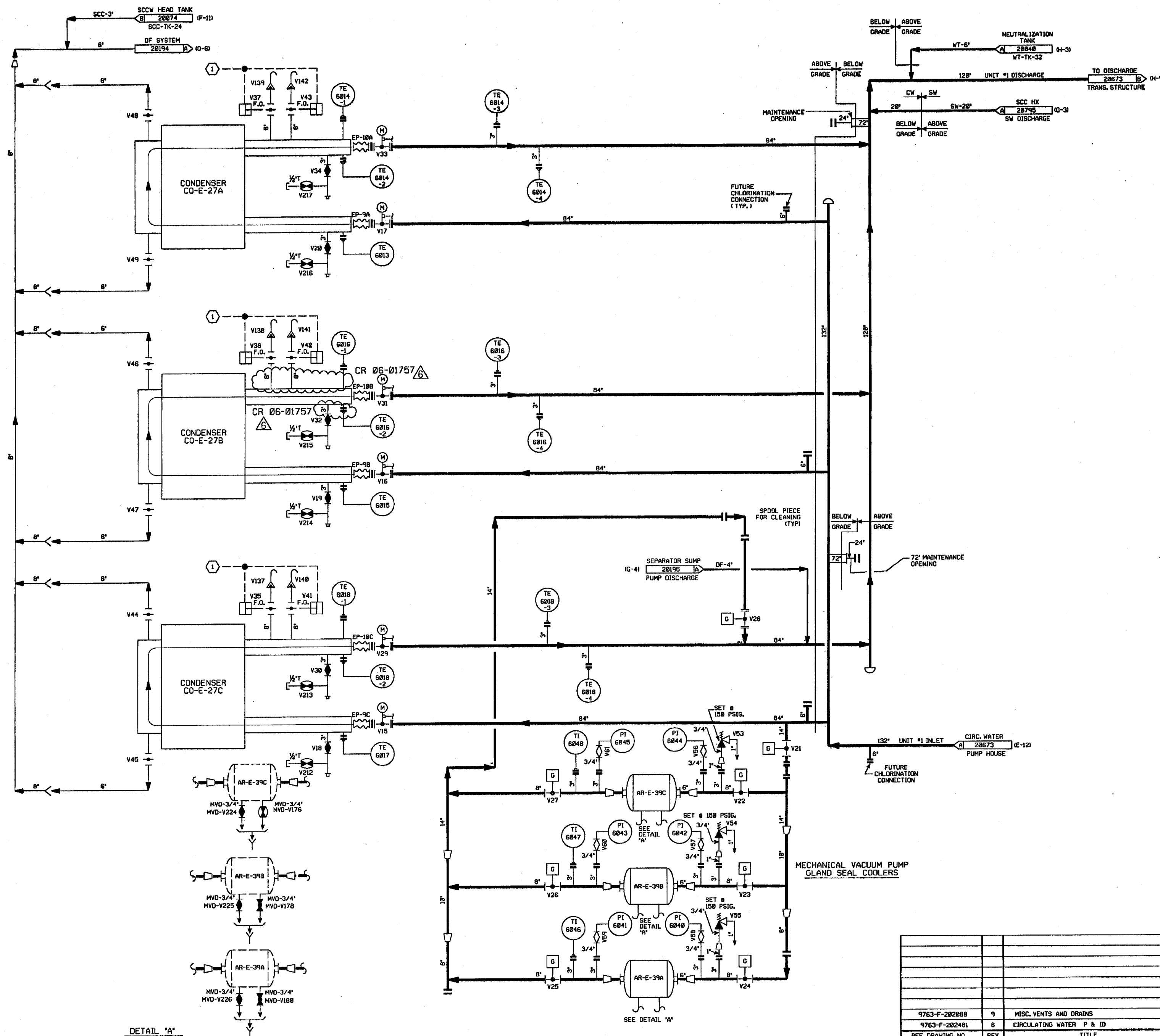
**CIRCULATING WATER  
DETAIL**

PID- 1-CW-B20673

9763-F-202481	6	CIRCULATING WATER P & ID
REF. DRAWING NO.	REV	TITLE

PID-1-CW-B20674

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2



NOTES:

- 1) WORK THIS DRAWING WITH DRAWINGS B20672, B20673 & B20675.
- 2) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX 1-CW, UNLESS NOTED OTHERWISE.
- 3) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NWS UNLESS NOTED OTHERWISE.
- 4) LUBE WATER FLOW NORMAL, SCREEN DIFFERENTIAL NORMAL AND CONDENSER WATER BOX VACUUM BREAKER VALVES CLOSED.
- 5) Δ INDICATES REVISION LEVEL.

6	3-29-06	BCS	IM	201	INCORP. CR 06-01757 REV. 0
5	10/1/01	BCS	MPW	DJM	INCORP. MSE 00-0376 REV. 0
4	10/6/99	MPW	BCS	DJM	INCORP. DCR 95-38 DCM 00
3	4/19/97	JDM	PAL	RRC	INCORP. DCR 86-602 CA 00
2	11/12/96	PAL	WRD	RRC	ADDED NOTE 4, REF. COORDS TO REF. FLANGES, MVD DRAINS TO GLAND SEAL COOLERS
1	6/13/95	DWS	DWS	RRC	ADDED OF CONTINUATION
0	1/28/95	DEE	TAK	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY** Seabrook Station



CIRCULATING WATER  
DETAIL

PID- 1-CW-B20674

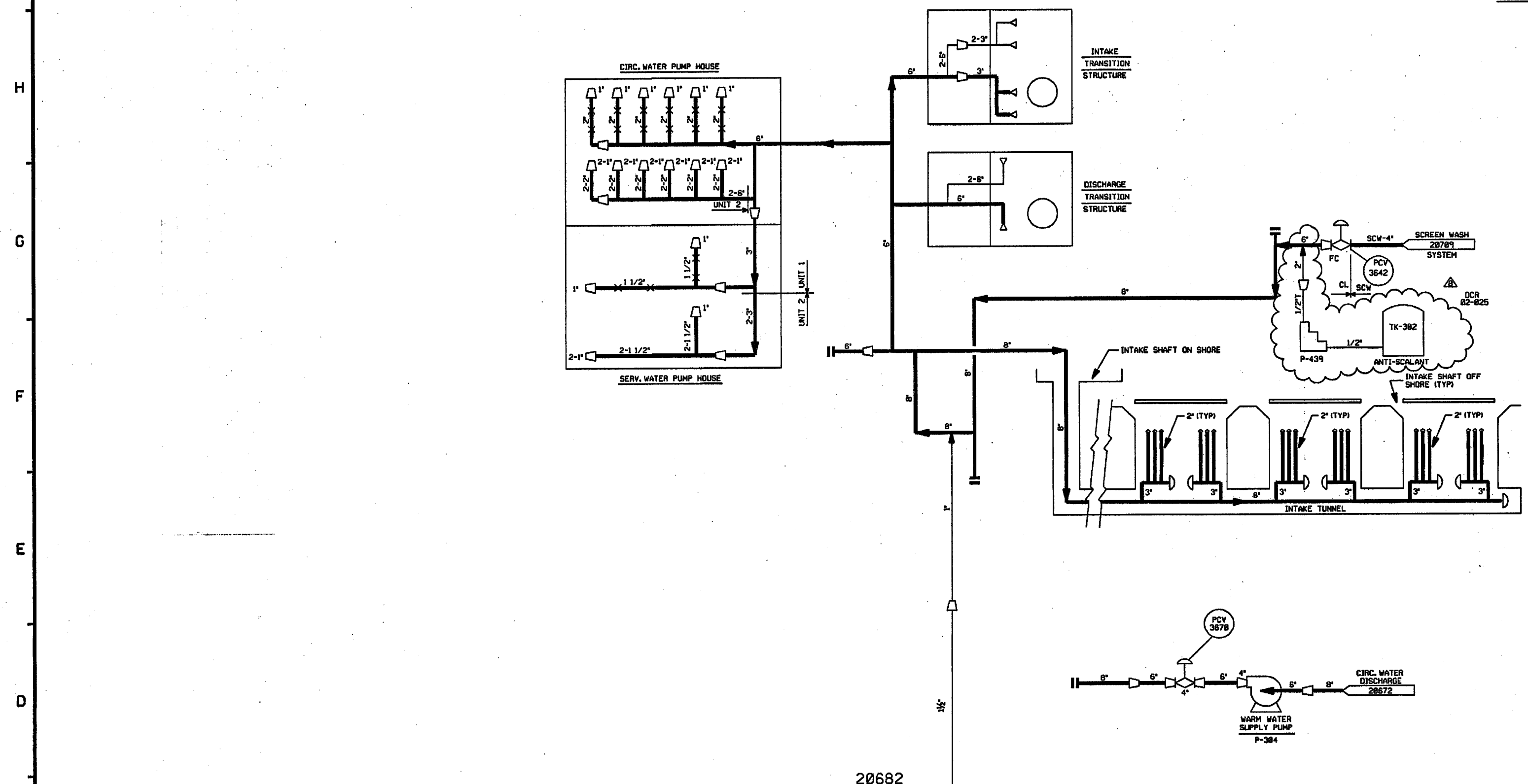
9763-F-202088	9	MISC. VENTS AND DRAINS
9763-F-202401	6	CIRCULATING WATER P & ID
REF. DRAWING NO.	REV	TITLE



PID-1-CL-B20688

20682

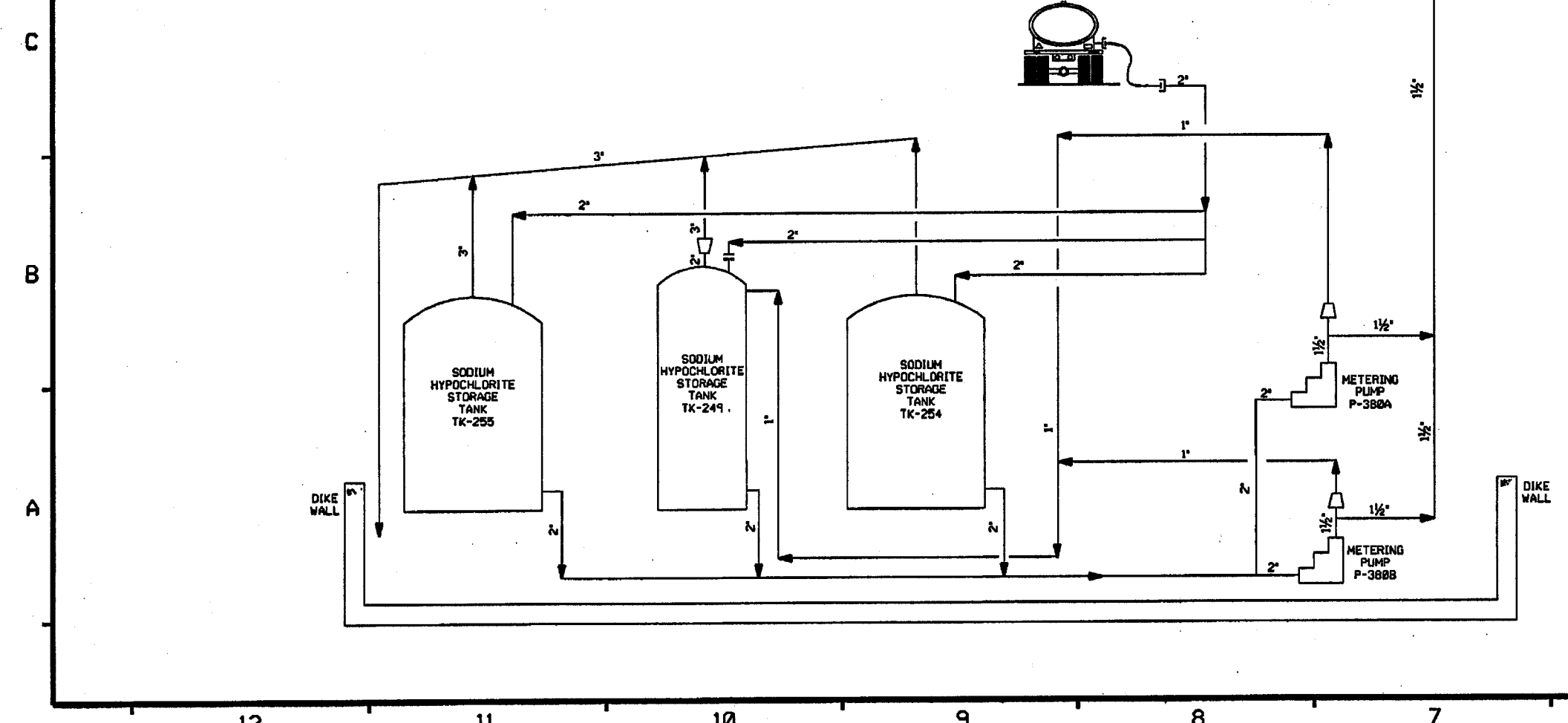
FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



20682

20681

20681

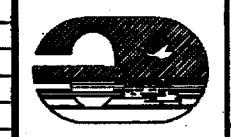


NOTES:  
1. WORK THIS DWS WITH DWS. 20681 & 20682.  
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS  
HAVE SYSTEM PREFIX CL. UNLESS NOTED.  
3.  $\Delta$  - INDICATES REVISION LEVEL.

8	4/21/04	BCS	JM	ML	INCORP. DCR 82-825 DCN-882.
7	5/25/82	JM	MPW	RRB	INCORPORATED M400 81-8568 DCN 88
6	3/24/88	BCS	MPW	SPF	INCORPORATED DCR 93-19 DCN-88
5	3/31/97	BCS	DMS	RSG	INCORPORATED DCR 94-49 CAB. 83. DCR 92-8812 CA-B, REINCORP. DCR 91-26 CA-B.
4	3/19/92	MRB	RMC	IV	INCORPORATED DCR 91-26 CAB
3	3/27/91	MRB	JM	MPW	INCORP. DCR 88-183 CAB ADDED: PAID REFERENCE DWS NOTE
2	4/25/89	MPW	MRB	PEB	DELETED DCR 85/2228 IN INCOMPLETE ITEMS PER DCR 88-546 INCORP. DCR 88-546 CAB.
1	1/28/87	WDS	WRD	VWS	ADDED NOTE 3, REVISED PER LATEST SYSTEM DRAWINGS
0	1/13/86	DM	WES	EDW	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	SES	DESCRIPTION

FPL ENERGY

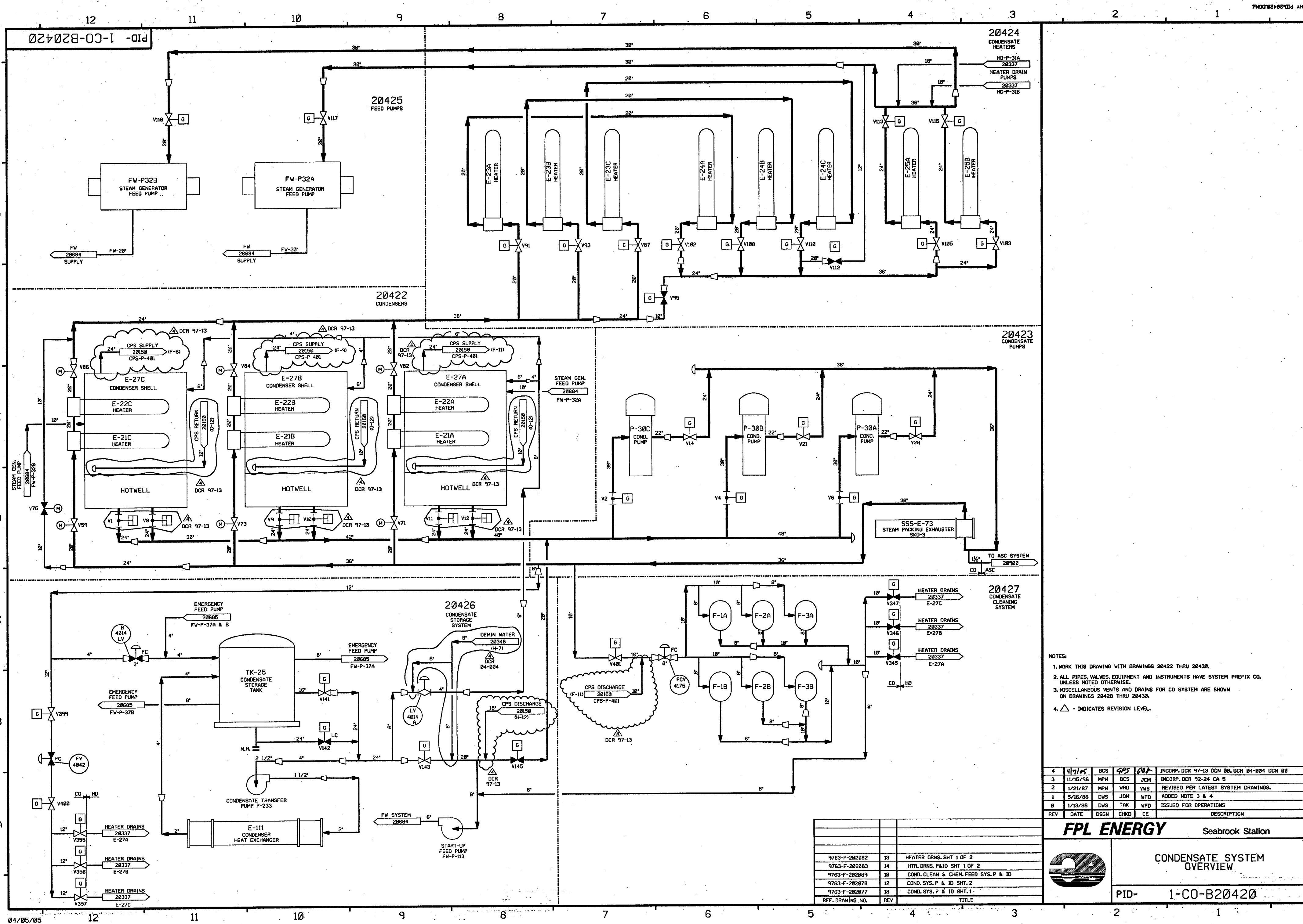
Seabrook Station




CHLORINATION SYSTEM  
OVERVIEW

PID- 1-CL-B20680

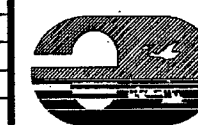
9763-F-282484	7	INTAKE TUNNEL CHLORINATION & DISTRIBUTION SYSTEM P & ID
REF. DRAWING NO.	REV	TITLE



- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20422 THRU 20430.
  2. ALL PIPES, VALVES, EQUIPMENT AND INSTRUMENTS HAVE SYSTEM PREFIX CO. UNLESS NOTED OTHERWISE.
  3. MISCELLANEOUS VENTS AND DRAINS FOR CO SYSTEM ARE SHOWN ON DRAWINGS 20428 THRU 20430.
  4.  - INDICATES REVISION LEVEL.

