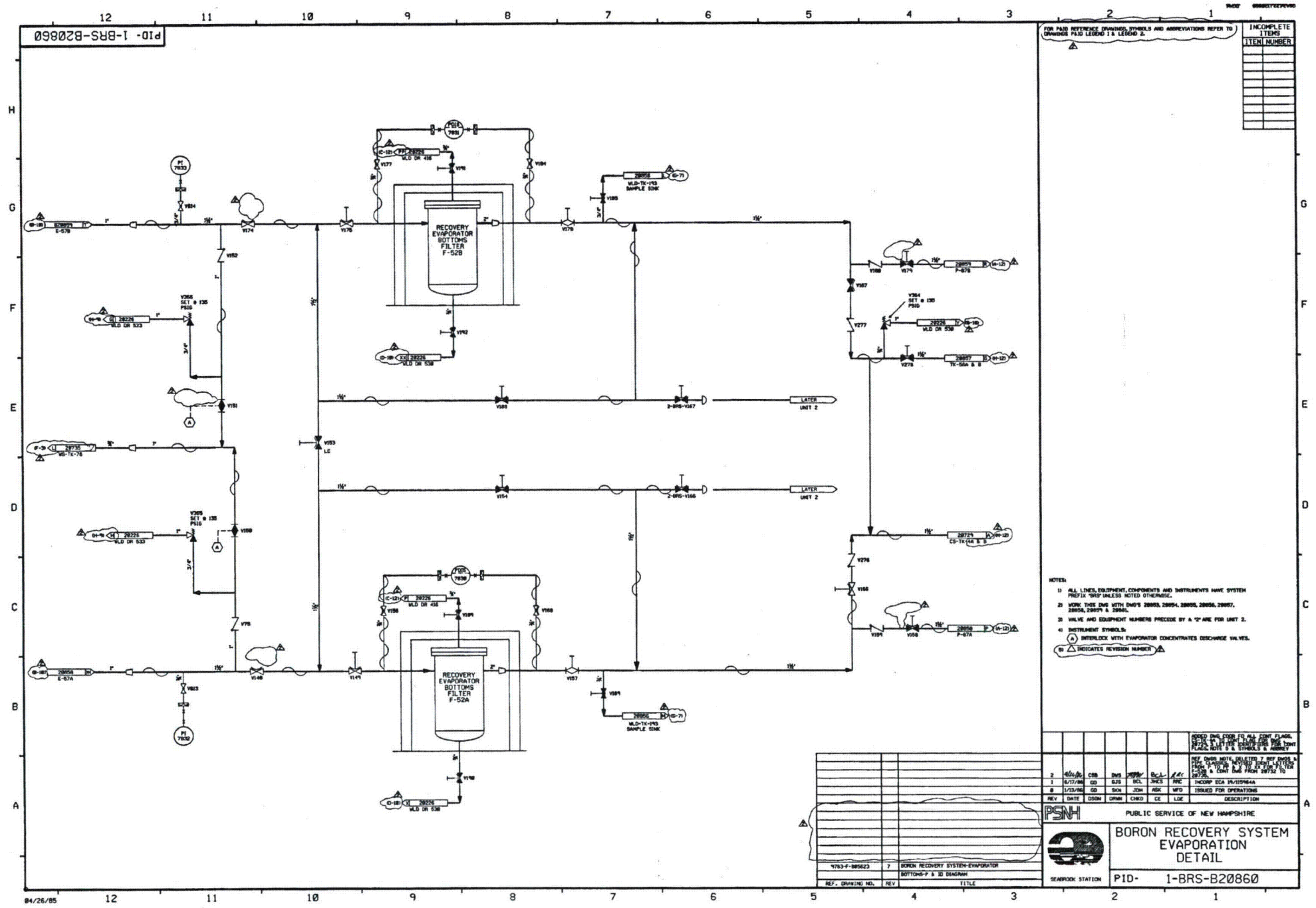
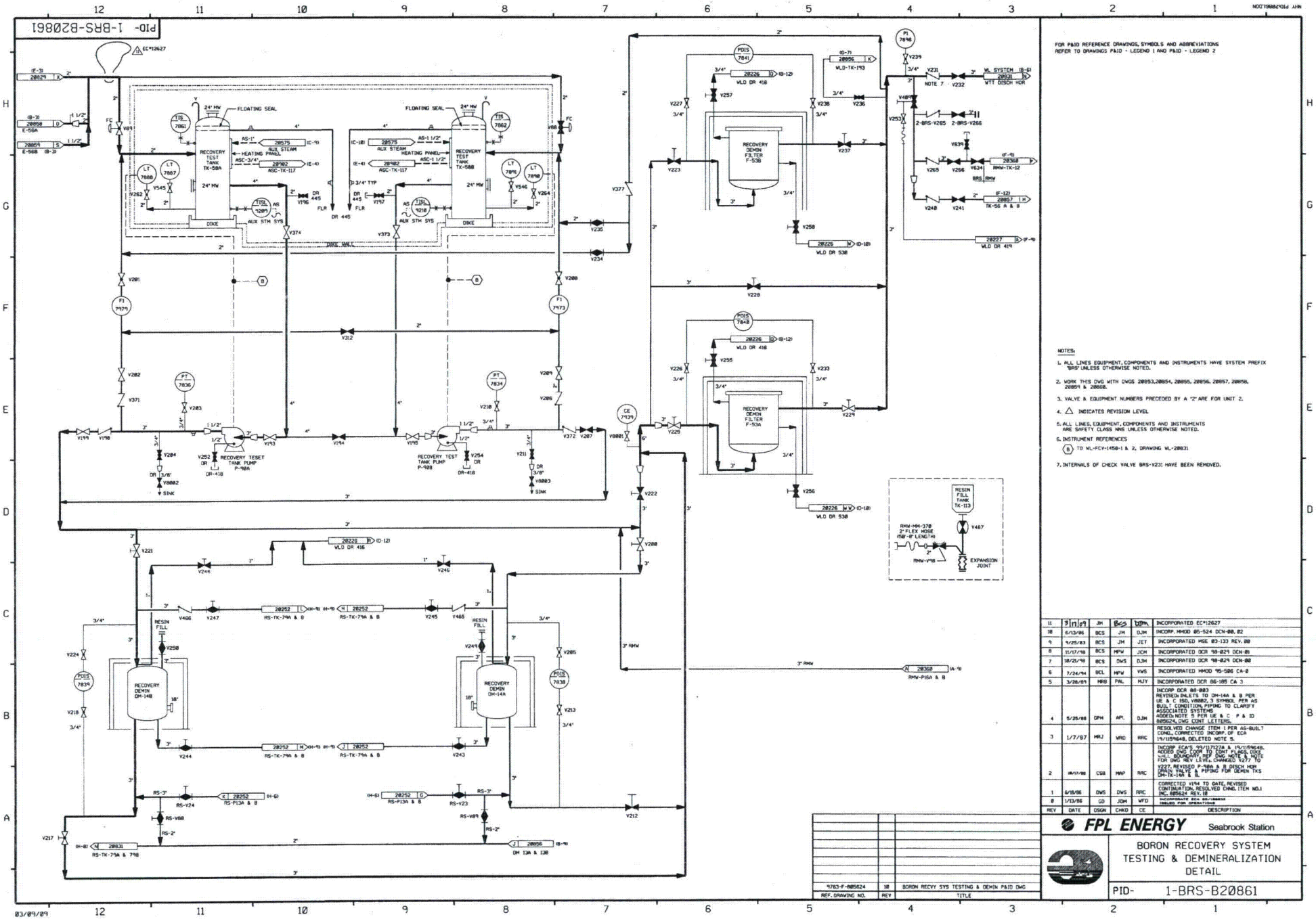

P&ID- 1-BRS-B20860
RECOVERY EVAPORATOR BOTTOMS FILTER F-52B
RECOVERY EVAPORATOR BOTTOMS FILTER F-52A
LATER UNIT 2
LATER UNIT 2
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID LEGEND 1 & LEGEND 2.
INCOMPLETE ITEMS
ITEM NUMBER
NOTES:
1) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "BRS" UNLESS NOTED OTHERWISE.
2) WORK THIS DWG WITH DWG'S 28953, 28954, 28955, 28956, 28957, 28958, 28959 & 28961.
3) VALVE AND EQUIPMENT NUMBERS PRECEDE BY A "2" ARE FOR UNIT 2.
4) INSTRUMENT SYMBOLS:
(A) INTERLOCK WITH EVAPORATOR CONCENTRATES DISCHARGE VALVES.
(0) INDICATES REVISION NUMBER
ADDED DWG ENOR TO ALL CONT FLAGS, CHANGED REVISED SCOPE TEXT TO REFLECT ECA 89-00164A, ADDED CONT FLAG NOTE 8 & SYMBOLS & AGENCY
REF DWGS NOTE, DELETED 7 REF DWGS & ADDED 3 NEW DWGS, REVISED SCOPE TEXT, ADDED 1 TO TIE & 2 TO EXISTING FLAGS & CONT DWG FROM 28732 TO 28730.
2 6/17/86 CSB DWS BCL WRC INCORP ECA 89-00164A
1 5/13/86 GD SJS JDH ABK WFD ISSUED FOR OPERATIONS
REV DATE DSGN DRWN CHKD CE LDE DESCRIPTION
PSNH
PUBLIC SERVICE OF NEW HAMPSHIRE
SEABROOK STATION
BORON RECOVERY SYSTEM EVAPORATION DETAIL
PID- 1-BRS-B20860
9763-F-B85823 7 BORON RECOVERY SYSTEM-EVAPORATOR BOTTOMS-P & ID DIAGRAM
REF. DRAWING NO. REV. TITLE
04/26/85



REV	DATE	DSGN	CHKD	CE	DESCRIPTION
11	9/11/09	JM	BCS	DJM	INCORPORATED EC*12627
10	6/13/86	BCS	JM	DJM	INCORP. MMOD 85-524 DCN-00, 02
9	9/25/83	BCS	JM	JET	INCORPORATED MSE 83-133 REV. 00
8	11/17/98	BCS	MPW	JCM	INCORPORATED DCR 98-029 DCN-01
7	10/25/98	BCS	DWS	DJM	INCORPORATED DCR 98-029 DCN-00
6	7/24/94	BCL	MPW	VWS	INCORPORATED MMOD 95-586 CA-8
5	3/28/89	MHB	PAL	MJY	INCORPORATED DCR 86-185 CA 3
4	5/25/88	GPH	APL	DJM	INCORP DCR 88-003 REVISED: INLETS TO DM-14A & B PER UE & C ISO, V8882, 3 SYMBOL PER AS BUILT CONDITION, PIPING TO CLARIFY ASSOCIATED SYSTEMS ADDED: NOTE 5 PER UE & C P & ID B05624, DWG CONT LETTERS.
3	1/7/87	MRJ	WRD	RRC	RESOLVED CHANGE ITEM 1 PER AS-BUILT COMPL. CORRECTED INCORP. OF ECA 19/1159648, DELETED NOTE 5.
2	09/17/86	CSB	MAP	RRC	INCORP ECA'S 93/17127A & 19/1159648. ADDED HOR DWR TO SHT 1. ADD DCP, ADD BOUNDARY, REF DWG NOTE & NOTE FOR DWG REV LEVL. CHANGED V227 TO V227, REVISED P-98A & B DISCH HDR DEMIN VALVE & PIPING FOR DEMIN TKS DM-TK-14A & B.
1	6/15/86	DWS	DWS	RRC	CORRECTED V194 TO GATE, REVISED CONTAINATION, RESOLVED CHNG ITEM NO.1 INC. B05624 REV.10
0	1/13/86	GD	JDM	WFD	INCORPORATE ECA 86-1868888 ISSUED FOR OPERATIONS

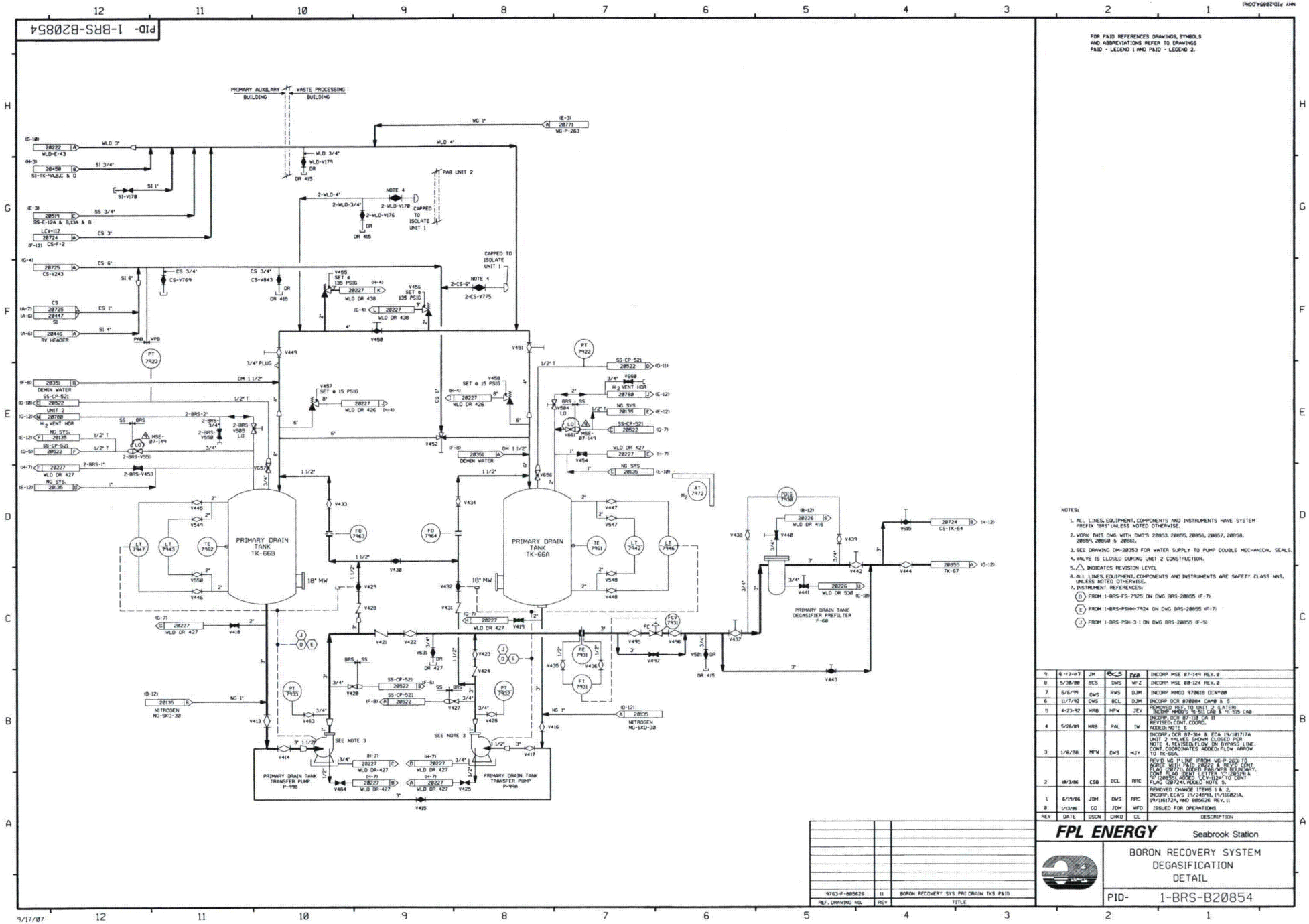
REF. DRAWING NO.	REV	TITLE
9763-F-805624	10	BORON RECVY SYS TESTING & DEMIN P&ID DWG

FPL ENERGY Seabrook Station

BORON RECOVERY SYSTEM TESTING & DEMINERALIZATION DETAIL

PID- 1-BRS-B20861

03/09/09



FOR P&ID REFERENCES 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 "BRS" UNLESS NOTED OTHERWISE.
2. WORK THIS DWG WITH DWG'S 28853, 28855, 28856, 28857, 28858, 28859, 28860 & 28861.
3. SEE DRAWING OM-28353 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
4. VALVE IS CLOSED DURING UNIT 2 CONSTRUCTION.
5. △ INDICATES REVISION LEVEL
6. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
7. INSTRUMENT REFERENCES:
   - (D) FROM 1-BRS-FS-7925 ON DWG BRS-28855 (F-7)
   - (E) FROM 1-BRS-PSHH-7924 ON DWG BRS-28855 (F-7)
   - (J) FROM 1-BRS-PSH-3-1 ON DWG BRS-28855 (F-5)

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
9	9-17-07	JM	BCS	DWS	WFZ	INCORP MSE 87-149 REV. 0
8	5/30/00	BCS	DWS	WFZ	INCORP MSE 00-124 REV. 0
7	6/6/99	DWS	RWS	DJM	INCORP MMOD 970018 DCN#00
6	11/7/92	DWS	BCL	DJM	INCORP DCR 870004 CA#B & 'S
5	4-23-92	MRB	MPW	JEV	REMOVED REF. TO UNIT 2 (LATER) INCORP M4005 'L' 'L' 515 CA# & 'L' 515 CA#
4	5/26/89	MRB	PAL	JW	INCORP. DCR 87-318 CA 11 REVISED CONT. COORD. ADDED NOTE 6.
3	1/6/88	MPW	DWS	MJY	INCORP. DCR 87-314 & ECA 19/181717A UNIT 2 VALVES SHOWN CLOSED PER NOTE 4, REVISED FLOW ON BYPASS LINE. CONT. COORDINATES ADDED, FLOW ARROW TO TK-66A.
2	10/3/86	CSB	BCL	RRC	REV'D. WG 1" LINE (FROM WG-P-283) TO AGREE WITH P&ID 28222 & REV'D CONT. FLAG (28771), ADDED P&B/WPB BOUNDARY, CONT FLAG (DENT LETTER 'C' (28614 & 'A' (28855), ADDED 'LCV-112A' 1/2" CONT FLAG (28724), ADDED NOTE 5.
1	6/19/86	JDM	DWS	RRC	REMOVED CHANGE ITEMS 1 & 2, INCORP. ECA'S 19/248918, 19/116821A, 19/181272A, AND 885626 REV. 11
0	1/13/86	CD	JDM	WFD	ISSUED FOR OPERATIONS

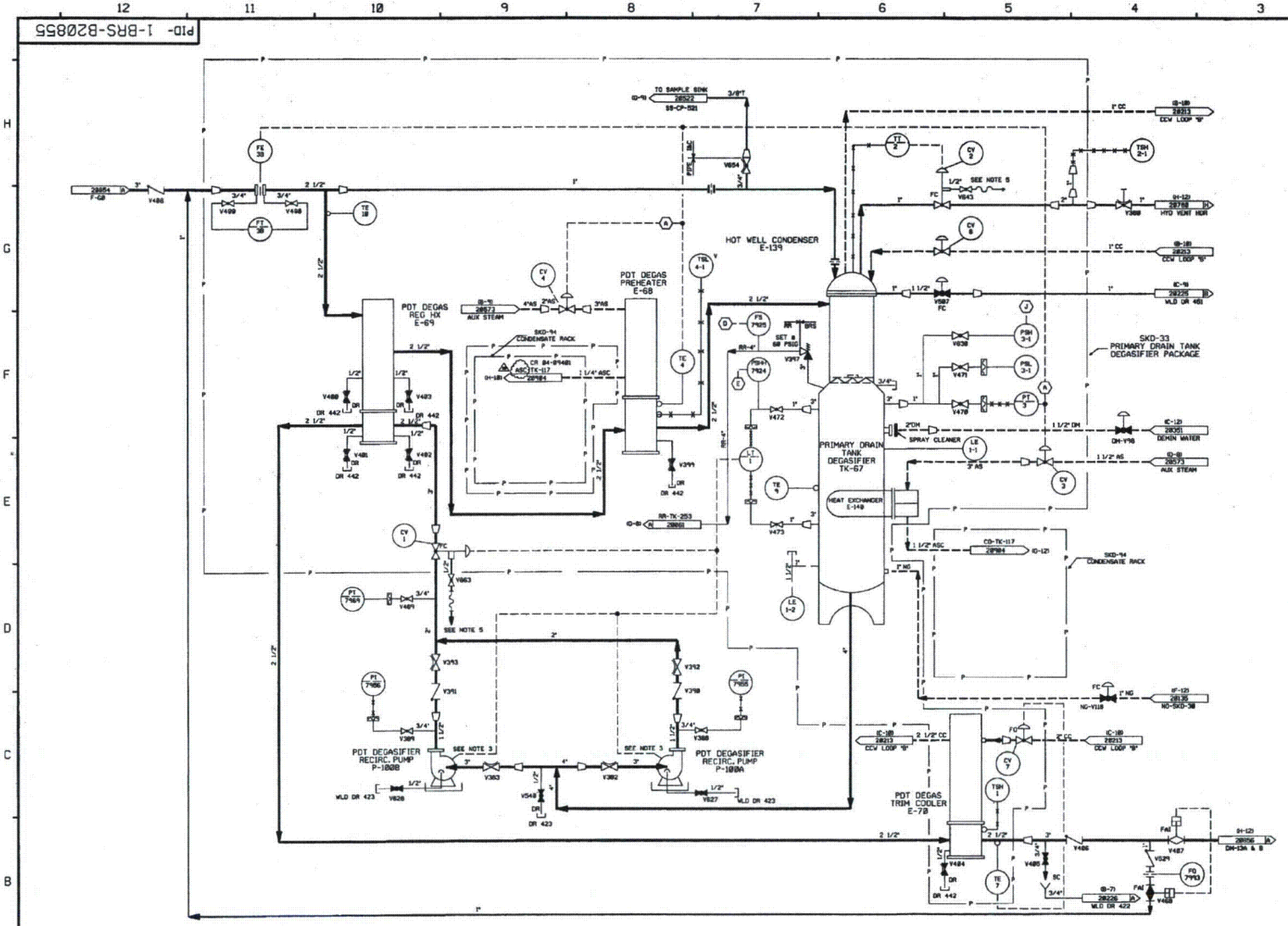
REF. DRAWING NO.	REV	TITLE
9763-F-885626	11	BORON RECOVERY SYS PRI DRAIN TKS P&ID

FPL ENERGY Seabrook Station

BORON RECOVERY SYSTEM
DEGASIFICATION
DETAIL

PID- 1-BRS-B20854

9/17/07



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 "BRS" UNLESS NOTED OTHERWISE.
2. WORK THIS DWG WITH DWG'S 28853, 28854, 28856, 28857, 28858, 28859, 28860 & 28861
3. SEE DWG SH-28354 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
4. △ INDICATES REVISION LEVEL
5. REFER TO DRAWING YSL-28774 FOR VALVE LEAKOFF.
6. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
7. INSTRUMENT REFERENCES:
   - (A) TO 1-BRS-CY-3 & 4 ON DWG AS-28573 ID-1B.
   - (D)(E)(J) TO 1-AS-CY-3, 1-AS-CY-4 ON DWG AS-28573 ID-1B.
     TO 1-BRS-P-99A & B ON DWG BRS-28854 IC-1B IC-1B.
     TO 1-SH-Y98 ON DWG SH-28351 IC-12B

REV	DATE	ORIGN	CHKD	CE	DESCRIPTION
10	12-6-99	BCS	JJH	JJKB	INCORP CR 84-09481 REV. 00
9	11/30/98	BCS	MPV	RCP	INCORP MMOD 98-041 DCN-00
8	12/7/92	MRB	DWS	DJM	INCORP DCR 87-04 CA 20
7	2/7/92	MRB	BCL	DJM	INCORP. DCR 87-04 CAP'S 5 & 25 ADDED NOTE 14 & INSTR. REFERENCE REMOVED FLANGES FROM B P&ID
6	12/28/91	MRB	PAL	ES	INCORP. DCR 86-113 CAB.
5	9/25/88	DPH	APL	DJM	INCORP. DCR 88-083 REVISED V382, 383, 393, 397, 399, 486, 481, 482, 483, & 484 VALVE SYMBOL PER FP 53676. ADDED RESTRICTING ORIFICE SYMBOL TO INLET F-139 PER FP 53755, NOTE 6 PER LE & S P & ID 88068.
4	8/14/87	DPH	MPV	RRC	INCORP. ECA 1V/87*0088 REVD. TO CLARIFY DUPLICATION OF ASSOC. SYSTEM & NOTE 3, ADDED NOTE 5, CONT COOPER, LINE SIZE & FLG'S
3	1/23/87	JDH	WPD	RRC	INCORP. DCR-618
2	5/28/86	MPV	MAP	RRC	REMOVED NONAPPLICABLE REF. DWGS. INCORP. ECA 86/1MAJECA 86/11237A. SYSTEM CHANGED TO BRS ON VALVES CV-1, CV-2, CV-5 & CV-7 WAS AS AND TO TK 139/69. ADDED CONTINUATIONS.
1	6/15/86	DWS	JDM	RRC	INCORPD ECA 86/114788A
0	V13/86	DD	JDH	WPD	ISSUED FOR OPERATIONS

RECORDS MANAGEMENT DEPT.
CONTROL NUMBER _____

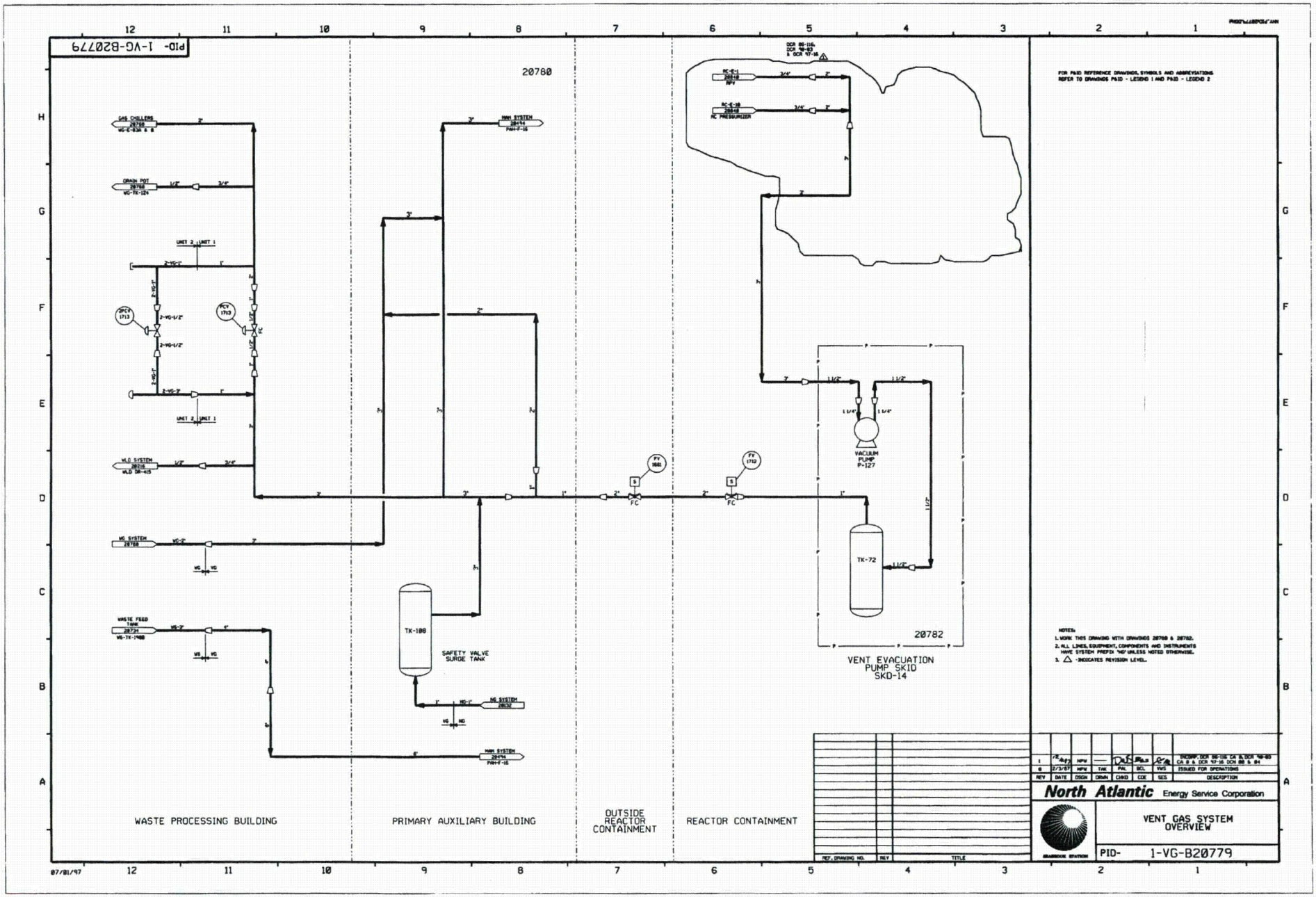
REF. DRAWING NO.	REV	TITLE
9763-F-885618	10	BORON RECOV SYS-FROM DRAIN TK DEGAS P&ID

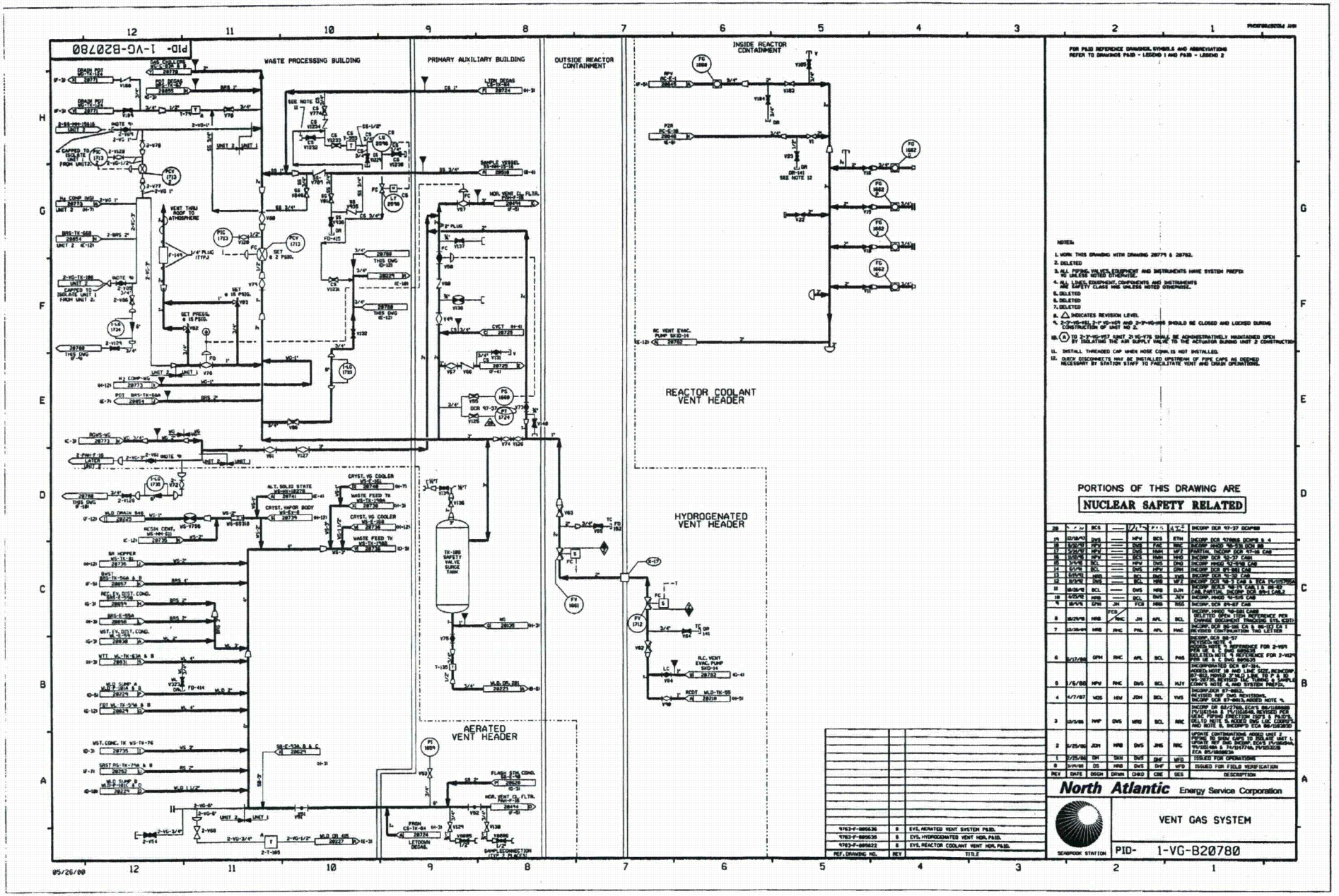
FPL ENERGY Seabrook Station

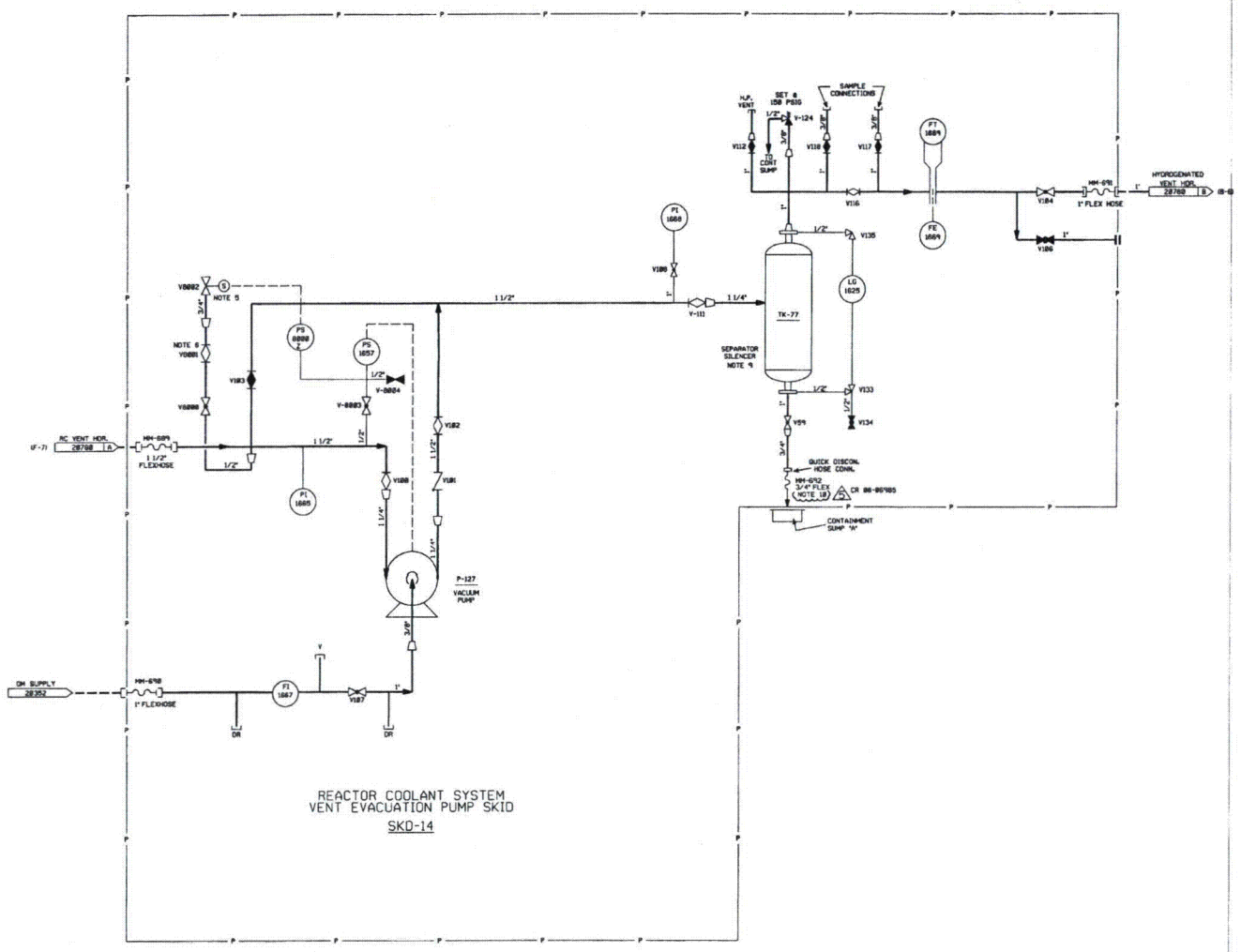
BORON RECOVERY SYSTEM
DEGASIFICATION
DETAIL

PID- 1-BRS-B20855

12/24/99


PID- 1-VG-B20779
20780
20782
WASTE PROCESSING BUILDING
PRIMARY AUXILIARY BUILDING
OUTSIDE REACTOR CONTAINMENT
REACTOR CONTAINMENT
TK-108
SAFETY VALVE SURGE TANK
TK-72
VACUUM PUMP P-127
VENT EVACUATION PUMP SKID SKD-14
FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2
NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20780 & 20782.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "VG" UNLESS NOTED OTHERWISE.
3. △ -INDICATES REVISION LEVEL.
REV DATE DSGN DRWN CHKD COE QES DESCRIPTION
0 2/3/97 MPV TAK PAL BCL VWS ISSUED FOR OPERATIONS
North Atlantic Energy Service Corporation
VENT GAS SYSTEM OVERVIEW
SEABROOK STATION
PID- 1-VG-B20779
07/01/97


PID- 1-VG-B20780
WASTE PROCESSING BUILDING
PRIMARY AUXILIARY BUILDING
OUTSIDE REACTOR CONTAINMENT
INSIDE REACTOR CONTAINMENT
REACTOR COOLANT VENT HEADER
HYDROGENATED VENT HEADER
AERATED VENT HEADER
VENT THRU ROOF TO ATMOSPHERE
SET PRESS. @ 15 PSIG.
SET @ 2 PSIG.
SET @ 15 PSIG.
TX-189 SAFETY VAL VE SURGE TANK
RC VENT EVAC. PUMP SKID-14
RCDT WLD-TK-105
LETDOWN REGEN.
SAMPLE CONNECTION (TYP 2 PLACES)
FLASH ETH. COND. WS-E-53A,B,&C
WST. CONC. TK WS-TK-76
SGBT RS-TK-79A & B
WLD SUMP A WLD-P-181A & B
WLD SUMP B WLD-P-181C & D
WLD DR. 685
WLD DR. 281
WLD. DR. 685
WLD. DR. 281
FROM CS-TK-64
SEE NOTE 12
SEE NOTE 13
SEE NOTE 14
SEE NOTE 15
UNIT 2
UNIT 1
PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED
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 DRAWING 28771 & 28752.
2. DELETED
3. ALL PIPING VALVES, EQUIPMENT AND INSTRUMENTS HAVE SYSTEM PREFIX UNLESS NOTED OTHERWISE.
4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS AND UNLESS NOTED OTHERWISE.
5. DELETED
6. DELETED
7. DELETED
8. △ INDICATES REVISION LEVEL.
9. 2-VG-V85, 2-VF-V0-V69 AND 2-VG-V0-V68 SHOULD BE CLOSED AND LOCKED DURING CONSTRUCTION OF UNIT NO 2.
10. Ⓐ TO 2-VG-V87 UNIT 2 VG-V78 SHALL BE ADMINISTRATIVELY MAINTAINED OPEN BY ISOLATING THE AIR SUPPLY VALVE TO THE ACTUATOR DURING UNIT 2 CONSTRUCTION
11. INSTALL THREADED CAP WHEN HOSE CONN. IS NOT INSTALLED.
12. QUICK DISCONNECTS MAY BE INSTALLED UPSTREAM OF PIPE CAPS AS DEEMED NECESSARY BY STATION STAFF TO FACILITATE VENT AND DRAIN OPERATIONS.
9763-F-B80636 B EVS. AERATED VENT SYSTEM P&ID.
9763-F-B80635 B EVS. HYDROGENATED VENT HDR. P&ID.
9763-F-B80622 B EVS. REACTOR COOLANT VENT HDR. P&ID.
REF. DRAWING NO. REV TITLE
REV DATE DSGN DRWN CHKD CDE SES DESCRIPTION
0 5/25/00 DS HRB DVS DVF WFD ISSUED FOR FIELD VERIFICATION
1 5/25/00 DH SKH DVS DVF WFD ISSUED FOR OPERATIONS
2 5/25/00 JDH HRB DVS JHS RRC UPDATE CONTINUATIONS ADDED UNIT 2 PIPING TO SHOW CAPS TO ISOLATE UNIT 1, UPDATE REF DWG SKETCH, ECN'S 9763B0636, 9763B0635 & 9763B0622, PVR'S 00-0746, PVR00-0838 ECA 80-00080-01
3 3/3/00 HHP DVS WRD SCL RRC INCORP DR 69/2780, ECA'S 80/00080 (9/00154A & 9/00154B), REVISED PER VEND. PIPING INSPECTION (SQT) & P&ID'S, DELETED NOTE 6, ADDED DWG LOC CORR'S AND NOTE 6, INCORP'S ECA 80/00080
4 4/7/97 WDS HSV JDH SCL VHS INCORP.ECN 97-0002, REVISION, REF DWG REVISIONS, INCORP ECR 97-0003,ADDED NOTE 11
5 5/1/98 HHP DVS WRD SCL RRC INCORP DR 69/2780, ECA'S 80/00080 (9/00154A & 9/00154B), REVISED PER VEND. PIPING INSPECTION (SQT) & P&ID'S, DELETED NOTE 6, ADDED DWG LOC CORR'S AND NOTE 6, INCORP'S ECA 80/00080
6 5/1/98 DS HRB DVS DVF WFD ISSUED FOR FIELD VERIFICATION
7 12/26/01 HRB RHC PHL APL RHC INCORP. ECN 99-97 CA 1 & WP-157 CR 1 REVISED CONTINUATION TAG LETTER
8 5/17/02 GPM RHC APL SCL PAS INCORP. DCR 99-97 ADDED NOTE 3 REFERENCE FOR 2-VG71 ADDED NOTE 4 REFERENCE FOR 2-VG74 DELETED NOTE 4 REFERENCE FOR 2-VG74 (NOW NOTE 3)
9 2/6/03 HPV RHC DVS SCL HJY INCORPORATED DCR 97-39, ADDED NOTE 10 AND LINE SIZE, INCORP DC 99-3 (NCR 99-2-0-0) & DCR 97-37 CA 1 & 2, ADDED NOTE 12, REVISED P & ID, CORR'S NOTE 4, AND SYSTEM PREFIX.
10 05/26/00 DS HRB DVS DVF WFD ISSUED FOR FIELD VERIFICATION
North Atlantic Energy Service Corporation
SEABROOK STATION
VENT GAS SYSTEM
PID- 1-VG-B20780
05/26/00



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 28788.
2. SYSTEM DESCRIPTION NO IS 34.
3. SYSTEM PREFIX IS "VG" UNLESS OTHERWISE NOTED.
4. SYSTEM DESIGN PRESSURE (EXCLUDING PUMP) =150 PSIG.
   PUMP DESIGN PRESSURE =15 PSIG
   SYSTEM DESIGN TEMPERATURE =100° F
5. VACUUM BREAKER ASSEMBLY CONSISTING OF V-0000, V-0001 V-0002, AND PS-0002-SET AT 20 IN. H2O VAC.
6. VALVE V-0001 IS SET TO METER FLOW TO MAINTAIN 19 1/2 IN. H2O VAC.
7. ALL PIPING AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
8. △ INDICATES REVISION LEVEL.
9. DURING PERIODS OF PRESSURIZER PURGING, 1-VG-SKD-143 MAY BE INSTALLED IN PLACE OF 1-VG-TK-77, REF. DCR 97-16.
10. FLEX HOSE MM-692 IS STORED LOCALLY AND INSTALLED AS NEEDED FOR SYSTEM OPERATION. CAP INSTALLED WHEN NOT IN USE. △5 CR 98-86985

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
5	6/15/98	JM	BCS	VWS	INCORP CR 98-86985 REV 98
4	12/18/97	MPV	BCS	ETM	INCORP. DCR 97-16 DCN 98 & 84. REMOVED LATCH CONTINUATION
3	9/24/98	MRB	JM	BCL	INCORP. MMOD 98-516 CA 8
2	11/16/88	JDM	WRD	RRC	INCORP. ECA 88/1167988, REV'D VALVE TYPES & POSITION PER UEAC P&ID. REV'D REVISION BLOCK & ADDED NOTE 8, DWG. LOC. COORD'S.
1	8/16/88	BCL	JDM	RRC	ISSUED FOR OPERATIONS, ADDED TAG NUMBERS
0	2/28/85	MDB	JNM	WFD	INITIAL ISSUE

REF. DRAWING NO.	REV	TITLE
9763-F-885622	6	EVS. REACTOR COOLANT VENT HDR. P & ID

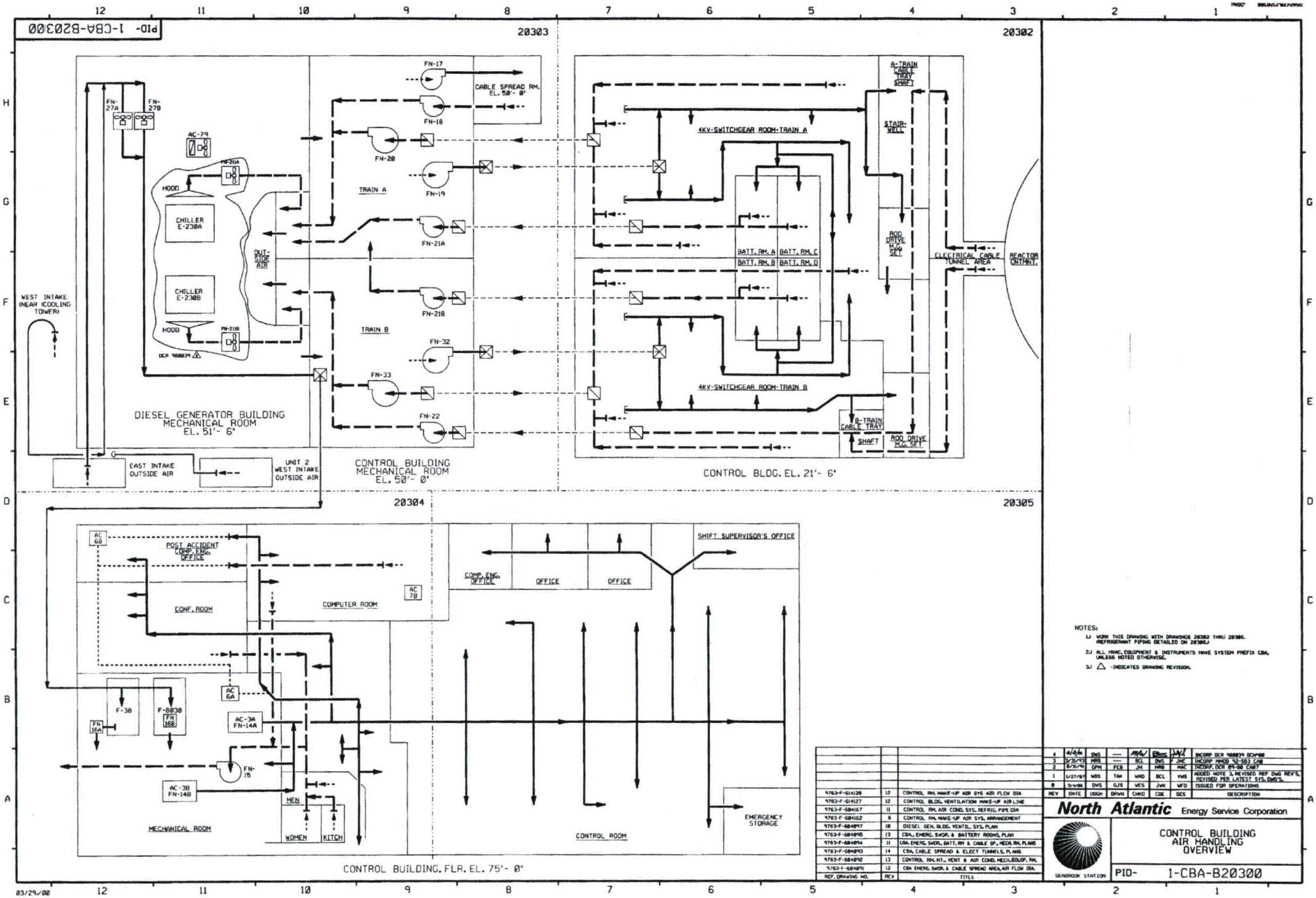
FPL ENERGY Seabrook Station

VENT GAS SYSTEM
RCS AIR EVACUATION SKID
P & I DIAGRAM

PID- 1-VG-B20782

08/08/08

PID- 1-VG-B20782



NOTES:

1. WORK THIS DRAWING WITH DRAWINGS 20302 THRU 20306. REFRIGERANT PIPING DETAILED ON 20306.
2. ALL HVAC EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX CBA, UNLESS NOTED OTHERWISE.
3. △ -INDICATES DRAWING REVISION.

REF. DRAWING NO.	REV	TITLE
9763-F-814128	12	CONTROL RM. MAKE-UP AIR SYS AIR FLOW DIA
9763-F-814127	12	CONTROL BLDG. VENTILATION MAKE-UP AIR LINE
9763-F-884167	11	CONTROL RM. AIR COND. SYS. REFRIG. PIPE DIA
9763-F-884152	6	CONTROL RM. MAKE-UP AIR SYS. ARRANGEMENT
9763-F-884097	10	DIESEL GEN. BLDG. VENTIL. SYS. PLAN
9763-F-884095	13	CBA., EMERG. SWGR. & BATTERY ROOMS, PLAN
9763-F-884094	11	CBA EMERG. SWGR., BATT. RM. & CABLE SP., MECH. RM. PLANS
9763-F-884093	14	CBA, CABLE SPREAD & ELECT TUNNELS, PLANS
9763-F-884092	13	CONTROL RM. MT., VENT & AIR COND. MECH. EQUIP. RM.
9763-F-884091	12	CBA EMERG. SWGR. & CABLE SPREAD AREA, AIR FLOW DIA.

REV	DATE	DSGN	DRWN	CHKD	COE	DES	DESCRIPTION
4	4/4/96	DWS	—	MRB	BCL	DWS	F JHC	INCORP DCR 98003? DCP#98
3	3/31/93	MRB	—	—	BCL	DWS	F JHC	INCORP MMOD 92-553 CAB
2	6/5/90	GPH	FCB	JH	MRB	MAC	INCORP. DCR 89-88 CAB7
1	1/27/89	WDS	TAK	WHO	BCL	YWB	ADDED NOTE 3, REVISED REF DWG REV'S, REVISED PER LATEST SYS. DWG'S.
B	3/4/88	DWS	GJS	WES	JWK	WFD	ISSUED FOR OPERATIONS

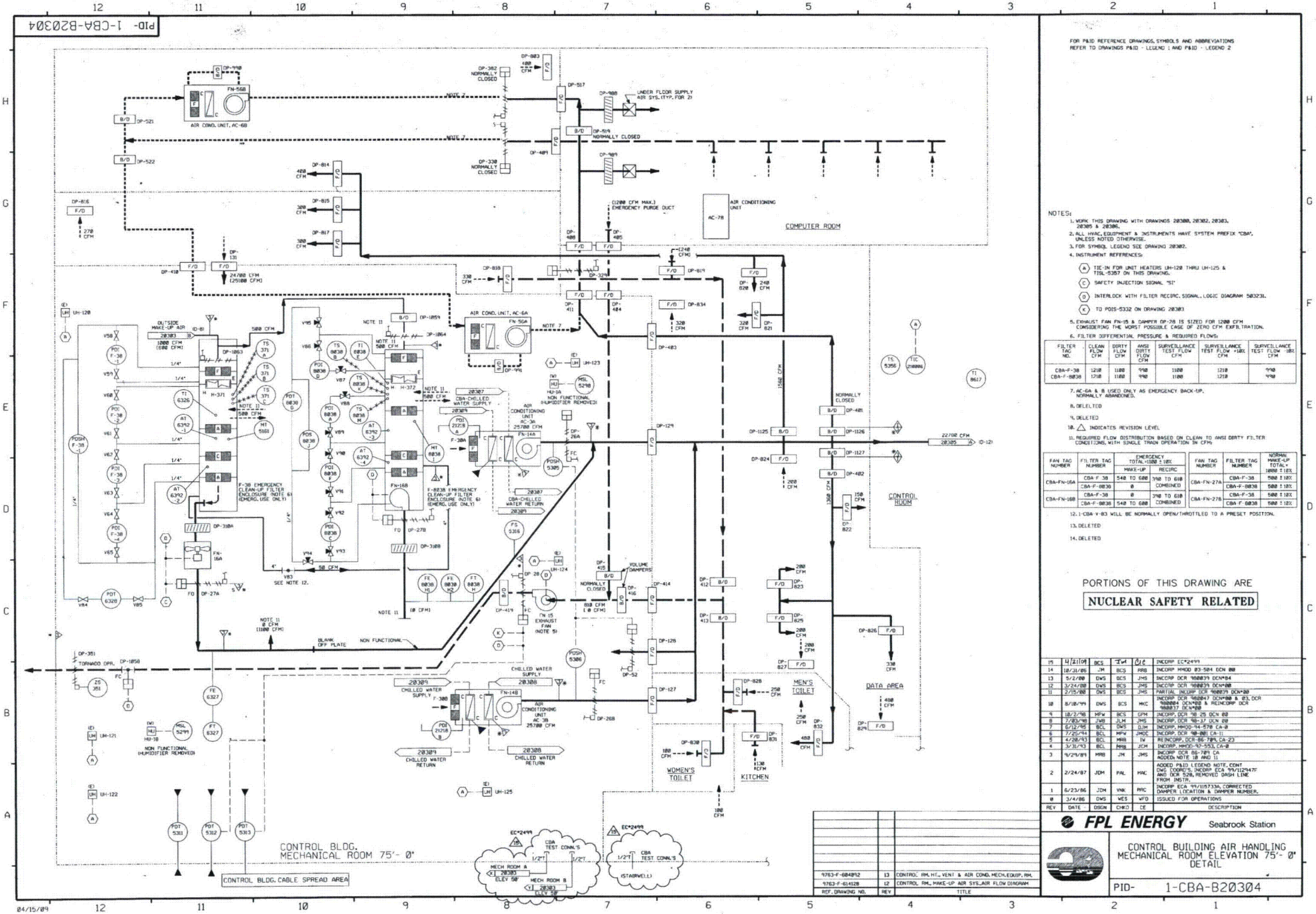
North Atlantic Energy Service Corporation

SEABROOK STATION

CONTROL BUILDING AIR HANDLING OVERVIEW

PID- 1-CBA-B20300

03/29/00



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 20300, 20302, 20303, 20305 & 20306.
2. ALL HVAC EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX "CBA", UNLESS NOTED OTHERWISE.
3. FOR SYMBOL LEGEND SEE DRAWING 20302.
4. INSTRUMENT REFERENCES:
   - (A) TIE-IN FOR UNIT HEATERS UH-120 THRU UH-125 & TISL-5357 ON THIS DRAWING.
   - (C) SAFETY INJECTION SIGNAL "S1"
   - (D) INTERLOCK WITH FILTER RECIRC. SIGNAL, LOGIC DIAGRAM 50323L
   - (K) TO PDIS-5332 ON DRAWING 20303
5. EXHAUST FAN FN-15 & DAMPER DP-28 IS SIZED FOR 1200 CFM CONSIDERING THE WORST POSSIBLE CASE OF ZERO CFM EXFILTRATION.
6. FILTER DIFFERENTIAL PRESSURE & REQUIRED FLOWS:

FILTER TAG NO.	CLEAN FLOW CFM	DIRTY FLOW CFM	ANSI DIRTY FLOW CFM	SURVEILLANCE TEST FLOW CFM	SURVEILLANCE TEST FLOW +10% CFM	SURVEILLANCE TEST FLOW -10% CFM
CBA-F-38	1210	1100	990	1100	1210	990
CBA-F-8838	1210	1100	990	1100	1210	990

7. AC-6A & B USED ONLY AS EMERGENCY BACK-UP, NORMALLY ABANDONED.
8. DELETED
9. DELETED
10. △ INDICATES REVISION LEVEL
11. REQUIRED FLOW DISTRIBUTION BASED ON CLEAN TO ANSI DIRTY FILTER CONDITIONS, WITH SINGLE TRAIN OPERATION IN CFM:

FAN TAG NUMBER	FILTER TAG NUMBER	EMERGENCY TOTAL +10% -10% MAKE-UP	EMERGENCY TOTAL +10% -10% RECIRC	FAN TAG NUMBER	FILTER TAG NUMBER	NORMAL MAKE-UP TOTAL + 10% -10%
CBA-FN-16A	CBA-F-38	540 TO 680	390 TO 610 COMBINED	CBA-FN-27A	CBA-F-38	500 ±10%
	CBA-F-8838	0			CBA-F-8838	500 ±10%
CBA-FN-16B	CBA-F-38	0	390 TO 610 COMBINED	CBA-FN-27B	CBA-F-38	500 ±10%
	CBA-F-8838	540 TO 680			CBA-F-8838	500 ±10%

12. CBA-V-83 WILL BE NORMALLY OPEN/THROTTLED TO A PRESET POSITION.
13. DELETED
14. DELETED

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
15	4/21/09	BCS	TJW	DJC	INCORP EC*2499
14	10/31/06	JM	BCS	RRB	INCORP MMOD 03-504 DCN 00
13	5/2/00	DWS	BCS	JMS	INCORP DCR 980039 DCN*04
12	3/24/00	DWS	BCS	JMS	INCORP DCR 980039 DCN*00
11	2/15/00	DWS	BCS	JMS	PARTIAL INCORP DCR 980039 DCN*00
10	8/10/99	DWS	BCS	MKC	INCORP DCR 980047 DCN*00 & 03, DCR 980064 DCN*00 & REINCORP DCR 980017 DCN*00
9	10/2/98	MPW	BCS	GPM	INCORP. DCR 98-25 DCN 00
8	7/02/98	JWB	JLM	JMS	INCORP. DCR 98-17 DCN 00
7	6/12/95	BCL	DWS	DJH	INCORP. MMOD-94-578 CA-0
6	7/25/94	BCL	MPW	JMDC	INCORP. DCR 90-001 CA-11
5	4/28/93	BCL	MRB	IW	REINCORP. DCR-86-78% CA-23
4	3/31/93	BCL	MRB	JCM	INCORP. MMOD-92-553 CA-0
3	9/29/89	MRB	JM	JMS	INCORP DCR 86-78% CA ADDED NOTE 10 AND 11
2	2/24/87	JDM	PAL	MAC	ADDED P&ID LEGEND NOTE, CONT DWG CODE'S, INCORP ECA 99/112947F AND DCR 526, REMOVED DASH LINE FROM INSTR.
1	6/23/86	JDM	VNK	PRC	INCORP ECA 99/115733A, CORRECTED DAMPER LOCATION & DAMPER NUMBER.
0	3/4/86	DWS	WES	WFD	ISSUED FOR OPERATIONS

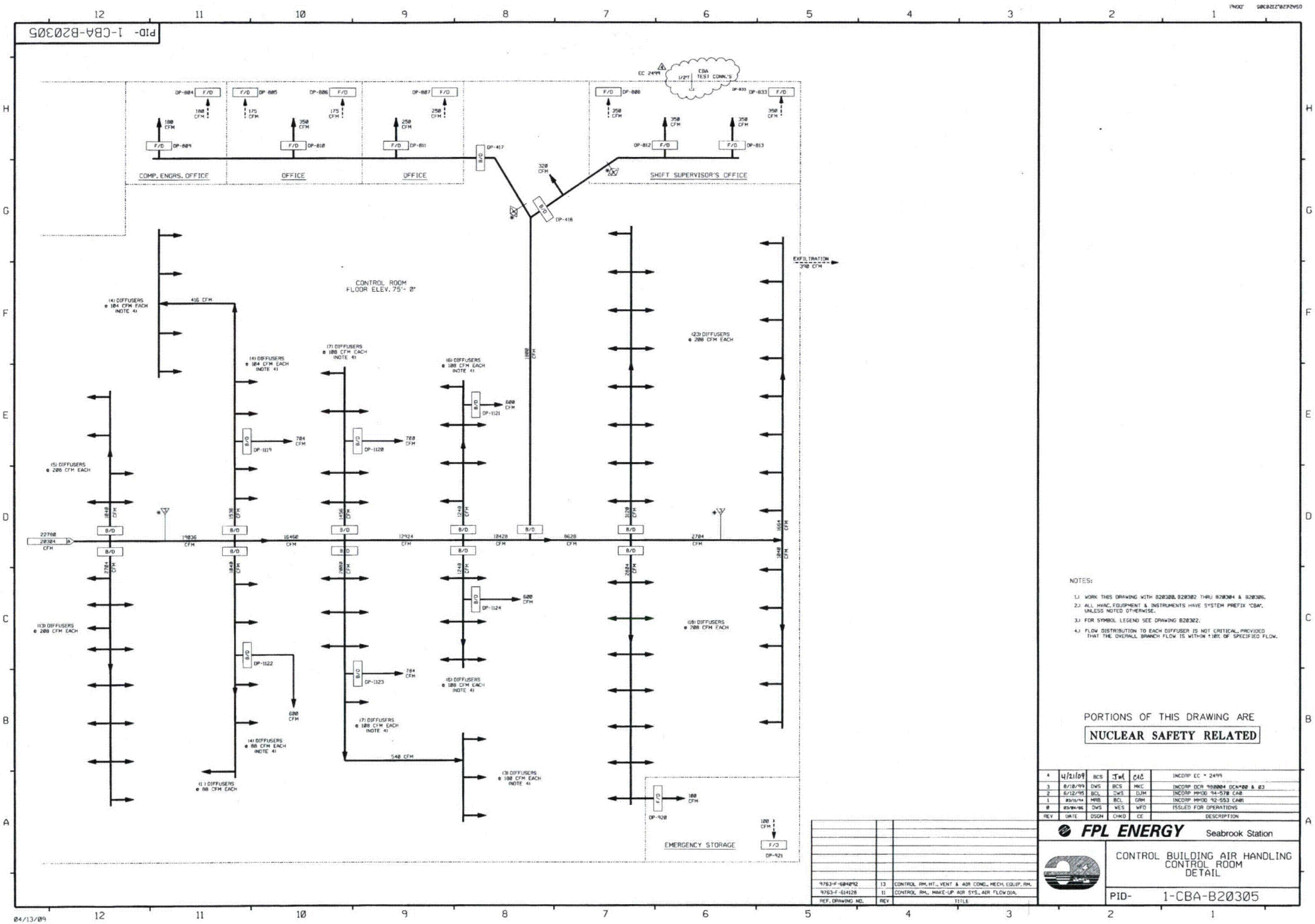
REF. DRAWING NO.	REV	TITLE
9763-F-604852	13	CONTROL RM. HT., VENT & AIR COND. MECH. EQUIP. RM.
9763-F-614128	12	CONTROL RM., MAKE-UP AIR SYS. AIR FLOW DIAGRAM

FPL ENERGY Seabrook Station

CONTROL BUILDING AIR HANDLING MECHANICAL ROOM ELEVATION 75'- 0" DETAIL

PID- 1-CBA-B20304

04/15/09



NOTES:

1. WORK THIS DRAWING WITH B20300, B20302 THRU B20304 & B20306.
2. ALL HVAC EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX 'CBA', UNLESS NOTED OTHERWISE.
3. FOR SYMBOL LEGEND SEE DRAWING B20302.
4. FLOW DISTRIBUTION TO EACH DIFFUSER IS NOT CRITICAL, PROVIDED THAT THE OVERALL BRANCH FLOW IS WITHIN ±10% OF SPECIFIED FLOW.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	QE	DESCRIPTION
4	4/21/09	BCS	JWL	CAC	INCORP EC # 24499
3	8/18/99	DWS	BCS	MKC	INCORP OCR 980004 OCN#00 & 03
2	6/12/95	BCL	DWS	DJM	INCORP MMOD 94-578 CA8
1	03/04/94	MRB	BCL	GRM	INCORP MMOD 92-553 CA81
0	03/04/86	DWS	WES	WFO	ISSUED FOR OPERATIONS

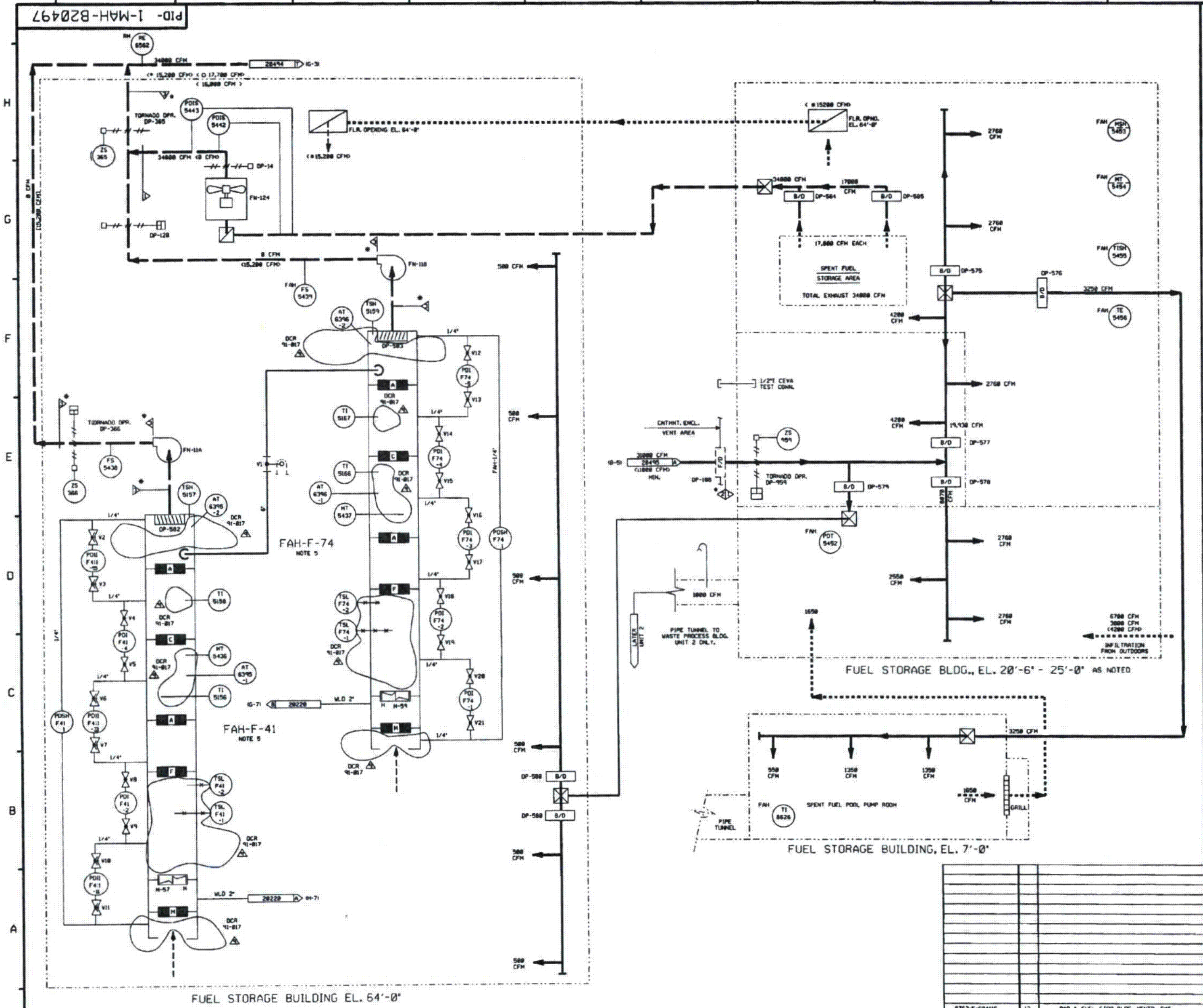
FPL ENERGY Seabrook Station

CONTROL BUILDING AIR HANDLING CONTROL ROOM DETAIL

PID- 1-CBA-B20305

REF. DRAWING NO.	REV	TITLE
9763-F-68492	13	CONTROL RM, HT., VENT & AIR COND., MECH. EQUIP. RM.
9763-F-61412B	11	CONTROL RM., MAKE-UP AIR SYS., AIR FLOW DIA.