4	4/7/05	BCS	GPS	682	INCRP. DCR 97-13 DCM 00, DCR 04-004 DCM 00
3	11/15/96	MPW	BCS	JCM	INCRP. DCR 92-24 CA 5
2	1/21/87	MPW	WRD	VWS	REVISED PER LATEST SYSTEM DRAWINGS.
1	5/16/86	DWS	WJM	WFD	ADDED NOTE 3 & 4
0	1/13/86	DWS	TAK	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY** Seabrook Station



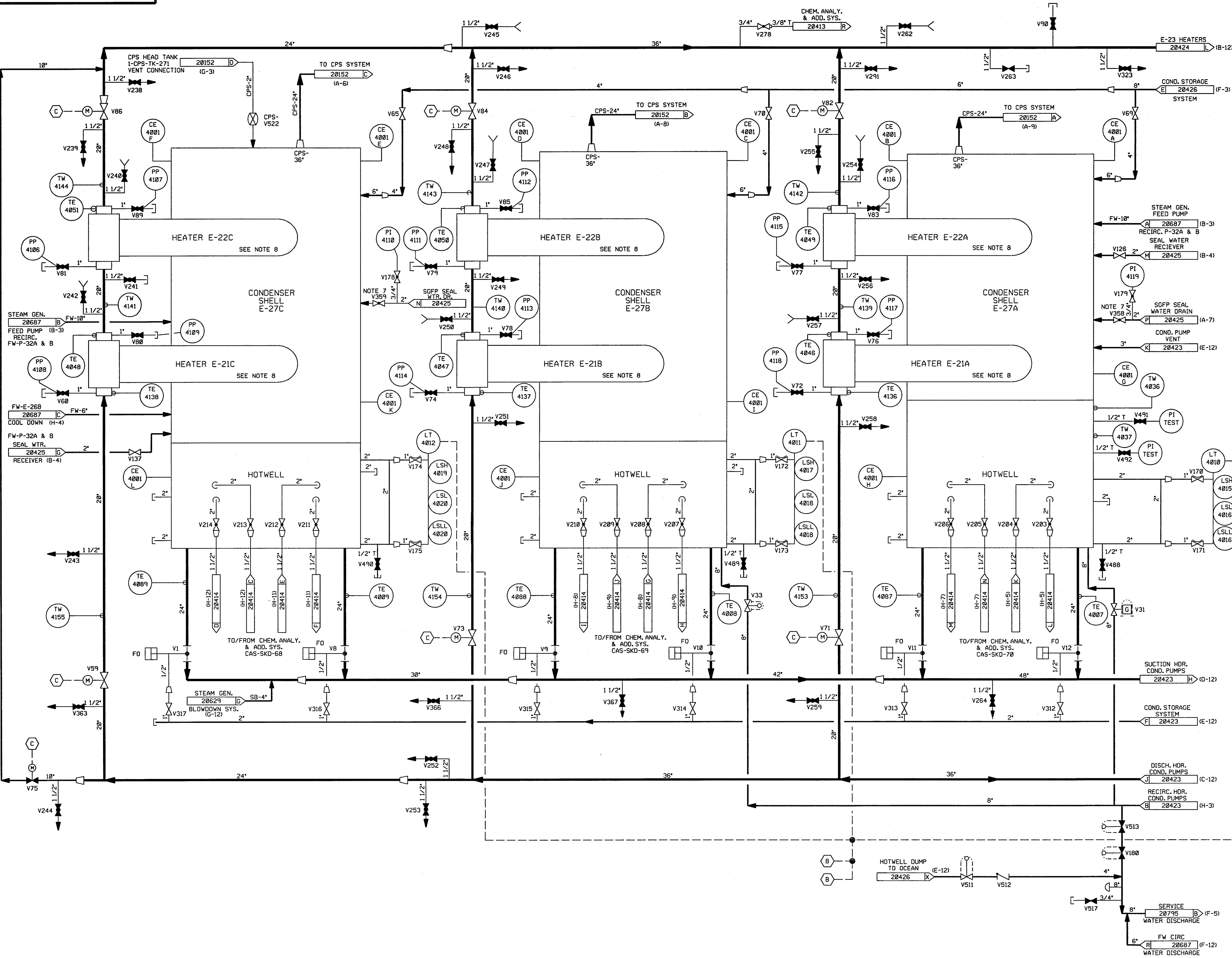
## CONDENSATE SYSTEM OVERVIEW

PID- 1-CO-B20420

9763-F-282882	13	HEATER DRNS. SHT 1 OF 2
9763-F-282883	14	HTR. DRNS. PAID SHT 1 OF 2
9763-F-282889	19	COND. CLEAN & CHEM. FEED SYS. P & ID
9763-F-282878	12	COND. SYS. P & ID SHT. 2
9763-F-282877	18	COND. SYS. P & ID SHT. 1
RFF. DRAWING NO.	REV	TITLE

PID-1-CO-B20422

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID-LEGEND 1 AND P&ID-LEGEND 2.

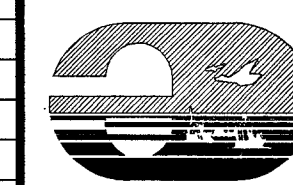


- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20420, 20423 THRU 20427.
  2. ALL LINES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX CO, UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
  4. INSTRUMENTATION REFERENCES:  
(B) TO COND. STORAGE SYSTEM, 1-CO-LV-4014A & B ON DWG CO-20426.  
(C) HIGH-HIGH LEVEL TO CLOSE RESPECTIVE HEATER COND. INLET TO NO.1 & OUTLET OF NO.2 WHILE OPENING BYPASS VALVE 1-CO-V75.
  5. DELETED
  6.  $\Delta$  - INDICATES REVISION LEVEL
  7. VALVES 358 & 359 TO BE MAINTAINED IN A THROTTLED POSITION TO PROVIDE A 60 PSIG NOMINAL BACK PRESSURE.
  8. FOR OTHER NOZZLES ON HEATERS 1-CO-21A,B&C AND 1-CO-E-22A,B&C SEE PID'S

18	7-12-07	BCS	JW	20422	INCORP CR 07-05581 REV. 0
17	4/20/05	BCS	JM	PAL	INCORP DCR 97-13 DCM-00, 60, 222
16	10/14/03	MPW	JM	SAK	PARTIAL INCORP DCR 97-013 DCM 00, 29 & 51
15	4/03/03	BCS	JM	MPW	INCORP CR 03-01559 REV. 0
14	5/25/02	BCS	MPW	RRB	INCORP MMOD 00-0533 DCM*01
13	5/17/02	JM	MPW	ICW	INCORP MMOD 00-0533 DCM*00
12	10/01/01	BCS	MPW	DJM	INCORP MSE 99-0161 REV. 0
11	11/14/00	DJM	BCS	DJM	INCORP DCR 95-0038 DCM 00 & 32
10	4/12/99	RWS	BCS	MKC	INCORP DCR 97-0044 DCM 07
9	6/28/97	MPW	DWS	WNF	INCORP MMOD 96-503 DCM 01, DCR 92-51 DCM 00, 01 & 05, PARTIAL INCORP DCR 95-38 DCM 00
8	2/28/96	DWS	BCS	VWS	INCORP MMOD 940574 CA*0
7	4/18/94	MPW	BCL	MPW	INCORP MMOD 93-554 CA0
6	4/5/93	MRB	DWS	JCM	INCORP MMOD 92-553 CA0
5	4/23/92	MRB	BCL	JEV	INCORP MMOD 91-515 CA0
4	9/17/91	MRB	JM	IW	INCORP MMOD 90-647, CA0
3	10/23/87	MPW			INCORP DCR 87-125 & 87-142, REVISED NOTE 3.
2	10/3/86	PAL	MAP	RRC	ADDED LEGEND DWG NOTE, REVISED VENT & DRAIN SYMBOLS INCORPORATE ECA 90/10861A REV'D CONTINUATION REFS., ADDED NOTE 7.
1	5/16/86	OPD	JDM	WFD	ADDED NOTE 6 AND REVISED CONTINUATIONS
0	1/13/86	DWS	TAK	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY**

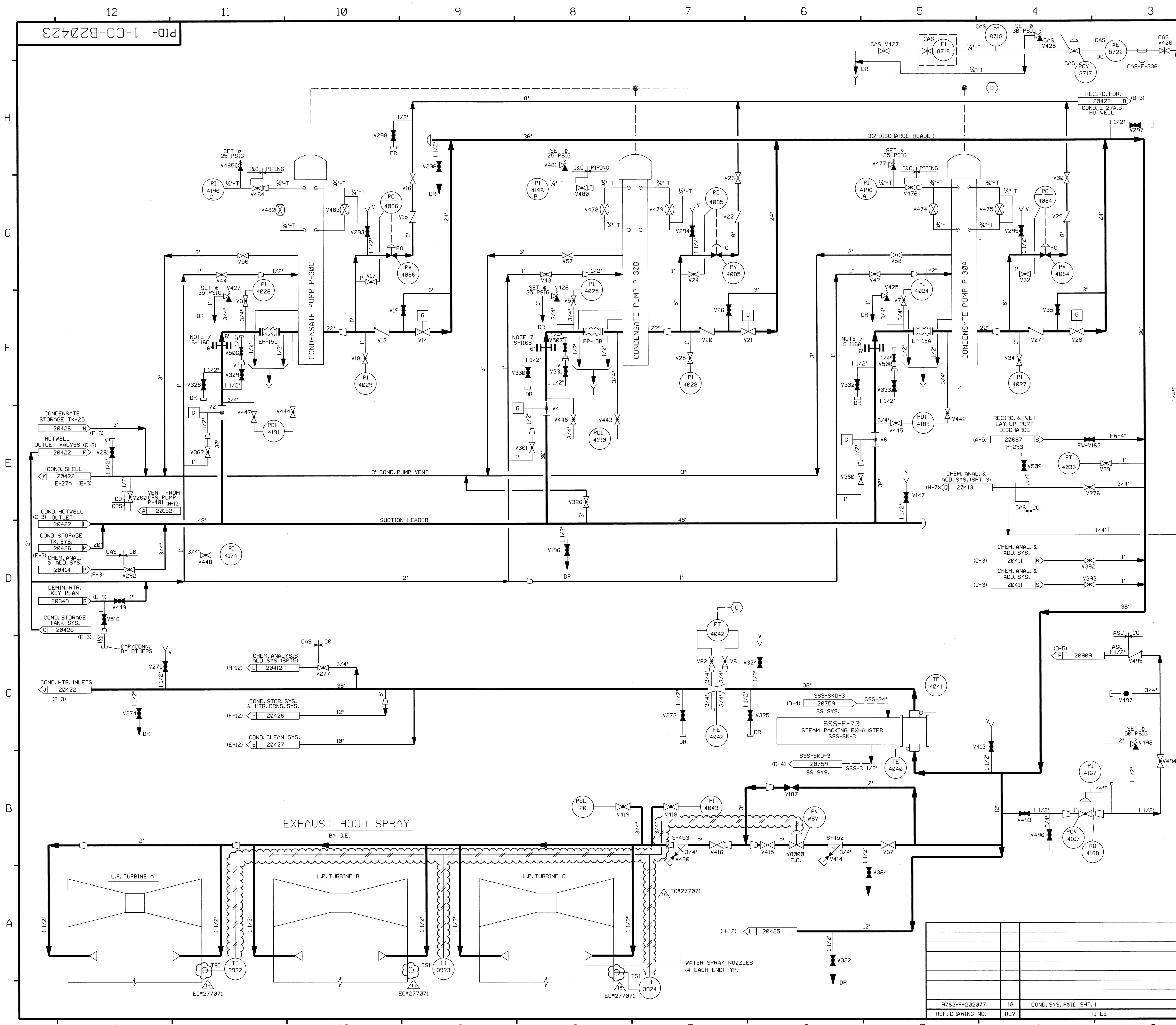
Seabrook Station



CONDENSATE SYSTEM  
DETAIL

PID- 1-CO-B20422


9763-F-202401	6	CIRCULATING WATER P & ID
9763-F-202077	18	COND. SYS. P&ID SHT 1
REF. DRAWING NO.	REV	TITLE




FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20420, 20422 & 20424 THRU 20427.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX CO, UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
  4. INSTRUMENTATION REFERENCES:
    - (C) TO COND. STORAGE SYS., I-CO-FV-4042 ON DWG. 20426.
    - (D) TO FEEDWATER PUMP SUCTION I-CO-PSL-4034 & 4035 DWG CO-20425.
  5.  $\Delta$  - INDICATES REVISION LEVEL.
  6. DELETED
  7. PERMANENT SPOOL PIECE INSTALLATION IS SHOWN. SUCTION STRAINER IS USED DURING INITIAL OPERATION. STRAINER CAN BE REMOVED FOLLOWING CO SYSTEM CLEAN-UP.

15	12/20/12	JM	BCS	MAP	INCORP EC*277071
14	8/1/06	JM	MPW	MAP	INCORP MSE 06-064 REV 00
13	4/19/05	BCS	JM	BCS	INCORP DCR 97-13 DCN-00
12	5/16/02	JM	MPW	IW	INCORP MMOD 00-0533 DCN*00 & *05
11	2/4/02	BCS	JM	DEA	INCORP MSE 01-0174 REV. 00
10	7/26/00	MPW	DWS	RWM	INCORP MMOD 97-637 DCN 00
9	6/7/97	BCS	MPW	RCP	INCORP DCR 92-31 CA04
8	11/13/95	BCL	MPW	RRC	REVISED PER ISO CO-4053-34
7	5/18/95	BCL	MPW	RCP	INCORP DCR 92-31 CA0 & 03
6	5/2/94	BCL	MPW	JCM	INCORP DCR 92-24 CA0 & 1
5	8/19/93	MRB	BCL	RSG	INCORP MMOD 98-547 CA02 & MMOD 89-616 CA02
4	9/17/91	MRB	JM	IW	INCORPORATED DCR 89-47 CA02 REVISED NOTES 2 AND 3 ADDED SSS-SYSTEM INTERFACE FOR CLARITY
3	12/29/89	MRB	APL	WFD	REVISED LINE SIZES TO EXH. HOOD SPRAY PER G.E. FP-20551. ADDED INSTRUMENTATION & LINE NOS PER U&C P&ID. PI WAS PI IN ERROR. ADDED ZONE LOCATIONS TO FLAGS DELETED NOTE 6, UPDATED REV. BLOCK.
2	10/30/86	PAL	WRD	RRC	ADDED EXHAUST HOOD SPRAY AND CONTINUATIONS, NOTE 5 INCORP. CHG ITEM 4 PER 202077-R17
1	5/27/86	OPD	JDM	WFD	ISSUED FOR OPERATIONS
0	1/13/86	DWS	TAK	WFD	
REV	DATE	DSGN	CHKD	CE	DESCRIPTION



CONDENSATE SYSTEM  
DETAIL

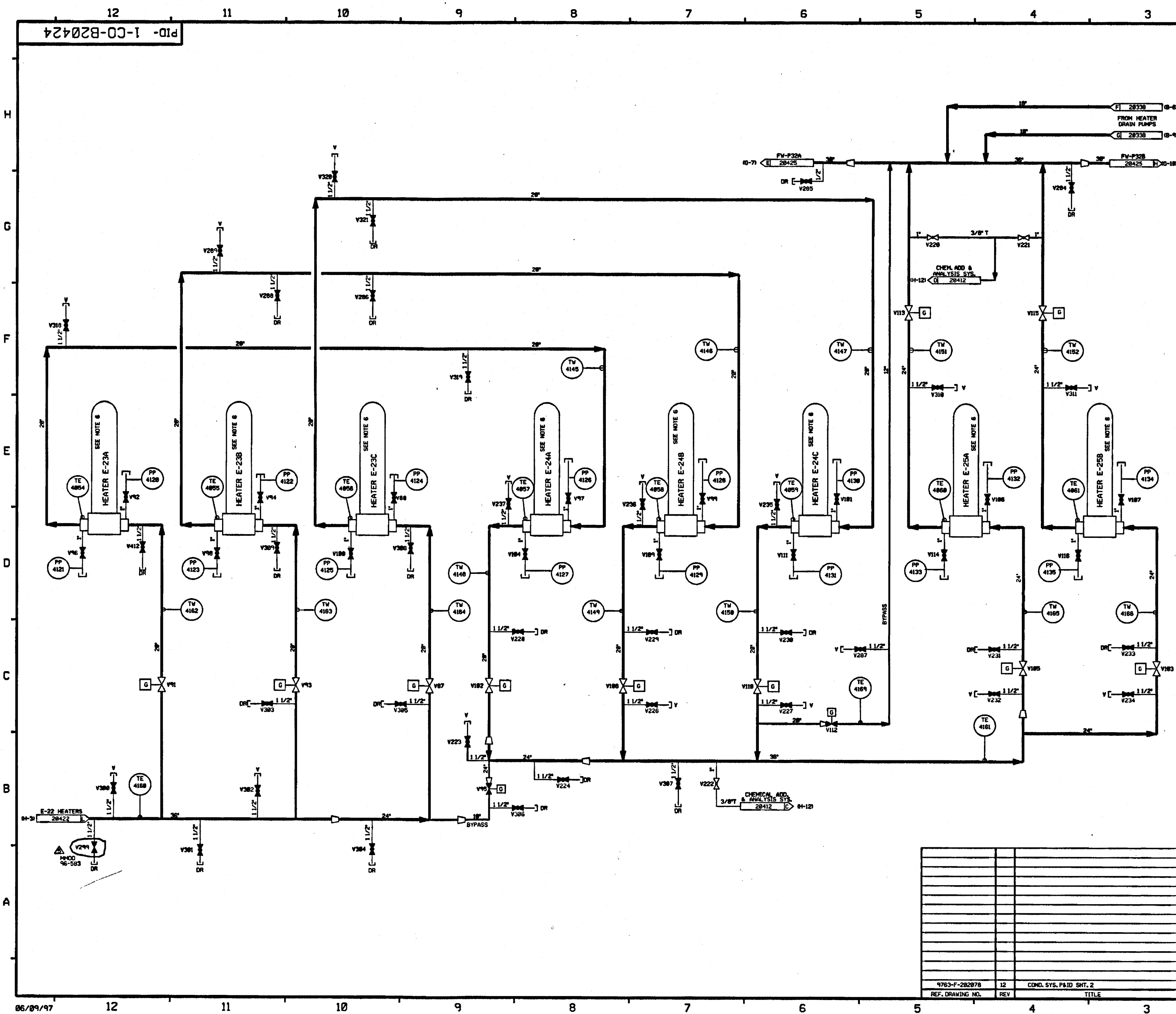


SEABROOK STATION

PID- 1-CO-B20423

9763-F-202077	18	COND. SYS. P&ID SHT. 1
REF. DRAWING NO.	REV	TITLE



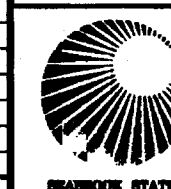


FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID-LEGEND 1 AND P&ID-LEGEND 2.