04/13/09



9763-F-604116	12	PAB & FUEL STOR. BLDG. VENTIL. SYS.
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 20492, 20494 THRU 20496 & 20498 THRU 20500.
2. ALL HVAC, EQUIP, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX FAH (FUEL STORAGE BLDG. AIR HANDLING), UNLESS NOTED.
3. FOR SYMBOL LEGEND, SEE NOTE 3 ON DRAWING 20494.
4. ▷ ALL DUCTWORK, UNLESS NOTED.
5. FILTER HOUSING DIFFERENTIAL PRESS & REQUIRED FLOWS :

FILTER TAG NO.	CLEAN FLOW CFM	DIRTY FLOW CFM	ANSI DIRTY FLOW CFM	SURVEILLANCE TEST FLOW CFM	SURVEILLANCE TEST FLOW +10% CFM	SURVEILLANCE TEST FLOW -10% CFM
FAH-F-41	17700	16000	15200	16450	18095	14805
FAH-F-74	17700	16000	15200	16450	18095	14805

6. △ INDICATES REVISION LEVEL.

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

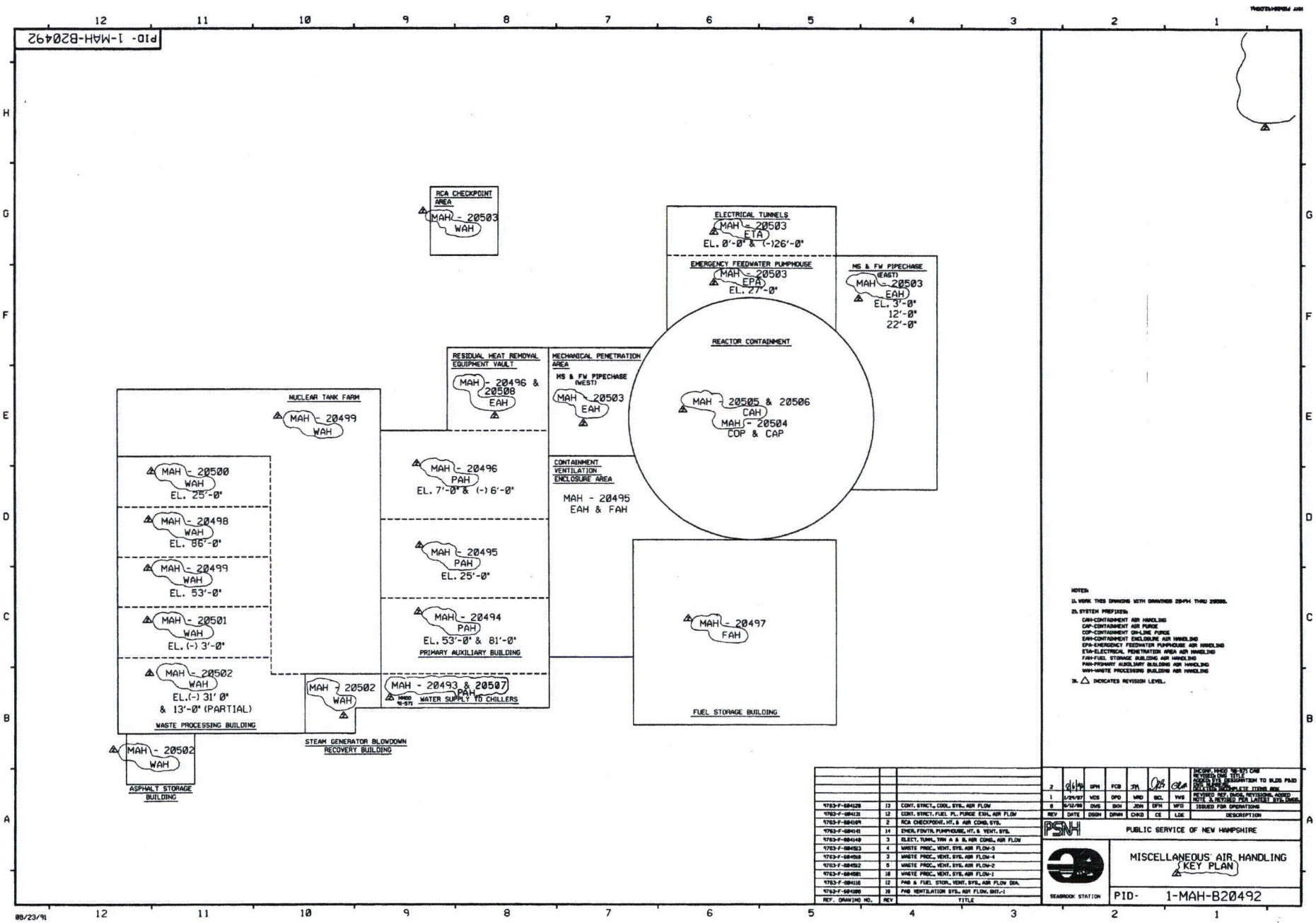
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
9	[illegible]	BCS	—	[illegible]	[illegible]	[illegible]	INCORP DCR 91-017 DCN-0
8	5/11/92	MRB	—	BCL	DVS	GPM	INCORP MMOD 91-622 CA0
7	8/16/91	GPM	FCB	JM	MRB	IV	INCORP. DCR 86-554 CA0
6	12/19/90	MRB	RHC	JM	DWS	IV	INCORP. DCR 87-373 CA0
5	4/11/90	HP	FCB	MRB	APL	DJH	INCORP DCR 86-548 CA0
4	4/27/89	GPM	RHC	MRB	BCL	MAC	INCORP. DCR 86-555 CA 9
3	2/24/87	PAL	DPO	MPW	BCL	MAC	ADDED ECA 99/115014A, CONT. REF. DWGS, NOTE 6, PIPE TUNNEL AND CORRECTED DRAFTING ERRORS PER UE&C P&ID INCORP. DCR-520.
2	12/23/86	JDM	DPO	PAL	BCL	RRC	ADDED P&ID LEGEND NOTE, CONT. REF. DWGS., INCORP. ECA 99/112947F
1	9/2/86	JDM	DWS	MAP	BCL	RRC	INCORP ECA 98/117840A
0	6/12/86	DWS	DSB	JDM	DFM	WFD	ISSUED FOR OPERATIONS INCORP. ECA 95/112547A

North Atlantic Energy Service Corporation

SEABROOK STATION

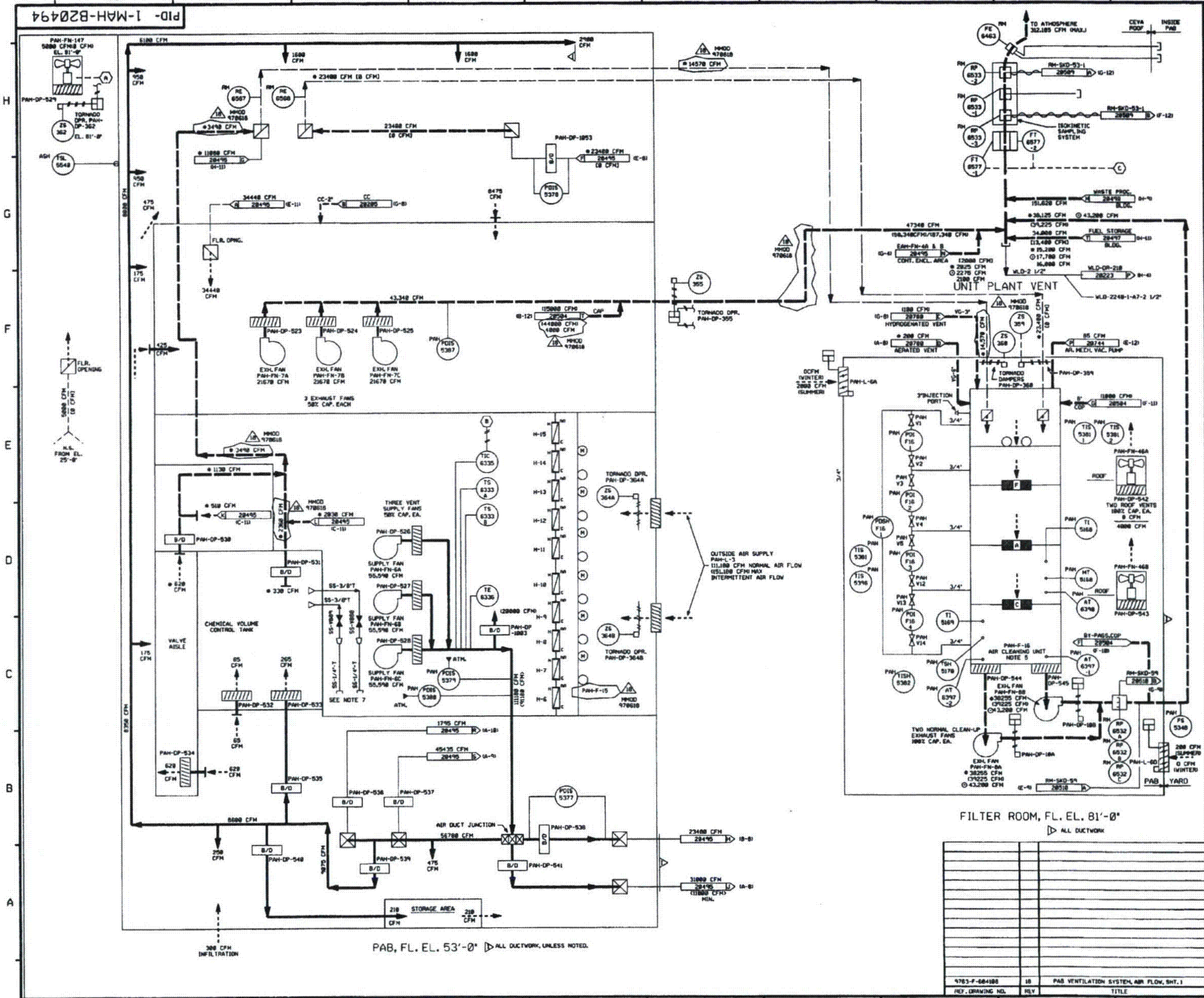
MISCELLANEOUS AIR HANDLING
FUEL STORAGE BUILDING
DETAIL

PID- 1-MAH-B20497



REV. DRAWING NO.	REV	TITLE
9763-F-884129	13	CONT. STRCT., COOL. SYS., AIR FLOW
9763-F-884131	12	CONT. STRCT. FUEL PL. PURGE EXH., AIR FLOW
9763-F-884189	2	RCA CHECKPOINT, HT. & AIR COND. SYS.
9763-F-884141	14	EMER. FDWTR. PUMPHOUSE, HT. & VENT. SYS.
9763-F-884149	3	ELECT. TUNN., TRN A & B, AIR COND., AIR FLOW
9763-F-884153	4	WASTE PROC., VENT. SYS. AIR FLOW-3
9763-F-884158	3	WASTE PROC., VENT. SYS. AIR FLOW-4
9763-F-884152	5	WASTE PROC., VENT. SYS. AIR FLOW-2
9763-F-884151	10	WASTE PROC., VENT. SYS. AIR FLOW-1
9763-F-884116	12	PAB & FUEL STOR., VENT. SYS., AIR FLOW DIA.
9763-F-884186	10	PAB VENTILATION SYS., AIR FLOW, SHT.-1

REV	DATE	DSGN	DRAWN	CHKD	CE	LDE	DESCRIPTION
2	9/6/96	BPH	FCB	JM			INCORP. MMOD 96-571 CAB REVISION TAKE TITLE ADDED SYS DESIGNATION TO BLDG P&ID DWG NUMBER DELETION INCOMPLETE ITEMS NOTE
1	2/24/97	WDS	DPD	WRD	BCL	WS	REVISED REF. DWGS, REVISIONS, ADDED NOTE 3, REVISED PER LATEST STA DWGS.
0	5/12/88	DWS	SKH	JSH	DPH	WFD	ISSUED FOR OPERATIONS



9763-F-604108	18	PAB VENTILATION SYSTEM, AIR FLOW, 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 20492 & 20495 THRU 20508.
2. SYSTEM PREFIXES:
   - PAH - PRIMARY AUX. BLDG. AIR HANDLING.
   - CAP - CONTAINMENT AIR PURGE.
   - COP - CONTAINMENT ON-LINE PURGE.
   - SS - SAMPLE SYSTEM
   - ASC - AUXILIARY STEAM CONDENSATE
3. LEGEND:
   - XXX CFM - NORMAL AIR FLOW
   - <XXX CFM> - FUEL HANDLING AIR FLOW
   - (XXX CFM) - INTERMITTENT AIR FLOW
   - [XXX CFM] - EMERGENCY AIR FLOW
   - ⊙ XXXX CFM - DENOTES "CLEAN SYSTEM" AIR FLOW RATE @ 12.90 "H_2O
   - ● XXXX CFM - DENOTES AIR FLOW RATE AT ANSI N510-1980 TEST REQUIREMENT
   - DUCTED SUPPLY AIR
   - DUCTED EXH OR RETURN AIR
   - NON-DUCTED AIR
   - VERTICAL CONTINUATION OF DUCTS
   - TO ATMOSPHERE (INSTRUMENTATION)
   - — R — REFRIGERANT LINE
4. INSTRUMENTATION REFERENCES:
   - (A) TO PAH-TSH-5392 ON DWG. 20495.
   - (B) TO TCV-6335 ON DWG 20507.
   - (C) TO FCV-6497 ON DWG 20509.
5. FILTER DIFFERENTIAL PRESSURES & REQUIRED FLOW:

FILTER TAG NO	CLEAN FLOW CFM	DIRTY FLOW CFM	ANSI DIRTY FLOW CFM	SURVEILLANCE TEST FLOW CFM	SURVEILLANCE TEST FLOW + 10% CFM	SURVEILLANCE TEST FLOW - 10% CFM
PAH-F-16	43200	39225	38125	40663	44729	36597

6. △ INDICATES REVISION LEVEL
7. AIR SAMPLE STATION

REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
18	[illegible]	DWS	—	RWS	[illegible]	[illegible]	INCORP MMOD 970618 DCN#00
17	[illegible]	MPW	—	[illegible]	[illegible]	DG	INCORPORATED MMOD [illegible] DCN [illegible]
16	8/18/97	MPW	—	BCS	DWS	[illegible]	INCORPORATED MMOD [illegible] DCN [illegible]
15	4/24/97	DWS	—	BCS	MPW	JPS	INCORPORATE MMOD 960571 CA#10
14	[illegible]	BCS	—	DWS	MPW	WFZ	INCORPORATED MMOD [illegible] CA#9
13	1/19/96	BCS	—	MPW	[illegible]	[illegible]	REINCORP. DCR 90-005 CA8
12	6/12/95	BCL	—	DWS	MPW	DJM	INCORPORATED MMOD 94-578 CA#9
11	12/6/94	DWS	—	MPW	BCL	[illegible]	INCORPORATED MMOD [illegible] CA#9
10	12/7/93	MRB	—	BCL	DWS	RSD	INCORPORATED DCR 90-005 CA8
9	12/13/89	MRB	RMC	MP	APL	WFD	ADDED CONTINUATIONS TO AND FROM RM-SKD-59
8	9/29/89	MRB	RMC	PAL	MPW	RRC	INCORPORATED DCR 88-12 CA ADDED SYS PREFIX PER SIS VERIFICATION REVISED NOTE 2
7	4/27/89	GPM	FCB	PAL	APL	MAC	INCORP DCR 86-555 CA 9
6	4/21/89	MRB	RMC	GPM	PAL	MAC	INCORPORATED DCR 87-265 CA 4 RE-INCORPORATED DCR 86-564 CA-2
5	8/10/88	MPW	JM	BCL	DWS	MAC	INCORP ECA [illegible] & DCR 87-37 ADDED INSTR. TIE-INS & NEW P&ID PER [illegible] DELETED SYMBOL LEGEND. REVISED DP-383 TO DP-355 [illegible]
4	4/9/87	DAP	HBW	LFC	BCL	MAC	REISSUED TO RESOLVE PREVIOUS REV 3 SIGNOFF DATE ERROR.
3	3/13/87	PAL	DWS	MRJ	BCL	MAC	CORRECTED INSTRUMENTATION TO REFLECT AS-BUILT CONDITION, ADDED REF. COORD TO REF PLANS & NOTE 5, CORRECTED DRAFTING ERROR OF PAH FAN FROM 8A TO 8B & DCR 86-564, CA-2
2	12/23/86	JDM	OPD	MRJ	MPW	MHC	ADDED P&ID LEGEND NOTE & CONT DWG COORDS, CORRECTED CONT DWGS, INCORP ECA'S 99/112947F, 98/117935A, 98/118237A, 86/118330A, ADDED LINE NUMBER
1	10/3/86	JDM	DWS	MAP	BCL	RRC	INCORP ECA 98/117848A, 86/0020000 & 98/118817A
0	6/12/86	JDM	SKN	DWS	DFM	WFD	ISSUED FOR OPERATIONS AND INCORP. ECA [illegible]

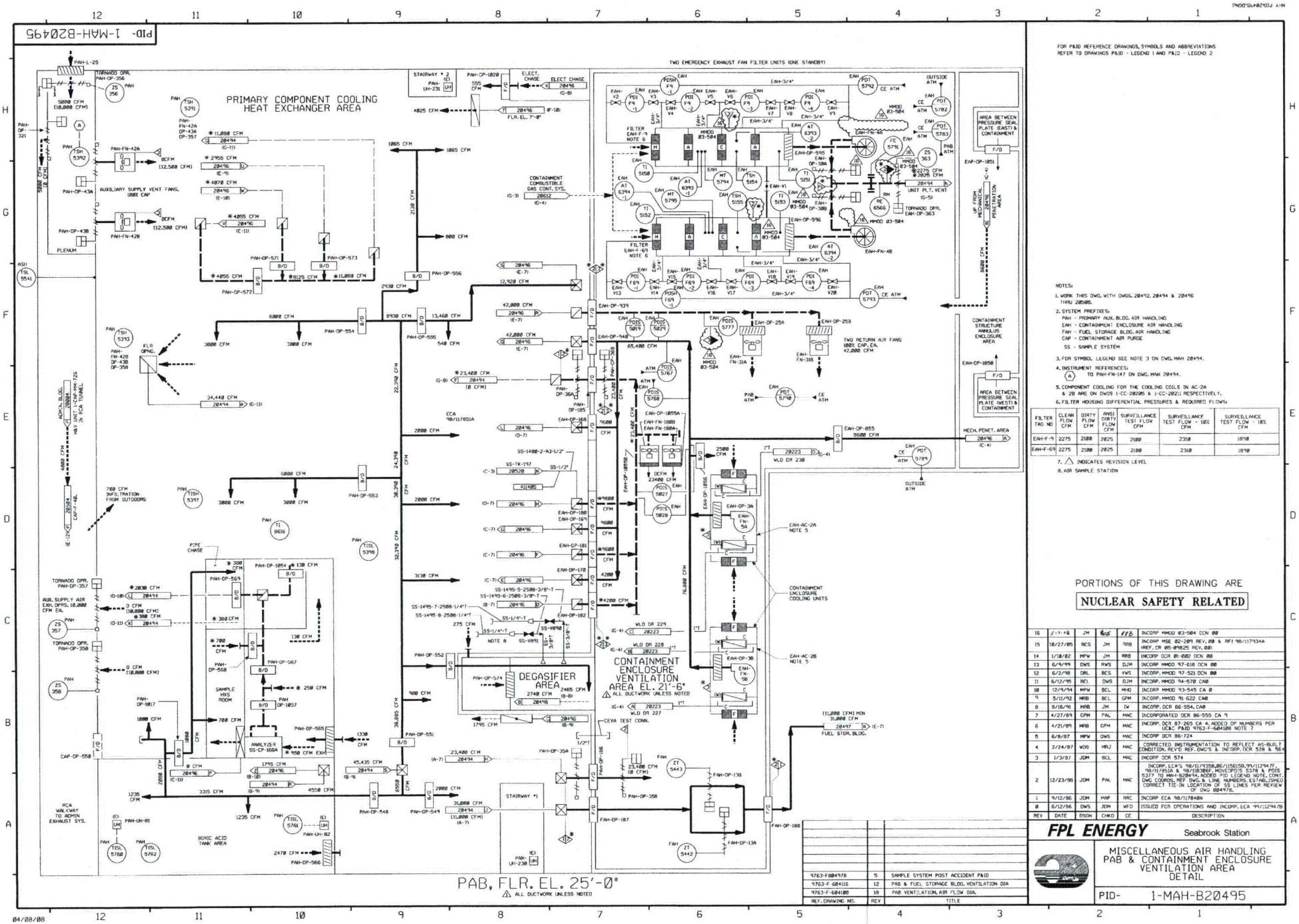
North Atlantic Energy Service Corporation

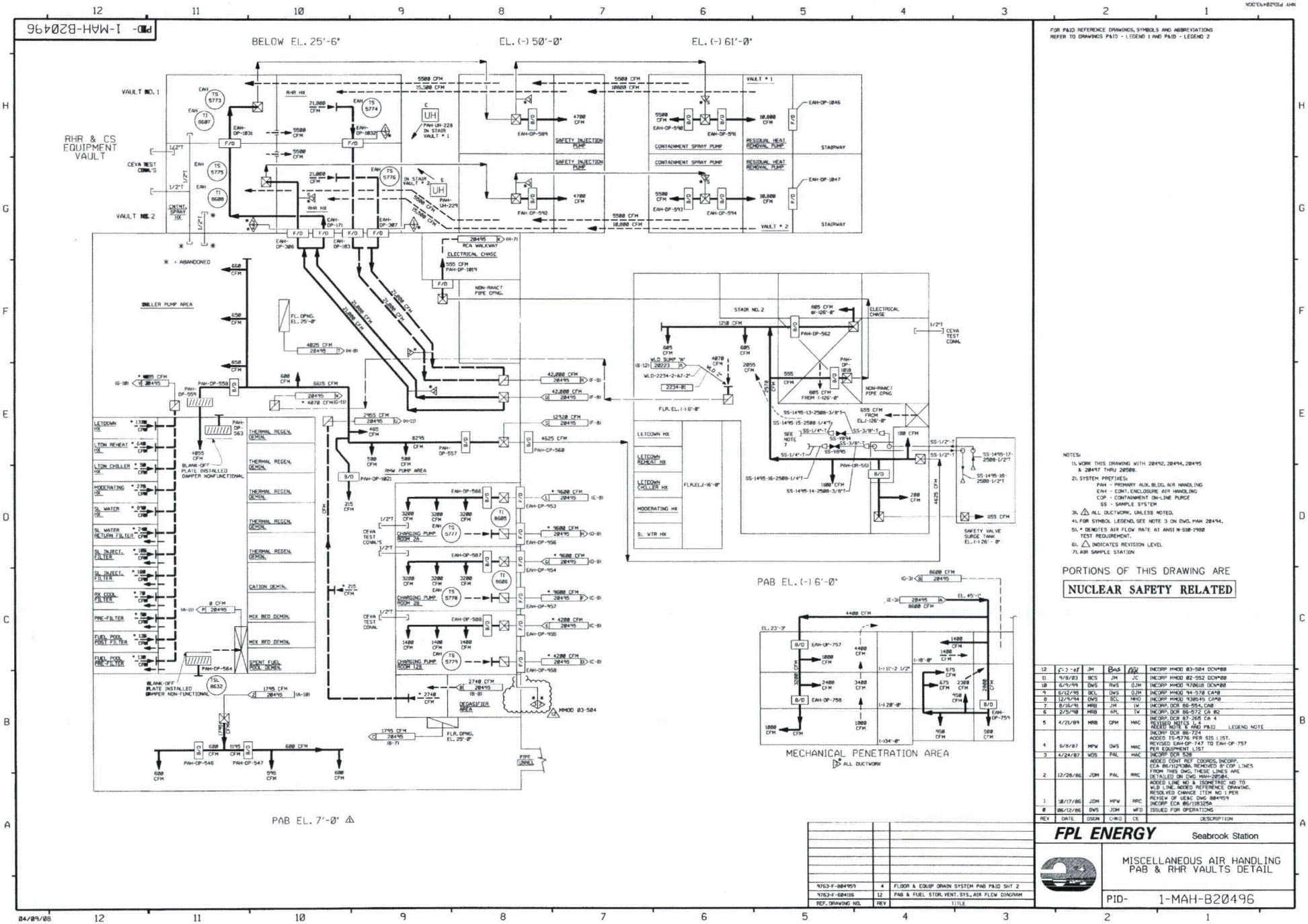
SEABROOK STATION

MISCELLANEOUS AIR HANDLING
PAB EL. 53'-0" & 81'-0"
DETAIL

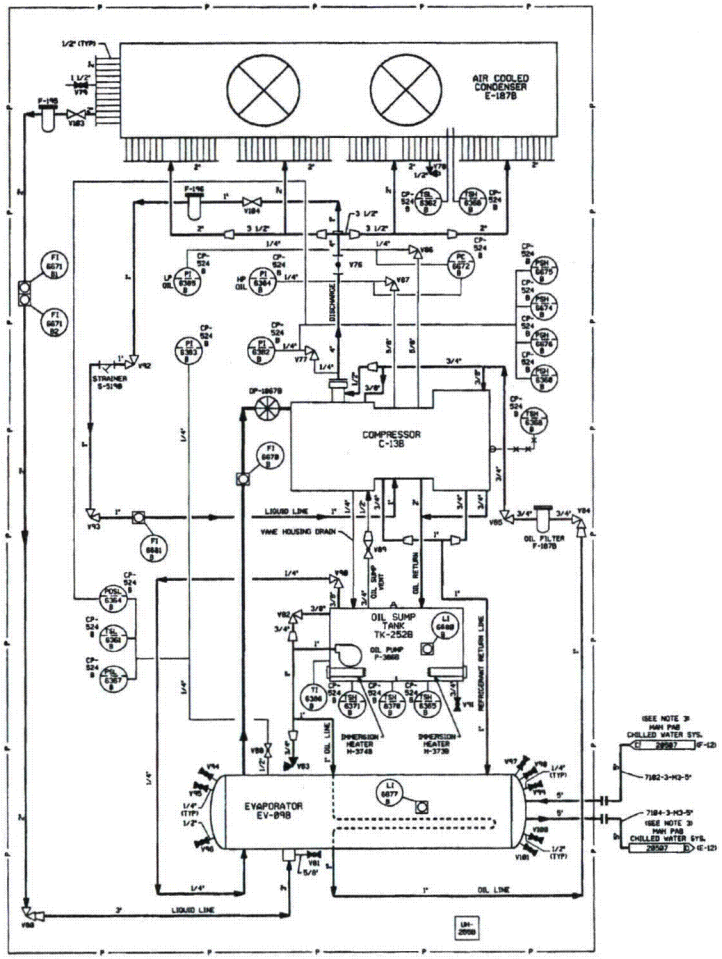
PID- 1-MAH-B20494

03/12/99

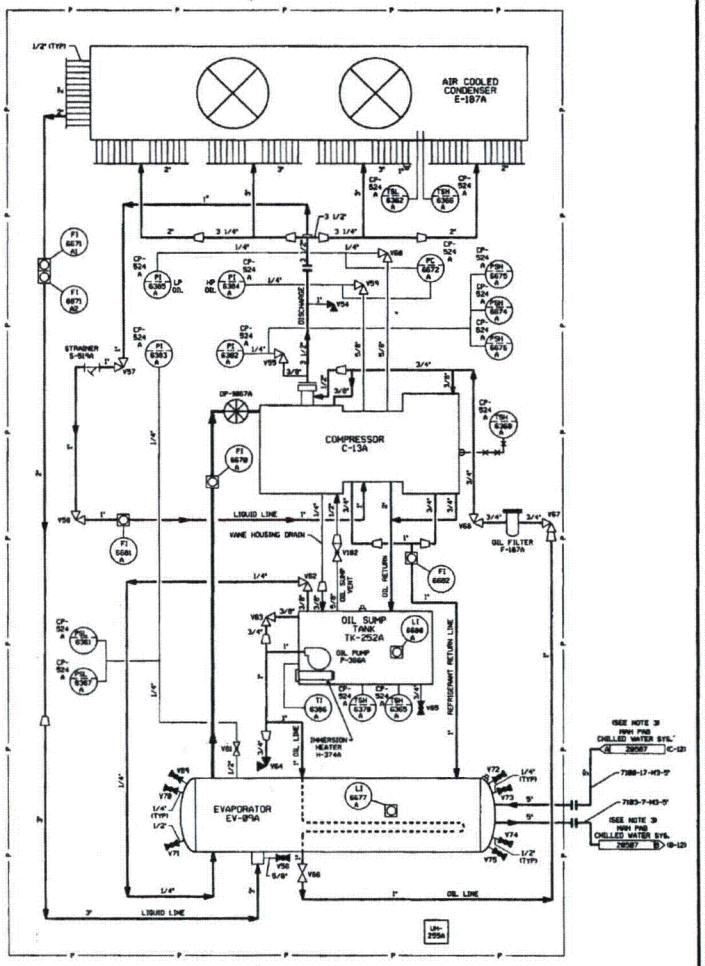

PID- 1-MAH-B20495
PRIMARY COMPONENT COOLING HEAT EXCHANGER AREA
TWO EMERGENCY EXHAUST FAN FILTER UNITS (ONE STANDBY)
CONTAINMENT ENCLOSURE VENTILATION AREA EL. 21'-6" ALL DUCTWORK UNLESS NOTED
DEGASIFIER AREA
PAB, FLR. EL. 25'-0" ALL DUCTWORK UNLESS NOTED
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2
NOTES:
1. WORK THIS DWG. WITH DWGS. 20492, 20494 & 20496 THRU 20498.
2. SYSTEM PREFIXES:
PAH - PRIMARY AUX. BLDG. AIR HANDLING
EAH - CONTAINMENT ENCLOSURE AIR HANDLING
FAH - FUEL STORAGE BLDG. AIR HANDLING
CAP - CONTAINMENT AIR PURGE
SS - SAMPLE SYSTEM
3. FOR SYMBOL LEGEND SEE NOTE 3 ON DWG. MAH 20494.
4. INSTRUMENT REFERENCES:
(A) TO PAH-FN-147 ON DWG. MAH 20494.
5. COMPONENT COOLING FOR THE COOLING COILS IN AC-2A & 2B ARE ON DWGS 1-CC-20205 & 1-CC-20211 RESPECTIVELY.
6. FILTER HOUSING DIFFERENTIAL PRESSURES & REQUIRED FLOWS:
FILTER TAG NO. | CLEAN FLOW CFM | DIRTY FLOW CFM | ANSI DIRTY FLOW CFM | SURVEILLANCE TEST FLOW CFM | SURVEILLANCE TEST FLOW - 10% CFM | SURVEILLANCE TEST FLOW - 10% CFM
EAH-F-9 | 2275 | 2100 | 2025 | 2100 | 2310 | 1890
EAH-F-69 | 2275 | 2100 | 2025 | 2100 | 2310 | 1890
7. △ INDICATES REVISION LEVEL
8. AIR SAMPLE STATION
PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED
16 | 5-7-98 | JM | BCS | MB | INCORP MMOD 03-584 CCN 00
15 | 10/27/05 | BCS | JM | MB | INCORP MSE 02-209 REV. 00 & RFI 98/117934A (REF. CR 05-09825 REV. 00)
14 | 1/18/02 | MPW | JM | RRB | INCORP DCR 01-002 CCN 00
13 | 6/9/99 | DWS | RWS | DJM | INCORP MMOD 97-618 CCN 00
12 | 6/2/98 | DRL | BCS | VWS | INCORP. MMOD 97-521 CCN 00
11 | 6/12/95 | RCL | DWS | DJM | INCORP. MMOD 94-578 CA0
10 | 12/9/94 | MPW | BCL | MHD | INCORP MMOD 93-545 CA 0
9 | 5/11/92 | MRB | BCL | GPM | INCORP. MMOD 91-622 CA0
8 | 8/16/91 | MRB | JM | IW | INCORP. DCR 86-554, CA0
7 | 4/27/89 | GPM | PAL | MAC | INCORPORATED DCR 86-555 CA 9
6 | 4/21/89 | MRB | GPM | MAC | INCORP. DCR 87-265 CA 4. ADDED DP NUMBERS PER UE&C P&ID 9763-F-684108 NOTE 7
5 | 6/8/87 | MPW | DWS | MAC | INCORP DCR 86-724
4 | 2/24/87 | WDS | MRJ | MAC | CORRECTED INSTRUMENTATION TO REFLECT AS-BUILT CONDITION. REVD REF. DWG'S & INCORP. TCR 528 & 564
3 | 1/3/87 | JDM | BCL | MAC | INCORP DCR 574
2 | 12/23/86 | JDM | PAL | MAC | INCORP. ECA'S 98/117938,86/156158,99/112947F, 98/117952A & 98/103862. MOVED PCIS 5378 & PCIS 5377 TO MAH-B20494. ADDED PID LEGEND NOTE, CONT. DWG CODES, REF DWG & LINE NUMBERS, ESTABLISHED CORRECT TIE-IN LOCATION OF SS LINES PER REVIEW OF DWG 884978.
1 | 9/12/86 | JDM | MAP | RRC | INCORP ECA 98/117840A
0 | 6/12/86 | DWS | JDM | WFD | ISSUED FOR OPERATIONS AND INCORP. ECA 99/112947B
REV | DATE | DSGN | CHKD | QE | DESCRIPTION
9763-F-884978 | 5 | SAMPLE SYSTEM POST ACCIDENT P&ID
9763-F-684116 | 12 | PAB & FUEL STORAGE BLDG. VENTILATION DIA
9763-F-684108 | 16 | PAB VENTILATION AIR FLOW DIA.
REF. DRAWING NO. | REV | TITLE
FPL ENERGY Seabrook Station
MISCELLANEOUS AIR HANDLING PAB & CONTAINMENT ENCLOSURE VENTILATION AREA DETAIL
PID- 1-MAH-B20495
04/08/08


PID- 1-MAH-B20496
BELOW EL. 25'-6"
EL. (-) 50'-0"
EL. (-) 61'-0"
RHR & CS EQUIPMENT VAULT
VAULT NO. 1
VAULT NO. 2
VAULT * 1
VAULT * 2
RHR HX
CNTMT. SPRAY HX
CEVA TEST CONN'S
SAFETY INJECTION PUMP
CONTAINMENT SPRAY PUMP
RESIDUAL HEAT REMOVAL PUMP
STAIRWAY
ELECTRICAL CHASE
RCA WALKWAY
NON-RMACT PIPE CPNG.
SMALLER PUMP AREA
RHR PUMP AREA
LETDOWN HX
LTDN REHEAT HX
LTDN CHILLER HX
MODERATING HX
SL WATER HX
SL WATER RETURN FILTER
SL INJECT. FILTER
RX COOL. FILTER
PRE-FILTER
FUEL POOL POST FILTER
FUEL POOL PRE-FILTER
THERMAL REGEN. DEMIN.
CATION DEMIN.
MIX BED DEMIN.
SPENT FUEL MIX. DEMIN.
CHARGING PUMP ROOM 26
CHARGING PUMP ROOM 27
CHARGING PUMP ROOM 28
DEGASIFIER AREA
BLANK-OFF PLATE INSTALLED DAMPER NON-FUNCTIONAL
MMOD 83-584
PAB EL. 7'-0" ⚠
PAB EL. (-) 6'-0"
MECHANICAL PENETRATION AREA
ALL DUCTWORK
SAFETY VALVE SURGE TANK EL. (+) 26' - 8"
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 28492, 28494, 28495 & 28497 THRU 28500.
2. SYSTEM PREFIXES:
PAH - PRIMARY AUX. BLDG. AIR HANDLING
EAH - CONT. ENCLOSURE AIR HANDLING
CPP - CONTAINMENT ON-LINE PURGE
SS - SAMPLE SYSTEM
3. ⚠ ALL DUCTWORK, UNLESS NOTED.
4. FOR SYMBOL LEGEND, SEE NOTE 3 ON DWG. MAH 28494.
5. * DENOTES AIR FLOW RATE AT ANSI N-510-1980 TEST REQUIREMENT.
6. △ INDICATES REVISION LEVEL.
7. AIR SAMPLE STATION
PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED
9763-F-804959 4 FLOOR & EQUIP DRAIN SYSTEM PAB P&ID SHT 2
9763-F-804116 12 PAB & FUEL STOR. VENT. SYS., AIR FLOW DIAGRAM
REF. DRAWING NO. REV TITLE
12 6-2-98 JM BWS JC INCORP MMOD 83-584 DCN*88
11 9/8/93 BCS JM JC INCORP MMOD 82-552 DCN*88
10 6/5/95 DWS RWS DJM INCORP MMOD 93861B DCN*88
9 6/12/95 BCL DWS DJM INCORP MMOD 94-570 CA*8
8 12/9/94 DWS BCL HHQ INCORP MMOD 93845 CA*8
7 8/16/91 MRB JM IW INCORP. DCR 86-554, CA8
6 2/5/90 MRB APL IW INCORP. DCR 86-572 CA 82
5 4/21/89 MRB GPM MAC INCORP. DCR 87-265 CA 4 REVISED NOTES 1, 4 ADDED NOTE 5 AND P&ID. LEGEND NOTE
4 6/8/87 MPW DWS MAC INCORP DCR 86-724 ADDED TS-5776 PER SIS LIST. REVISED EAH-DP-747 TO EAH-DP-757 PER EQUIPMENT LIST
3 4/24/87 WDS PAL MAC INCORP DCR 528
2 12/28/86 JDM PAL RRC ADDED CONT REF COORDS, INCORP. ECA 86/112938A. REMOVED 8" CPP LINES FROM THIS DWG, THESE LINES ARE DETAILED ON DWG. MAH-28584.
1 10/17/86 JDM MPW RRC ADDED LINE NO & ISOMETRIC NO TO W.O LINE. ADDED REFERENCE DRAWING. RESOLVED CHANGE ITEM NO 1 PER REVIEW OF UE&C DWG 884959 INCORP ECA 86/118325A
0 06/12/86 DWS JDM WFD ISSUED FOR OPERATIONS
REV DATE DSGN CHKD CE DESCRIPTION
FPL ENERGY Seabrook Station
MISCELLANEOUS AIR HANDLING PAB & RHR VAULTS DETAIL
PID- 1-MAH-B20496
04/09/98

P10- 1-MAH-B20493



AC-86B



AC-86A

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 MAH UNLESS NOTED.
2. WORK THIS DRAWING WITH DRAWINGS 28492 & 28494 THRU 28508.
3. NORMALLY ONE PUMP AND ONE CHILLER OPERATE AT A TIME. THE OTHER PUMP AND CHILLER SERVE AS STANDBY EQUIPMENT.
4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS MHL, UNLESS NOTED OTHERWISE.
5. CHILLED WATER CONSISTS OF WATER WITH 40% GLYCOL (BY WEIGHT) ADDED FOR FREEZE PROTECTION.
7. △ - INDICATES REVISION LEVEL.