- NOTES:
1. WORK THIS DRAWING WITH 20428, 20422, 20423 , 20425, 20426 & 20427.
  2. ALL LINES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM IDENTIFICATION UNLESS NOTED OTHERWISE.
  3. ALL LINES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS 1, UNLESS NOTED OTHERWISE.
4.  $\Delta$  - INDICATES REVISION LEVEL
5. DELETED
6. FOR OTHER NOZZLES ON HEATERS 1-CO-E-23A,B,C AND 1-CO-24A,B,C SEE PID'S
- CO-20428  
CO-20429  
CO-20430  
EX-20428  
EX-20429  
EX-20430  
EX-20431  
EX-20432  
EX-20433  
EX-20434  
EX-20435  
EX-20436  
EX-20437  
EX-20438  
EX-20439  
EX-20440  
EX-20441  
EX-20442

5	04/01	MPV	---	DWS	FAC	BZ	INCORP MH40 46-563 DCN 01
4	4/5/93	MWB	---	DWS	BCL	JCH	INCORP MH40 46-563 CAB
							ADDED CORDS AND CORDS ADDED DRAIN PER ELECTION LOG ADDED DRAIN ADDED DRAIN PER ELECTION LOG ADDED DRAIN ADDED DRAIN PER ELECTION LOG ADDED DRAIN ADDED DRAIN PER ELECTION LOG ADDED DRAIN DELETED NOTE 5.
3	10/24/96	MRJ	DWS	WRD	RRC	PHH	
2	8/27/98	JDM	TAK	BCL	JMCS	RRC	CHANGE DRAIN LOCATION BACK TO DESIGN PER WALKDOWN
1	5/16/98	OPD	SKN	JDM	DJM	WFD	ADDED NOTES 4 & 5
0	1/13/98	OPD	SKN	TAK	DHF	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

**North Atlantic** Energy Service Corporation

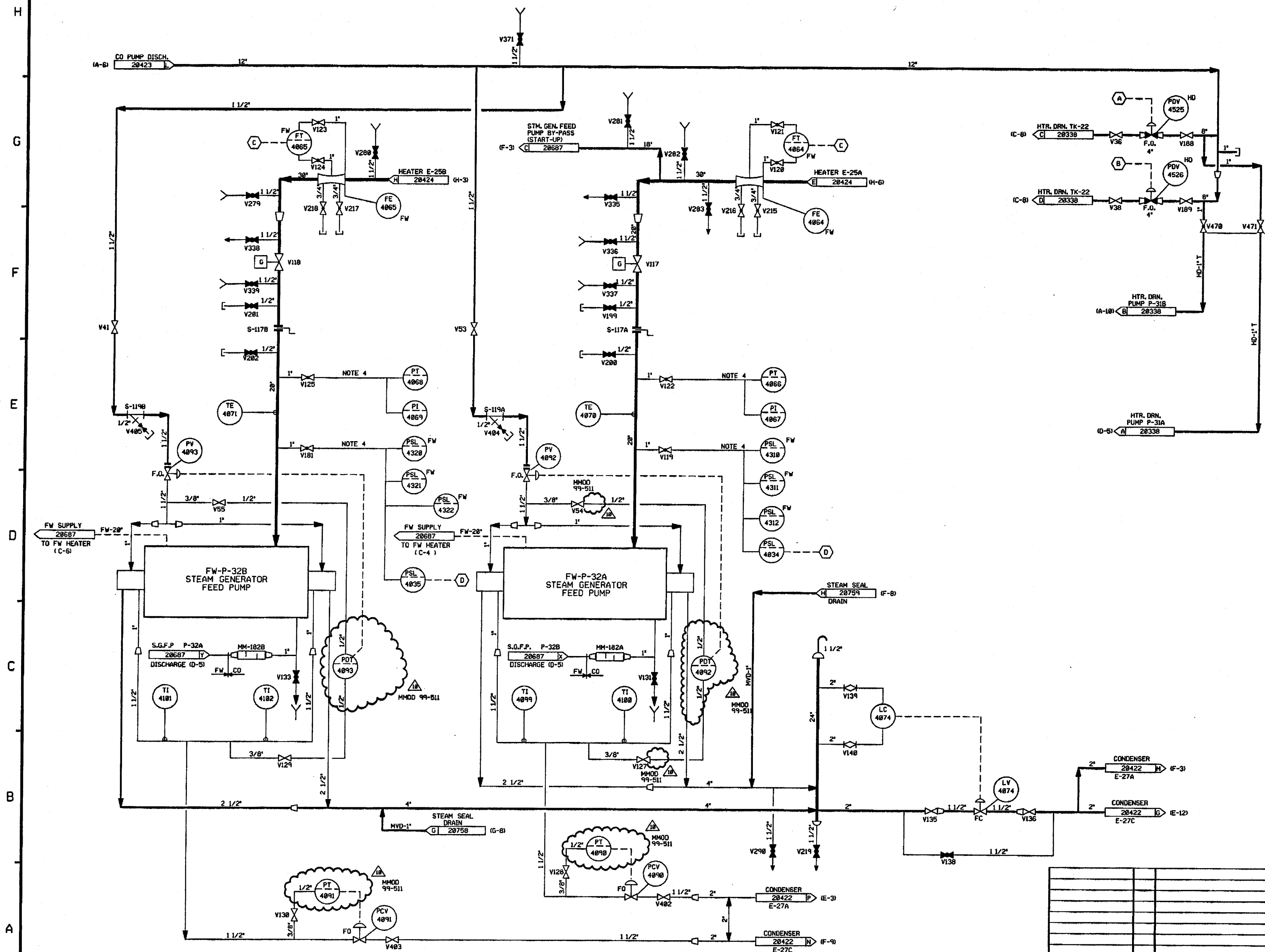


## CONDENSATE SYSTEM DETAIL

PID- 1-CO-B20424

PID-1-CO-B20425

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20420, 20422, 20423, 20424, 20426 THRU 20430.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX CO UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NMS, UNLESS NOTED OTHERWISE.
  4. REFERENCE TEST LOOP DWGS. FOR VALVE I.D.
  5. INSTRUMENTATION REFERENCES:
    - (A) FROM HD-PDY-4525-2 LOCATED IN HD-CP-551.
    - (B) FROM HD-PDY-4526-2 LOCATED IN HD-CP-551.
    - (C) TO RECIRCULATING VALVES FW-4064 & 4065.
    - (D) TO CONDENSATE PUMP MOTORS 1-CO-P-30A, B&C ON DWG. CO-20423.
  6.  $\Delta$  INDICATES REVISION LEVEL.

REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
10	11/11/00	MRB	---	---	---	---	INCORP. MMOD 99-511 DGN 00
9	8/10/99	MRB	---	---	---	---	INCORP. MMOD 92-053 C&B1
8	11/16/92	MRB	---	---	---	---	INCORP. MMOD 91-552 C&B & DCR 91048 C&B
7	1/20/90	MRB	---	---	---	---	INCORP. MMOD 91-622 C&B
6	9/17/90	MRB	FCB	JM	GPM	WFD	INCORP. MMOD 90-647 C&B
5	8/2/90	MRB	RNC	FCB	DWS	WFD	INCORP. DCR 89-47 C&B
4	5/5/89	MRB	JM	GPM	PAL	GRM	REVISED CONTINUATION REFERENCE, ADDED PAID LEGEND REF. NOTE.
3	3/4/87	OPD	TAK	MRJ	BCL	RRC	ADDED DRAIN & VENT SYMBOLS, ADDED CONTINUATION REFERENCES, REV'D TO INC. PIPING ERECTION ISO. 1-CO-4049-57
2	4/17/86	BCL	TAK	MAP	VNK	RRC	ADDED CONTINUATIONS & NOTE 6.
1	2/16/86	OPD	SKN	JDM	DFM	WFD	ADDED CONTINUATIONS & NOTE 6.
0	1/13/86	DWS	MRB	TAK	DHF	WFD	ISSUED FOR OPERATIONS

North Atlantic Energy Service Corporation



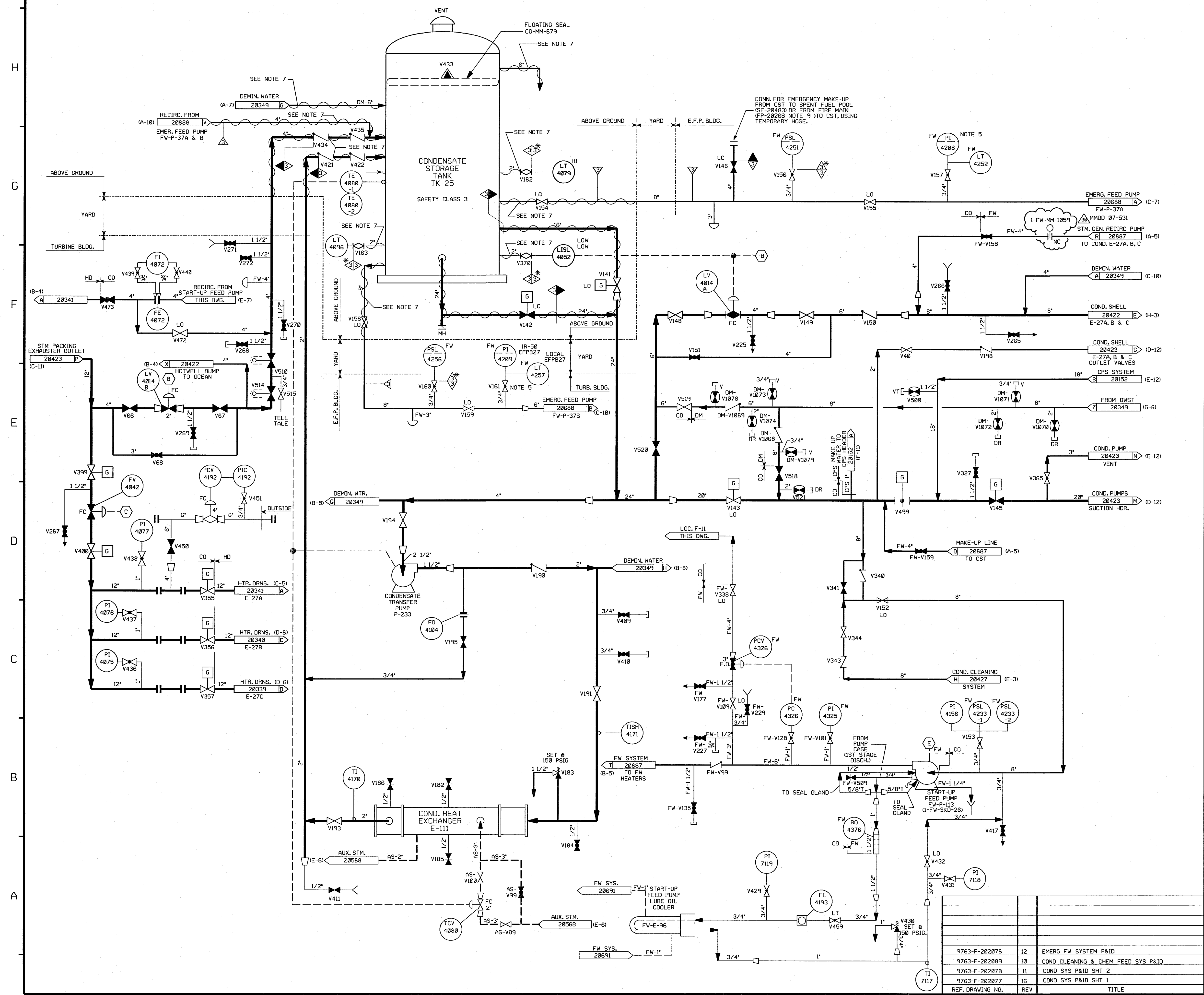
CONDENSATE SYSTEM  
DETAIL

PID-1-CO-B20425

REF. DRAWING NO.	REV	TITLE
9763-F-202083	14	HTR. DRN. SYS. PAID SHT. 2 OF 2
9763-F-202089	10	COND. CLEANING & CHEM. FEED SYS. PAID
9763-F-202070	11	COND. SYS. PAID SHT. 2
9763-F-202077	16	COND. SYS. PAID SHT. 1

PID-1-CO-B20426

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

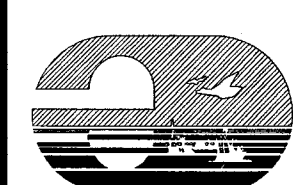


- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20420, 20422, 20423, 20424, 20425 & 20427.
  2. ALL LINES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX CO, UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NWS, UNLESS NOTED OTHERWISE.
  4. INSTRUMENTATION REFERENCES:
    - (B) TO COND. HOTWELL, 1-CO-LT-4010, 4011, 4012 DWG 20422.
    - (C) TO STEAM PACKING EXHAUSTER VENTURI, 1-CO-FT-4042 ON DWG 20423.
    - (E) LUBE OIL PIPING FROM FW-P-161
  5. REF TEST LOOP DIAGRAM FOR VALVE I.D..
  6.  $\Delta$  - INDICATES REVISION LEVEL.
  7. HEAT TRACING HAS BEEN DISCONNECTED AND IS NONFUNCTIONAL.

PORTIONS OF THIS DRAWING ARE  
**NUCLEAR SAFETY RELATED**

30	4/25/08	JM	BS	DM	INCORP MMOD 07-531 DCN 00
29	3/14/07	BCS	JM	RRB	INCORP MSE 06-132 REV. 0
28	11/1/06	JM	BCS	RRB	INCORP MMOD 03-504 DCN 00
27	4/30/05	BCS	JM	DJM	INCORP DCR 97-013 DCN 00, 174 INCORP DCR 04-004 DCN 00 & 06
26	11/24/03	BCS	MPW	HWM	INCORP CR 03-05429
25	10/14/03	MPW	BCS	SAK	PARTIAL INCORP. DCR 97-013 DCN 00
24	7/11/02	MPW	JM	IW	INCORP DCR 95-038 DCN 00 & 38 MMOD 00-533 DCN 00
23	3/14/02	JM	MPW	DJM	INCORP MSE 00-189 REV. 0
22	10/01/01	BCS	MPW	DJM	INCORP MSE 00-233 REV. 0
21	6/9/99	DWS	RWS	DJM	INCORP MMOD 97-618 DCN 00
20	1/2/98	DRL	MPW	VWS	INCORP MMOD 96-550 DCN 02
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

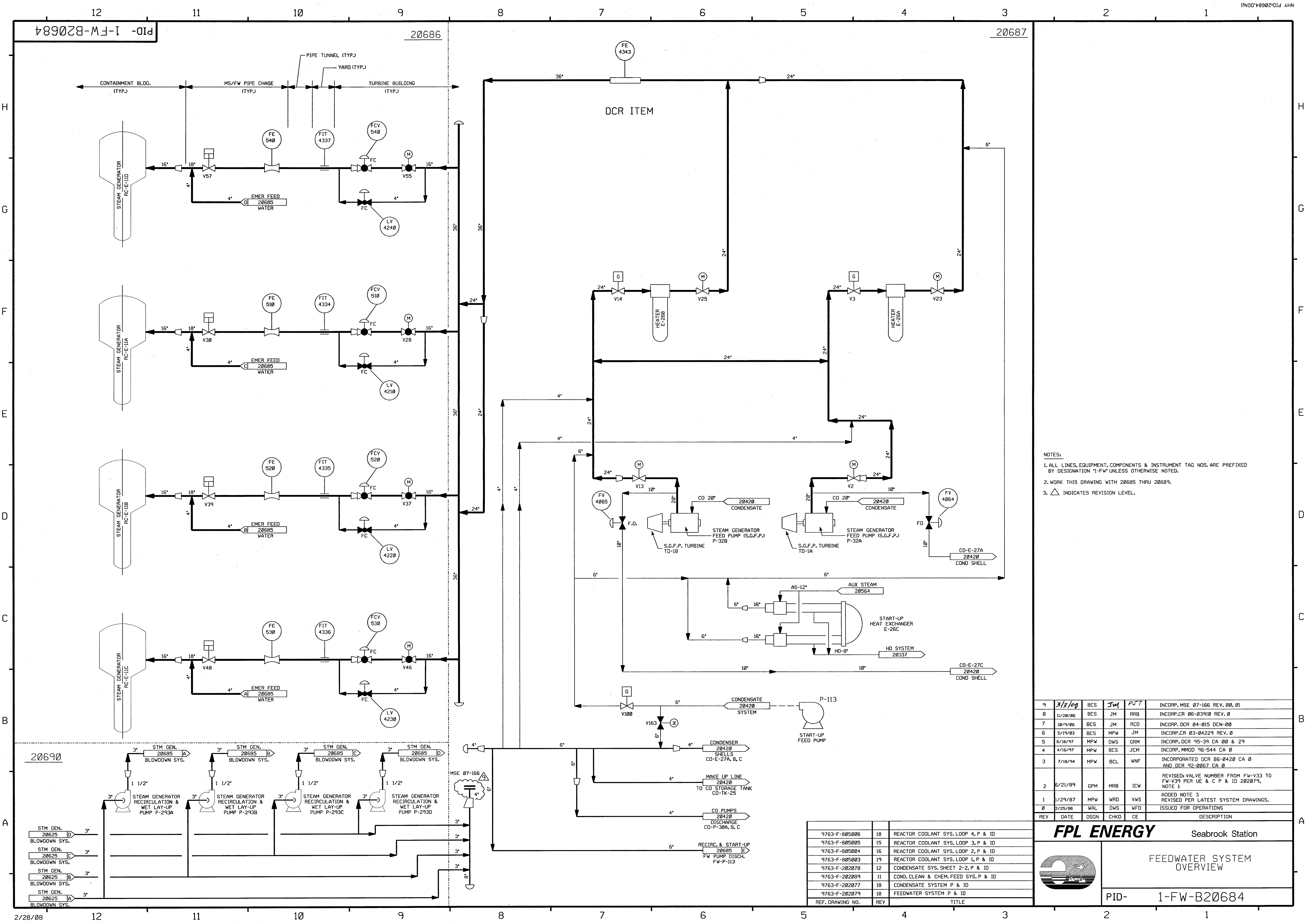
**FPL ENERGY** Seabrook Station



CONDENSATE SYSTEM  
DETAIL

PID-1-CO-B20426

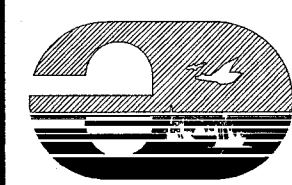
763-F-202076	12	EMERG. FW SYSTEM P&ID
763-F-202089	10	COND. CLEANING & CHEM FEED SYS P&ID
763-F-202078	11	COND. SYS P&ID SHT. 2
763-F-202077	16	COND. SYS P&ID SHT. 1
REF. DRAWING NO.	REV	TITLE



NOTES:  
1. ALL LINES, EQUIPMENT, COMPONENTS & INSTRUMENT TAG NOS. ARE PREFIXED BY DESIGNATION '1-FW' UNLESS OTHERWISE NOTED.  
2. WORK THIS DRAWING WITH 20685 THRU 20689.  
3. △ INDICATES REVISION LEVEL.

9	3/3/09	BCS	JM	PJT	INCORP. MSE 07-166 REV. 00. 01
8	11/20/06	BCS	JM	RRB	INCORP. DCR 06-03910 REV. 0
7	10/9/06	BCS	JM	RCD	INCORP. DCR 04-015 DCN-00
6	5/19/03	BCS	MPW	JM	INCORP. DCR 03-04229 REV. 0
5	6/18/97	MPW	DWS	CRM	INCORP. DCR 95-39 CA 00 & 29
4	4/16/97	MPW	BCS	JCM	INCORP. MMOD 96-544 CA 0
3	7/18/94	MPW	BCL	WNF	INCORP. DCR 86-0420 CA 0 AND DCR 92-0067 CA 0
2	6/21/89	GPM	MRB	ICW	REVISED VALVE NUMBER FROM FW-V33 TO FW-V39 PER UE & C P & ID 202079, NOTE 1
1	1/29/87	MPW	WRD	VWS	ADDED NOTE 3
0	2/25/86	WAL	DWS	WFD	REVISED PER LATEST SYSTEM DRAWINGS.
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

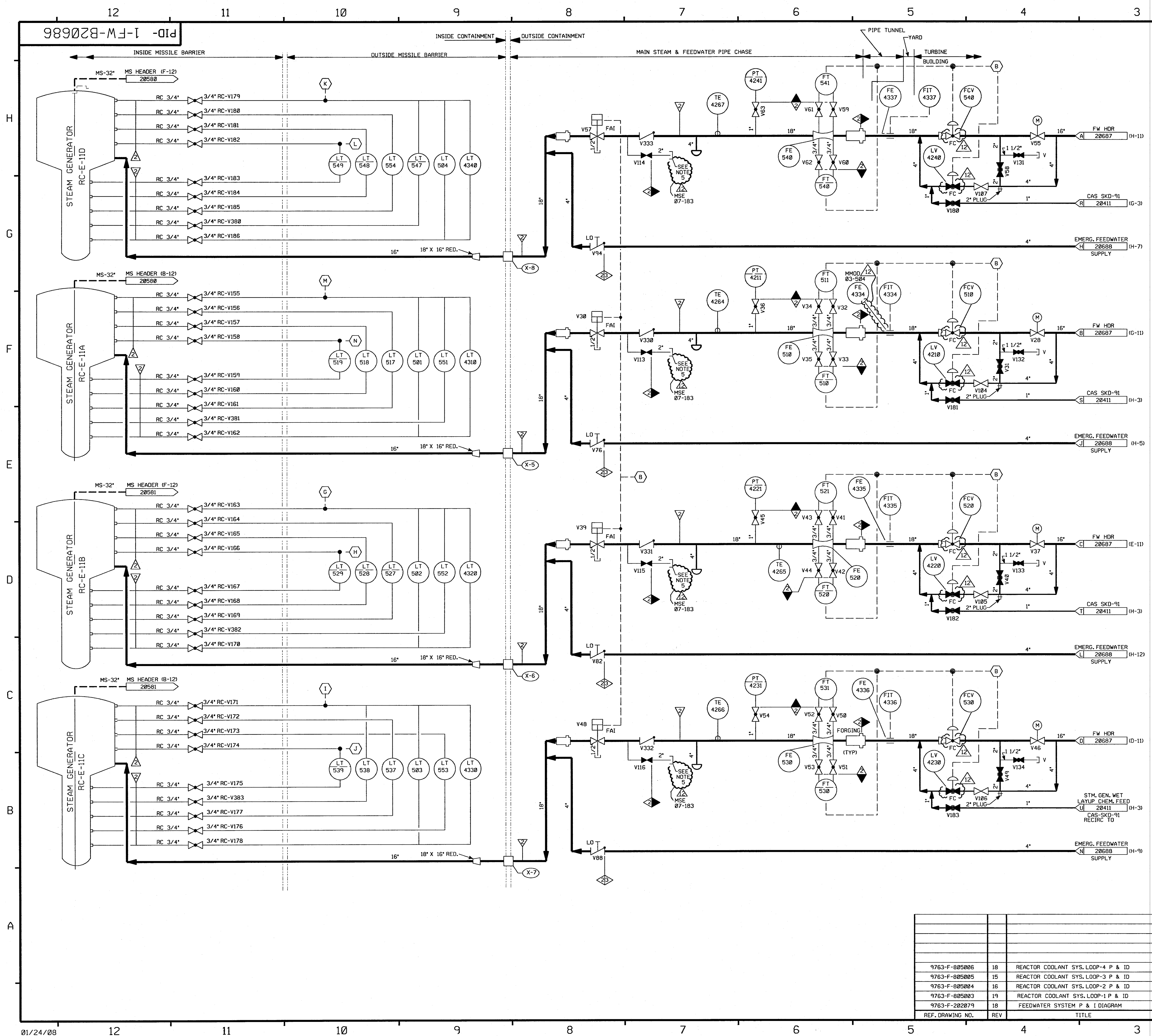
**FPL ENERGY** Seabrook Station

 **FEEDWATER SYSTEM OVERVIEW**

PID- 1-FW-B20684

9763-F-805006	18	REACTOR COOLANT SYS. LOOP 4, P & ID
9763-F-805005	15	REACTOR COOLANT SYS. LOOP 3, P & ID
9763-F-805004	16	REACTOR COOLANT SYS. LOOP 2, P & ID
9763-F-805003	19	REACTOR COOLANT SYS. LOOP 1, P & ID
9763-F-202070	12	CONDENSATE SYS. SHEET 2-2, P & ID
9763-F-202089	11	COND. CLEAN & CHEM. FEED SYS. P & ID
9763-F-202077	18	CONDENSATE SYSTEM P & ID
9763-F-202079	18	FEEDWATER SYSTEM P & ID
REF. DRAWING NO.	REV	TITLE





FOR P&ID REFERENCE, DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID-LEGEND 1 AND P&ID-LEGEND 2.

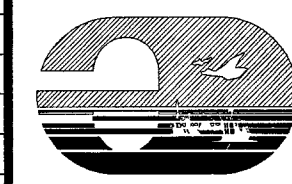
- NOTES:
1. PIPING, VALVES, EQUIPMENT & INSTRUMENT TAG NOS. ARE PREFIXED BY DESIGNATION "1-FW", UNLESS OTHERWISE NOTED.
  2. WORK THIS DWG. WITH 20684, 20685, 20687 & 20688.
  3. INSTRUMENT IDENTIFICATION
    - (B) PROTECTION SYS. FW ISOLATION SIGNAL.
    - (G) TO FT-523 ON DWG. 1-MS-20581
    - (H) TO FT-522 ON DWG. 1-MS-20581
    - (I) TO FT-533 ON DWG. 1-MS-20581
    - (J) TO FT-532 ON DWG. 1-MS-20581
    - (K) TO FT-542 ON DWG. 1-MS-20588
    - (L) TO FT-543 ON DWG. 1-MS-20588
    - (M) TO FT-512 ON DWG. 1-MS-20588
    - (N) TO FT-513 ON DWG. 1-MS-20588
  4. VENTS, DRAINS AND TEST CONNECTION CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-000111 UNLESS NOTED OTHERWISE.
  5. CONNECTION USED FOR PRE-PLANNED MAKEUP STRATEGY. SEE FPS99899.

PORTIONS OF THIS DRAWING ARE  
**NUCLEAR SAFETY RELATED**

12	1-31-08	JM	GPS	qyf	INCORP. MMOD 03-504 DCN 00, MSE 07-183 REV 00 & CHANGED VALVE SYMBOLS
11	11/8/00	BCS	MPW	ARB	INCORP. DCR 98-31 DCN 00
10	4/27/99	RWS	BCS	HWM	INCORP. DCR 96-0028 DCN 00
9	6/02/98	DRL	BCS	VNS	INCORP. MMOD 97-521 DCN 00
8	11/27/95	MPW	BCS	HWM	INCORP. DCR 95-42 CA0
7	7/19/94	BCL	DWS	WHF	INCORP. MMOD 92-67 CA0
6	3/11/94	MRB	BCL	GRM	INCORP. MMOD 92-553 CA01
5	4/20/92	MRB	BCL	RRB	INCORP. MMOD 91-515 CA0
4	9/27/88	GPM	APL	---	REVISED: PIPING TO CLARIFY DUPLICATION OF ASSOCIATED SYSTEMS AND INTERFACES. LOC OF CLASS BREAK FOR CLARIFICATION. DELETED NNS-1 CL BOUNDARY. CORRECTED INSTR CONN PER REVIEW OF DWG 0802008. ADDED LEGEND NOTE & CONT DWG CORR'S. UPDATED REF DWG REV'S.
3	11/4/86	JDM	WRD	RRR	REV'D TO REFLECT AS-BUILT CONFIG.
2	8/22/86	JDM	WRD	PHH	ECA 05/103386B
1	6/16/86	TAK	DWS	RRR	ISSUED FOR OPERATIONS
0	2/24/86	WAL	DWS	WFD	
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY**

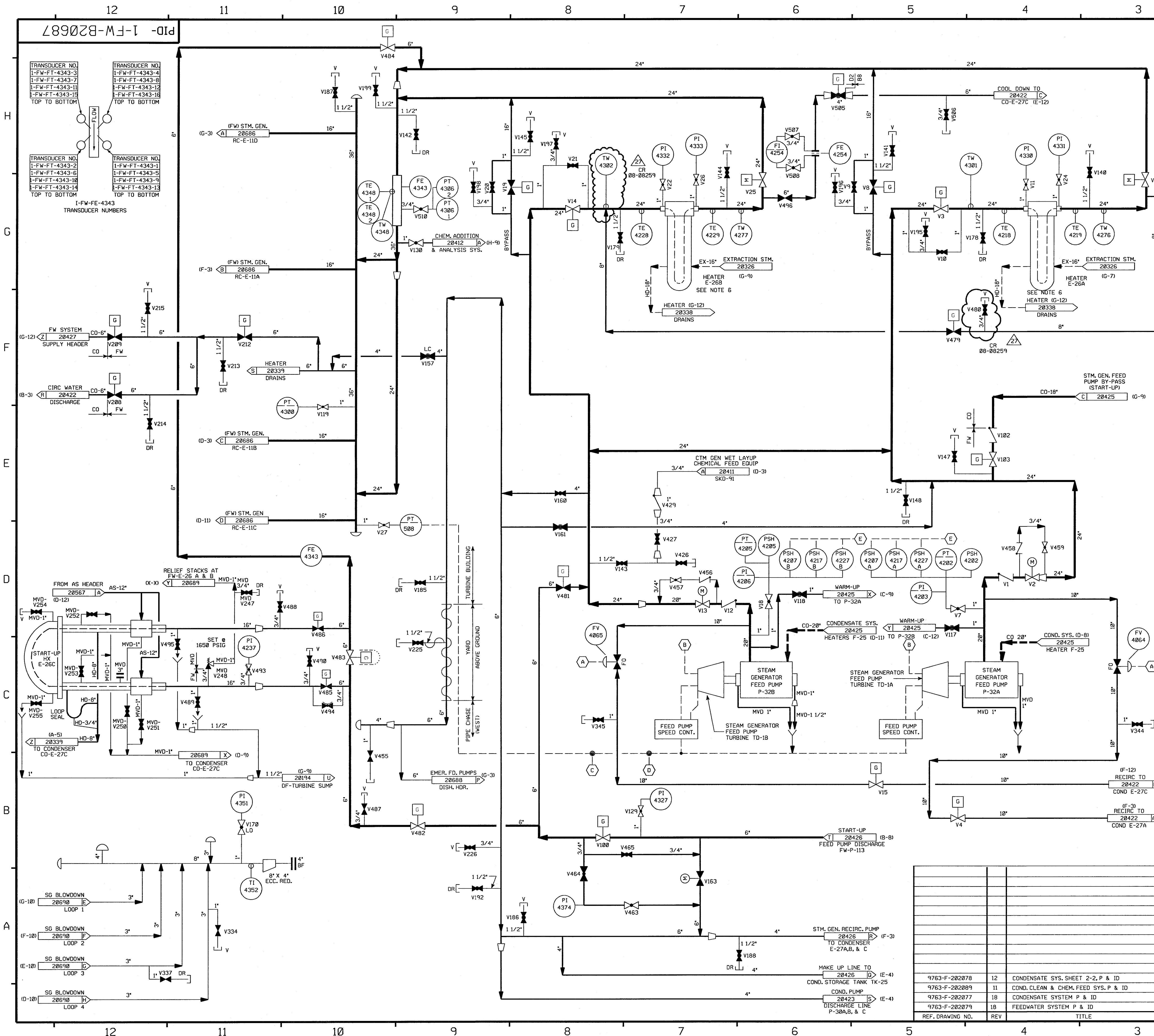
Seabrook Station



FEEDWATER SYSTEM  
DETAILS

PID- 1-FW-B20686

9763-F-805006	18	REACTOR COOLANT SYS. LOOP-4 P & ID
9763-F-805005	15	REACTOR COOLANT SYS. LOOP-3 P & ID
9763-F-805004	16	REACTOR COOLANT SYS. LOOP-2 P & ID
9763-F-805003	19	REACTOR COOLANT SYS. LOOP-1 P & ID
9763-F-202879	18	FEEDWATER SYSTEM P & I DIAGRAM
REF. DRAWING NO.	REV	TITLE



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH 20684 THRU 20686 & 20688, 20689 & 20990.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "FW", UNLESS OTHERWISE NOTED.
  3. INSTRUMENT REFERENCES:
    - (A) FEEDWATER PUMP FLOW (LOW)
    - (B) PROTECTION SYS. FW ISOLATION SIGNAL
    - (C) MAIN STEAM HEADER PRESSURE
    - (D) TOTAL STEAM FLOW
    - (E) TRIPS FEEDWATER PUMPS ON 2/3 HIGH PRESSURE
  4. ALL LINES, EQUIPMENT, COMPONENTS & INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS OTHERWISE NOTED.
  5.  $\Delta$  INDICATES REVISION LEVEL.
  6. FOR OTHER NOZZLES ON HEATERS 1-FW-E-26A&B SEE PID'S:
    - EX-20326
    - FW-20689
    - HD-20338
    - MD-20475