REV	DATE	DSGN	DRWN	CHKD	QE	LOE	DESCRIPTION
8	5/4/10	DVS	JH	B.C.L.	MFB	CAM	FIRST ISSUE PER MMOD 10-571, CABLE 35

PSNH — PUBLIC SERVICE OF NEW HAMPSHIRE

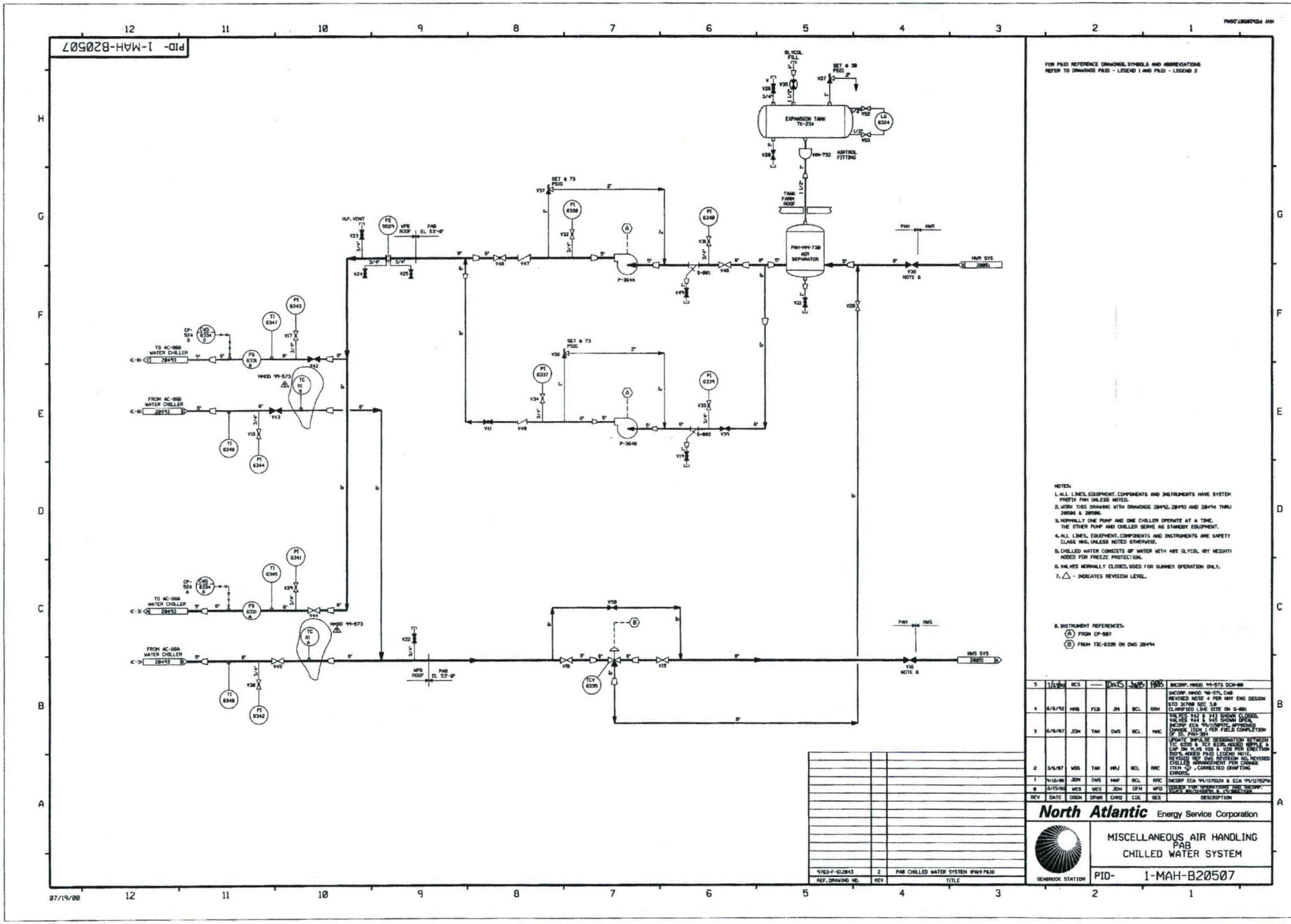
SEABROOK STATION

MISCELLANEOUS AIR HANDLING PAB CHILLED WATER SYSTEM

PID- 1-MAH-B20493

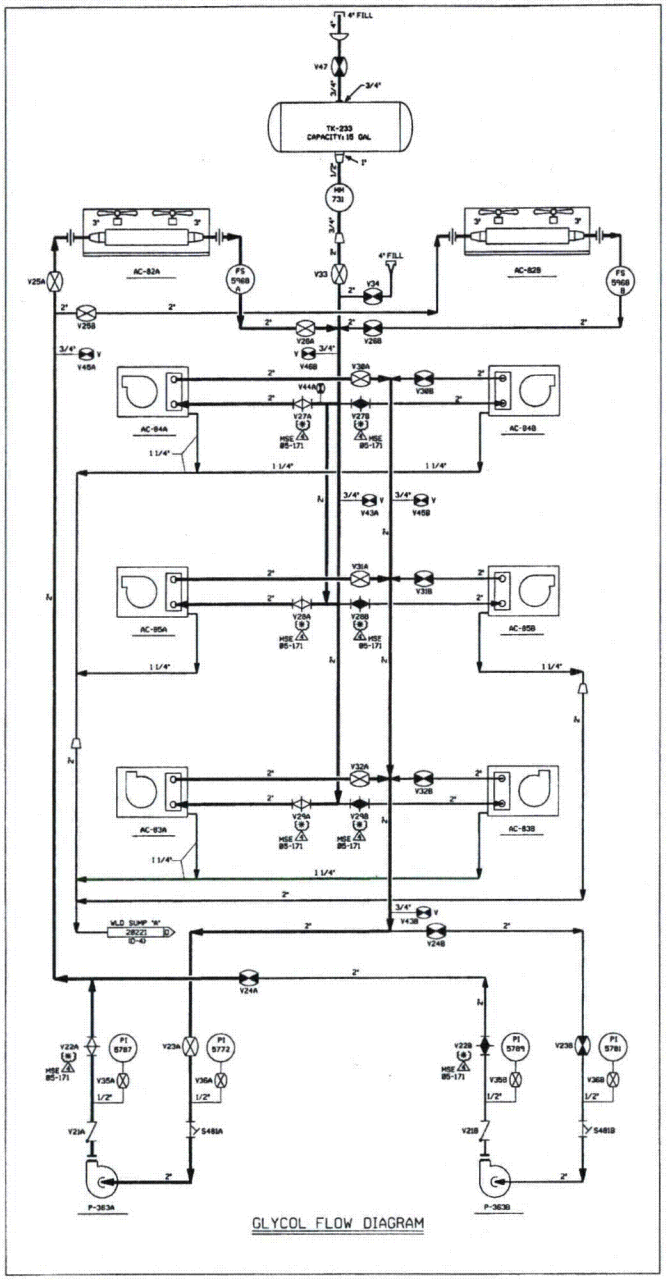
REF. DRAWING NO.	REV	TITLE
9763-F-612943	2	PAB CHILLED WATER SYSTEM (PWR P&ID

86/23/92

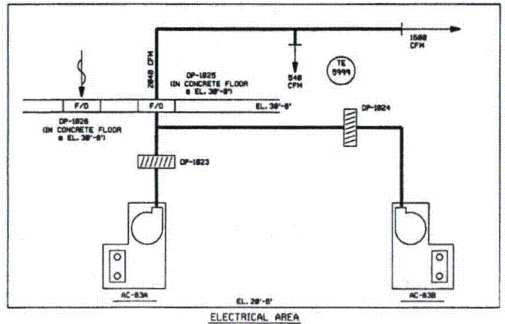


REV	DATE	DSGN	DRWN	CHKD	COE	WES	DESCRIPTION
5	1/[illegible]/98	BCS	——	DWS	JHB	GRH	INCORP. MHOD 99-573 DCN-88
4	8/6/92	MPB	FCB	JH	BCL	GRH	INCORP. MHOD 98-571, CAB REVISED NOTE 4 PER NNY ENG DESIGN STD 31700 SEC 3.8 CLARIFIED LINE SIZE ON S-881
3	6/8/87	JDH	TAK	DWS	BCL	MAC	VALVES V42 & V43 SHOWN CLOSED, VALVES V44 & V45 SHOWN OPEN. INCORP ECA 99/137SPTC APPROVED CHANGE ITEM 1 PER FIELD COMPLETION OF ITL PAH-364
2	3/6/87	WDS	TAK	MRJ	BCL	RAC	UPDATE IMPULSE DESIGNATION BETWEEN TIC 6335 & TCV 6335, ADDED NIPPLE & CAP ON VLVS V20 & V28 PER INSTRUM TSD'S, ADDED P&ID LEGEND NOTE, REVISED REF DWG REVISION NO, REVISED CHILLER ARRANGEMENT PER CHANGE ITEM 2, CORRECTED DRAFTING ERRORS.
1	9/12/86	JDH	DWS	MAP	BCL	RAC	INCORP ECA 99/137SSZA & ECA 99/137SZPA
0	6/15/86	WES	WES	JDH	DFH	WPD	ISSUED FOR CONSTRUCTION
REV	DATE	DSGN	DRWN	CHKD	COE	WES	DESCRIPTION

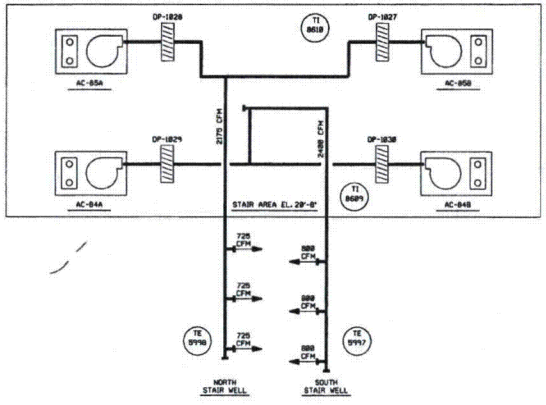
PID- 1-MAH-B20508



GLYCOL FLOW DIAGRAM



ELECTRICAL AREA



AIR FLOW DIAGRAM

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 28492 & 28494 THRU 28587.
2. ALL PIPING, VALVES, EQUIPMENT, AND INSTRUMENTS ARE SYSTEM PREFIX "GAH" UNLESS OTHERWISE NOTED.
3. ALL PIPING, VALVES, EQUIPMENT, AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
4. △ -INDICATES REVISION LEVEL.
5. ⊕ THESE VALVES ARE SUBJECT TO A PART SUBSTITUTION AUTHORIZED BY RSMSE171, VALVE SYMBOL MAY NOT REFLECT INSTALLED VALVE TYPE. DRAWING UPDATES WILL BE MADE UPON RECEIPT OF FORM WM 8.4F. MSE 85-171

REV.	DATE	DSGN	CHKD	CE	DESCRIPTION
4	8-21-98	JM	GPJ	RCB	INCORP MSE 85-171 REV. 00
3	1/22/98	MRB	JM	DJM	INCORP. ECA 96/117754A REVISED NOTE 3
2	3/16/97	DPD	MRJ	BCL	ADDED 1500 CFM DESIGNATION
1	3/24/97	WDS	PAL	BCL	ADDED NOTE 4, REVISED REF DWG REVISION, INCORP DCR 526.
0	6/12/96	JDM	DWS	DFM	ISSUED FOR OPERATIONS

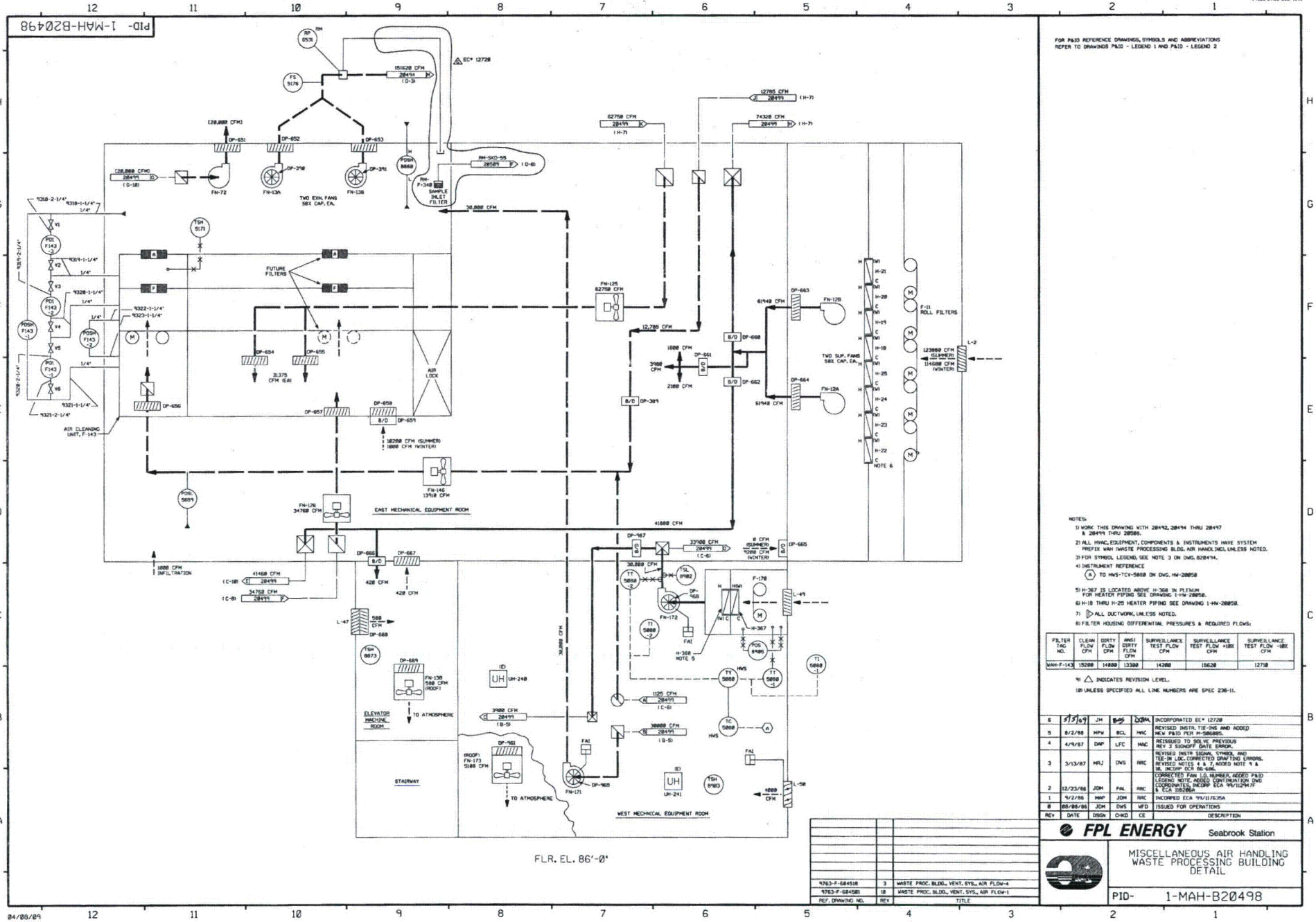
REF. DRAWING NO.	REV	TITLE
9763-F-612841	3	GLYCOL, AIR FLOW DIAG. AC SYST. ELECT. VAULT & STAIRS

FPL ENERGY Seabrook Station

GLYCOL, AIR FLOW DIAGRAM
AC SYSTEM
ELECTRICAL VAULT & STAIRS

PID- 1-MAH-B20508

09/28/07



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 28492, 28494 THRU 28497 & 28499 THRU 28586.
2) ALL HVAC, EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX WAH (WASTE PROCESSING BLDG. AIR HANDLING), UNLESS NOTED.
3) FOR SYMBOL LEGEND, SEE NOTE 3 ON DWG. B20494.
4) INSTRUMENT REFERENCE
   (A) TO HVS-TCV-5888 ON DWG. HW-28858
5) H-367 IS LOCATED ABOVE H-368 IN PLENUM. FOR HEATER PIPING SEE DRAWING 1-HW-28858.
6) H-18 THRU H-25 HEATER PIPING SEE DRAWING 1-HW-28858.
7) ▷ ALL DUCTWORK, UNLESS NOTED.
8) FILTER HOUSING DIFFERENTIAL PRESSURES & REQUIRED FLOWS:

FILTER TAG NO.	CLEAN FLOW CFM	DIRTY FLOW CFM	AVG DIRTY FLOW CFM	SURVEILLANCE TEST FLOW CFM	SURVEILLANCE TEST FLOW +10% CFM	SURVEILLANCE TEST FLOW -10% CFM
WAH-F-143	15200	14800	13300	14200	15620	12718

9) △ INDICATES REVISION LEVEL.
10) UNLESS SPECIFIED ALL LINE NUMBERS ARE SPEC 236-11.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
6	5/5/89	JM	BSS	DBM	INCORPORATED EC# 12720
5	8/2/88	MPW	BCL	MAC	REVISED INSTR. TIE-INS AND ADDED NEW P&ID PER M-586885.
4	4/9/87	DAP	LFC	MAC	REISSUED TO SOLVE PREVIOUS REV 3 SIGNOFF DATE ERROR.
3	3/13/87	MRJ	DWS	ARC	REVISED INSTR SIGNAL SYMBOL AND TEE-IN LOC. CORRECTED DRAFTING ERRORS. REVISED NOTES 8 & 7, ADDED NOTE 9 & 10, INCORP DCR 86-686.
2	12/23/86	JDM	PAL	ARC	CORRECTED FAN I.D. NUMBER, ADDED P&ID LEGEND NOTE, ADDED CONTINUATION DWG COORDINATES, INCORP ECA 99/112947F & ECA 105286A.
1	9/2/86	MAP	JDM	ARC	INCORPED ECA 99/117635A
0	08/08/86	JDM	DWS	WFD	ISSUED FOR OPERATIONS

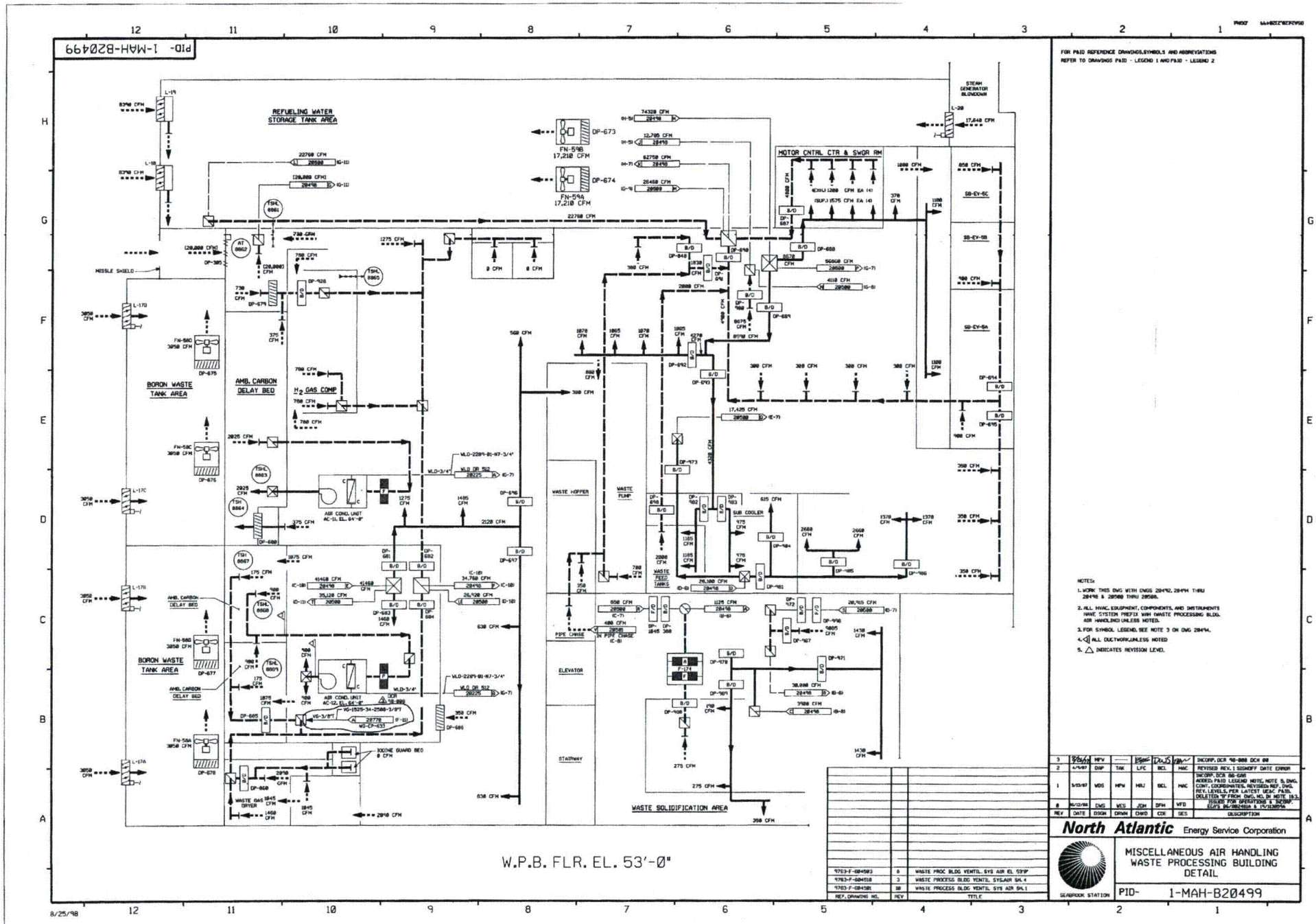
REF. DRAWING NO.	REV	TITLE
9763-F-684518	3	WASTE PROC. BLDG., VENT. SYS., AIR FLOW-4
9763-F-684581	18	WASTE PROC. BLDG., VENT. SYS., AIR FLOW-1

FPL ENERGY Seabrook Station

MISCELLANEOUS AIR HANDLING WASTE PROCESSING BUILDING DETAIL

PID- 1-MAH-B20498

04/08/89



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

NOTES:

1. WORK THIS DWG WITH DWGS 20492, 20494 THRU 20498 & 20500 THRU 20508.
2. ALL HVAC, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX WAH (WASTE PROCESSING BLDG. AIR HANDLING) UNLESS NOTED.
3. FOR SYMBOL LEGEND, SEE NOTE 3 ON DWG 20494.
4. ◁| ALL DUCTWORK UNLESS NOTED
5. △ INDICATES REVISION LEVEL.

REF. DRAWING NO.	REV	TITLE
9763-F-084583	8	WASTE PROC BLDG VENTIL SYS AIR EL 53'0"
9763-F-084518	3	WASTE PROCESS BLDG VENTIL SYS AIR SH.4
9763-F-084581	10	WASTE PROCESS BLDG VENTIL SYS AIR SH.1

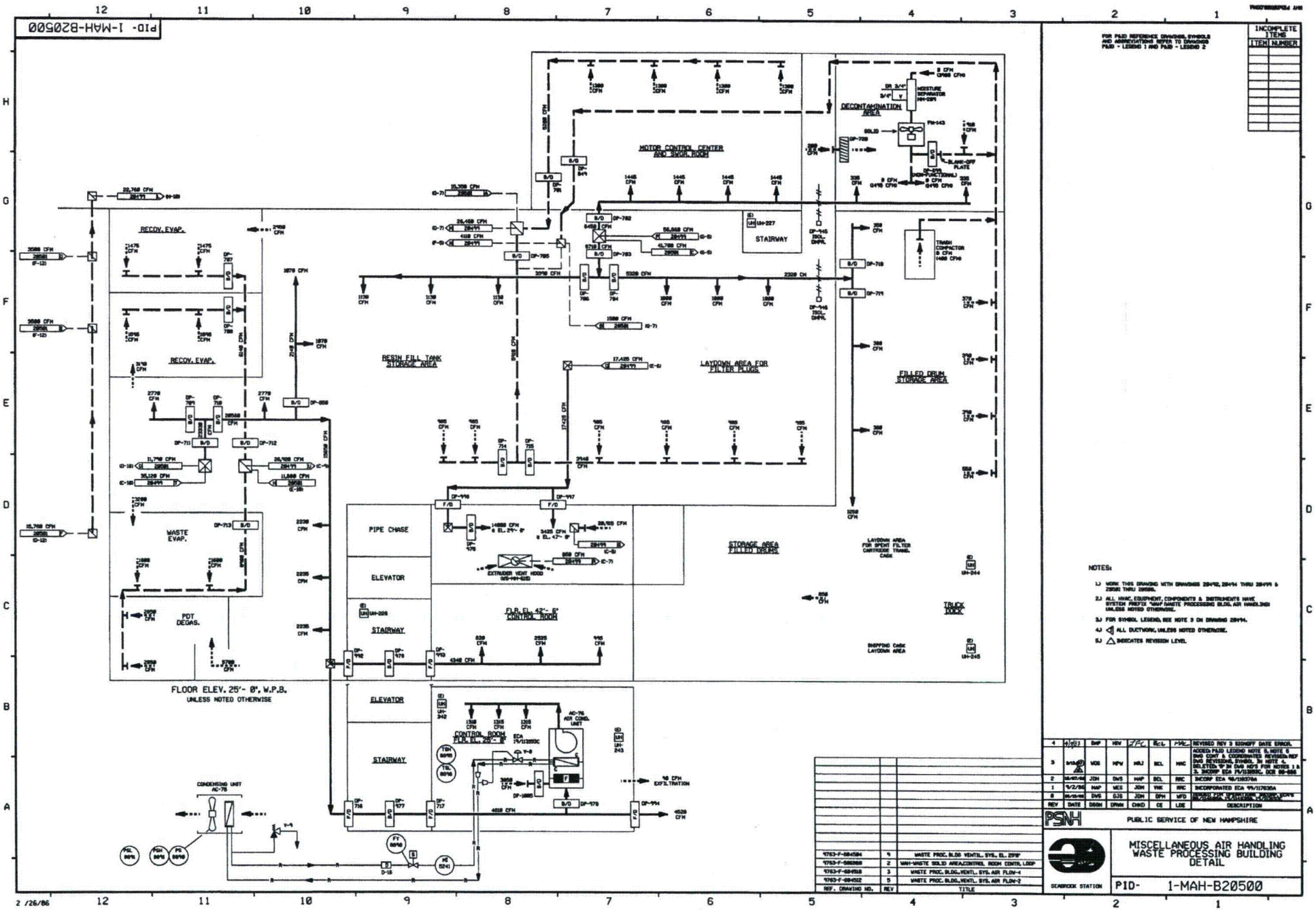
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
3	8/25/98	MPV	----	LFC	DWS	MAC	INCORP. DCR 98-088 DCN 08
2	4/14/97	DMP	TAK	LFC	BCL	MAC	REVISED REV. 1 SIGNOFF DATE ERROR
1	5/23/97	WDS	MPW	MRJ	BCL	MAC	INCORP. DCR 96-086 ADDED P&ID LEGEND NOTE, NOTE 5, DWG. CONT. COORDINATES, REVISED REF. DWG. REV. LEVELS, PER LATEST UE&C P&ID. DELETED "F" FROM DWG. NO. IN NOTE 10.3.
0	10/12/96	DWG	MES	JDH	DFH	WFD	ISSUED FOR OPERATIONS & INCORP. ECR'S 96-086/088 & 95/0389A

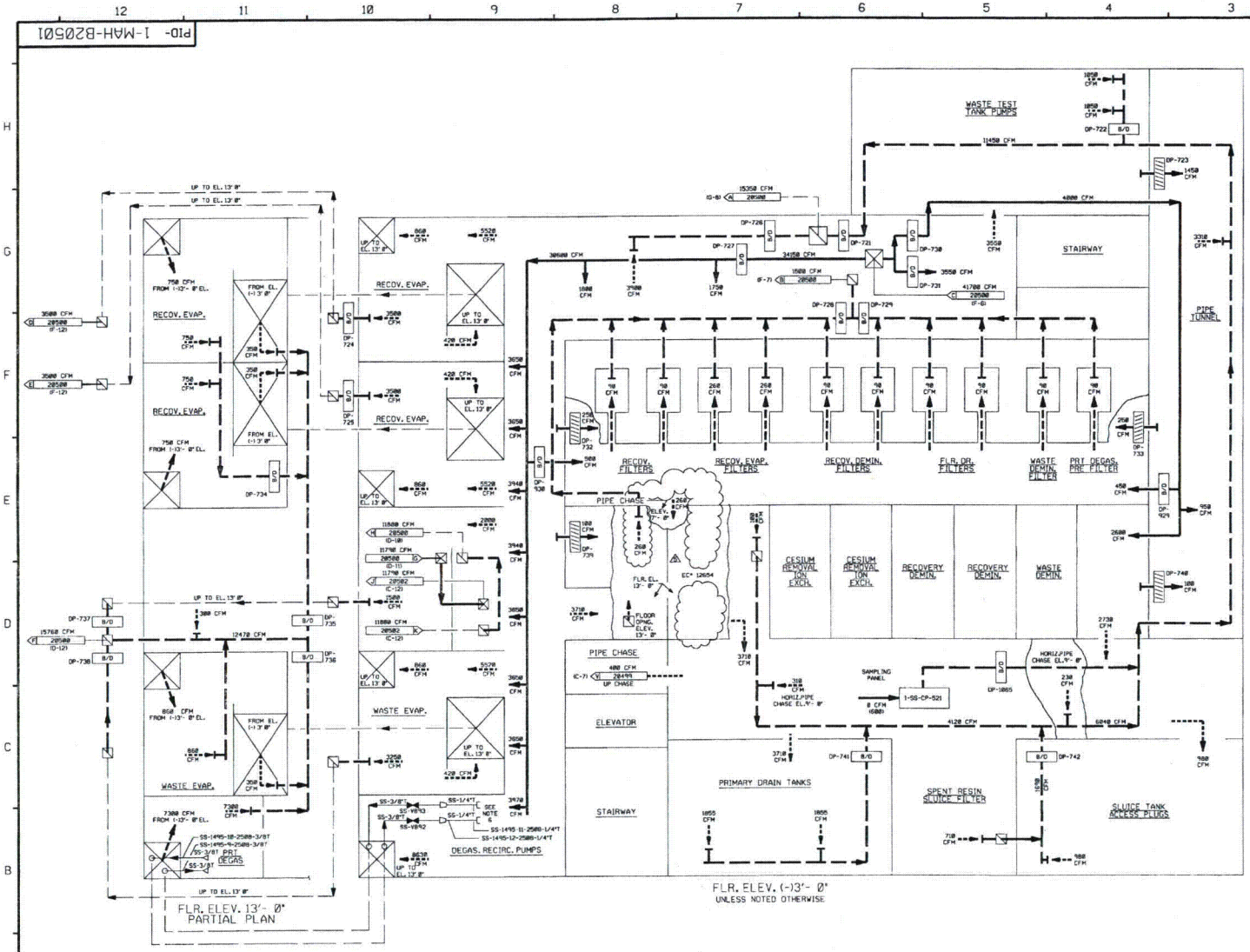
North Atlantic Energy Service Corporation