27	7/29/08	GPS	JM	QW	INCORP CR 08-08259 & REINCORP DCR 95-0039 CA 00
26	4/25/08	JM	BCS	DJM	INCORP MMD 07-531 DCN 00
25	3/3/08	BCS	JM	PJT	INCORP MSE 07-166 REV. 00, 01
24	11/20/06	BCS	JM	RRB	INCORP CR 06-03910 REV. 0
23	10/09/06	BCS	JM	RCD	INCORP DCR 04-015 DCN 00
22	12/1/05	BCS	JM	HWM	INCORP MMD 05-518 DCN-03
21	2/14/02	MPW	BCS	DJM	INCORP. ECA 73/5270A
20	10/6/00	DWS	MPW	JCM	INCORP MMD 980594 DCN*00
19	4/11/99	RWS	BCS	MKC	INCORP DCR 97-0044 DCN 00
18	2/23/99	BCS	DWS	MKC	INCORP MMD 98-636 DCN-00
17	9/18/97	BCS	MPW	GG	INCORP DCR 96-594 DCN-0
16	7/17/97	MPW	BCS	GRM	INCORP DCR 95-39 DCN 49
15	6/18/97	MPW	DWS	GRM	INCORP DCR 95-39 CA 29 & DCN 39
14	4/16/97	MPW	BCS	JCM	INCORP MMD 96-544 CA0
13	12/2/95	MPW	BCS	RJF	INCORP DCR 95-39 CA 0, 1 & 6
12	7/18/94	MPW	BCL	JCM	INCORP DCR 86-420 CA 0
11	4/5/93	MRB	DWS	JCM	INCORP MMD 92-553 CA0
10	10/27/92	MRB	BCL	IW	INCORP DCR 91-57 CA0
9	9/2/92	MRB	DWS	DJM	INCORP. MMD 90677 CA 5
8	4/20/92	DWS	BCL	DJM	INCORP. MMD 90677 CA 1, 2 & 3
7	9/25/91	GPM	JM	DJM	INCORP. DCR 91-049 CA0 PARTIAL INCORP. OF MMD 90-677 CA0 REVISED NOTES 1, 2, 3 & 4
6	5/30/91	MRB	RMC	IW	INCORPORATED MMD 90-588 CA0
5	3/29/90	MRB	APL	RSQ	INCORPORATED DCR 89-21 CA REVISED INSTR. PER SIS VERIFICATION
4	10/30/87	MPW	BCL	PAS	REV'D NOTE 2.4 DWG. CONT. DELETED/REPLACED VALVES, PIPING & ECA IN ILS/SUPERSEDED BY DCR 86-420
3	5/14/87	MPW	DWS	MJY	INCORP DCR 87-176. REVISED PER U&C P&ID, ADDED NOTE 5, REVISED TO CLARIFY DUPLICATION OF SYSTEMS. REINCORP. ECA 99/112343A, ADDED I.O.C.A. DESIGNATION TO CONTINUATIONS. REV'D SIZE OF FV-4064 & FV-4065 FROM 6" TO 10" DELETED VENTS (V136, V137, V138, V139) PER ECA 19/113318, EXPANDED SB INTAKE HEADER AREA FOR CLARITY. INCORP. ECA 19/082798 95/112343A AND 95/116083A, CORRECTED PUMP NO. 293, APPROP'D CHANGE ITEM #1 PER 2020/9 REV. 18
2	10/9/86	PAL	MAP	RRC	ISSUED FOR OPERATIONS
1	6/20/86	DWS	JDM	RRC	
0	8/24/86	WAL	DWS	WFD	
REV	DATE	DSGN	CHKD	SES	DESCRIPTION

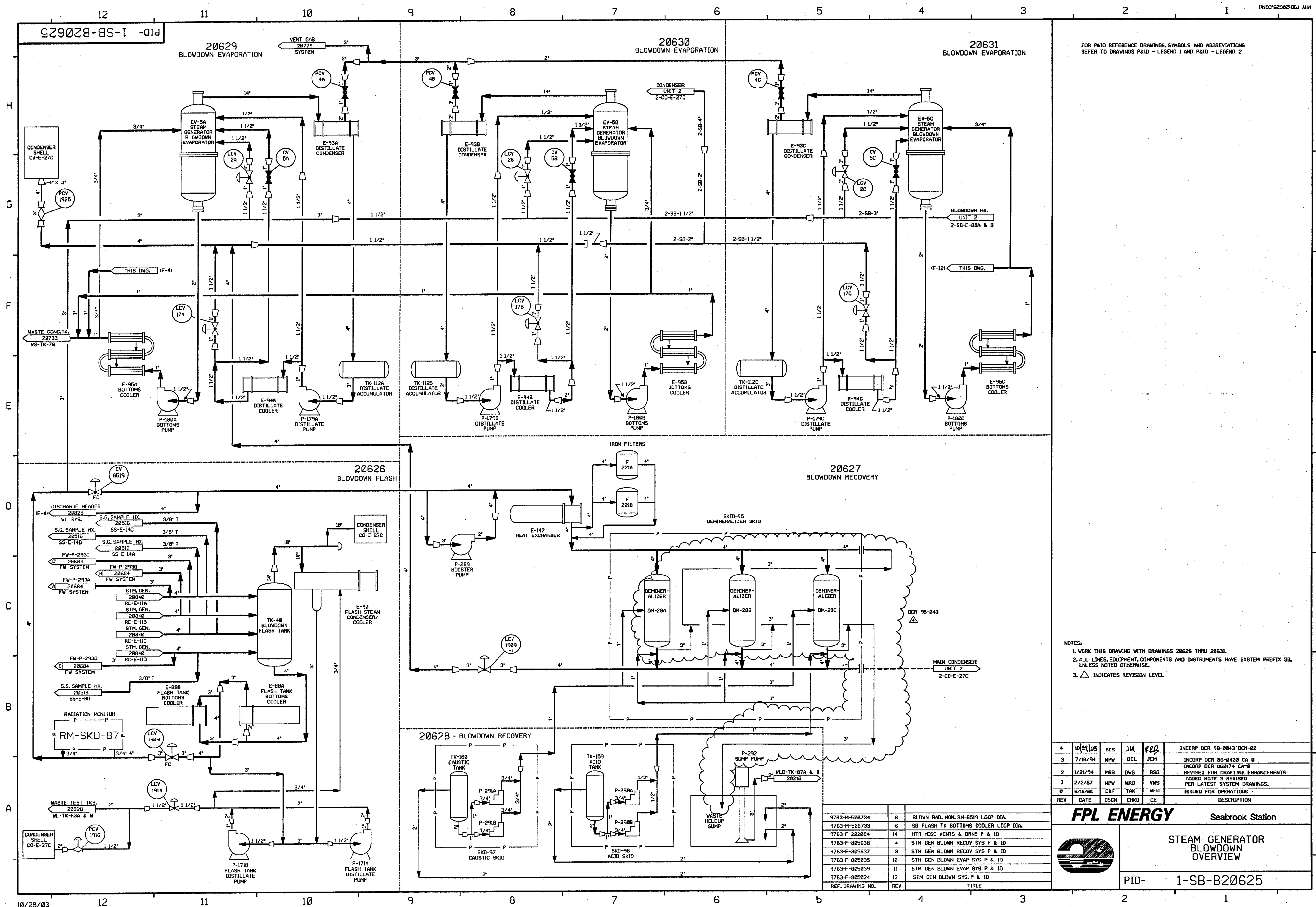
**FPL ENERGY**

Seabrook Station

**FEEDWATER SYSTEM DETAILS**

PID-1-FW-B20687

REF. DRAWING NO.	REV	TITLE
9763-F-202078	12	CONDENSATE SYS. SHEET 2-2, P & ID
9763-F-202089	11	COND. CLEAN & CHEM. FEED SYS. P & ID
9763-F-202077	18	CONDENSATE SYSTEM P & ID
9763-F-202079	18	FEEDWATER SYSTEM P & ID



NOTES:

1. WORK THIS DRAWING WITH DRAWINGS 20626 THRU 20631.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SB, UNLESS NOTED OTHERWISE.
3.  $\Delta$  INDICATES REVISION LEVEL.

4	10/29/03	BCS	JH	REP	INCORP DCR 98-043 DCH-00
3	7/18/94	WV	BEL	JCH	INCORP DCR 88-0420 CA 0
2	1/21/94	MRB	DWS	RSG	INCORP DCR 88074 CA00
1	2/2/87	WV	WV	WV	ADDED NOTE 3 REVISED PER LATEST SYSTEM DRAWINGS.
0	5/15/86	DBF	TAK	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

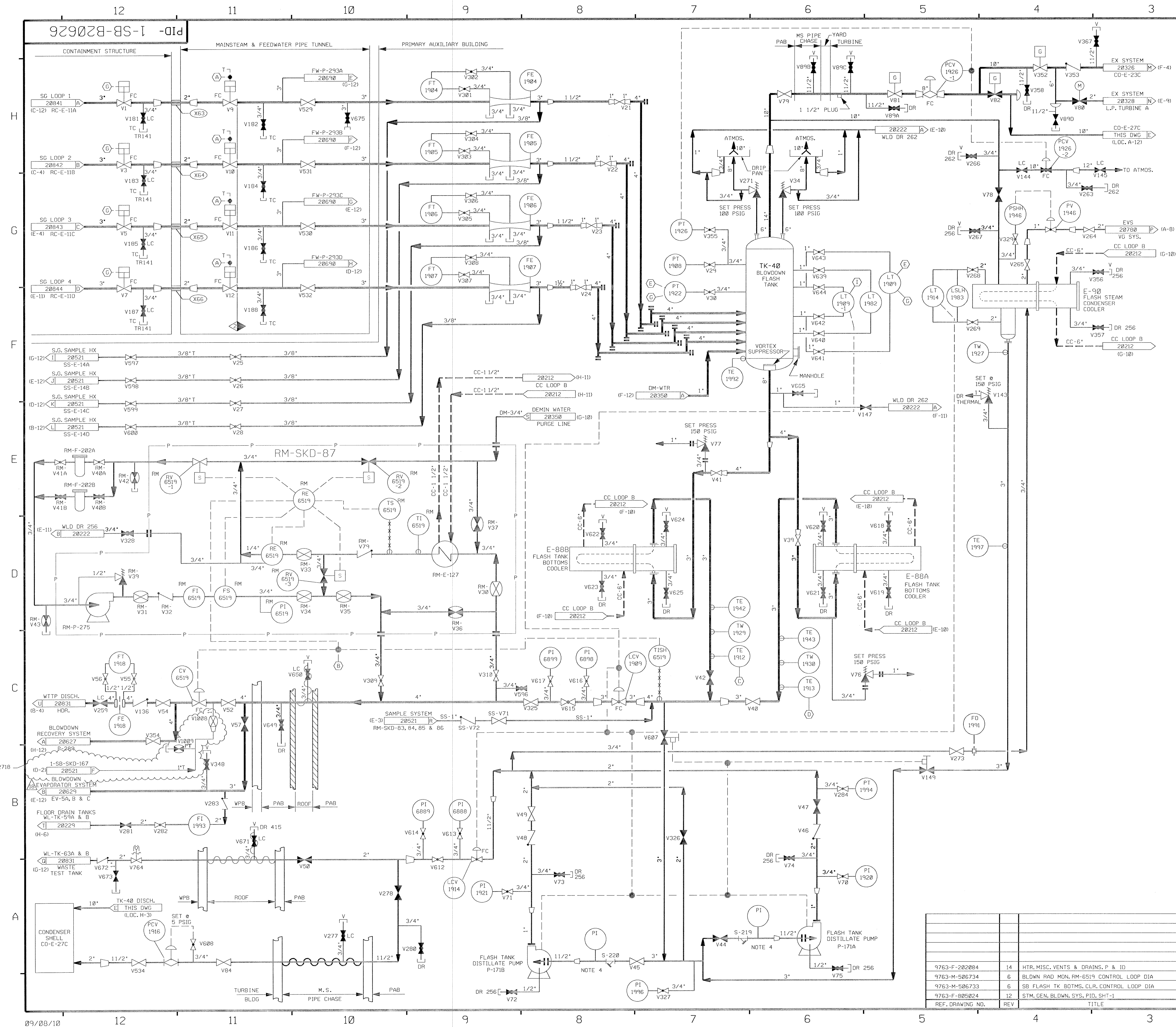
**FPL ENERGY**

Seabrook Station

**STEAM GENERATOR BLOWDOWN OVERVIEW**

PID- 1-SB-B20625






FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING 20625 AND 20627 THRU 20631.
  2. ALL PIPING, VALVES, EQUIP. & INSTRUMENTS HAVE SYSTEM PREFIX SB, UNLESS NOTED OTHERWISE.
  3. ALL PIPING, VALVES, EQUIPMENT & INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
  4. PROVIDE 3/4" PRESSURE TAP & PLUG FOR P.I.'S. START-UP ENGINEERING TO PROVIDE PIPING, VALVES & P.I.'S; ALSO STRAINER BLOW-OFF PIPING & VALVES FOR INITIAL OPERATION. STRAINER SCREEN TO BE REMOVED AFTER START-UP.
  5. Δ INDICATES REVISION LEVEL.
  6. VENTS, DRAINS, AND TEST CONNECTION CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1- NHY-005111, UNLESS NOTED OTHERWISE.
  7. INSTRUMENT REFERENCES:
    - (A) FROM EMERGENCY FEEDWATER PUMPS, CLOSE SIGNAL TO SB-V9 THRU SB-V12.
    - (B) FROM RM-RM-6510 THRU 6519 INTERLOCK, DWG 20519 & RM-RM-6519.
    - (C) TO TCV-1912 (SB-E-88B OUTLET) ON DWG 20212.
    - (D) TO TCV-1913 (SB-E-88A OUTLET) ON DWG 20212.
    - (E) TO TCV-1922 (SB-E-90 OUTLET) ON DWG 20212.
    - (F) HI HI PR & HI HI LEVEL DN TK-40 TO SHUT SB-V1, V3, V5 & V7.
    - (I) TO LCV-1909-1 ON DWG 20627.

PORTIONS OF THIS DRAWING ARE  
**NUCLEAR SAFETY RELATED**

18	9/9/10	BCS	MW	SAK	INCORP. EC*12718
17	5/4/10	JM	MW	SAK	PARTIAL INCORP. EC*12718
16	8/16/07	BCS	JM	TAS	INCORP. DCR 06-010 DCN-00
15	2/2/05	BCS	JM	RRB	INCORP. CR 04-12557 REV. 00
REV	DATE	DSGN	CHKD	CE	DESCRIPTION



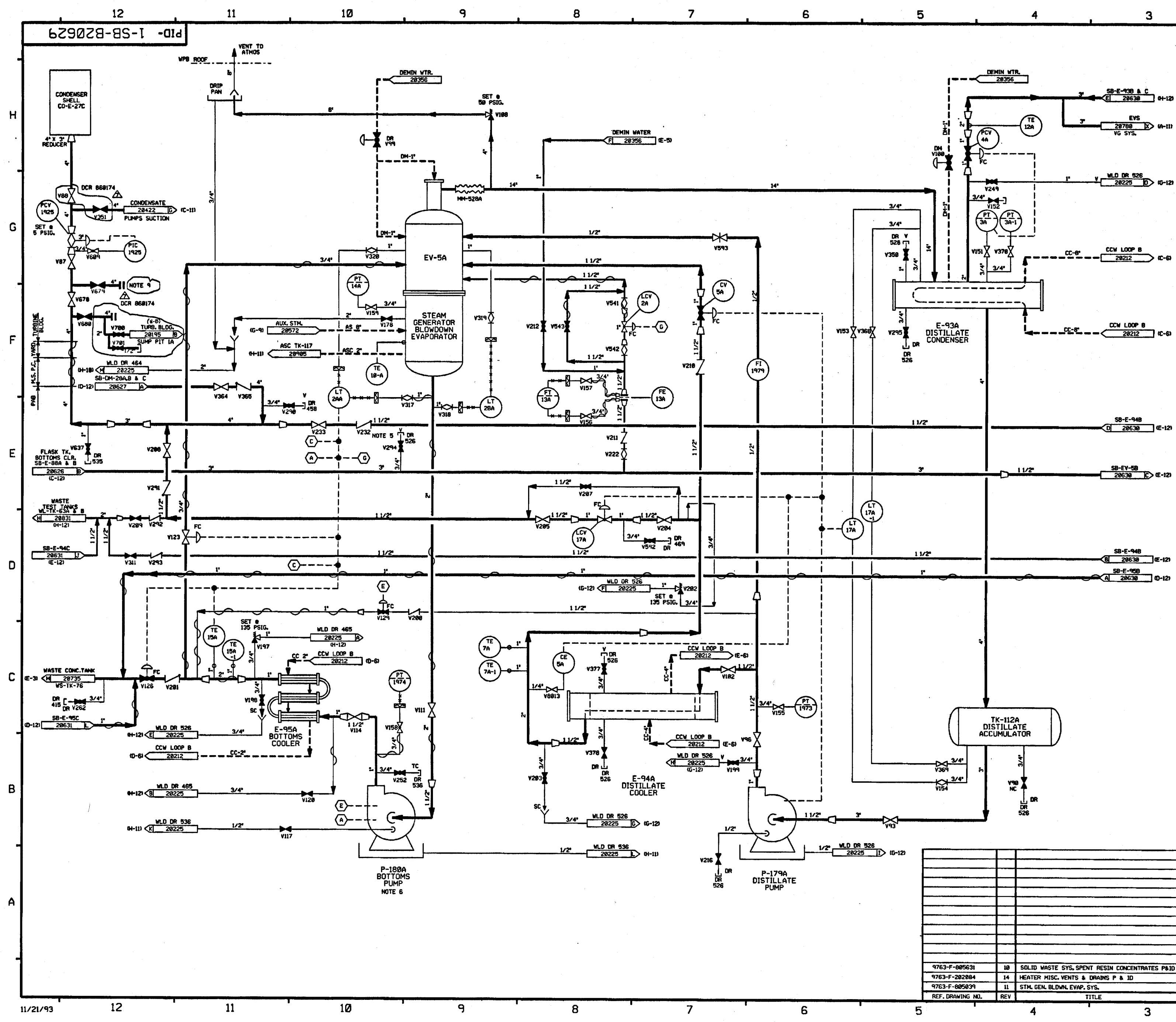
SEABROOK STATION

STEAM GENERATOR BLOWDOWN  
(BLOWDOWN FLASH)  
DETAIL

PID- 1-SB-B20626

9763-F-202084	14	HTR, MISC. VENTS & DRAINS, P. & ID
9763-M-506734	6	BLOWN RAD. MON. RM-6519 CONTROL LOOP DIA
9763-M-506733	6	SB FLASH TK. BOTMS. CLR. CONTROL LOOP DIA
9763-F-805824	12	STM. GEN. BLOWN. SYS. P.I.D. SHT-1
REF. DRAWING NO.	REV	TITLE





FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID-LEGEND 1 AND P&ID-LEGEND 2.

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20625 THRU 20628, 20630 & 20631.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SS, UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS MNS, UNLESS NOTED OTHERWISE.
  4. FLUSH AND CHEMICAL ADDITION CONNECTION.
  5. NITROGEN PURGE CONNECTION FOR DRY LAY-UP.
  6. SEE DRAWING 20353 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
  7.  $\Delta$  INDICATES REVISION LEVEL.
  8. INSTRUMENTATION REFERENCES:
    - (A) LOW LOW EV-5A INTERLOCK WITH P-188A
    - (B) HIGH E-95A OUTLET TEMP., HIGH WS-TK-76 LEVEL AND LOW DISCHARGE EV-5A INTERLOCK.
    - (C) DISTILLATE FLUSH V123, P-188A.
    - (D) EV-5A HI HI LVL. LCV-2A INTERLOCK.
    - (E) CONNECTION FOR TEMPORARY CST FILL LINE.

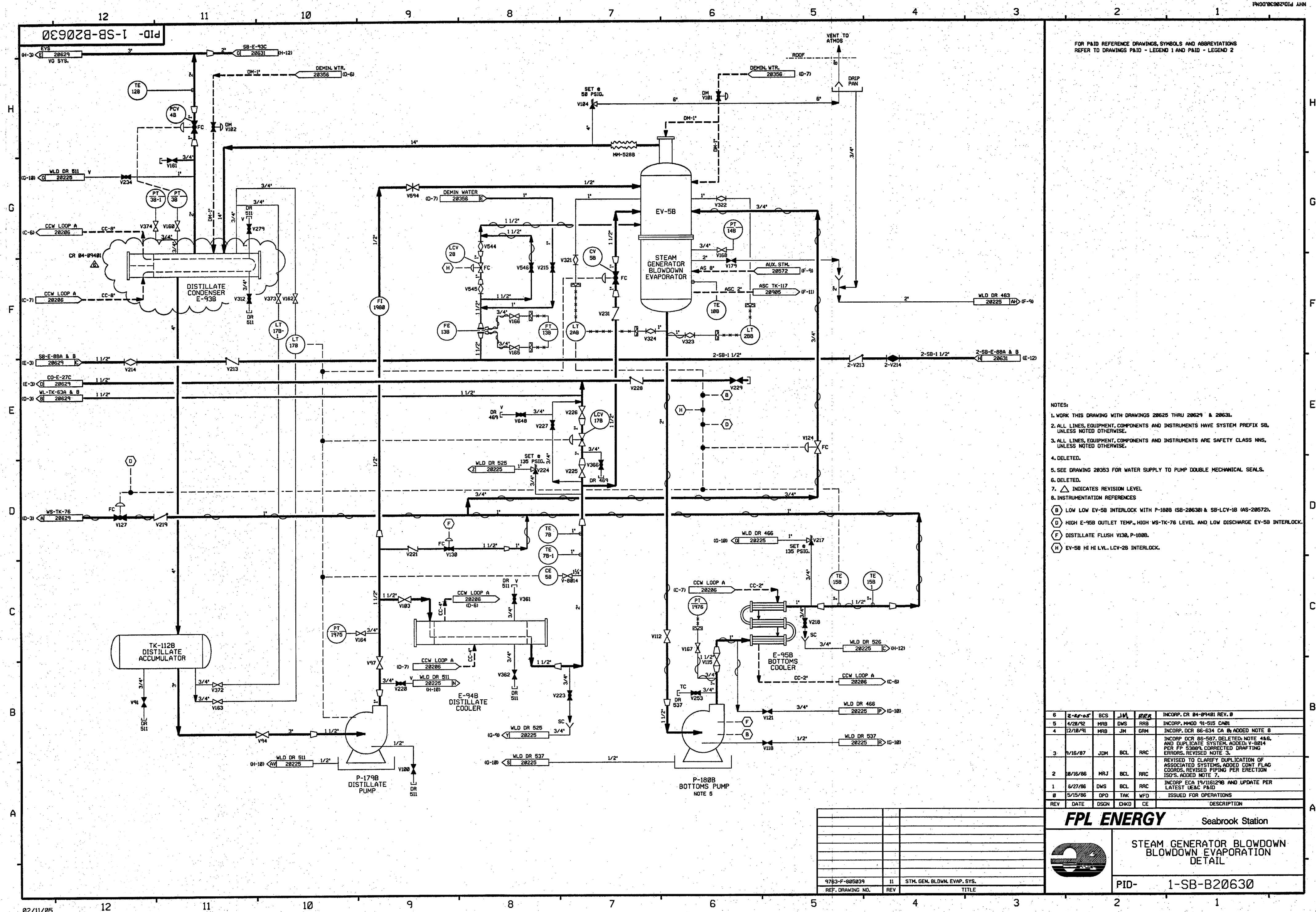
7	11/25/86	BCL		PLD	MLD	RSB	INCORP DCR 868174 CAPS
6	4/28/92	DWS		BCL	MRB	RSB	INCORP. MMD 98-616 CAP
5	12/18/91	MRB	FCB	JM	GPM	GRM	INCORP. MMD 98-616 CAP AND DCR 86-634 CAPS, ADDED NOTE 8
4	3/24/90	MRB	FCB	OSB	APL	DJM	INCORP. MMD 98-549 CAP2
3	9/16/87	MRJ	HEV	BCL	MPW	RRC	RESOLVED CHANGE ITEM 10, ADDED LINE SIZES, NOTE 7, CORRECTED DRAFTING ERROR, REVISED INSTR CONN PER EXISTING FIELD CONFIGURATION & NOTE 3, INCORP. DCR 86-587, ECA 83/118761C, DELETED DUPLICATION OF ASSOCIATED SYSTEMS.
2	10/28/86	MPW	DWS	VRD	BCL	RRC	ADDED VALVE V2013 PER EP-53889, REF CONT LOCATIONS, CHANGE ITEM 1, BELIEVED VALVE V188 AND V202 PER ERECTION ISO'S.
1	5/24/86	DBF	MRB	YMK	JMCS	RRC	INCORP. FTR 73/87424, ADDED DR 465, DR & V DESIGNATIONS.
0	5/15/86	DBF	MRB	TAK	ASK	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

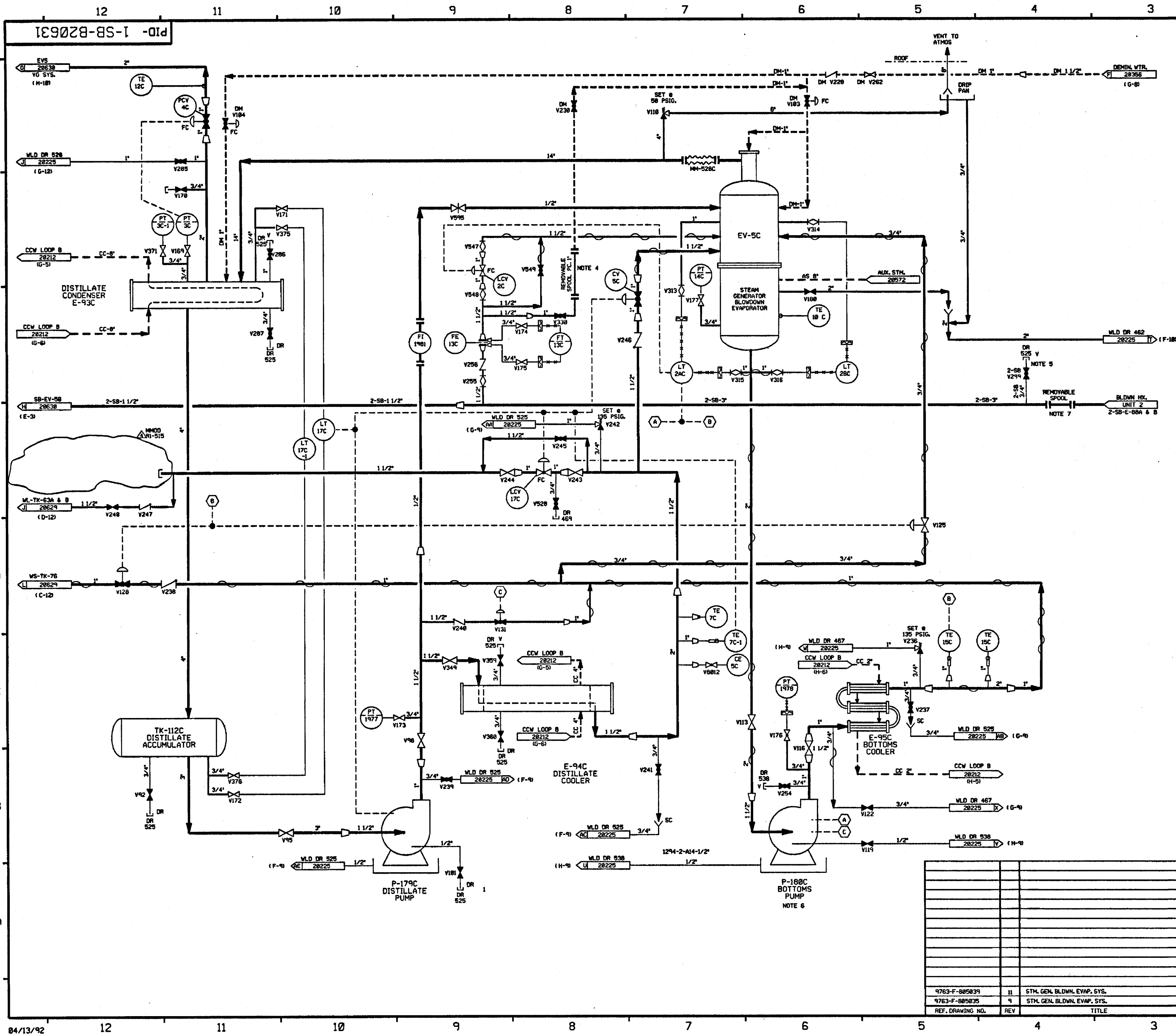
**North Atlantic** Energy Service Corporation

**STEAM GENERATOR BLOWDOWN BLOWDOWN EVAPORATOR DETAIL**

SEABROOK STATION PID- 1-SB-B20629

9763-F-005631	10	SOLID WASTE SYS. SPENT RESIN CONCENTRATES P&ID
9763-F-202084	14	HEATER MISC. VENTS & DRAINS P & ID
9763-F-805039	11	STM. GEN. BLOWN EVAP. SYS.
REF. DRAWING NDL	REV	TITLE






FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS PAID-LEGEND 1 AND PAID-LEGEND 2.

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20625 THRU 20638.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SB, UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NMS, UNLESS NOTED OTHERWISE.
  4. FLUSH AND CHEMICAL ADDITION CONNECTION.
  5. NITROGEN PURGE CONNECTION FOR DRY LAY-UP.
  6. SEE DRAWING 20633 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
  7. REMOVEABLE SPOOL TO BE REMOVED & REPLACED WITH BLIND FLANGE DURING UNIT 2 CONSTRUCTION.
  8.  $\Delta$  INDICATES REVISION LEVEL.

- INSTRUMENTATION REFERENCES
- (A) LOW LOW EV-5C INTERLOCK WITH P-180C.
  - (B) HIGH E-95C OUTLET TEMP., HIGH WS-TK-76 LEVEL AND LOW LEVEL EV-5C INTERLOCK.
  - (C) DISTILLATE FLUSH V131, P-180C INTERLOCK.

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
4	4/2/92	MRB		DWS	BCL	RIS	INCOMP. MMD 91-515 CAB1
3	9/18/87	JDM	RMC	MRJ	BCL	RRC	INCOMP. DCR 86-587, REVISED TO CLARIFY DUPLICATION OF ASSOCIATED SYSTEMS. REVISED NOTE 3.
2	10/4/86	MRJ	DWS	MPW	VNK	RRC	REVISED CONTROL BLOCK, PER USAC PAID. CORRECTED FLOW DIRECTION, ADDED V6812 & CONFIRMATION FLAG REFERENCES. ADDED NOTE 8.
1	6/23/86	DBF	MRB	VNK	JMCS	RRC	ADDED "DRY" DESIGNATIONS, HEAT TRACING & VALVE SIZE PER USAC. PAID REVIEW.
0	5/15/86	DBF	MRB	TAK	ASK	WFD	ISSUED FOR OPERATION



PUBLIC SERVICE OF NEW HAMPSHIRE

STEAM GENERATOR BLOWDOWN  
BLOWDOWN EVAPORATION  
DETAIL

SEABROOK STATION

PID- 1-SB-B20631

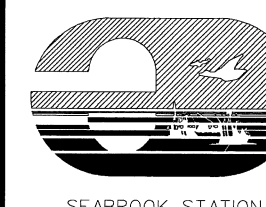
REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
9763-F-805839	11	STM, GEN. BLDWN, EVAP, SYS.					
9763-F-805835	9	STM, GEN. BLDWN, EVAP, SYS.					
REF. DRAWING NO.	REV	TITLE					



- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20625, 20626, & 20628 THRU 20631.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SB, UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
  4. STRAINER TO BE REMOVED DURING NORMAL PLANT OPERATION.
  5.  $\Delta$  - INDICATES REVISION LEVEL.
  6. DELETED
  7. SEE DRAWING DM-20353 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS. ALSO FOR PUMP 2-P-289 (NOT SHOWN)
  8. ALL AIR OPERATED BALL VALVES IN SKD-95 DENOTE (FC) FAIL CLOSED.

21	2/20/15	BCS	JM	CIT	INCOMP EC12464
20	2/11/19	JM	BCS	WAK	INCOMP MSE 08-163, INCV, CR 01-03393 REV 00
19	8/21/01	BCS	MRB	RCP	INCOMP MMOD 97-662 DCN-00
18	8/8/00	BCS	MPW	DEA	INCOMP MSE 00-0095, REV. 0
17	8/3/00	DWS	BCS	JCM	INCOMP DCR 980043 DCN#00 ,02 & 03
16	5/9/00	BCS	MPW	RSJ	PARTIAL INCOMP MSE 00-0095, REV. 0
15	5-16-96	BCS	MPW	DJM	INCOMP MMOD 960547 CA#0
14	12-9-94	MPW	BCL	MMD	INCOMP MMOD 930545 CA#0
13	6/3/94	BCL	DWS	RSC	INCOMP DCR 930823 CA#0
12	1/21/94	DWS	MRB	RSC	INCOMP DCR 860714 CA#0 & 2
11	2-8-93	BCL	MRB	RSG	INCOMP DCR 920011 CA#01
10	8-26-92	DWS	BCL	RSG	INCOMP DCR 910022 CA#13
9	8/3/92	DWS	BCL	GRM	FINAL INCOMP DCR 910022 CA#1
8	7-16-92	MRB	BCL	RSG	INCOMP DCR'S 86-538 CA0,04 AND 91-0022 CA0,01
7	4-30-92	DWS	BCL	RSG	INCOMP MMOD 90-616 CA0
6	4-15-92	MRB	BCL	RSG	INCOMP MMOD 902540 CA4
5	3/23/92	MRB	BCL	RSG	INCOMP MMOD 91-501 CA0 ADMINISTRATIVE UPDATE TO PROVIDE VALUE FAILURE MODES AS DESCRIBED IN APPRV. DCR 91-002 INCORPORATED DCR 87-235 CA0 REVISED NOTE 3, LINE SIZE PER PP 55166 PIPING CONFIGURATION PER UE & C P & ID 806548, PNEUMATIC VALVE SET POINT PER PP-55671 & DRAFTING ENHANCEMENTS. ADDED CONTINUATION COORD'S.
4	4/15/89	MRB	PAL	MJY	NOTED TEMP MOD 86-057, ADDED: NOTE 7 DELETED NOTE 6;
3	10/14/87	MPW	MRJ	RRC	ADDED CONT LOC COORDS, 1 1/2" LINE SIZE TO DEMIN TX-284 UTILITY, PAID REV DWG NOTE & RESUB-RES-8101 REV. DELETED REDUCER FROM P-289 DRN LINE, REV'D FY-6869 INSTR SYMBOL, CORRECTED TAGS V383 8V384 SHOWN REVERSED, CLARIFIED PIPING AROUND AROUND RELIEF VALV V384 & C5-6884.
2	10/16/86	CSB	WRD	RRC	UPDATED UE & C REV'S, ADDED NOTES 5 & 6, ADDED CHANGE ITEM 1.
1	7/8/86	DBF	DS	RRC	ADDED 98000 PNEUMATIC VALVE. ISSUED FOR OPERATION INCOMP. ECS# 19/106087A 99/114922A
0	5/16/86	DBF	TAK	WFD	
REV	DATE	DSGN	CHKD	CNO	DESCRIPTION