SEABROOK STATION

MISCELLANEOUS AIR HANDLING WASTE PROCESSING BUILDING DETAIL

PID- 1-MAH-B20499


PID- 1-MAH-B20500
MOTOR CONTROL CENTER AND SWGR ROOM
DECONTAMINATION AREA
STAIRWAY
RECOV. EVAP.
RECOV. EVAP.
RESIN FILL TANK STORAGE AREA
LAYDOWN AREA FOR FILTER PLUGS
FILLED DRUM STORAGE AREA
TRASH COMPACTOR
WASTE EVAP.
PDT DEGAS.
PIPE CHASE
ELEVATOR
STAIRWAY
FLR. EL. 42'- 0" CONTROL ROOM
STORAGE AREA FILLED DRUMS
LAYDOWN AREA FOR SPENT FILTER CARTRIDGE TRANS. CASK
TRUCK DOCK
SHIPPING CASK LAYDOWN AREA
ELEVATOR
STAIRWAY
CONTROL ROOM FLR. EL. 25'- 0"
AC-78 AIR COND. UNIT
CONDENSING UNIT AC-78
FLOOR ELEV. 25'- 0", W.P.B. UNLESS NOTED OTHERWISE
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2
INCOMPLETE ITEMS
ITEM NUMBER
NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28492, 28494 THRU 28499 & 28500 THRU 28508.
2. ALL HVAC EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX "MAH" (WASTE PROCESSING BLDG. AIR HANDLING) UNLESS NOTED OTHERWISE.
3. FOR SYMBOL LEGEND, SEE NOTE 3 ON DRAWING 28494.
4. ALL DUCTWORK, UNLESS NOTED OTHERWISE.
5. INDICATES REVISION LEVEL.
4 4/9/87 BMP HBV JFC RCL MAC REVISED REV 3 SIGNOFF DATE ERROR.
3 9/3/87 WDS MPW MRJ SCL MAC ADDED P&ID LEGEND NOTE 5, NOTE 5 AND CONT & COORDINATES REVISION REF DWG REVISIONS, ENGR'G. NOTE 6 DELETED, "P" IN P&ID MD'S FOR NOTES 1 & 3. INCORP ECA FW/3128SDC, DCR 86-666
2 06/07/86 JDH DWS MAP SCL RMC INCORP ECA 86/1357MA
1 9/2/86 MAP WES JDH WK RMC INCORPORATED ECA 85/1176358
0 05/20/86 DVS GJS JDH BPH WFD ISSUED FOR OPERATIONAL REVIEW COMMENTS
REV DATE DSGN DRWN CHKD QE LDE DESCRIPTION
1763-F-884584 4 WASTE PROC. BLDG VENTIL. SYS., EL. 25'0"
1763-F-588888 2 MAH-WASTE SOLID AREA/CONTROL ROOM CONTR. LOOP
1763-F-884518 3 WASTE PROC. BLDG. VENTIL. SYS. AIR FLOW-1
1763-F-884552 5 WASTE PROC. BLDG. VENTIL. SYS. AIR FLOW-2
REF. DRAWING NO. REV TITLE
PSNH PUBLIC SERVICE OF NEW HAMPSHIRE
SEABROOK STATION
MISCELLANEOUS AIR HANDLING WASTE PROCESSING BUILDING DETAIL
PID- 1-MAH-B20500
2/26/86



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 20492, 20494 THRU 20500 & 20502 THRU 20508.
2. ALL HVAC, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "MAH" (WASTE PROCESSING BUILDING AIR HANDLING), UNLESS NOTED OTHERWISE.
3. FOR SYMBOL LEGEND SEE NOTE 3 ON DRAWING 820494.
4. ▷ ALL DUCTWORK, UNLESS NOTED OTHERWISE.
5. △ INDICATES REVISION LEVEL
6. AIR SAMPLE STATION

REV	DATE	DSGN	CHKD	QE	DESCRIPTION
5	8/31/89	BCS	JM	QA	INCORP. EC* 12654
4	5/26/89	MRB	PAL	IW	INCORPORATED DCR 87-118 CA 11
3	4/2/89	MRB	GPM	MAC	INCORPORATED DCR 87-265 CA 4
2	1/9/87	DAP	LFC	MAC	REVISED REV. 1 SIGNOFF DATE ERROR
1	3-13-87	MRJ	DPD	MAC	ADDED CONTINUATION FLAG COORDS AND NOTES, REVISED AIR FLOW PER UE&C. INCORP DCR 86-686
0	6/13/86	DWS	JDM	WFD	ISSUED FOR OPERATIONS

NEXTera ENERGY SEABROOK

SEABROOK STATION

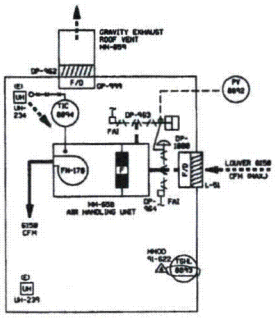
MISCELLANEOUS AIR HANDLING WASTE PROCESSING BUILDING DETAIL

PID- 1-MAH-B20501

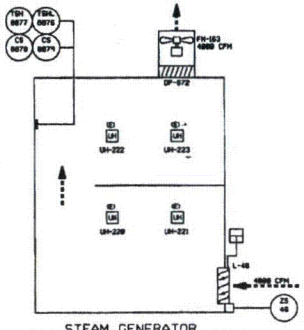
REF. DRAWING NO.	REV	TITLE
9763-F-684513	3	WASTE PROC. BLDG. VENTL. SYS. AIR FLOW-3

08/23/89

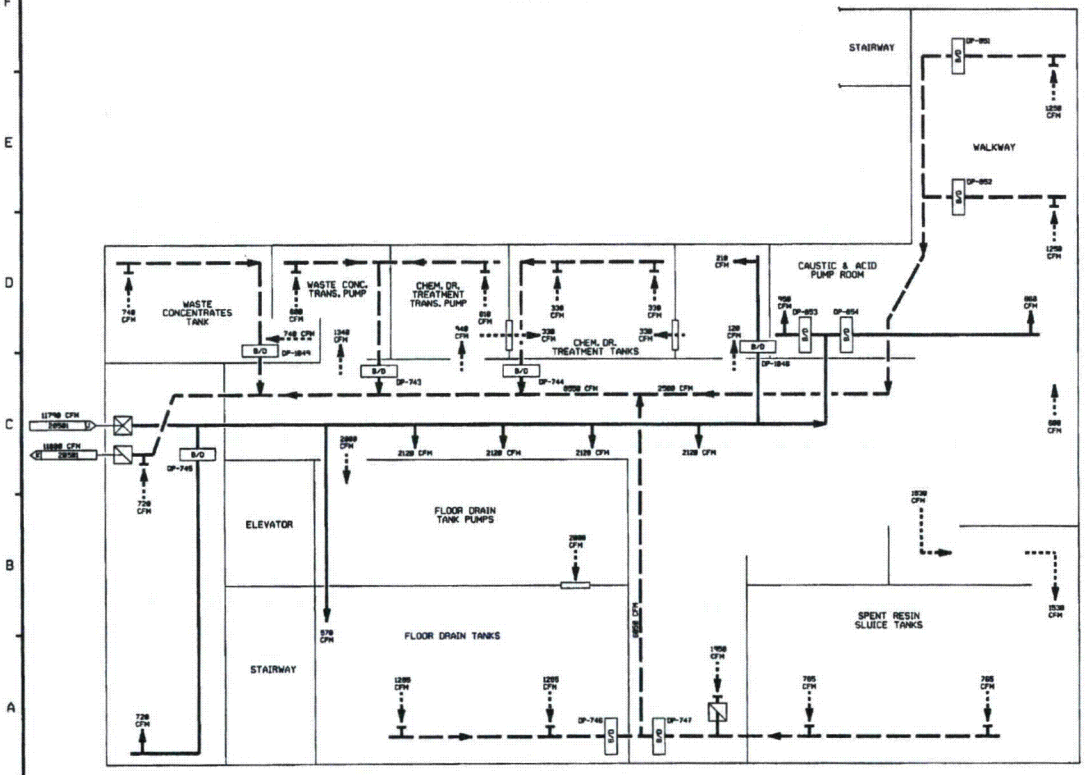
PID- 1-MAH-B20502



ASPHALT STORAGE ROOM



STEAM GENERATOR
BLOWDOWN RECOVERY BUILDING



FLOOR ELEV. (-)31'- 0"

REF. DRAWING NO.	REV	TITLE
9763-F-884568	2	WASTE PROC.BLDG.VENTIL.SYS.AIR FLOW-1
9763-F-884588	9	WASTE PROC.BLDG.VENTIL.SYS.AIR FLOW-2
9763-F-884553	3	WASTE PROC.BLDG.VENTIL.SYS.AIR FLOW-3

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 28492, 28494, 28508 & 28583 THRU 28588.
2. ALL HVAC EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX MAH (WASTE PROCESSING AIR HANDLING), UNLESS NOTED OTHERWISE.
3. FOR SYSTEM LEGEND, SEE NOTE 3 ON DRAWING B28494.
4. ▷ ALL DUCTWORK, UNLESS NOTED OTHERWISE.
5. △ -INDICATES REVISION LEVEL.

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
4	2-7-92	MMB	—	Bec-L	D.H.S	AFA	INCORP. HH00 %-622 CAB
3	4/4/97	DRP	TAK	LFC	BCL	MAC	REVISED REV. 2 SIGNOFF DATE ERROR.
2	9/23/97	PAL	TAK	MHJ	BCL	MAC	INCORP. DCR 98-690 AND ADDED DAMPERS PER USAC P&ID, CORRECTED SHAFTING ERRORS, ADDED NOTE 5 AND P&ID LEGEND REF NOTE.
1	9/2/98	MAP	MES	JDH	MAK	MAC	INCORPORATED ECA 98/07835A
0	05/12/98	DWS	GJS	JDH	DFH	WFD	ISSUED FOR OPERATIONS

PSNH — PUBLIC SERVICE OF NEW HAMPSHIRE

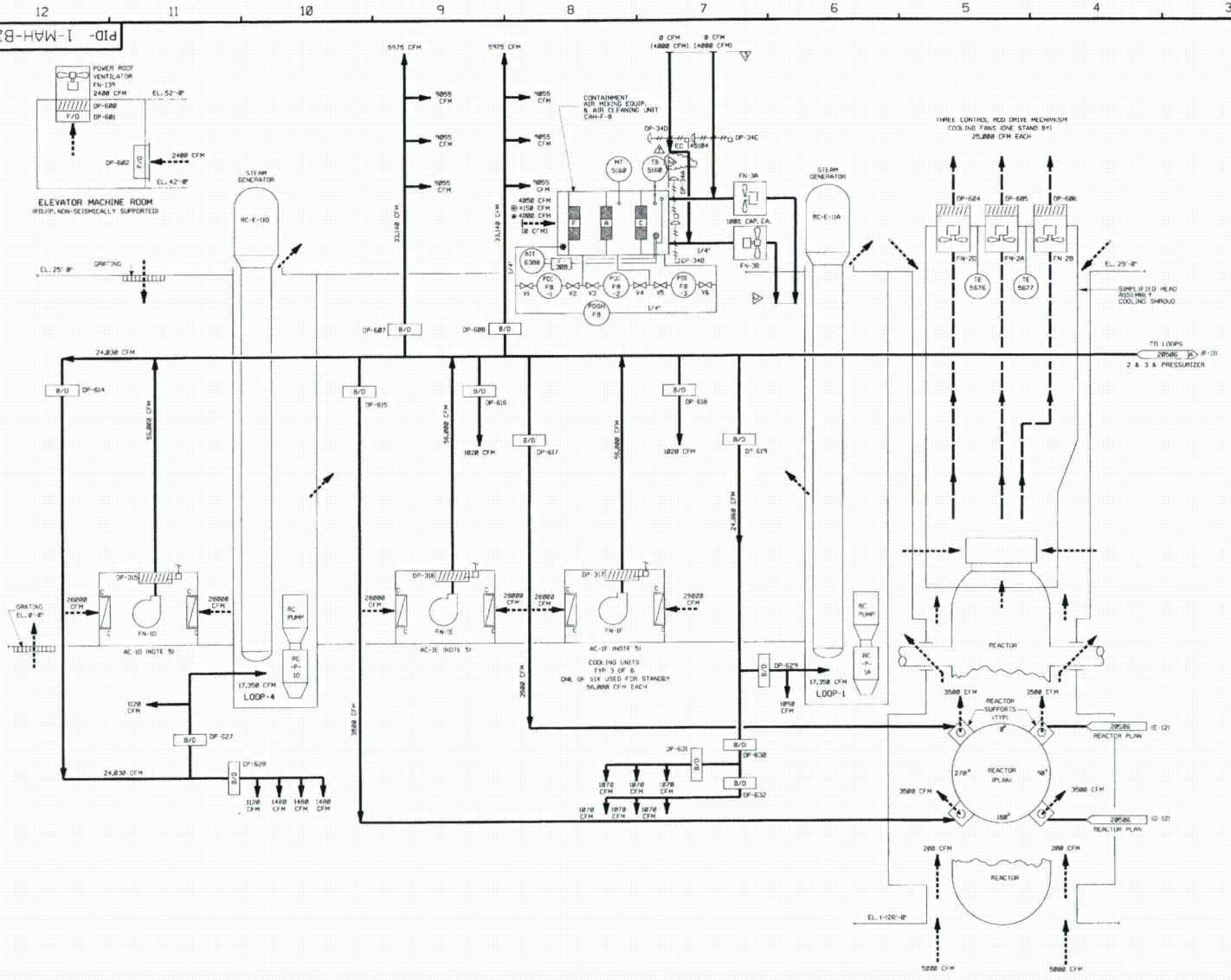
SEABROOK STATION

MISCELLANEOUS AIR HANDLING WASTE PROCESS BUILDING DETAIL OF ELEV. (-)31'- 0"

PID- 1-MAH-B20502

05/06/92

PID- 1-MAH-B20505



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

NOTES:

1. WORK THIS DWG WITH DWGS 20492, 20494 THRU 20504 & 20506.
2. ALL HVAC EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX CAH (CONTAINMENT AIR HANDLING) UNLESS NOTED.
3. FOR SYMBOL LEGEND, SEE NOTE 3 ON DWG 20494.
4. ALL DUCT WORK UNLESS NOTED.
5. COMPONENT COOLING (CC) FOR THE COOLING COILS IN THE AIR CONDITIONING UNITS ARE AS FOLLOWS:
   CAH-AC-1D - 1-CC-20214
   CAH-AC-1E - 1-CC-20208
   CAH-AC-1F - 1-CC-20207
6. FILTER DIFFERENTIAL PRESSURE AND REQUIRED FLOWS:

FILTER TAG NO.	CLEAN FLOW CFM	DIRTY FLOW CFM	ANSI DIRTY FLOW CFM	SURVEILLANCE TEST FLOW CFM	SURVEILLANCE TEST FLOW +10% CFM	SURVEILLANCE TEST FLOW -10% CFM
CAH-F-8	4150	4052	4000	4275	4702	3848

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
7	11/18/09	BCS	JM	WSR	INCORP EC 145104
6	6/26/07	BCS	JM	SPF	INCORP MSE 07-103 REV. 00
5	5/25/00	BCS	JCM	WFZ	RE-INCORP DCR 96-009 DCN 00
4	4/30/99	RWS	BCS	MRJ	INCORP DCR 96-009 DCN 00 & DCR 98-0034 DCN 00
3	5/03/94	RCL	MPW	JWS	INCORP MMOD 94-509 CA-0
2	4/27/89	GPM	MRB	MAC	INCORP DCR 86-555 CA 9 REVISED INSTR. DESIGNATION PER UE & C DWG. 9763-M-58G134, NOTE 4 ADDED NOTE 7
1	12/23/86	JDM	PAL	MAC	MOVED DETAIL WITH RM-SKD-62 TIES-IN TO MAH-20504, ADDED P&ID LEGEND NOTE, CONT. DWG. COORDS. INCORP. ECA 99/112947F
0	3/21/86	DWS	DM	WFD	ISSUED FOR OPERATIONS INCORP. ECA 99/112947B

REF. DRAWING NO.	REV	TITLE
9763-C-505232	1	INSTR. INSTALL. PROC. AIR TO SKID 62
9763-F-684131	12	CNTMNT. STRUCT. FUEL POOL & PURGE AIR
9763-F-684128	13	CONT. STRUCT. COOL. SYS. AIR FLOW DIA.

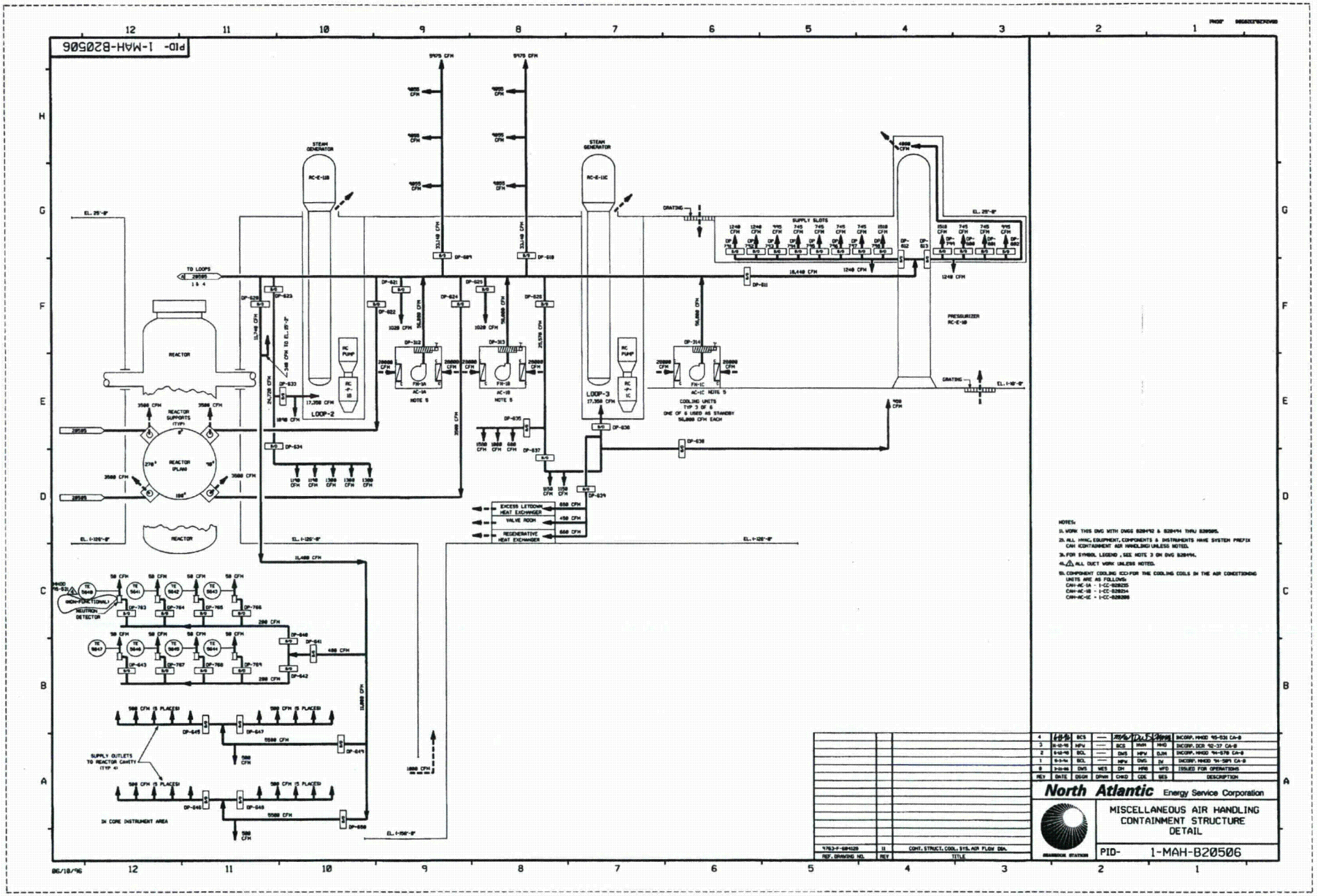
NEXTera ENERGY SEABROOK

SEABROOK STATION

MISCELLANEOUS AIR HANDLING CONTAINMENT STRUCTURE DETAIL

PID- 1-MAH-B20505

11/10/09



REV	DATE	DSGN	DRWN	CHKD	QDE	QES	DESCRIPTION
4	11-8-96	BCS	—	MAH	MHD		INCORP. MMOD 95-031 CA-8
3	8-12-96	MPV	—	BCS	MAH	MHD	INCORP. ECR 92-37 CA-8
2	6-10-96	BCL	—	DMS	MPV	DJH	INCORP. MMOD 94-579 CA-8
1	9-3-94	BCL	—	MPV	DMS	JV	INCORP. MMOD 94-589 CA-8
0	3-31-95	DMS	WES	DH	MPD	WFD	ISSUED FOR OPERATIONS

North Atlantic Energy Service Corporation

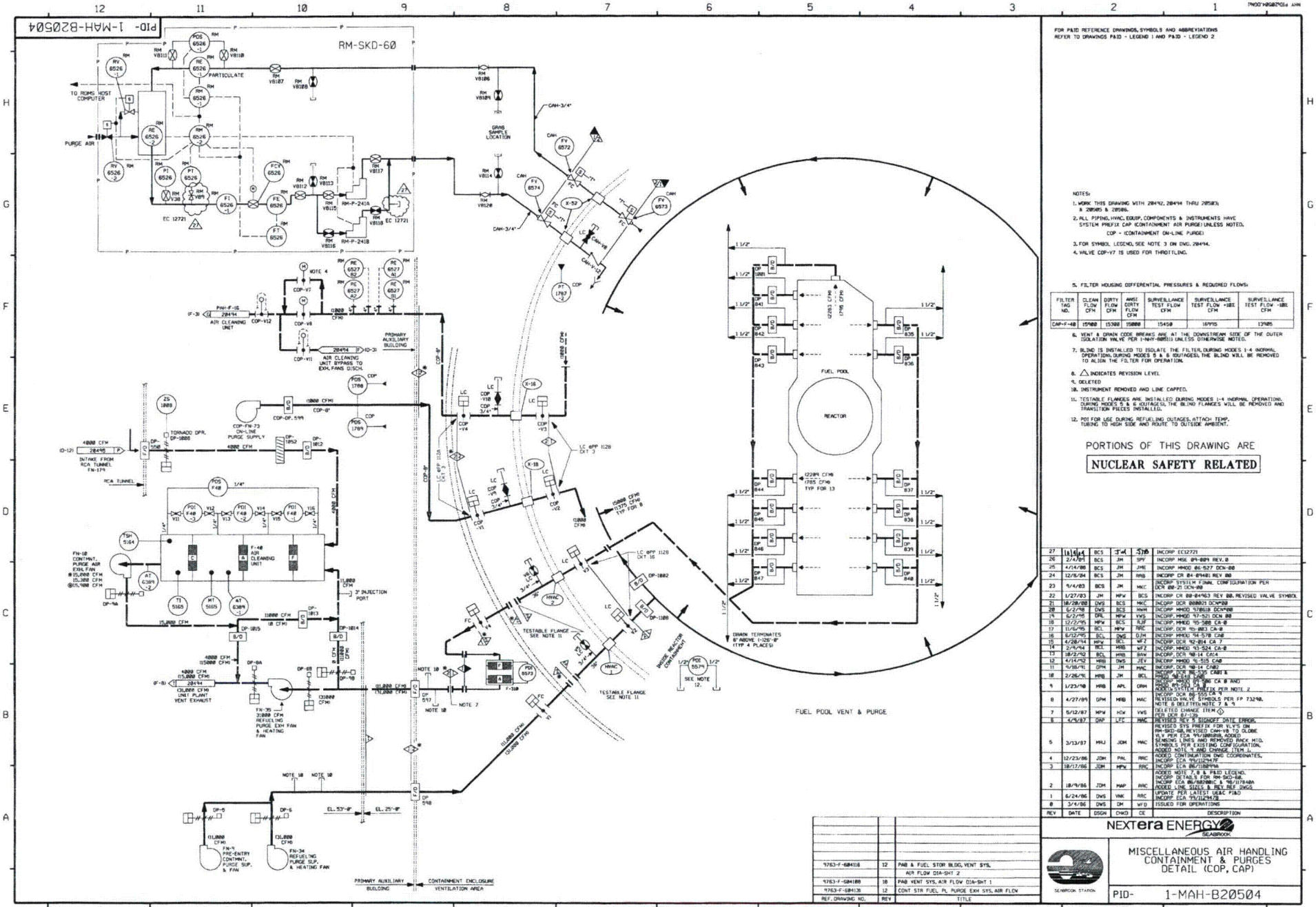
SEABROOK STATION

MISCELLANEOUS AIR HANDLING CONTAINMENT STRUCTURE DETAIL

PID- 1-MAH-B20506

REF. DRAWING NO.	REV	TITLE
9763-F-669329	11	CONT. STRUCT. COOL. SYS. AIR FLOW DIA.

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



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 28492, 28494 THRU 28503 & 28505 & 28506.
2. ALL PIPING, HVAC, EQUIP, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX CAP (CONTAINMENT AIR PURGE) UNLESS NOTED.
   COP - (CONTAINMENT ON-LINE PURGE)
3. FOR SYMBOL LEGEND, SEE NOTE 3 ON DWG. 28494.
4. VALVE COP-V7 IS USED FOR THROTTLING.
5. FILTER HOUSING DIFFERENTIAL PRESSURES & REQUIRED FLOWS:

FILTER TAG NO.	CLEAN FLOW CFM	DIRTY FLOW CFM	ANSI DIRTY FLOW CFM	SURVEILLANCE TEST FLOW CFM	SURVEILLANCE TEST FLOW +10% CFM	SURVEILLANCE TEST FLOW -10% CFM
CAP-F-48	15980	15300	15000	15450	16995	13905

6. VENT & DRAIN CODE BREAKS ARE AT THE DOWNSTREAM SIDE OF THE OUTER ISOLATION VALVE PER 1-NAY-B0511 UNLESS OTHERWISE NOTED.
7. BLIND IS INSTALLED TO ISOLATE THE FILTER DURING MODES 1-4 (NORMAL OPERATION). DURING MODES 5 & 6 (OUTAGES), THE BLIND WILL BE REMOVED TO ALIGN THE FILTER FOR OPERATION.
8. △ INDICATES REVISION LEVEL
9. DELETED
10. INSTRUMENT REMOVED AND LINE CAPPED.
11. TESTABLE FLANGES ARE INSTALLED DURING MODES 1-4 (NORMAL OPERATION). DURING MODES 5 & 6 (OUTAGES), THE BLIND FLANGES WILL BE REMOVED AND TRANSITION PIECES INSTALLED.
12. PDI FOR USE DURING REFUELING OUTAGES. ATTACH TEMP. TUBING TO HIGH SIDE AND ROUTE TO OUTSIDE AMBIENT.

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	QE	DESCRIPTION
27	10/14/94	BCS	JM	SPV	INCORP EC12721
26	2/4/94	BCS	JM	SPV	INCORP MSE 89-089 REV. 0
25	4/14/88	BCS	JM	JME	INCORP MMOD 86-527 DCN-00
24	12/5/84	BCS	JM	RAB	INCORP CR 84-04401 REV 00
23	9/4/83	BCS	JM	MKC	INCORP SYSTEM FINAL CONFIGURATION PER DCR 88-21 DCN-00
22	1/27/93	JM	MPW	BCS	INCORP CR 00-04963 REV 00. REVISED VALVE SYMBOL
21	10/28/88	DWS	BCS	MKC	INCORP DCR 008021 DCN-00
20	6/2/98	DWS	BCS	MWH	INCORP MMOD 97-0618 DCN-00
19	6/2/95	DRL	MPW	YWS	INCORP MMOD 97-521 DCN 00
18	12/2/95	MPW	BCS	RJF	INCORP MMOD 95-588 CA-0
17	11/6/95	BCL	MPW	RRC	INCORP DCR 95-883 CA-0
16	5/12/95	BCL	DWS	DJM	INCORP MMOD 94-578 CA0
15	4/28/94	MPW	BCL	WFZ	INCORP DCR 92-814 CA 7
14	2/9/94	BCL	MRB	WFZ	INCORP MMOD 93-524 CA-0
13	10/2/92	BCL	MRB	BAW	INCORP DCR 90-14 CA14
12	4/14/92	MRB	DWS	JEV	INCORP MMOD 91-515 CA0
11	9/18/91	GPM	JM	MAC	INCORP DCR 90-14 CA02
10	2/26/91	MRB	JM	BCL	INCORP MMOD 89-396 CA0 & MMOD 89-397 CA0
9	1/23/90	MRB	APL	ORM	INCORP MMOD 89-396 CA 8 AND MMOD 89-397 CA 8. ADDED SYSTEM PREFIX PER NOTE 2
8	4/27/89	GPM	MRB	MAC	INCORP DCR 86-555 CA 9. REVISED VALVE SYMBOLS PER FP 73290. NOTE 8 DELETED. NOTE 7 & 9
7	5/12/87	MPW	HW	VWS	DELETED CHANGE ITEM △ PER DCP 87-10
6	4/9/87	GAP	LFC	MAC	REVISED REV 5 SIGNOFF DATE ERROR.
5	3/13/87	MRJ	JDM	MAC	REVISED SYS PREFIX FOR VLYS ON RM-SKD-60. REVISED CAH-V8 TO CLOSE VLV PER ECA 99/1000108. ADDED SENSING LINES AND REMOVED RACK MTD. SYMBOLS PER EXISTING CONFIGURATION. ADDED NOTE 11 AND CHANGE ITEM 10.
4	12/23/86	JDM	PAL	RRC	ADDED CONTINUATION DWG COORDINATES. INCORP. ECA 99/1024479.
3	10/17/86	JDM	MPW	RRC	INCORP. ECA 86/1082994
2	10/9/86	JDM	MAP	RRC	ADDED NOTE 7 & P&ID LEGEND. INCORP DETAILS FOR RM-SKD-60. INCORP ECA 86/0830BC & 98/0784BA ADDED LINE SIZES & REV REF DWGS
1	6/24/86	DWS	VNK	RRC	UPDATE PER LATEST UE&C P&ID INCORP. ECA 99/1024478.
0	3/4/86	DWS	DM	WFD	ISSUED FOR OPERATIONS

REF. DRAWING NO.	REV	TITLE
9763-F-684116	12	PAB & FUEL STOR BLDG. VENT SYS. AIR FLOW DIA-SHT 2
9763-F-684180	18	PAB VENT SYS. AIR FLOW DIA-SHT 1
9763-F-684138	12	CONT STR FUEL PL PURGE EXH SYS. AIR FLOW

NEXTera ENERGY SEABROOK

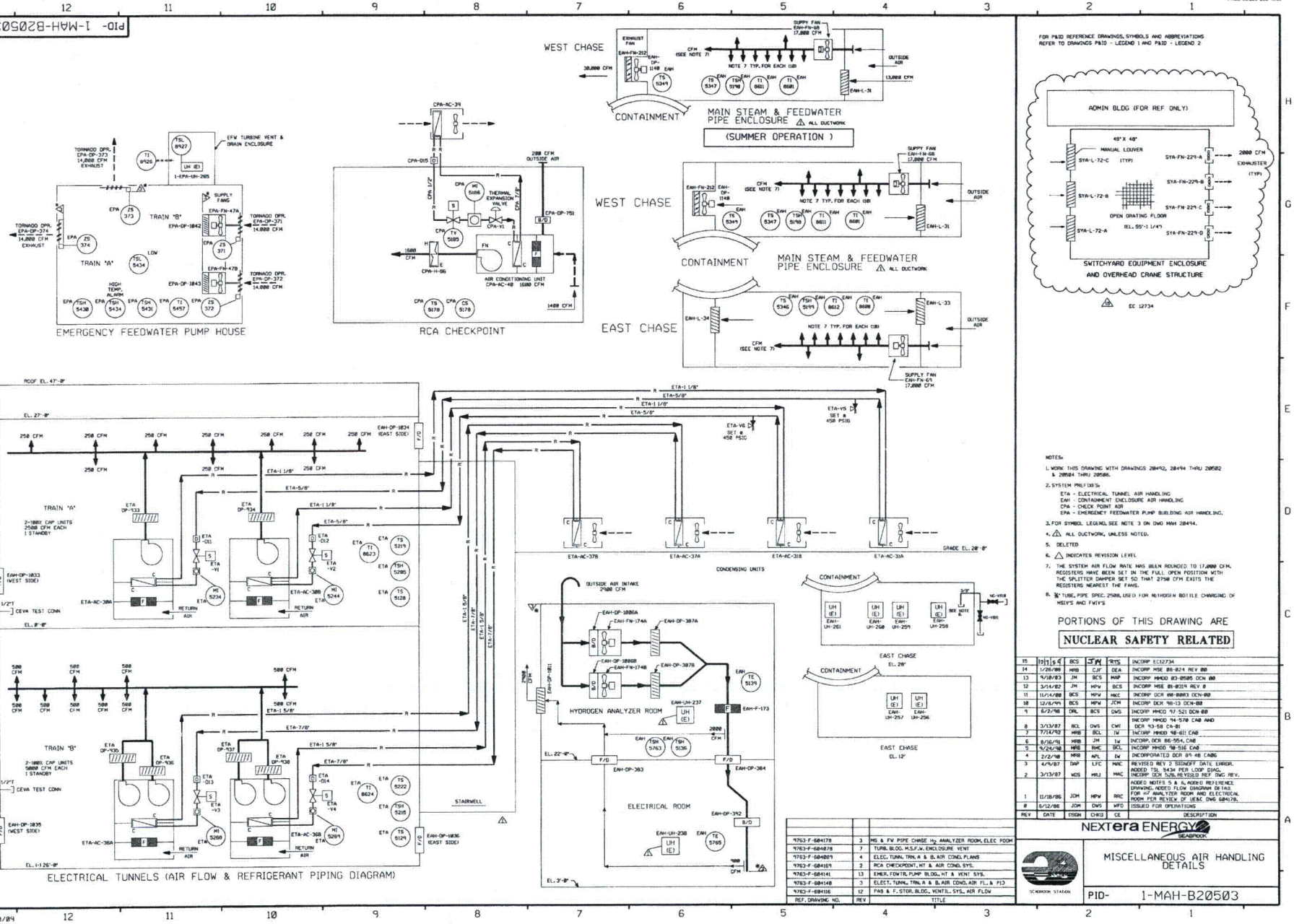
SEABROOK STATION

MISCELLANEOUS AIR HANDLING CONTAINMENT & PURGES DETAIL (COP, CAP)

PID- 1-MAH-B20504

9/29/89

P&ID- 1-MAH-B20503



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 20492, 20494 THRU 20502 & 20504 THRU 20506.
2. SYSTEM PREFIXES:
   - ETA - ELECTRICAL TUNNEL AIR HANDLING
   - EAH - CONTAINMENT ENCLOSURE AIR HANDLING
   - CPA - CHECK POINT AIR
   - EPA - EMERGENCY FEEDWATER PUMP BUILDING AIR HANDLING.
3. FOR SYMBOL LEGEND, SEE NOTE 3 ON DWG MAH 20494.
4. △ ALL DUCTWORK, UNLESS NOTED.
5. DELETED
6. △ INDICATES REVISION LEVEL
7. THE SYSTEM AIR FLOW RATE HAS BEEN ROUNDED TO 17,000 CFM. REGISTERS HAVE BEEN SET IN THE FULL OPEN POSITION WITH THE SPLITTER DAMPER SET SO THAT 2750 CFM EXITS THE REGISTERS NEAREST THE FANS.
8. ¾" TUBE, PIPE SPEC. 2S8B, USED FOR NITROGEN BOTTLE CHARGING OF MSIVS AND FWIVS

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
15	10/12/04	BCS	JFW	RTS	INCORP EC12734
14	1/20/00	MRB	CJF	DEA	INCORP MSE 00-824 REV 00
13	9/18/03	JM	BCS	MAP	INCORP MMOD 03-0585 DCN 00
12	3/14/02	JM	MPW	BCS	INCORP MSE 01-0324 REV 0
11	11/14/00	BCS	MPW	MKC	INCORP DCR 00-0003 DCN-00
10	12/6/99	BCS	MPW	JCM	INCORP DCR 98-13 DCN-00
9	6/2/98	DRL	BCS	DWS	INCORP MMOD 97-521 DCN-00
8	3/13/87	RCL	DWS	CWE	INCORP MMOD 94-570 CAB AND DCR 93-58 C4-01
7	7/14/92	MRB	BCL	IW	INCORP MMOD 90-611 CAB
6	8/16/91	MRB	JM	IW	INCORP. DCR 86-954, CAB
5	9/24/90	MRB	RMC	BCL	INCORP MMOD 90-516 CAB
4	2/2/90	MRB	APL	IW	INCORPORATED DCR 89-48 CABS
3	4/9/87	DAP	LFC	MAC	REVISED REV 2 SIGNOFF DATE ERROR.
2	3/13/87	WDS	MRJ	MAC	ADDED TSL 5434 PER LOOP DIAG, INCORP DCR 5434 REVISED REF DWG REV.
1	11/18/86	JDM	MPW	RRC	ADDED NOTES 5 & 6, ADDED REFERENCE DRAWING, ADDED FLOW DIAGRAM DETAIL FOR H2 ANALYZER ROOM AND ELECTRICAL ROOM PER REVIEW OF IE&C DWG 68417B.
0	6/12/86	JDM	DWS	WFO	ISSUED FOR OPERATIONS

REF. DRAWING NO.	REV	TITLE
9763-F-684178	3	MS. & FW PIPE CHASE H_2 ANALYZER ROOM, ELEC ROOM
9763-F-684878	7	TURB. BLDG. M.S.F.W. ENCLOSURE VENT
9763-F-684089	4	ELEC. TUNN. TRN. A & B, AIR COND. PLANS
9763-F-684169	2	RCA CHECKPOINT, HT & AIR COND. SYS.
9763-F-684141	13	EMER. FDWTR. PUMP BLDG., HT & VENT SYS.
9763-F-684148	3	ELECT. TUNN., TRN. A & B, AIR COND. AIR FL. & PID
9763-F-684116	12	PAB & F. STOR. BLDG., VENTIL. SYS., AIR FLOW

NEXTera ENERGY SEABROOK

SEABROOK STATION

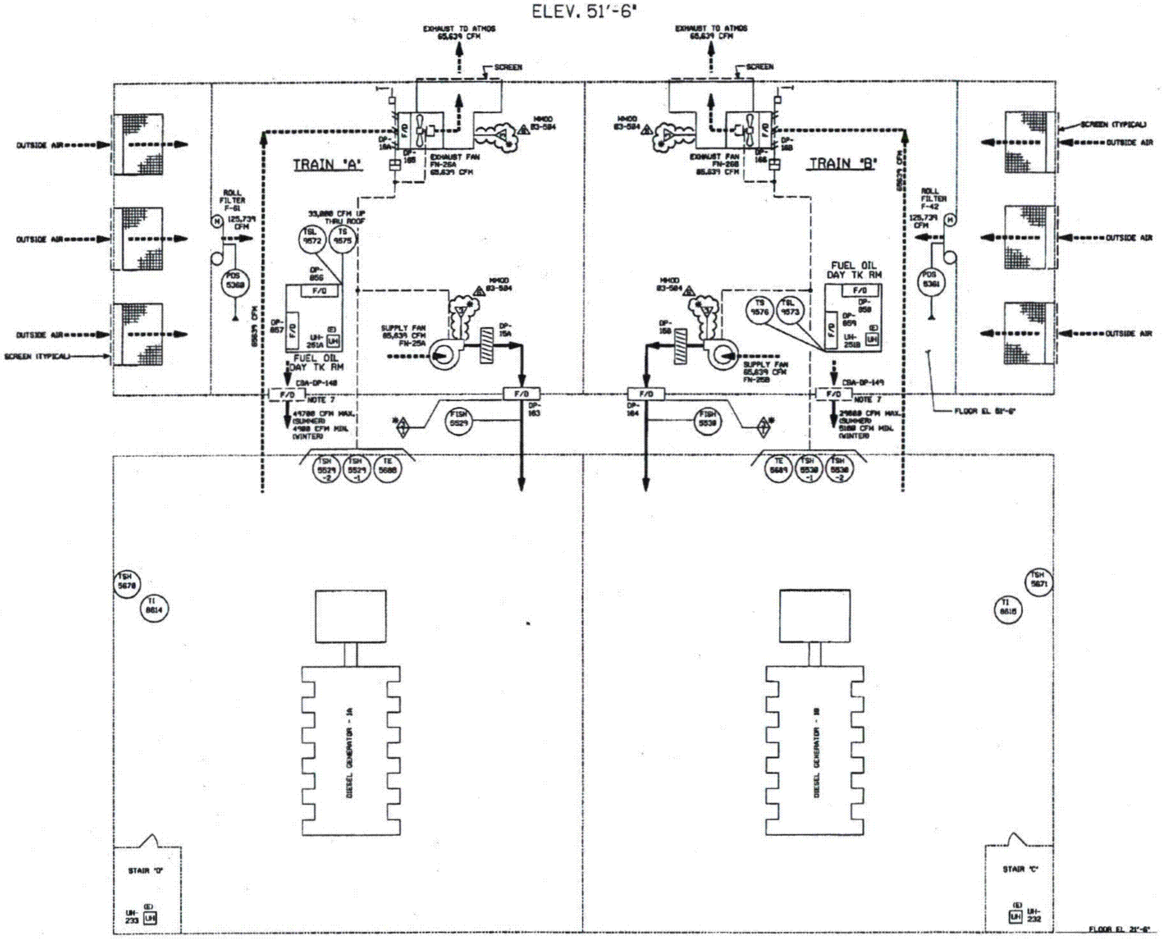
MISCELLANEOUS AIR HANDLING DETAILS

PID- 1-MAH-B20503

10/08/04

PID- 1-DAH-B20624

ELEV. 51'-6"



ELEV. 21'-6"

DIESEL GENERATOR BUILDING

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

NOTES:

1. ALL HVAC, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX DAH UNLESS NOTED.
2. THE DAH SYSTEM IS A ONE DWG. SYSTEM, AN OVERVIEW IS NOT REQUIRED.
3. ALL HVAC, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS N UNLESS NOTED.
4. ———— - INDICATES DUCTED SUPPLY AIR
5. — — — - INDICATES DUCTED EXHAUST OR RETURN AIR
6. - - - - - - INDICATES NON DUCTED AIR
7. ADDITIONAL AIR HANDLING FOR DIESEL GENERATOR BLDG. SHOWN ON 1-CBA-B20303.
8. △ INDICATES REVISION LEVEL.

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
6	[illegible]	JM	BSS	RRB	INCORP MMOD 03-504 DCN 00
5	3/24/00	DWS	BCS	JHS	INCORP DCR 980839 DCN*00 & 20
4	8/12/95	BCL	DSW	DJM	INCORP. MMOD 94-578 CA-0
3	12/1/94	MPW	DWS	JPS	INCORP. DCR 93-44 CA-0
2	12/18/89	MRB	PAL	IW	INCORPORATED DCR 87-405 CA ADDED P & ID LEGEND 1 & 2 NOTE.
1	2/24/87	WDS	PAL	MAC	REVISE REF DWG REVISIONS INCORP DCR 520
0	5-28-86	WES	JDH	WFD	ISSUED FOR OPERATIONS & INCORP. ECA'S 99/112680 & 99/114490A

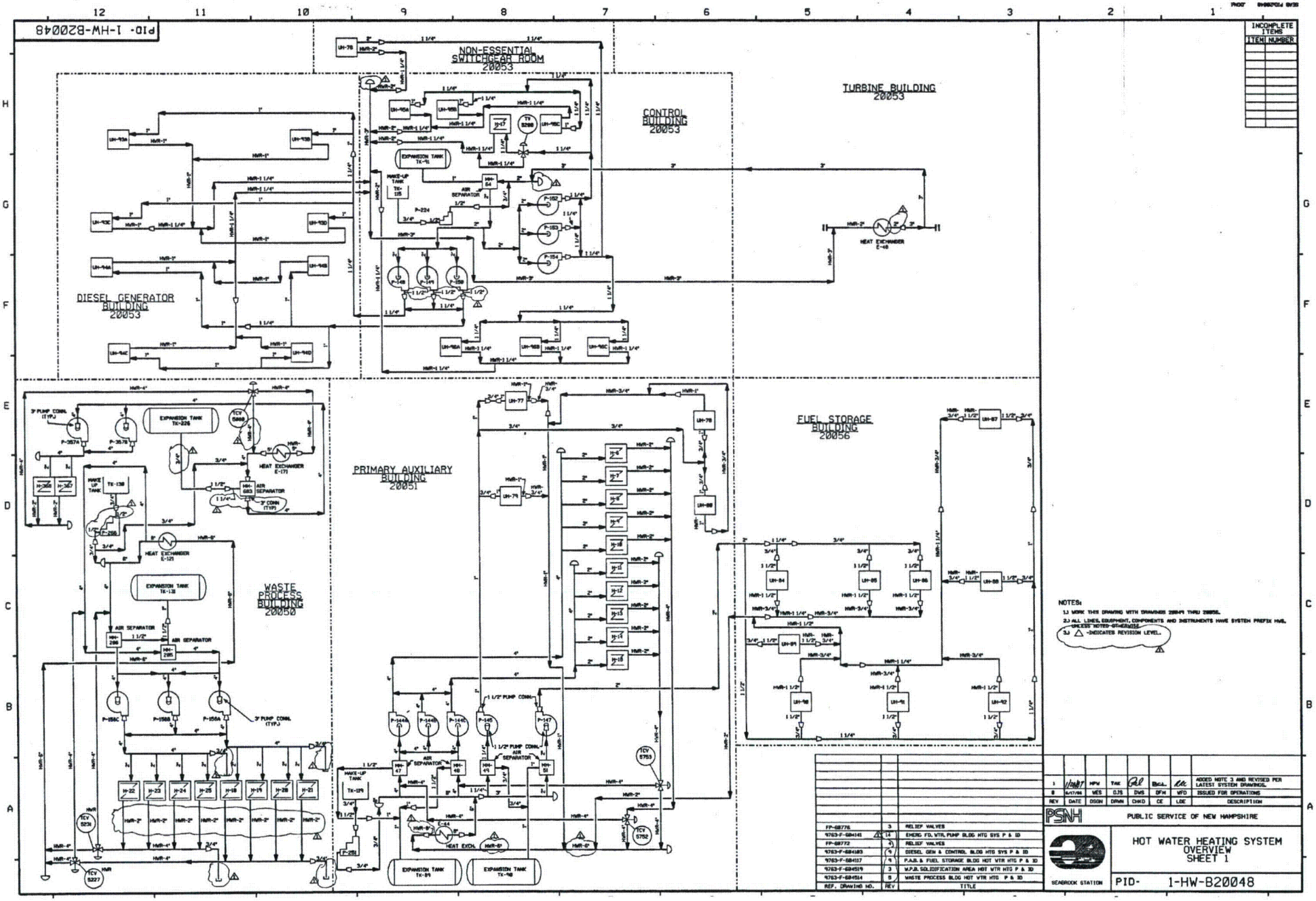
REF. DRAWING NO.	REV	TITLE
9763-F-604091	12	CONTROL BLDG., VENTL. SYS., AIR FLOW DIAG.
9763-F-604096	7	DIESEL GEN BLDG AIR FLOW DIAG

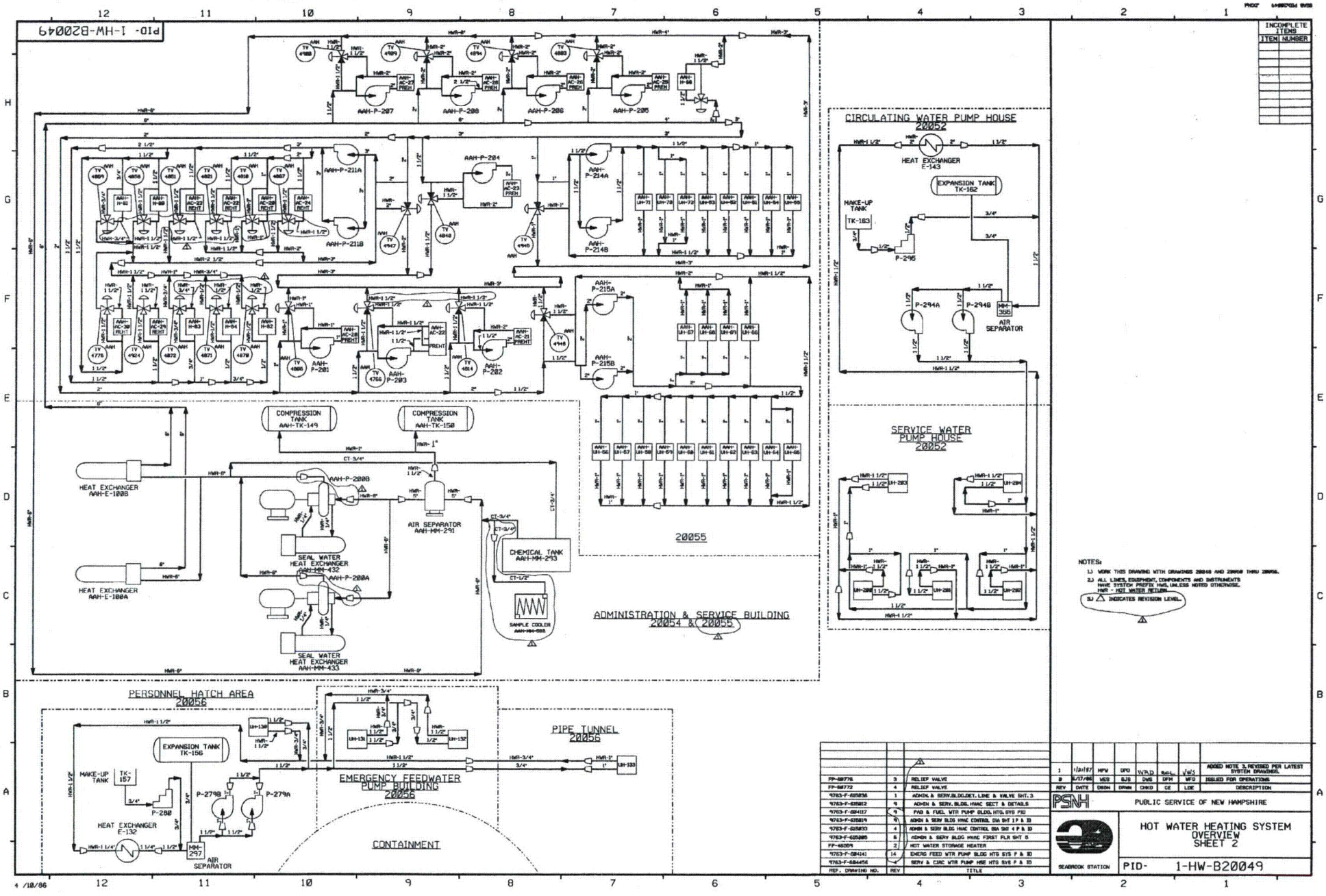
FPL ENERGY Seabrook Station

DIESEL GENERATOR BUILDING AIR HANDLING

PID- 1-DAH-B20624

11/15/06


P&ID- 1-HW-B20048
NON-ESSENTIAL SWITCHGEAR ROOM 20053
CONTROL BUILDING 20053
TURBINE BUILDING 20053
DIESEL GENERATOR BUILDING 20053
PRIMARY AUXILIARY BUILDING 20051
WASTE PROCESS BUILDING 20050
FUEL STORAGE BUILDING 20056
EXPANSION TANK TK-91
EXPANSION TANK TK-138
EXPANSION TANK TK-89
EXPANSION TANK TK-98
HEAT EXCHANGER E-48
HEAT EXCHANGER E-171
HEAT EXCHANGER E-121
HEAT EXCH.
AIR SEPARATOR
MAKE-UP TANK
INCOMPLETE ITEMS
ITEM NUMBER
NOTES:
1.) WORK THIS DRAWING WITH DRAWINGS 20849 THRU 20858.
2.) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX HWB, UNLESS NOTED OTHERWISE.
3.) △ -INDICATES REVISION LEVEL.
FP-68776 3 RELIEF VALVES
9763-F-684141 14 EMERG. FD. WTR. PUMP BLDG HTG SYS P & ID
FP-68772 4 RELIEF VALVES
9763-F-684183 5 DIESEL GEN & CONTROL BLDG HTG SYS P & ID
9763-F-684117 4 P.A.B. & FUEL STORAGE BLDG HOT WTR HTG P & ID
9763-F-684519 3 W.P.B. SOLIDIFICATION AREA HOT WTR HTG P & ID
9763-F-684514 5 WASTE PROCESS BLDG HOT WTR HTG P & ID
REF. DRAWING NO. REV TITLE
1 1/10/97 MPV TAK Bcl. ADDED NOTE 3 AND REVISED PER LATEST SYSTEM DRAWINGS.
0 6/17/94 WES DJS DWS DFH WFD ISSUED FOR OPERATIONS
REV DATE DSGN DRWN CHKD CE LDE DESCRIPTION
PSNH
PUBLIC SERVICE OF NEW HAMPSHIRE
SEABROOK STATION
HOT WATER HEATING SYSTEM OVERVIEW SHEET 1
PID- 1-HW-B20048



INCOMPLETE ITEMS

ITEM	NUMBER

NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20048 AND 20908 THRU 20908.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX HWS, UNLESS NOTED OTHERWISE. HWR - HOT WATER RETURN.
3. △ INDICATES REVISION LEVEL.

FP-B8776	3		RELIEF VALVE
FP-B8772	4		RELIEF VALVE
9763-F-635836	1		ADMIN. & SERV.BLDG.DET. LINE & VALVE SHT. 3
9763-F-635812	9		ADMIN & SERV. BLDG. HVAC SECT & DETAILS
9763-F-684117	9		PAB & FUEL WTR PUMP BLDG. HTG. SYS P&ID
9763-F-635819	9		ADMIN & SERV BLDG HVAC CONTROL DIA SHT 1 P & ID
9763-F-635803	4		ADMIN & SERV BLDG HVAC CONTROL DIA SHT 4 P & ID
9763-F-635805	6		ADMIN & SERV BLDG HVAC FIRST FLR SHT 6
FP-46009	2		HOT WATER STORAGE HEATER
9763-F-684141	14		EMERG FEED WTR PUMP BLDG HTG SYS P & ID
9763-F-684456	2		SERV & CIRC WTR PUMP HSE HTG SYS P & ID
REF. DRAWING NO.	REV		TITLE

REV	DATE	DRGN	DPO	CHKD	QE	LDE	DESCRIPTION
1	10/15/87	MPV	DPO	W.R.D	Bell	VWS	ADDED NOTE 3, REVISED PER LATEST SYSTEM DRAWINGS.
0	5/17/86	WEB	BJS	DWS	DPM	WFD	ISSUED FOR OPERATIONS

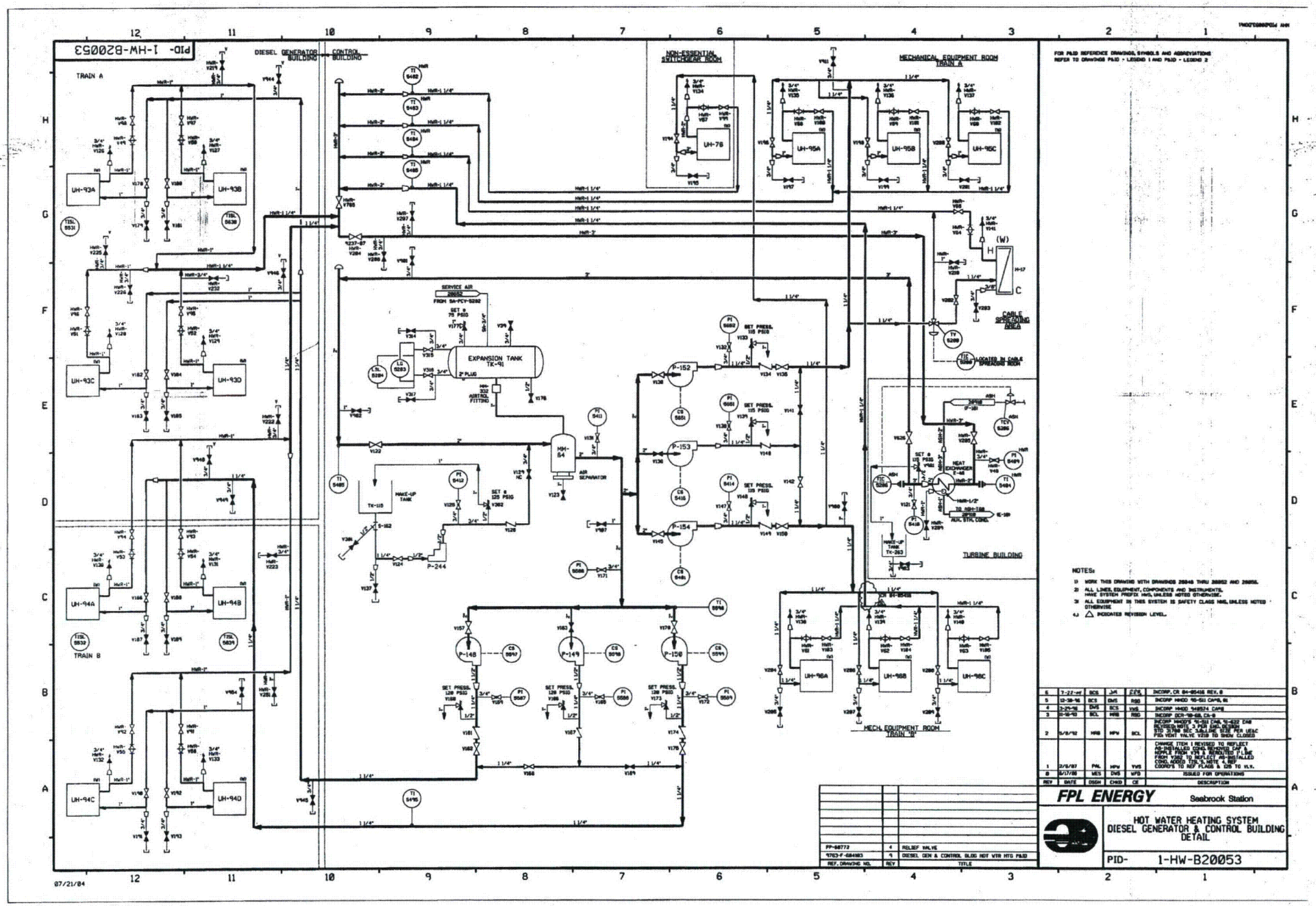
PSNH — PUBLIC SERVICE OF NEW HAMPSHIRE

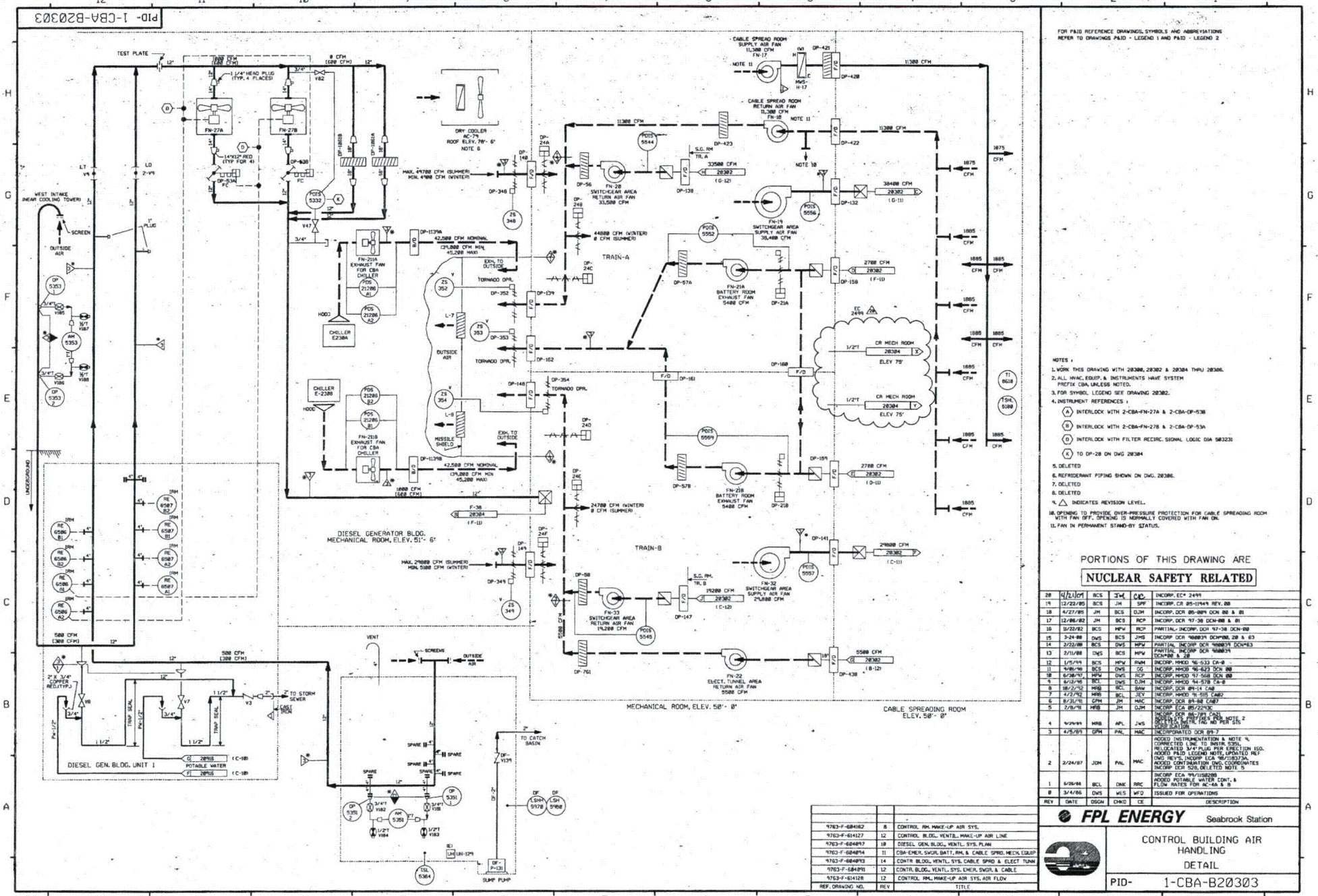
SEABROOK STATION

HOT WATER HEATING SYSTEM OVERVIEW SHEET 2

PID- 1-HW-B20049

4/10/86


PID- 1-HW-B20053
DIESEL GENERATOR BUILDING
CONTROL BUILDING
TRAIN A
TRAIN B
NON-ESSENTIAL SWITCHGEAR ROOM
MECHANICAL EQUIPMENT ROOM TRAIN A
MECH. EQUIPMENT ROOM TRAIN B
TURBINE BUILDING
CABLE SPREADING AREA
EXPANSION TANK TK-91
AIR SEPARATOR
HEAT EXCHANGER E-48
MAKE-UP TANK TK-115
MAKE-UP TANK TK-263
UH-93A
UH-93B
UH-93C
UH-93D
UH-94A
UH-94B
UH-94C
UH-94D
UH-78
UH-95A
UH-95B
UH-95C
UH-96A
UH-96B
UH-96C
P-152
P-153
P-154
P-148
P-149
P-150
P-244
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWING P&ID - LEGEND 1 AND P&ID - LEGEND 2
NOTES:
1) WORK THIS DRAWING WITH DRAWINGS 28048 THRU 28052 AND 28056.
2) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS, HAVE SYSTEM PREFIX HWB, UNLESS NOTED OTHERWISE.
3) ALL EQUIPMENT IN THIS SYSTEM IS SAFETY CLASS NNB, UNLESS NOTED OTHERWISE
4) △ INDICATES REVISION LEVEL.
6 7-22-94 BCS JM RSS INCORP. CR 94-05416 REV. 0
5 12-28-93 BCS DMS RSS INCORP HWDD 93-511 CAPS, RI
4 3-24-93 DMS BCS VMS INCORP HWDD 548274 CAPS
3 01-16-93 BCL MRS RSS INCORP DCR-92-GB-026 Ch-0
2 5/8/92 MRS MPV BCL INCORP HWDD'S 91-501 CHG. 92-622 CHG BETWEEN NOTE 1 AND GAP, ADD NOTE STD. 28789 SEC. 5.8.1.4.5. SEE PEA 1ESC PEA VENT VALVE V218 TO SHOW CLOSED
1 2/9/87 PAL MPV VMS CHANGE ITEM 1 REVISED TO REFLECT AS-INSTALLED CONFIG REMOVE CAP & NIPPLE FROM VT4 & REROUTED P-LINE FROM V302 TO REFLECT AS-INSTALLED COND. PER DCR 85-5, NOTE 4, REV COORD'S TO REF FLAGS & 025 TO V1.9.
0 5/17/88 WES DMS WFS ISSUED FOR OPERATIONS
REV DATE DSGN CHKD CE DESCRIPTION
FP-98772 4 RELIEF VALVE
9763-F-684183 9 DIESEL GEN & CONTROL BLDG HOT WTR HTG P&ID
REF. DRAWING NO. REV TITLE
FPL ENERGY Seabrook Station
HOT WATER HEATING SYSTEM DIESEL GENERATOR & CONTROL BUILDING DETAIL
PID- 1-HW-B20053
07/21/84



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 28300, 28302 & 28304 THRU 28306.
2. ALL HVAC, EQUIP. & INSTRUMENTS HAVE SYSTEM PREFIX CBA, UNLESS NOTED.
3. FOR SYMBOL LEGEND SEE DRAWING 28302.
4. INSTRUMENT REFERENCES :
   - (A) INTERLOCK WITH 2-CBA-FN-27A & 2-CBA-DP-53B
   - (B) INTERLOCK WITH 2-CBA-FN-27B & 2-CBA-DP-53A
   - (D) INTERLOCK WITH FILTER RECIRC. SIGNAL LOGIC DIA 503231
   - (K) TO DP-28 ON DWG 28304
5. DELETED
6. REFRIDERANT PIPING SHOWN ON DWG. 28306.
7. DELETED
8. DELETED
9. △ INDICATES REVISION LEVEL.
10. OPENING TO PROVIDE OVER-PRESSURE PROTECTION FOR CABLE SPREADING ROOM WITH FAN OFF. OPENING IS NORMALLY COVERED WITH FAN ON.
11. FAN IN PERMANENT STAND-BY STATUS.