**NEXTERA ENERGY**  
SEABROOK



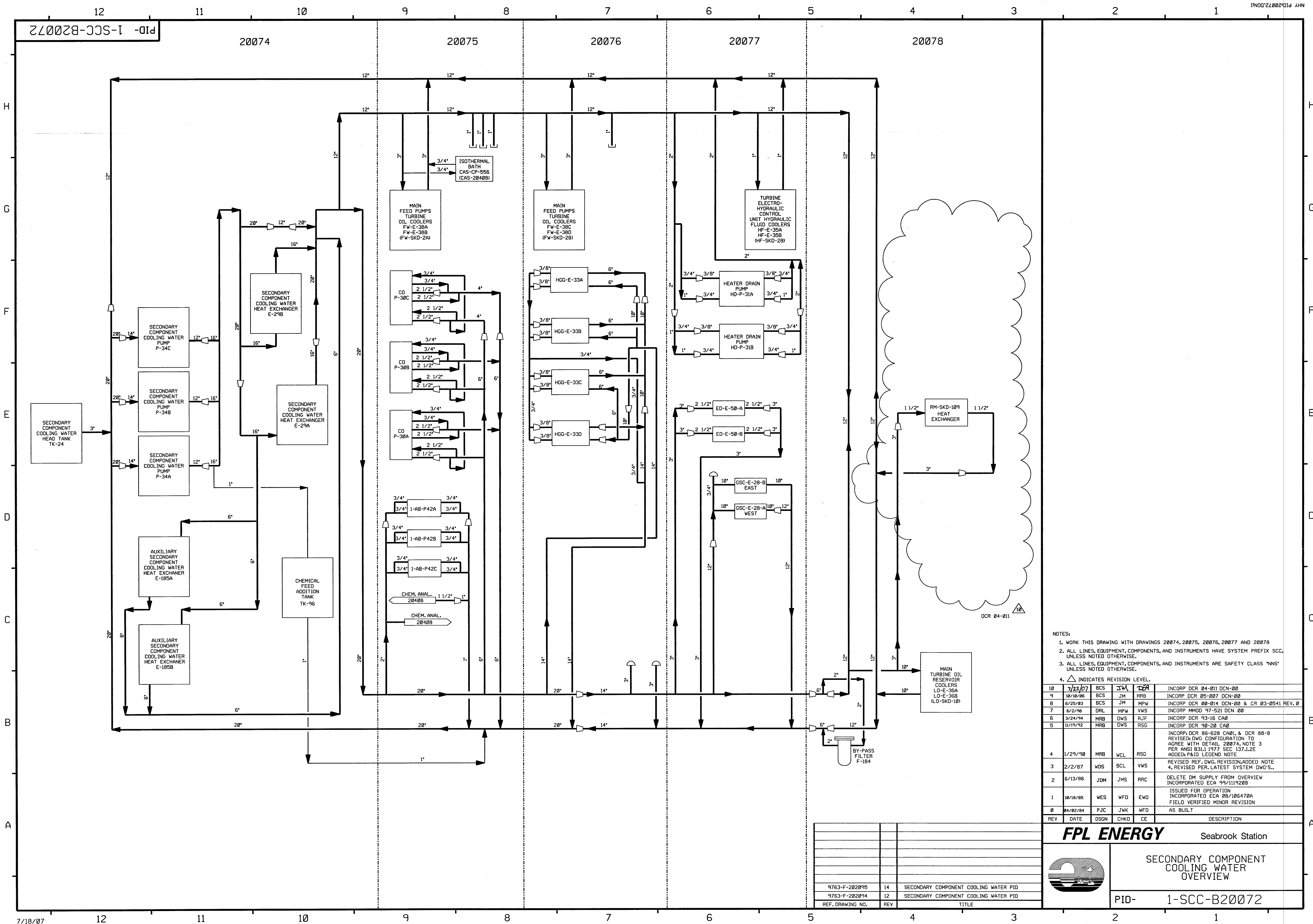
# STEAM GENERATOR BLOWDOWN BLOWDOWN RECOVERY DETAIL

PID- 1-SB-B20627

[illegible]







NOTES:  
 1. WORK THIS DRAWING WITH DRAWINGS 20074, 20075, 20076, 20077 AND 20078  
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX SCC, UNLESS NOTED OTHERWISE.  
 3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS "NNS" UNLESS NOTED OTHERWISE.

4. INDICATES REVISION LEVEL.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
10	7/23/07	BCS	JM	WFS	INCORP DCR 04-011 DCN-00
9	10/10/06	BCS	JM	RRB	INCORP DCR 05-007 DCN-00
8	6/25/03	BCS	JM	MPW	INCORP DCR 00-014 DCN-00 & CR 03-0541 REV. 0
7	6/2/98	DRL	MPW	VWS	INCORP MMOD 97-521 DCN 00
6	3/24/94	MRB	DWS	RJF	INCORP DCR 93-16 CA0
5	11/19/92	MRB	DWS	RSG	INCORP DCR 90-20 CA0
4	1/29/90	MRB	WCL	RSG	INCORP DCR 86-628 CA01, & DCR 88-8 REVISED: DWG CONFIGURATION TO AGREE WITH DETAIL 20074, NOTE 3 PER ANSI B31.1 1977 SEC 137.1.2E ADDED: P&ID LEGEND NOTE
3	2/2/87	WDS	BCL	VWS	REVISED REF. DWG. REVISION ADDED NOTE 4, REVISED PER LATEST SYSTEM DWG'S.
2	6/13/86	JDM	JMS	RRR	DELETE DM SUPPLY FROM OVERVIEW INCORPORATED ECA 93/111920B
1	10/18/85	WES	WFD	EW0	ISSUED FOR OPERATION INCORPORATED ECA 08/106470A FIELD VERIFIED MINOR REVISION
0	04/02/84	PJC	JWK	WFD	AS BUILT

**FPL ENERGY**

Seabrook Station

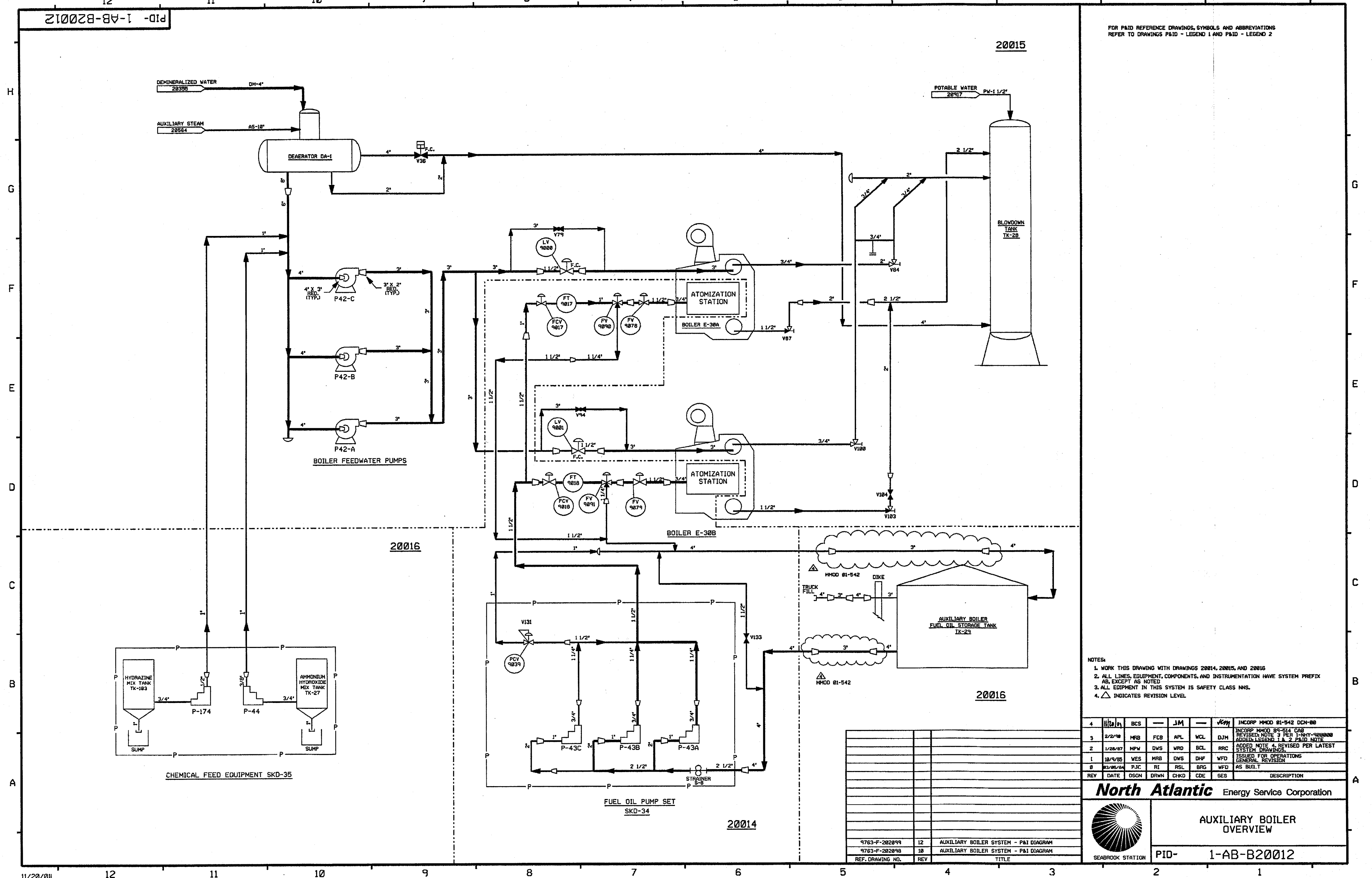
**SECONDARY COMPONENT COOLING WATER OVERVIEW**

PID- 1-SCC-B20072

REF. DRAWING NO.	REV	TITLE
9763-F-202095	14	SECONDARY COMPONENT COOLING WATER PID
9763-F-202094	12	SECONDARY COMPONENT COOLING WATER PID

PID-1-AB-B20012

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2



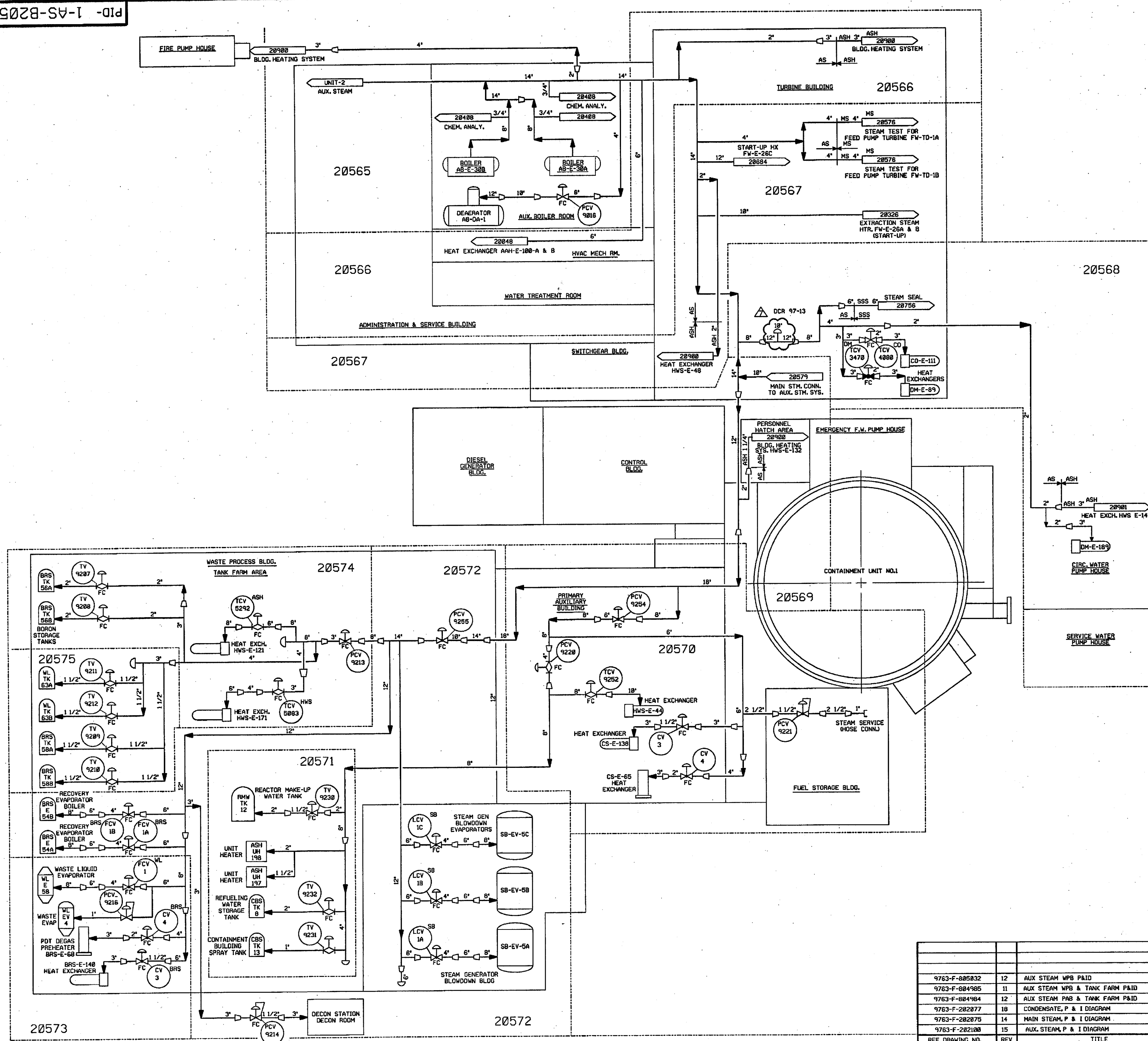
PID-1-AS-B20564

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

H  
G  
F  
E  
D  
C  
B  
A

H  
G  
F  
E  
D  
C  
B  
A

03/29/05



- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "AS", UNLESS NOTED OTHERWISE.
  2. WORK THIS DRAWING WITH DRAWINGS 20565 THRU 20575 & DRAWING 20576.
  3. Δ INDICATES REVISION LEVEL.

7	4/1/05	BCS	JM	M/W	INCORP DCR 97-13 DCN 08
6	9/14/99	MPW	DWS	DJM	INCORP DCR 97-12 DCN 08
5	5/6/99	BCS	DWS	DJM	INCORP DCR 95-38 DCN-22
4	6/18/97	MPW	DWS	GRM	INCORP DCR 95-39 CA 0
3	9/4/91	MRB	JM	DJM	INCORP DCR 90-23 CA11 ADDED P&ID LEGEND NOTE REV Dwg CONTINUATION TAG & DESCRIPT.
2	3/8/87	MPW	MRJ	RRC	ADDED NOTE 3 AND REVISED PER LATEST SYSTEM DRAWINGS.
1	4/18/86	WC	JDM	WFD	ISSUED FOR OPERATIONS
0	10/22/84	CO	RSL	PEF	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY** Seabrook Station