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
20	4/2/09	BCS	JM	CKD	INCORP. EC# 2499
19	12/22/05	BCS	JM	SPF	INCORP. CR 05-1949 REV. 00
18	4/27/05	JM	BCS	DJM	INCORP. DCR 05-009 DCN 00 & 01
17	12/06/02	JM	BCS	RCP	INCORP. DCR 97-38 DCN-00 & 01
16	11/22/02	BCS	MPW	RCP	PARTIAL- INCORP. DCR 97-38 DCN-00
15	3-24-00	DWS	BCS	JMS	INCORP DCR 980039 DCN#00, 20 & 63
14	2/22/00	BCS	DWS	MPW	PARTIAL INCORP DCR 980039 DCN#63
13	2/11/00	DWS	BCS	MPW	PARTIAL INCORP DCR 980039 DCN#00 & 20
12	1/5/99	BCS	MPW	RWM	INCORP. MMOD 96-533 CA-0
11	9/01/98	BCS	DWS	CG	INCORP. MMOD 96-623 DCN 00
10	6/30/97	MPW	DWS	RCP	INCORP. MMOD 97-568 DCN 00
9	6/12/96	BCL	DWS	DJM	INCORP. MMOD 94-578 CA-0
8	10/2/92	MRB	BCL	BAW	INCORP. DCR 89-14 CA0
7	4/2/92	MRB	BCL	JEY	INCORP. MMOD 96-595 CA02
6	8/31/91	GPM	JM	MAC	INCORP. DCR 89-08 CA07
5	2/8/91	MRB	JM	DJM	INCORP ECA 85/2243C
4	9/29/89	MRB	APL	JWS	INCORP DCR 88-19A CA01 ADDED STF PREFIXES PER NOTE 2 DELETED METR TAG NO PER STN VERIFICATION
3	4/5/89	GPM	PAL	MAC	INCORPORATED DCR 89-7
2	2/24/87	JDM	PAL	MAC	ADDED INSTRUMENTATION & NOTE 9, CORRECTED LINE TO INTER. 53B3, RELOCATED 3/4" PLUG PER ERECTION ISO. ADDED P&ID LEGEND NOTE, UPDATED REF DWG REV'S, INCORP ECA 86/118374, ADDED CONTINUATION DWG. COORDINATES INCORP DCR 526, DELETED NOTE 5
1	6/26/86	BCL	DNK	RRC	INCORP ECA 99/1158288 ADDED POTABLE WATER CONT. & FLOW RATES FOR AC-4A & B
0	3/4/86	DWS	WES	WFD	ISSUED FOR OPERATIONS

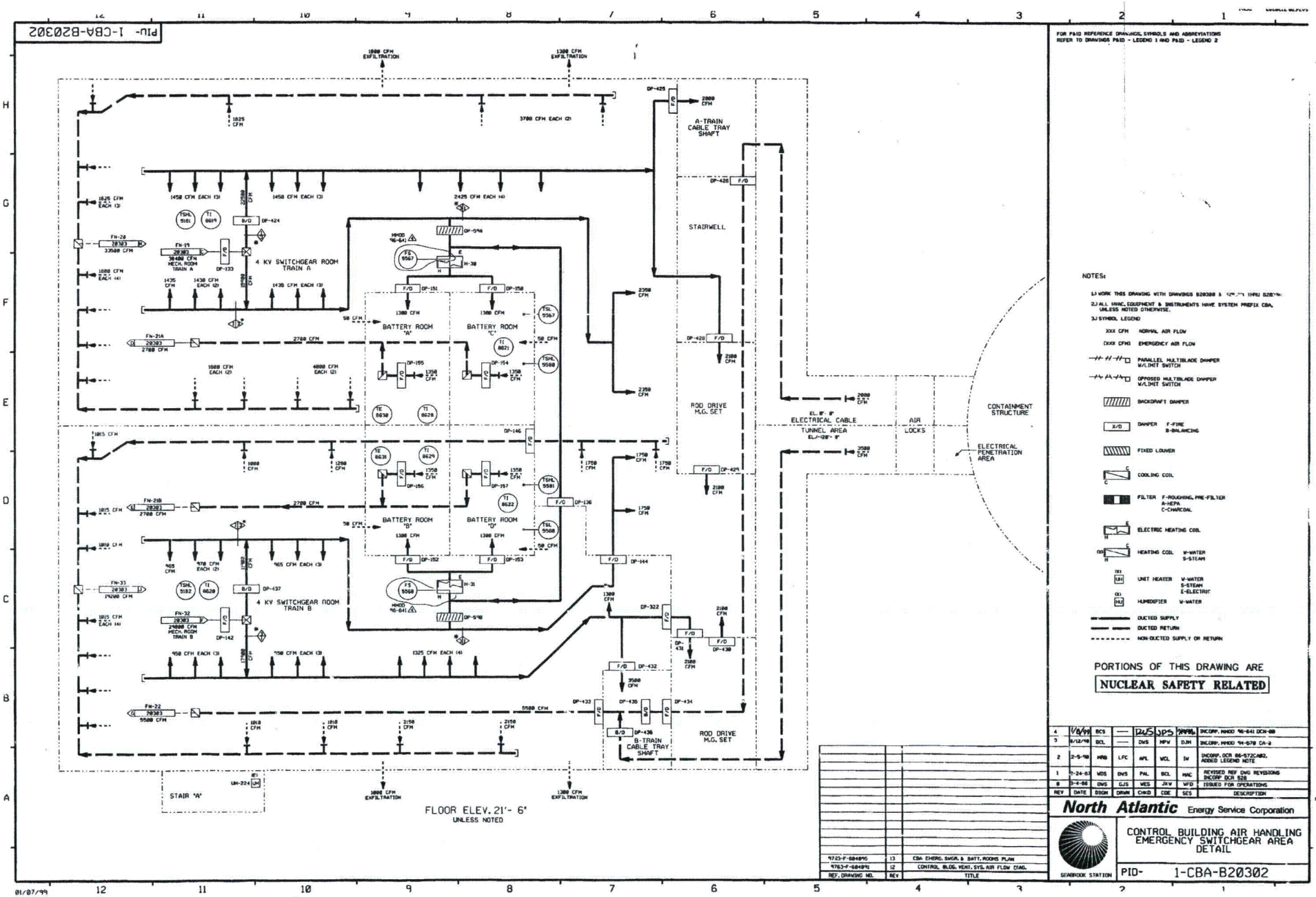
REF. DRAWING NO.	REV	TITLE
9763-F-684162	8	CONTROL RM. MAKE-UP AIR SYS.
9763-F-614127	12	CONTROL BLDG., VENTIL., MAKE-UP AIR LINE
9763-F-684897	10	DIESEL GEN. BLDG., VENTL. SYS. PLAN
9763-F-684894	11	CBA-EMER. SWGR, BATT. RM. & CABLE SPRD. MECH. EQUIP
9763-F-684893	14	CONTR BLDG., VENTL. SYS. CABLE SPRD & ELECT TUNN
9763-F-684891	12	CONTR. BLDG., VENTL. SYS. EMER. SWGR. & CABLE
9763-F-614128	12	CONTROL RM., MAKE-UP AIR SYS. AIR FLOW

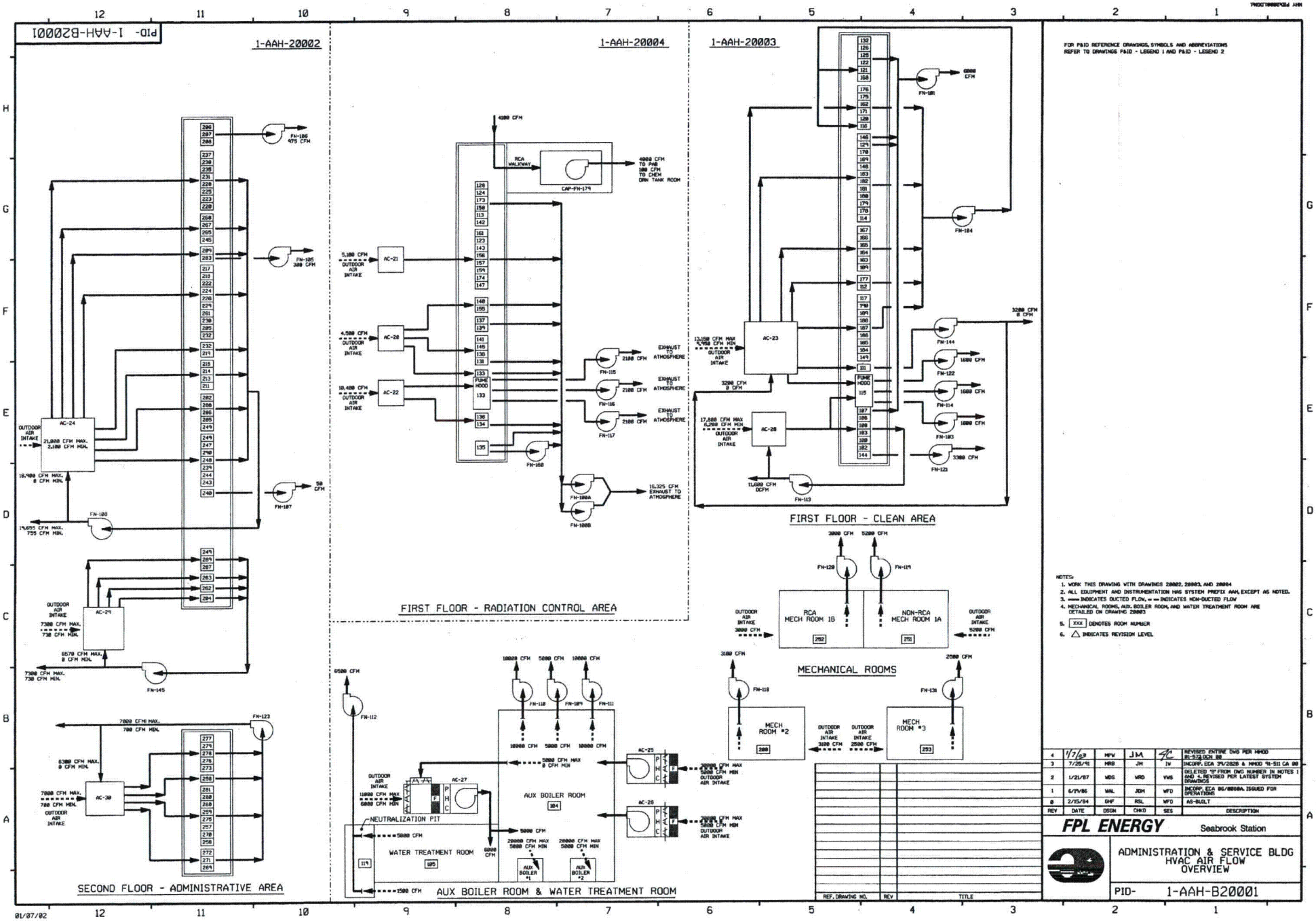
FPL ENERGY Seabrook Station

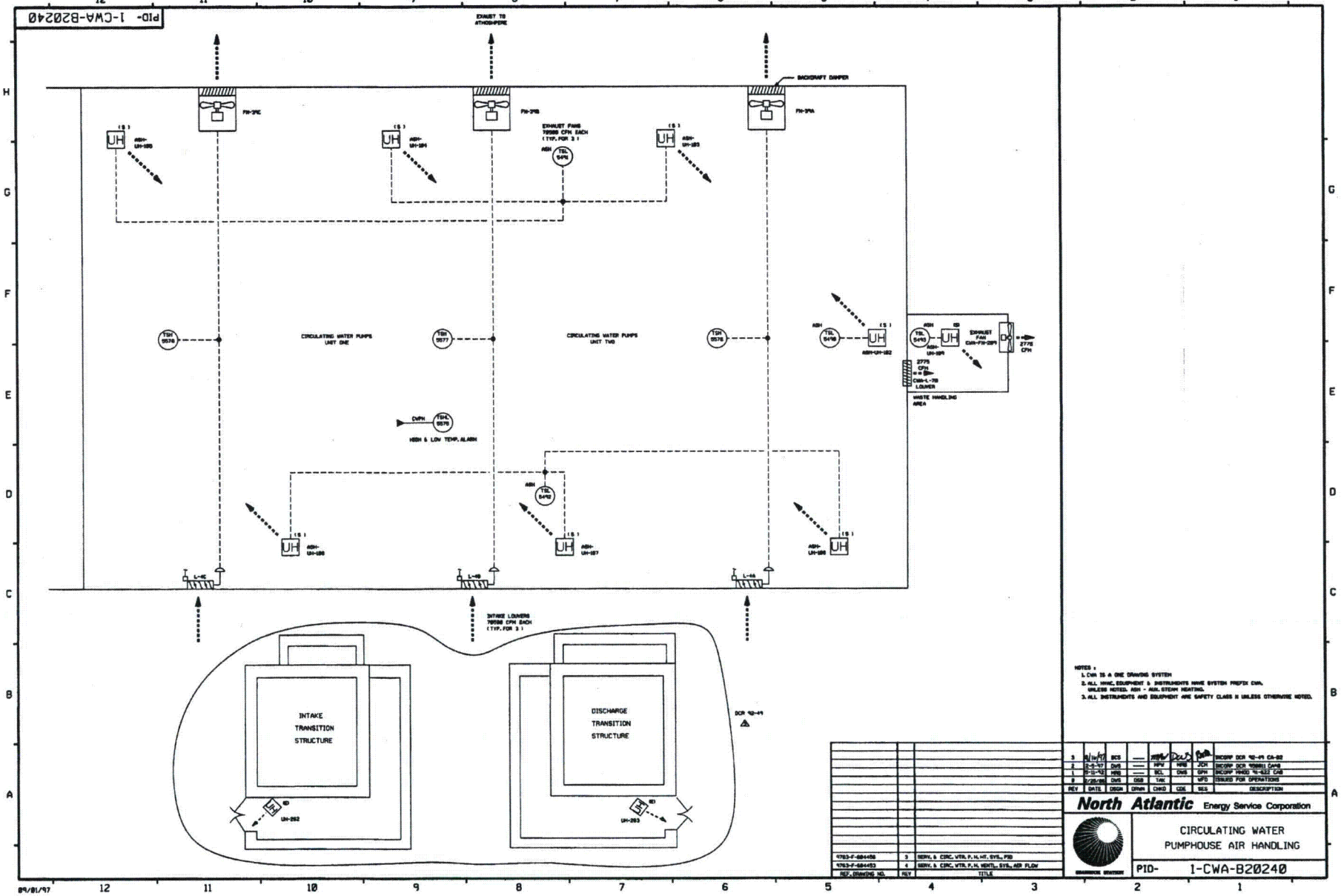
CONTROL BUILDING AIR HANDLING DETAIL

PID- 1-CBA-B20303

4/16/89


PID- 1-CBA-B20302
1800 CFM EXFILTRATION
1200 CFM EXFILTRATION
A-TRAIN CABLE TRAY SHAFT
STAIRWELL
4 KV SWITCHGEAR ROOM TRAIN A
4 KV SWITCHGEAR ROOM TRAIN B
BATTERY ROOM "A"
BATTERY ROOM "C"
BATTERY ROOM "B"
BATTERY ROOM "D"
ROD DRIVE M.G. SET
ELECTRICAL CABLE TUNNEL AREA
AIR LOCKS
CONTAINMENT STRUCTURE
ELECTRICAL PENETRATION AREA
B-TRAIN CABLE TRAY SHAFT
ROD DRIVE M.G. SET
STAIR "A"
FLOOR ELEV. 21'- 6" UNLESS NOTED
NOTES:
1) WORK THIS DRAWING WITH DRAWINGS B20300 & 12[illegible] THRU B2[illegible].
2) ALL HVAC, EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX CBA, UNLESS NOTED OTHERWISE.
3) SYMBOL LEGEND
XXX CFM NORMAL AIR FLOW
(XXX CFM) EMERGENCY AIR FLOW
PARALLEL MULTIBLADE DAMPER W/LIMIT SWITCH
OPPOSED MULTIBLADE DAMPER W/LIMIT SWITCH
BACKDRAFT DAMPER
DAMPER F-FIRE B-BALANCING
FIXED LOUVER
COOLING COIL
FILTER F-ROUGHING, PRE-FILTER A-HEPA C-CHARCOAL
ELECTRIC HEATING COIL
HEATING COIL W-WATER S-STEAM
UNIT HEATER W-WATER S-STEAM E-ELECTRIC
HUMIDIFIER W-WATER
DUCTED SUPPLY
DUCTED RETURN
NON-DUCTED SUPPLY OR RETURN
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
4 1/8/99 BCS — DWS MPW DJM INCORP. MMOD 98-641 DCN-08
3 8/12/98 BCL — DWS MPW DJM INCORP. MMOD 94-678 CA-2
2 2-5-98 MNB LPC APL WCL IW INCORP. OCR 86-572C&R2. ADDED LEGEND NOTE
1 7-24-97 WDS DWS PAL BCL MAC REVISED REF DWG REVISIONS INCORP DCR 528
0 3-4-96 DWS GJS MES JRW WFD ISSUED FOR OPERATIONS
REV DATE DSGN DRWN CHKD CDE SES DESCRIPTION
9723-F-88489 13 CBA EMERG. SWGR. & BATT. ROOMS PLAN
9763-F-88491 12 CONTROL BLDG. VENT. SYS. AIR FLOW DIAG.
REF. DRAWING NO. REV TITLE
North Atlantic Energy Service Corporation
SEABROOK STATION
CONTROL BUILDING AIR HANDLING EMERGENCY SWITCHGEAR AREA DETAIL
PID- 1-CBA-B20302
01/07/99


PID- 1-AAH-B20001
1-AAH-20002
1-AAH-20004
1-AAH-20003
FN-106 475 CFM
FN-105 300 CFM
AC-24
21,000 CFM MAX. 2,100 CFM MIN.
OUTDOOR AIR INTAKE
18,400 CFM MAX. 0 CFM MIN.
FN-107 50 CFM
FN-108
17,655 CFM MAX. 755 CFM MIN.
AC-29
7300 CFM MAX. 730 CFM MIN.
6570 CFM MAX. 0 CFM MIN.
7300 CFM MAX. 730 CFM MIN.
FN-145
FN-123
7000 CFM MAX. 700 CFM MIN.
6300 CFM MAX. 0 CFM MIN.
7000 CFM MAX. 700 CFM MIN.
AC-30
SECOND FLOOR - ADMINISTRATIVE AREA
4100 CFM
RCA WALKWAY
CAP-FN-179
4000 CFM TO P&B 100 CFM TO CHEM DRN TANK ROOM
5,100 CFM
AC-21
4,500 CFM
AC-28
18,400 CFM
AC-22
FUME HOOD
FN-115 2100 CFM
FN-116 2100 CFM
FN-117 2100 CFM
EXHAUST TO ATMOSPHERE
FN-168
FN-188A
FN-188B
16,325 CFM EXHAUST TO ATMOSPHERE
FIRST FLOOR - RADIATION CONTROL AREA
6000 CFM
FN-181
FN-184
13,150 CFM MAX 6,950 CFM MIN
AC-23
3200 CFM 0 CFM
FN-144 1600 CFM
FN-122 1600 CFM
FN-114 1800 CFM
FN-183 3300 CFM
FN-123
17,888 CFM MAX 6,298 CFM MIN
AC-28
11,680 CFM DCFM
FN-113
FIRST FLOOR - CLEAN AREA
3000 CFM
5200 CFM
FN-120
FN-119
RCA MECH ROOM 1B
252
NON-RCA MECH ROOM 1A
251
MECHANICAL ROOMS
3100 CFM
FN-118
MECH ROOM *2
200
2000 CFM
FN-131
MECH ROOM *3
253
6500 CFM
FN-112
10000 CFM
5000 CFM
FN-110
FN-109
FN-111
5000 CFM MAX 0 CFM MIN
AUX BOILER ROOM
184
AC-27
11000 CFM MAX 6000 CFM MIN
AC-25
AC-26
20000 CFM MAX 5000 CFM MIN
NEUTRALIZATION PIT
5000 CFM
WATER TREATMENT ROOM
185
6000 CFM
AUX BOILER *1
AUX BOILER *2
1500 CFM
AUX BOILER ROOM & WATER TREATMENT ROOM
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 20002, 20003, AND 20004
2. ALL EQUIPMENT AND INSTRUMENTATION HAS SYSTEM PREFIX AAH, EXCEPT AS NOTED.
3. —— INDICATES DUCTED FLOW, - - - INDICATES NON-DUCTED FLOW
4. MECHANICAL ROOMS, AUX. BOILER ROOM, AND WATER TREATMENT ROOM ARE DETAILED ON DRAWING 20003
5. XXX DENOTES ROOM NUMBER
6. △ INDICATES REVISION LEVEL
REF. DRAWING NO.
REV
TITLE
4 1/7/02 MPW JM JW REVISED ENTIRE DWG PER MMOD (R) STATION BB
3 7/25/91 MRB JM JW INCORP. ECA 3%/2828 & MMOD 91-511 CA 00
2 1/21/87 WDS WRD YWS DELETED "F" FROM DWG NUMBER IN NOTES 1 AND 4, REVISED PER LATEST SYSTEM DRAWINGS
1 6/19/86 WAL JDM WFD INCORP. ECA 86/0004A. ISSUED FOR OPERATIONS
0 2/15/84 GHF RSL WFD AS-BUILT
REV DATE DSGN CHKD SES DESCRIPTION
FPL ENERGY Seabrook Station
ADMINISTRATION & SERVICE BLDG HVAC AIR FLOW OVERVIEW
PID- 1-AAH-B20001
01/07/02



NOTES :
1. CWA IS A ONE DRAWING SYSTEM
2. ALL HVAC EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX CWA, UNLESS NOTED. ASH - ASH STEAM HEATING.
3. ALL INSTRUMENTS AND EQUIPMENT ARE SAFETY CLASS II UNLESS OTHERWISE NOTED.

REV	DATE	DSGN	DRWN	CHKD	QDS	SES	DESCRIPTION
3	8/16/97	BCS	—	MPV	MRB	JCH	BECORP DCR 92-49 CA-B2
2	2-3-97	DWS	—	MPV	MRB	JCH	BECORP DCR 92B01 CAWB
1	2-11-92	MRB	—	BCL	DWS	GPH	BECORP PHASE 1E-0.02 CAB
0	9/29/88	DWS	GSB	TAK		WFD	ISSUED FOR OPERATIONS

REF. DRAWING NO.	REV	TITLE
4763-F-884456	3	SERV. & CIRC. WTR. P. H. HT. SYS., P&ID
4763-F-884453	4	SERV. & CIRC. WTR. P. H. VENTIL. SYS., AIR FLOW

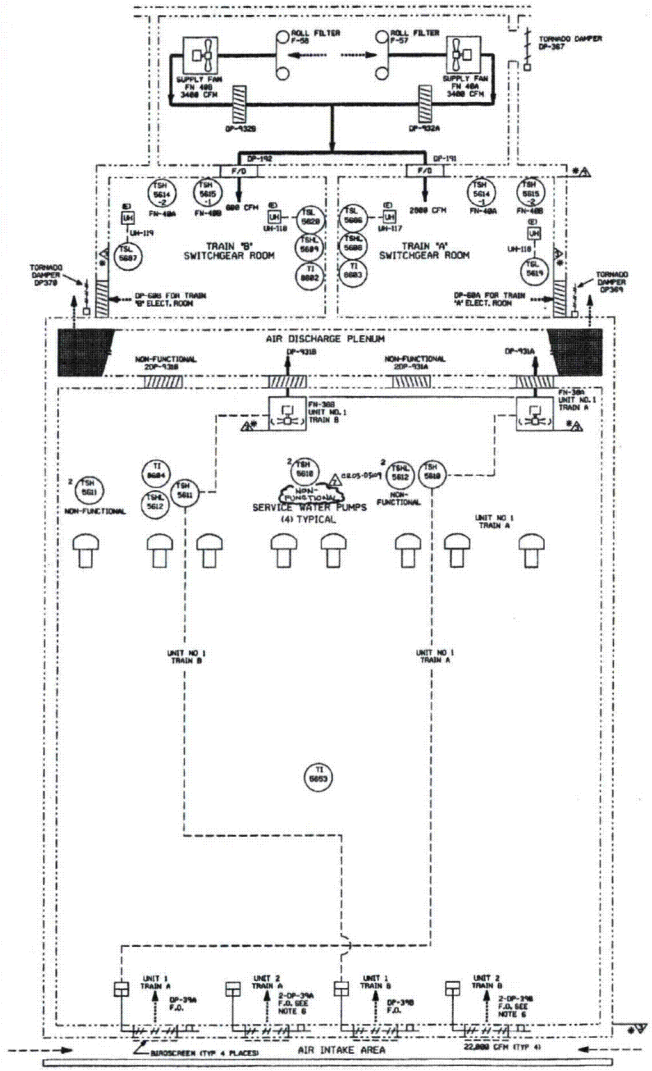
North Atlantic Energy Service Corporation

CIRCULATING WATER PUMPHOUSE AIR HANDLING

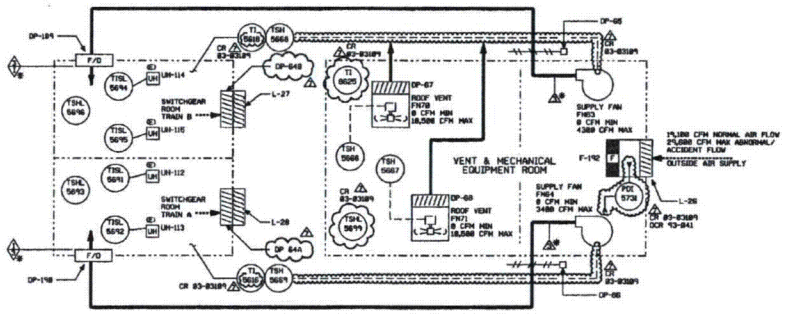
PID- 1-CWA-B20240

09/01/97

P&ID- 1-SWA-B20372



SERVICE WATER PUMP HOUSE



SERVICE WATER COOLING TOWER

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

NOTES:

1. ALL EQUIPMENT, COMPONENTS, & INSTRUMENTS HAVE SYSTEM PREFIX SWA UNLESS OTHERWISE NOTED.
2. THE SWA SYSTEM IS A ONE (1) DRAWING SYSTEM, AN OVERVIEW IS NOT REQUIRED.
3. △ ALL DUCTWORK, UNLESS NOTED.
4. ALL EQUIPMENT, COMPONENTS, & INSTRUMENTS ARE SAFETY CLASS AND UNLESS OTHERWISE NOTED.
5. △ INDICATES REVISION LEVEL.
6. THIS UNIT 2 EQUIPMENT IS NEEDED FOR UNIT 1 OPERATION.

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
7	5/17/07	JH			INCORP. CR 83-831B9 REV. 0B RE-INCORP. DCR 93-841 CA 01 & REVISED DAMPER ID's
6	6/14/95	BCL	MPV	YWS	INCORP. MMOD '94-578 CAB
5	12/9/94	BCL	MPV	YWS	INCORP. MMOD '94-581 CAB
4	3/28/93	MRB	BCL	JCH	INCORP. MMOD '92-853 CAB
3	9/24/90	MRB	JH	BCL	INCORP. MMOD '90-596 CA 2 REVISED NOTE 4 PER ENGINEERING DESIGN STANDARD 37208 SECT. 3.8 ADDED LEGEND NOTE
2	8/2/88	MPV	PAL	MAC	REVERSED TI NO'S PER M-088044 REV 4 & INCORP ECA 'M'/088052A
1	2/24/87	MDS	PAL	MAC	INCORP DCR 520, ADDED TI-5853 PER M-088041
0	4-24-86	JS	JSH	MFD	ISSUED FOR OPERATIONS

REF. DRAWING NO.	REV	TITLE
9763-F-084139	13	COOLING TOWER VENTILATION & DRAINAGE
9763-F-084453	5	SERV & CIRC. WATER PUMPHOUSE HVAC DIAG.

FPL ENERGY Seabrook Station

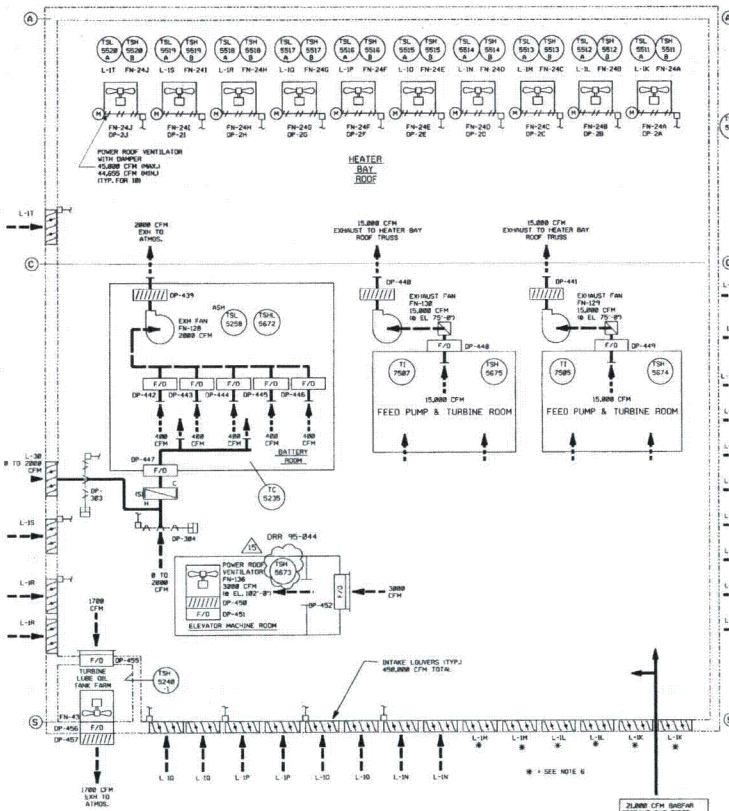
AIR HANDLING SYSTEM FOR SERVICE WATER PUMPHOUSE AND SERVICE WATER COOLING TOWER

PID- 1-SWA-B20372

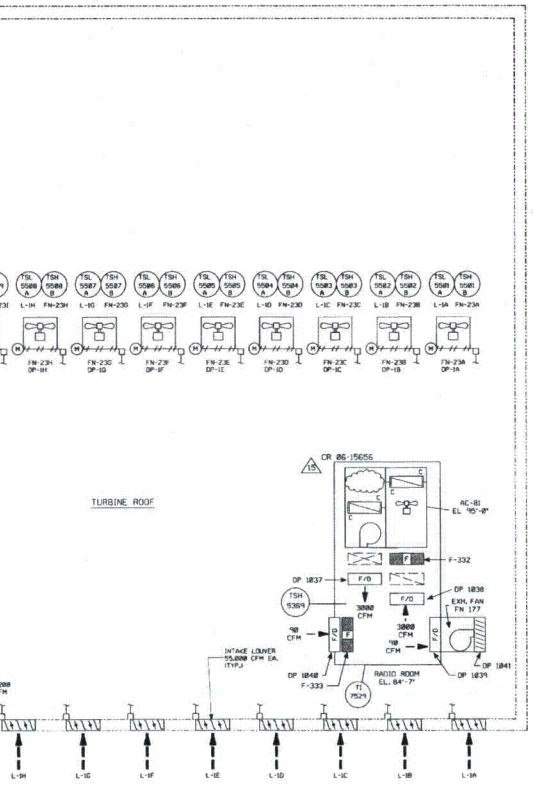
05/07/03

PID- 1-TAH-B20170

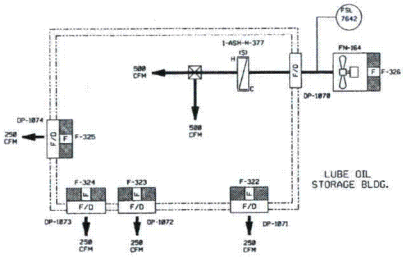
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

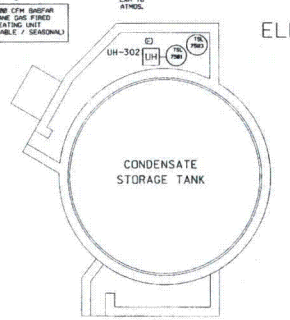


ELEVATION 21'-0"



ELEVATION 46'-0", 50'-0" & 75'-0"





NOTES:

1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX TAH UNLESS NOTED.
2. WORK THIS DWG. WITH DWGS. 20171 AND 20172.
3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED.
4. LEGEND:
   - DUCTED SUPPLY
   - DUCTED RETURN
   - NON DUCTED SUPPLY OR RETURN
   - S — SUCTION PIPING
   - L — LIQUID PIPING
5. △ INDICATES REVISION LEVEL.
6. INTAKE LOUVERS L-1K, 1L AND 1M ARE BLANKED OFF AND NON-FUNCTIONAL.