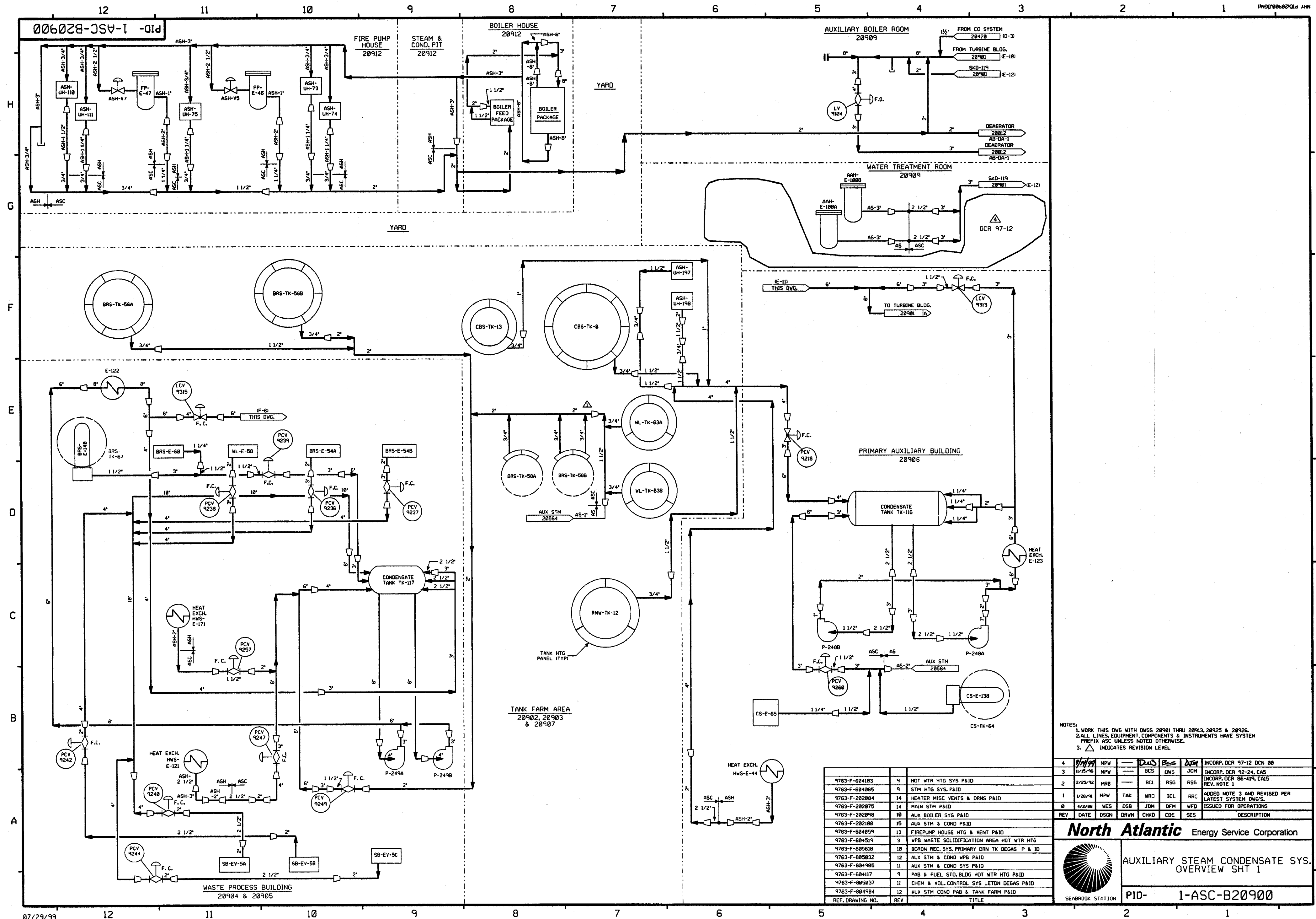


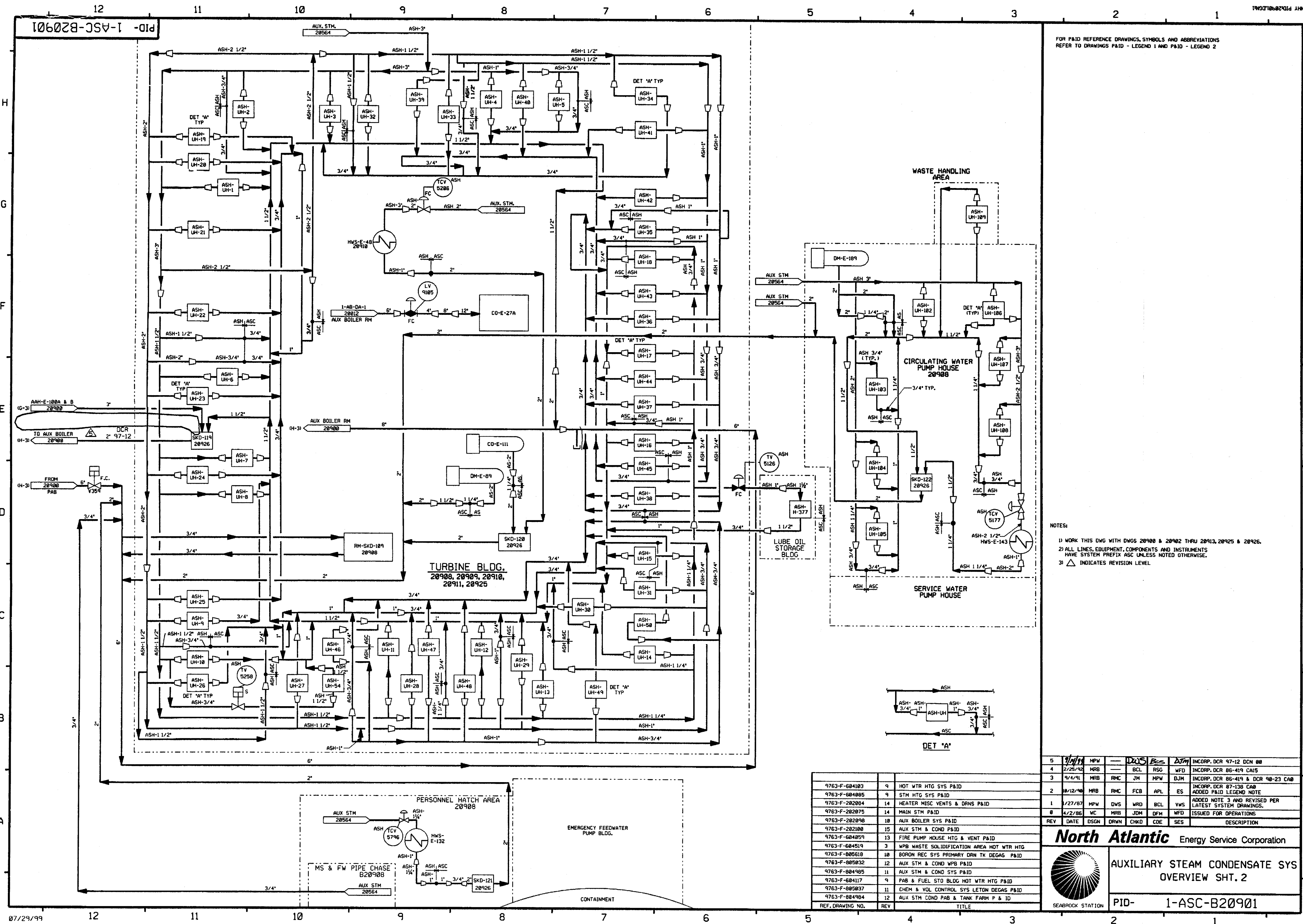
AUXILIARY STEAM  
OVERVIEW

PID- 1-AS-B20564

REF. DRAWING NO.	REV	TITLE
9763-F-885832	12	AUX STEAM WPB P&ID
9763-F-884985	11	AUX STEAM WPB & TANK FARM P&ID
9763-F-884984	12	AUX STEAM PAB & TANK FARM P&ID
9763-F-202877	18	CONDENSATE, P & I DIAGRAM
9763-F-202875	14	MAIN STEAM, P & I DIAGRAM
9763-F-202100	15	AUX. STEAM, P & I DIAGRAM








FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

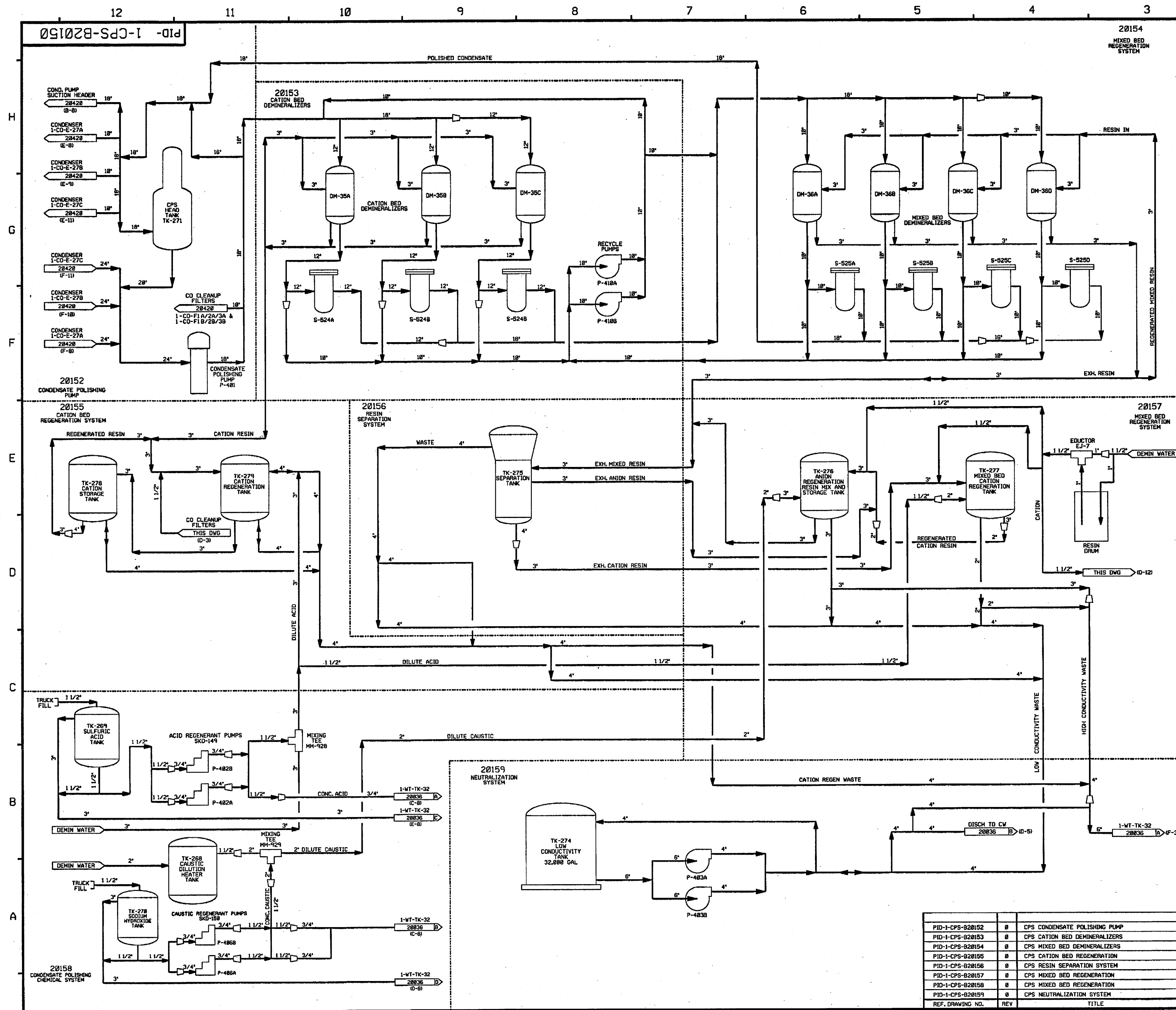
- NOTES:
- 1) WORK THIS DWG WITH DWGS 20908 & 20902 THRU 20913, 20925 & 20926.
  - 2) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX ASC UNLESS NOTED OTHERWISE.
  - 3) Δ INDICATES REVISION LEVEL.

REV	DATE	DSGN	DRWN	CHKD	CODE	SES	DESCRIPTION
5	1/1/91	MPW	—	DOS	BS	DTM	INCRP. DCR 97-12 DCN 00
4	2/25/92	MRB	—	BCL	RSG	WFD	INCRP. DCR 86-419 CAIS
3	9/4/91	MRB	RMC	JM	MPW	DJM	INCRP. DCR 86-419 & DCR 98-23 CA0
2	10/12/90	MRB	RMC	FCB	APL	ES	INCRP. DCR 87-130 CA0 ADDED PAID LEGEND NOTE
1	1/27/87	MPW	DVS	WRD	BCL	VWS	ADDED NOTE 3 AND REVISED PER LATEST SYSTEM DRAWINGS.
0	4/2/86	VC	MRB	JDM	DFW	WFD	ISSUED FOR OPERATIONS

**North Atlantic** Energy Service Corporation

**AUXILIARY STEAM CONDENSATE SYS  
OVERVIEW SHT. 2**

PID- 1-ASC-B20901



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

- NOTES:
1. ALL LINES, VALVES, EQUIPMENT AND INSTRUMENTS HAVE A SYSTEM PREFIX OF "CPS" UNLESS NOTED OTHERWISE.
  2. ALL LINES, VALVES, EQUIPMENT AND INSTRUMENTS ARE SAFETY CLASS MMS, UNLESS NOTED OTHERWISE.
  3. WORK THIS DRAWING WITH DRAWINGS 20152 THRU 20159.
  4.  $\Delta$  INDICATES REVISION LEVEL.

REV DATE DSGN CHKO CE INITIAL ISSUE PER OIR 97-013 DCN-00,235,236

**FPL ENERGY**

Seabrook Station



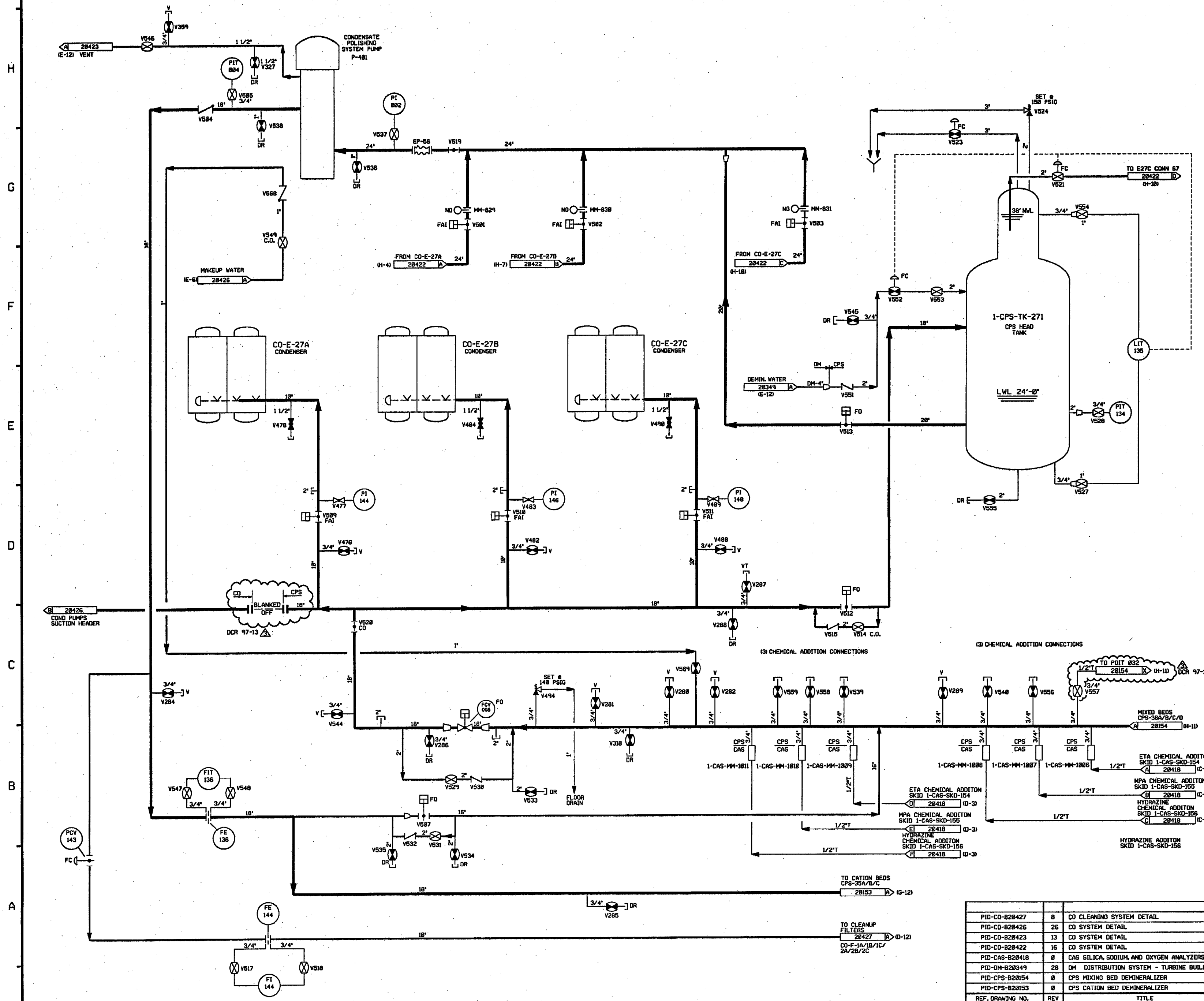
CONDENSATE POLISHING  
SYSTEM OVERVIEW

PID- 1-CPS-B20150

REV	DATE	DESCRIPTION
0	04/21/05	0 CPS CONDENSATE POLISHING PUMP
1	04/21/05	0 CPS CATION BED DEMINERALIZERS
2	04/21/05	0 CPS MIXED BED DEMINERALIZERS
3	04/21/05	0 CPS CATION BED REGENERATION
4	04/21/05	0 CPS RESIN SEPARATION SYSTEM
5	04/21/05	0 CPS MIXED BED REGENERATION
6	04/21/05	0 CPS MIXED BED REGENERATION
7	04/21/05	0 CPS NEUTRALIZATION SYSTEM
REF. DRAWING NO.	REV	TITLE

PID-1-CPS-B20152

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28150, 28153 THRU 28159.
  2. ALL LINES, EQUIPMENT, COMPONENTS, VALVES AND INSTRUMENTS HAVE SYSTEM PREFIX "1-CPS-", UNLESS NOTED OTHERWISE.
  3. ALL LINES, EQUIPMENT, COMPONENTS, VALVES AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
  4.  $\Delta$  INDICATES REVISION LEVEL.
  5. ALL 3 DIGIT NUMERICAL INSTRUMENT TAG NAMES ARE PREFIXED WITH "28".  
EXAMPLE:  $\Delta$  FIT 814 A = 1-CPS-FIT-28814-A

3	10-13-06	JM	BS	PRB	INCORP. DCR 97-13 DCN 274, 294
2	12/21/05	BCS	JM	SAK	INCORP. DCR 97-13 DCN 272
1	4/27/05	BCS	JM	PAL	INCORP. DCR 97-13 DCN 08, 46, 52, 54, 55, 69, 74, 174, 196
0	10/14/83	MPW	BCS	SAK	PARTIAL INCORP. DCR 97-13 DCN 08, 46, 54 & 55, INCORP. DCR 97-813 DCN 29 & 51.
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY**
Seabrook Station

**CONDENSATE POLISHING SYSTEM  
CONDENSATE POLISHING PUMP**

**PID- 1-CPS-B20152**

PID-NO	REV	TITLE
PID-CO-820427	8	CO CLEANING SYSTEM DETAIL
PID-CO-820426	26	CO SYSTEM DETAIL
PID-CO-820423	13	CO SYSTEM DETAIL
PID-CO-820422	16	CO SYSTEM DETAIL
PID-CAS-820418	8	CAS SILICA, SODIUM, AND OXYGEN ANALYZERS
PID-DM-820349	28	DM DISTRIBUTION SYSTEM - TURBINE BUILDING
PID-CPS-820154	8	CPS MIXING BED DEMINERALIZER
PID-CPS-820153	8	CPS CATION BED DEMINERALIZER
REF. DRAWING NO.	REV	TITLE