REV	DATE	DSGN	CHKD	ICE	DESCRIPTION
15	3-25-08	BCS	JM	EEB	INCORP CR 86-15656 REV. 8 & DRR 95-844 REV. 0
14	4/16/05	BCS	JM	RRB	INCORP DCR 02-16 DCN-12
13	11/24/04	BCS	JM	RRB	INCORP MSE 04-155 REV 00
12	10/5/04	BCS	JM	RRB	INCORP ECA 86/02135J & CR 20-03680 REV 00
11	2/13/03	BCS	JM	TWG	INCORP DCR 00-009 DCN-03
10	2/13/03	BCS	MPW	JM	INCORP MSE 02-009 REV 00
9	7/26/01	MPW	JM	MRB	INCORP MSE 00-0042 DCN 00
8	6/15/00	BCS	MPW	JCM	INCORP DCR-98-041 DCN-00
7	12/6/99	BCS	MPW	JCM	PARTIAL INCORP DCR-98-041 DCN-00
6	10/23/95	BCI	MPW	GRM	INCORP DCR-94-027 CA0
5	7/17/92	MRB	DWS	JW	INCORP MMOD 92-532, CA0
4	10/12/90	MRB	RMC	ES	INCORP DCR 87-138 CA0 REV. NOTE 3 PER NMP ENG DESIGN STD 37100 SECT. 3.0
3	11/22/89	MRB	PAL	BEB	INCORP. DCR 86-518 CA DELETED VALVE TAG PREFIX
2	4/5/89	GPM	PAL	DEK	INCORPORATED DCR 86-552, CA02
1	2/24/87	PAL	MPW	MAC	CORRECTED DRAFTING ERROR, ADDED NOTE 5 & REF. DRAWING NOTE.
0	4/23/86	JH	DWS	WFD	ISSUED FOR OPERATIONS

REF. DRAWING NO.	REV	TITLE
9763-F-684164	11	TURBINE BLDG AIR & BATTERY RM VENT
9763-F-684083	1	TURBINE BLDG VENT SYS EL 46'-0" & 50'-0"
9763-F-684082	2	TURBINE BLDG VENT SYS PLAN EL 21'-0"
9763-F-684081	8	TURBINE BLDG VENT SYS-ROOF PLAN
9763-F-684870	7	TURBINE BLDG FD PMP & TURB RM MSFW VENT

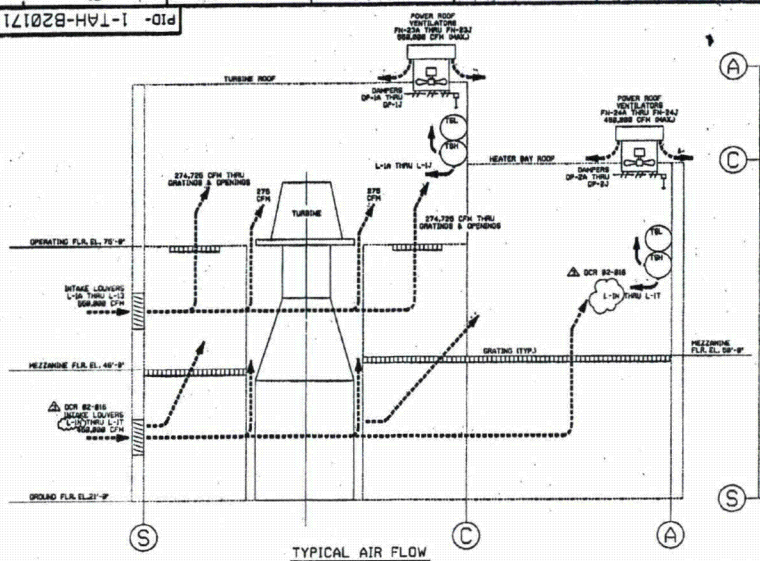
FPL ENERGY Seabrook Station

TURBINE BUILDING AIR HANDLING DETAIL

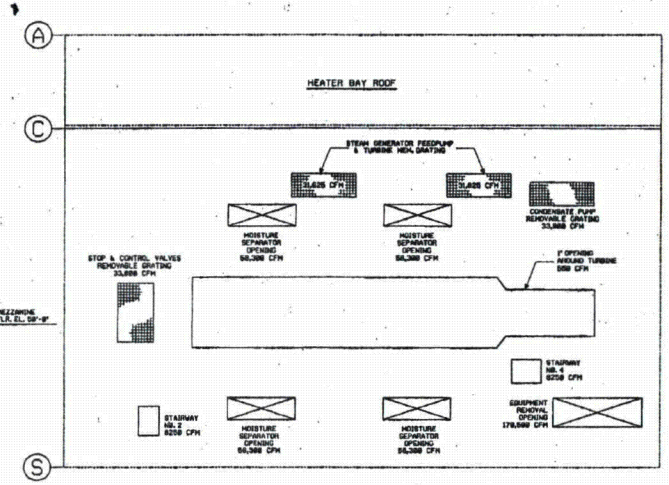
PID- 1-TAH-B20170

03/25/08

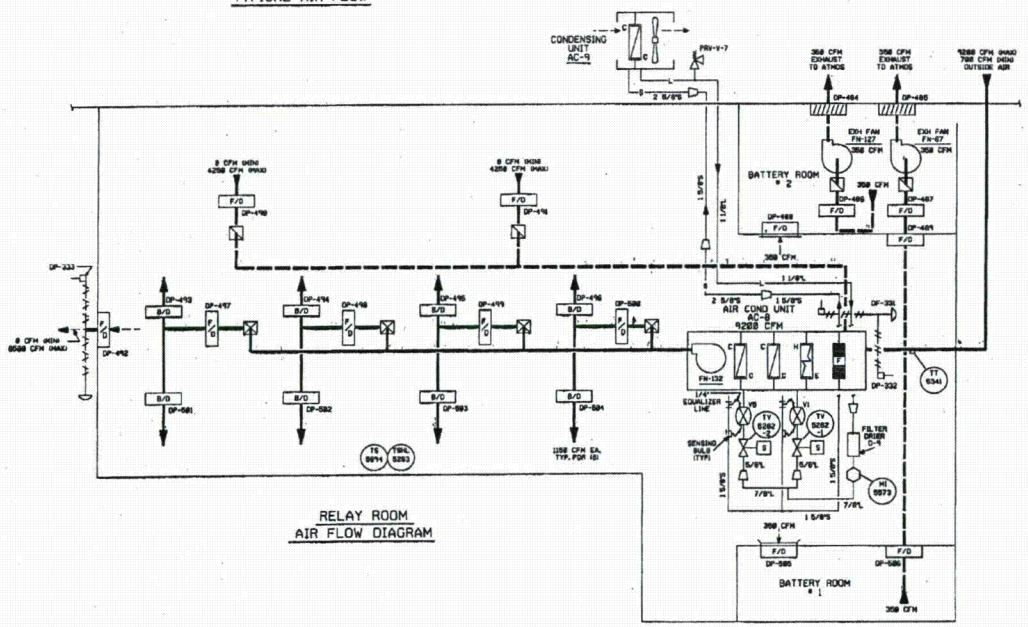
P&ID- 1-TAH-B20171



TYPICAL AIR FLOW



AIR FLOW PATTERN THRU
OPERATING FLOOR EL. 75'-0"



RELAY ROOM
AIR FLOW DIAGRAM

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

NOTES:
1. WORK THIS DWG. WITH DWG'S. 28679 AND 28672.
2. ALL HVAC EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX TAH (TURBINE AIR HANDLING) UNLESS NOTED.

5763-F-614884	9	TURB BLDG RELAY RM AC SYS PLANS & SECT'S
5763-F-684184	11	BATT. RM. ELEV. HVAC, RM. & AC EL. 75'-9"
5763-F-684883	1	TURB. BLDG. PLAN EL. 46'-9" & 59'-9"
5763-F-684882	2	TURB. BLDG. PLAN EL. 21'-9"
5763-F-684881	8	TURB. BLDG. ROOF PLAN
5763-F-684878	8	FEED PUMP & TURB. ROOM PLAN
REF. DRAWING NO.	REV	TITLE

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
3	11/15/85	BCS	JH	WCS	INCORP. DCR 82-816 DCN-12
2	7/17/85	MRB	DWG	JCH	INCORP. THRU 'EC-SIM' ADD
1	1/22/85	MRB	JH	DJH	REVISED PER VEAC P&ID 5763-F-684884 ADDED P&ID LEGEND NOTE
0	4/23/84	JH	DWG	WFO	ISSUED FOR OPERATIONS

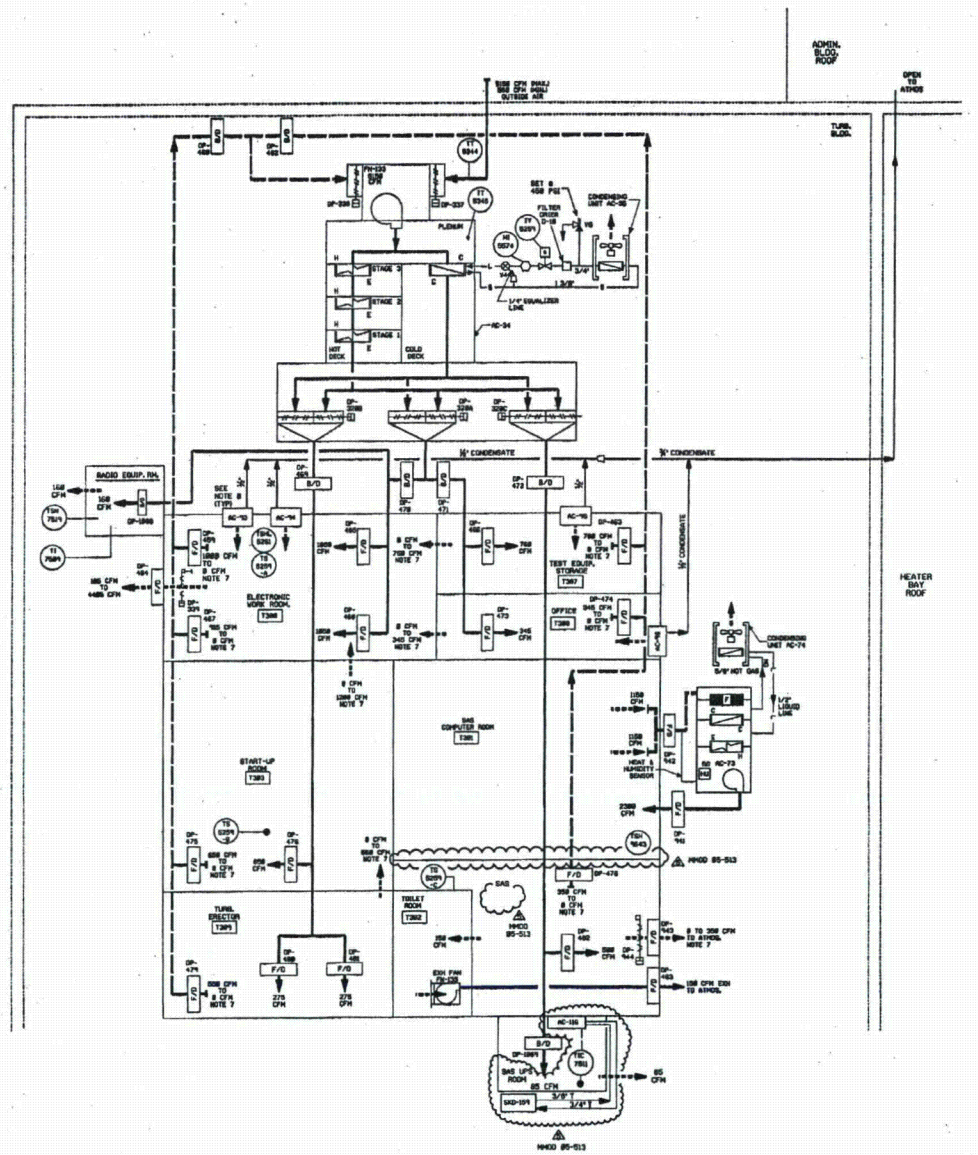
FPL ENERGY Seabrook Station

TURBINE BUILDING AIR HANDLING DETAIL

PID- 1-TAH-B20171

84/17/85

PID- 1-TAH-B20172



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 TAH UNLESS NOTED OTHERWISE.
2. WORK THIS DWG. WITH DWG. 28178 AND 28171
3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
4. LEGEND:
   - ========== DUCTED SUPPLY
   - ========== DUCTED RETURN
   - ========== NON DUCTED SUPPLY OR RETURN
   - —— S —— SUCTION PIPING
   - —— L —— LIQUID PIPING
5. △ INDICATES REVISION LEVEL.
6. ▭ INDICATES ROOM NUMBER.
7. FLOWS INCREASE OR DECREASE WITHIN THE LIMITS NOTED IN PROPORTION TO THE AMOUNT OF OUTSIDE AIR PROVIDED THROUGH MODULATING DAMPER 1-TAH-DP-339.
8. A/C UNITS NO. 93,94,98 & 99 ARE BACK UP UNITS TO MAIN A/C UNIT NO. 94 AND NORMALLY DO NOT OPERATE. ROOM OCCUPANTS MAY ADJUST AIR FLOW AS REQUIRED.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
5	12/13/95	JH	Shah	JC	INCORP MMOD 85-513 DCN 88
4	2/5/94	BCS	JH	TJG	INCORP DCN 88899 REV. 83
3	8/7/89	DWS	BCS	MHH	INCORP MMOD 178888 DCN*88
2	12/19/85	HPV	MHH	CVL	INCORP MMOD 85-558, CN8
1	5/28/85	HRB	BCL	HPV	INCORP DCN 85-36, CN8
0	7/14/82	HPV	HRB	BCL	ISSUED FOR OPERATIONS

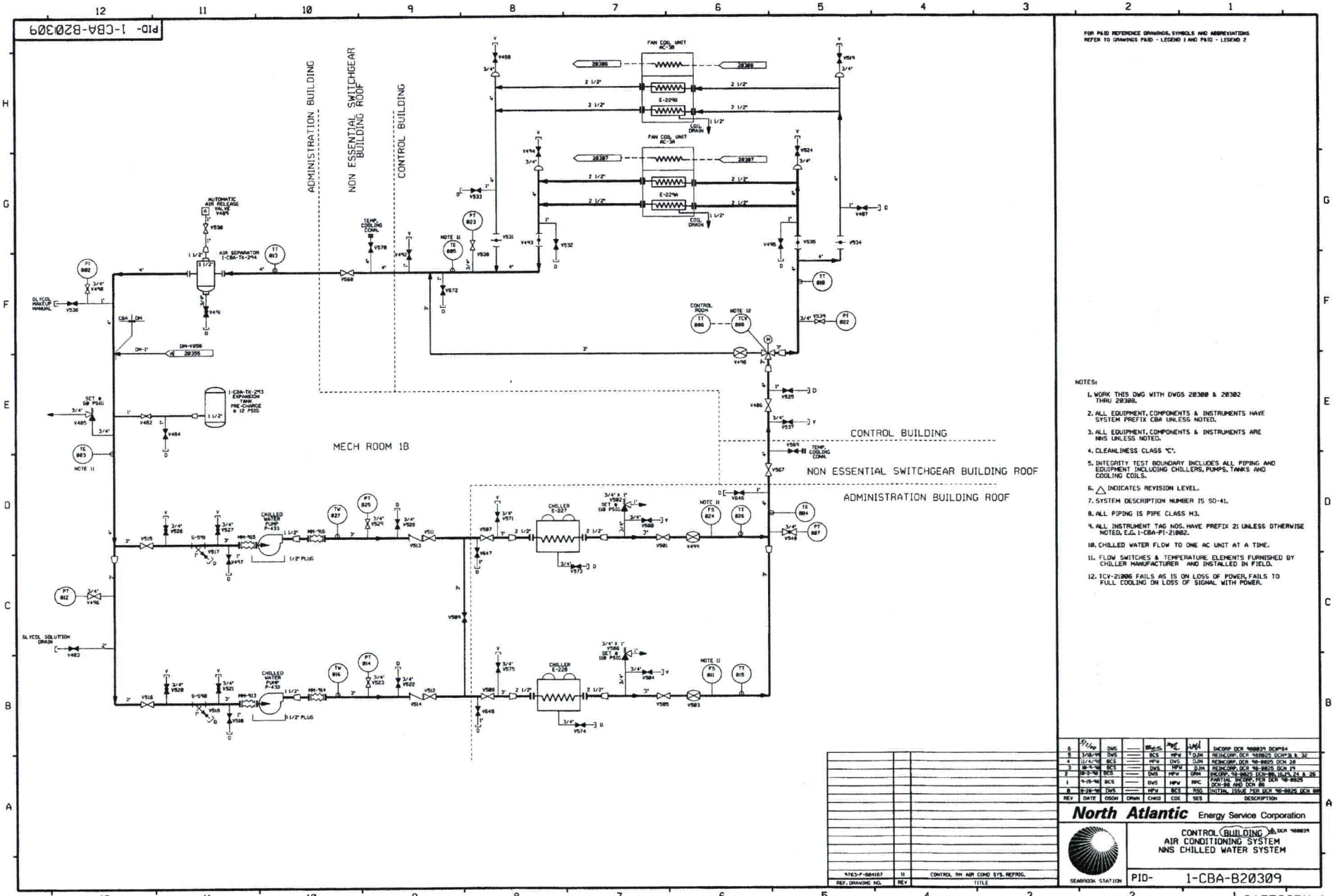
5610-F-684164	11	TURBINE BLDG AIR & BATTERY RM VENT	
REF. DRAWING NO.	REV	TITLE	

FPL ENERGY Seabrook Station

TURBINE BUILDING AIR HANDLING DETAIL

PID- 1-TAH-B20172

12/12/95



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

NOTES:

1. WORK THIS DWG WITH DWGS 20300 & 20302 THRU 20308.
2. ALL EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX CBA UNLESS NOTED.
3. ALL EQUIPMENT, COMPONENTS & INSTRUMENTS ARE NNS UNLESS NOTED.
4. CLEANLINESS CLASS 'C'.
5. INTEGRITY TEST BOUNDARY INCLUDES ALL PIPING AND EQUIPMENT INCLUDING CHILLERS, PUMPS, TANKS AND COOLING COILS.
6. △ INDICATES REVISION LEVEL.
7. SYSTEM DESCRIPTION NUMBER IS SD-41.
8. ALL PIPING IS PIPE CLASS M3.
9. ALL INSTRUMENT TAG NOS. HAVE PREFIX 21 UNLESS OTHERWISE NOTED, E.G. 1-CBA-PI-21002.
10. CHILLED WATER FLOW TO ONE AC UNIT AT A TIME.
11. FLOW SWITCHES & TEMPERATURE ELEMENTS FURNISHED BY CHILLER MANUFACTURER AND INSTALLED IN FIELD.
12. TCV-21206 FAILS AS IS ON LOSS OF POWER, FAILS TO FULL COOLING ON LOSS OF SIGNAL WITH POWER.

REV	DATE	DSGN	DRWN	CHKD	COE	SES	DESCRIPTION
6	5/12/00	DWS	—	BCS	MPW	Y DJM	INCORP DCR 980039 DCP#84
5	3/28/00	DWS	—	BCS	MPW	Y DJM	REINCORP. DCR 980025 DCP'S & 32
4	12/4/98	BCS	—	MPW	DWS	DJM	REINCORP. DCR 98-0825 DCN 28
3	10-1-98	BCS	—	DWS	MPW	DJM	REINCORP. DCR 98-0825 DCN 19
2	08-3-98	BCS	—	DWS	MPW	DRM	INCORP. 98-0825 DCN-88, 18,19, 24 & 26
1	4-15-98	BCS	—	DWS	MPW	RRC	PARTIAL INCORP. PER DCR 98-0825 DCN-88 AND DCN 89
0	8-20-98	DWS	—	MPW	BCS	RSG	INITIAL ISSUE PER DCR 98-0825 DCN 88

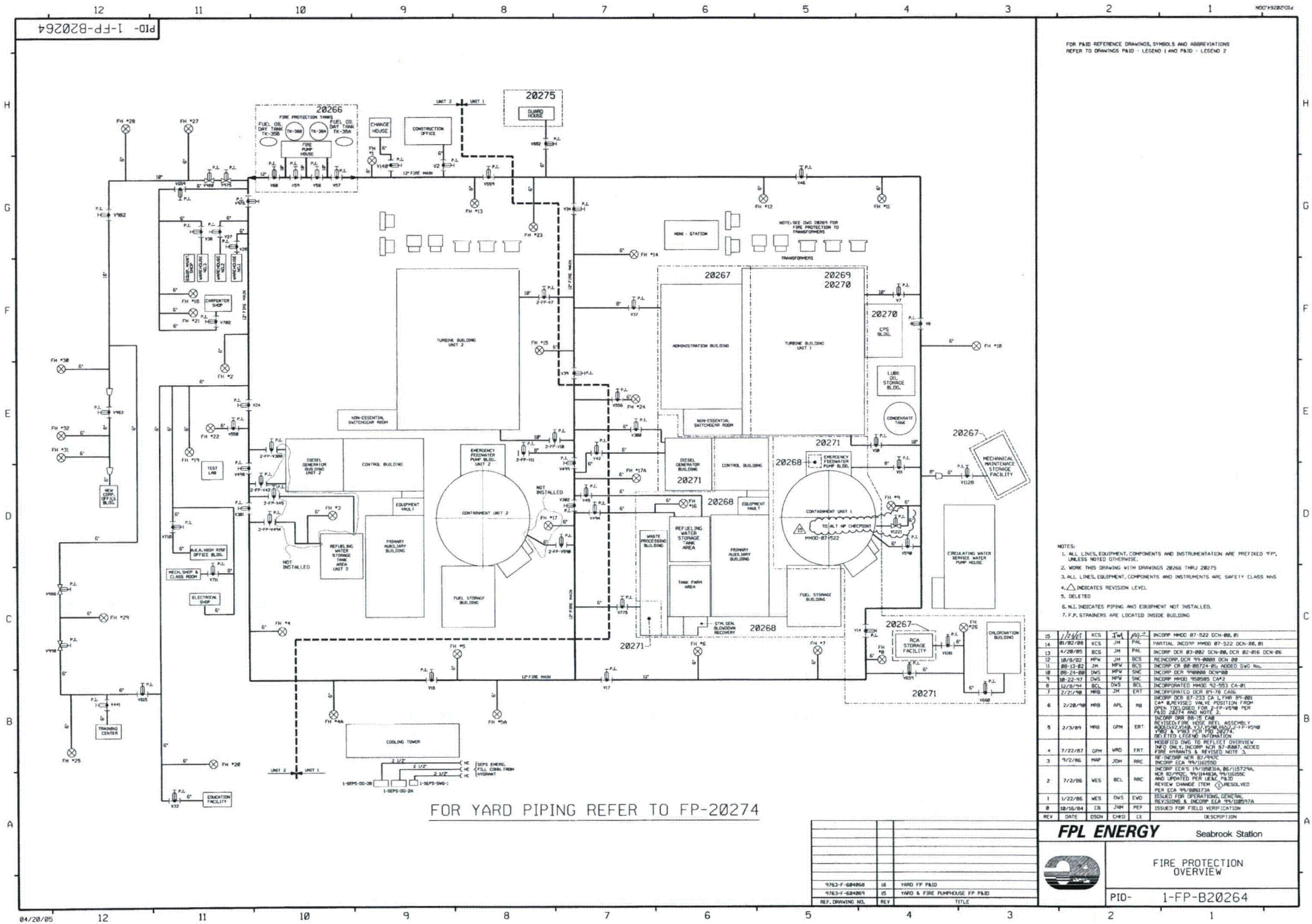
North Atlantic Energy Service Corporation

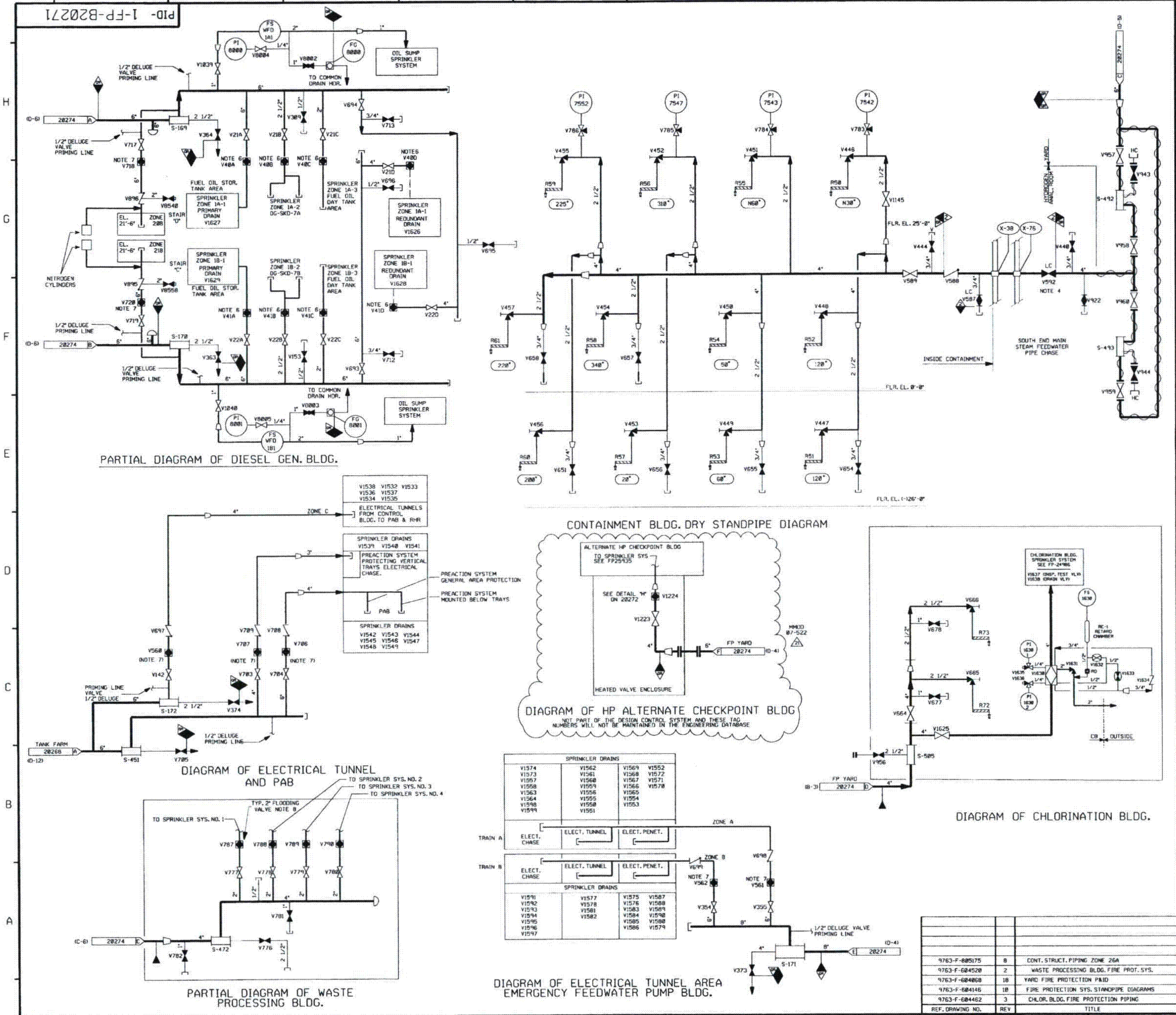
SEABROOK STATION

CONTROL BUILDING △ DCR 980039
AIR CONDITIONING SYSTEM
NNS CHILLED WATER SYSTEM

PID- 1-CBA-B20309

REF. DRAWING NO.	REV	TITLE
9763-F-884157	11	CONTROL RM AIR COND SYS. REFRIG.


P10- 1-FP-B20264
20266
FIRE PROTECTION TANKS
FUEL OIL DAY TANK TK-35B
TK-36B
TK-36A
FUEL OIL DAY TANK TK-35A
FIRE PUMP HOUSE
CHANGE HOUSE
CONSTRUCTION OFFICE
20275
GUARD HOUSE
12" FIRE MAIN
MINI - STATION
TRANSFORMERS
NOTE: SEE DWG 20269 FOR FIRE PROTECTION TO TRANSFORMERS
20267
20269
20270
ADMINISTRATION BUILDING
TURBINE BUILDING UNIT 1
TURBINE BUILDING UNIT 2
CPS BLDG.
LUBE OIL STORAGE BLDG.
CONDENSATE TANK
NON-ESSENTIAL SWITCHGEAR ROOM
DIESEL GENERATOR BUILDING
20271
CONTROL BUILDING
EMERGENCY FEEDWATER PUMP BLDG. UNIT 2
20268
EMERGENCY FEEDWATER PUMP BLDG.
CONTAINMENT UNIT 2
CONTAINMENT UNIT 1
EQUIPMENT VAULT
REFUELING WATER STORAGE TANK AREA UNIT 2
PRIMARY AUXILIARY BUILDING
WASTE PROCESSING BUILDING
REFUELING WATER STORAGE TANK AREA
TANK FARM AREA
FUEL STORAGE BUILDING
STM. GEN. BLOWDOWN RECOVERY
MECHANICAL MAINTENANCE STORAGE FACILITY
CIRCULATING WATER SERVICE WATER PUMP HOUSE
RCA STORAGE FACILITY
CHLORINATION BUILDING
TO ALT HP CHECKPOINT
MMOD-87-522
NOT INSTALLED
NON-ESSENTIAL SWITCHGEAR ROOM
TURBINE BUILDING UNIT 2
CARPENTER SHOP
TEST LAB
N.E.A. HIGH RISE OFFICE BLDG.
MECH. SHOP & CLASS ROOM
ELECTRICAL SHOP
NEW CORP. OFF. CL. BLDG.
TRAINING CENTER
EDUCATION FACILITY
COOLING TOWER
1-SEPS-DG-2B
1-SEPS-DG-2A
1-SEPS-SWG-1
SEPS EMERG. FILL CONN. FROM HYDRANT
FOR YARD PIPING REFER TO FP-20274
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 INSTRUMENTATION ARE PREFIXED "FP", UNLESS NOTED OTHERWISE.
2. WORK THIS DRAWING WITH DRAWINGS 20266 THRU 20275
3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS
4. △ INDICATES REVISION LEVEL
5. DELETED
6. N.I. INDICATES PIPING AND EQUIPMENT NOT INSTALLED.
7. F.P. STRAINERS ARE LOCATED INSIDE BUILDING
15 | 11/16/01 | KCS | JM | PAL | INCORP MMOD 87-522 DCN-00.01
14 | 01/02/00 | KCS | JM | PAL | INCORP MMOD 87-522 DCN-00.00
13 | 4/20/05 | BCS | JM | PAL | INCORP DCR #3-002 DCN-00, DCN #2-016 DCN-06
12 | 10/8/02 | MPW | JM | BCS | REINCORP. DCR 99-0000 DCN 00
11 | 00-13-02 | JM | MPW | BCS | INCORP CR 00-00724-01; ADDED DWG No.
10 | 00-24-00 | DWS | MPW | SNC | INCORP DCR 990008 DCN-00
9 | 10-22-97 | DWS | MPW | SNC | INCORP MMOD 950585 CA#2
8 | 12/8/94 | BCL | DWS | BCL | INCORPORATED MMOD 92-553 CA-01
7 | 2/21/90 | MRB | JM | ERT | INCORPORATED DCR 89-78 CA6b
6 | 2/20/90 | MRB | APL | RB | INCORP DCR 87-233 CA 1, THRU 89-001 CA* &REVISED VALVE POSITION FROM* OPEN TO CLOSED FOR 2-FP-V598 PER P&ID 20274 AND NOTE 2.
5 | 2/3/89 | MRB | GPM | ERT | INCORP DRR 88-15 CA8 REVISED FIRE HOSE REEL ASSEMBLY ADDED V347,V348,V602,2-FP-V598 V987 & V983 PER PID 20274. DELETED LEGEND INFORMATION
4 | 7/22/87 | GPM | WRD | ERT | MODIFIED DWG TO REFLECT OVERVIEW INFO ONLY, INCORP NCR 87-0087, ADDED FIRE HYDRANTS & REVISED NOTE 3.
3 | 9/2/86 | MAP | JDH | RRC | RE-INCORP NCR 87-965C
2 | 7/2/86 | WES | BCL | RRC | INCORP ECA 99/116550
INCORP ECA'S 19/15031A, 86/115729A, NCR 82-795C, 99/141824, 99/10255C AND UPDATED PER UE&C P&ID REVIEW CHANGE ITEM △1 RESOLVED PER ECA 99/806173A
1 | 1/22/86 | WES | DWS | EWD | ISSUED FOR OPERATIONS, GENERAL REVISIONS & INCORP ECA 35/112737A
0 | 10/15/84 | CB | JNM | PEF | ISSUED FOR FIELD VERIFICATION
REV | DATE | DSGN | CHKD | LE | DESCRIPTION
9763-F-684868 | 16 | YARD FP P&ID
9763-F-684869 | 15 | YARD & FIRE PUMPHOUSE FP P&ID
REF. DRAWING NO. | REV | TITLE
FPL ENERGY
Seabrook Station
FIRE PROTECTION OVERVIEW
PID- 1-FP-B20264
04/20/05



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 FP, UNLESS NOTED OTHERWISE.
2. DELETED
3. DELETED
4. STANDPIPE SYSTEM WITHIN CONTAINMENT SHALL BE DRAINED PRIOR TO OPERATION OF UNIT. VALVE MUST BE CLOSED IN MODE 1,2,3,4 AND CAN BE OPENED IN MODE 5.
5. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
6. SEE DETAIL A, DWG. 20272.
7. SEE DETAIL B, DWG. 20272.
8. SEE DETAIL C, DWG. 20272.
9. △ INDICATES REVISION LEVEL.
10. DELETED
11. DELETED
12. DELETED
13. DELETED
14. DELETED

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

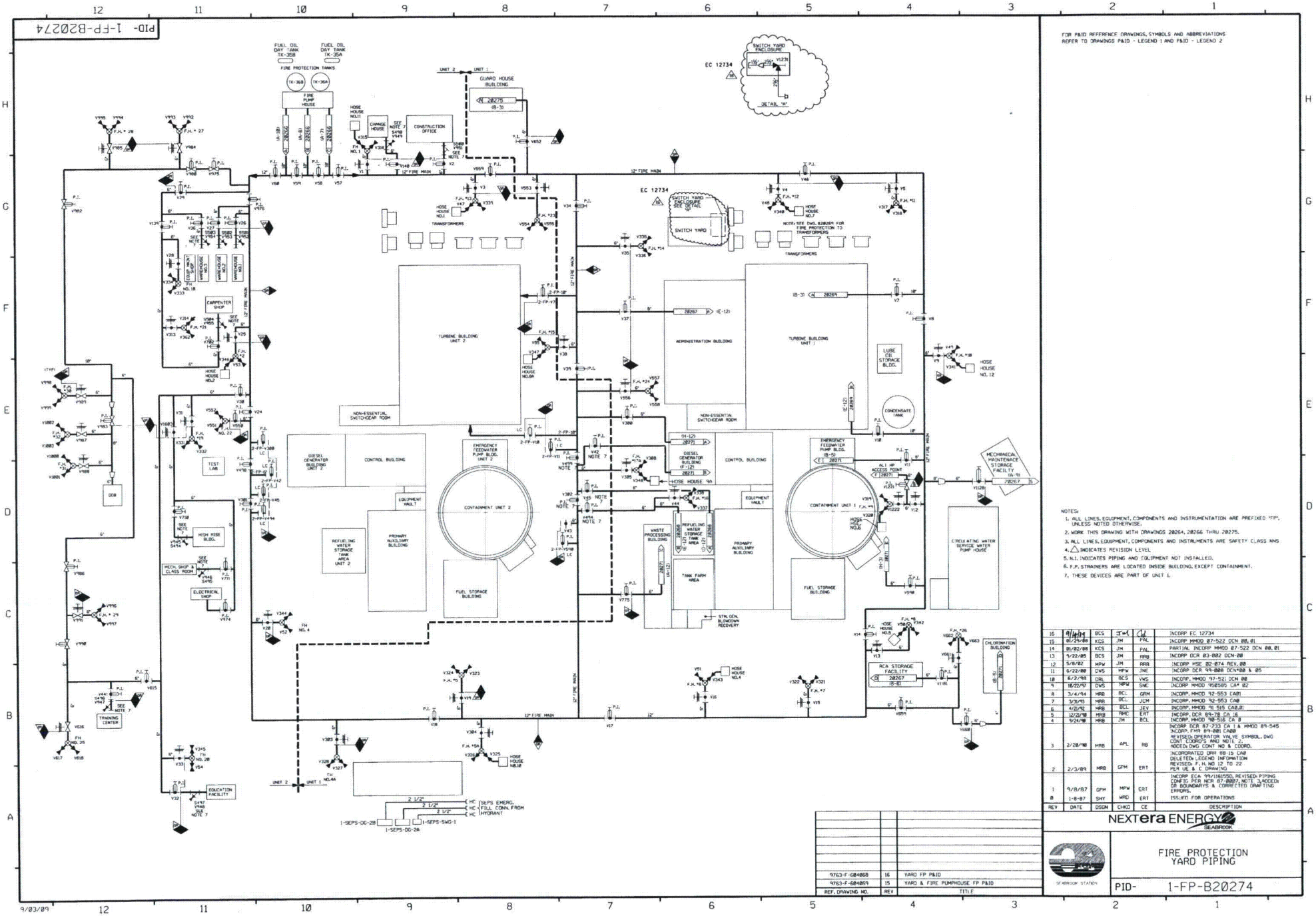
REV	DATE	DSGN	CHKD	CE	DESCRIPTION
21	1/09/08	KCS	JM	DCZ	INCORP MMOD-07-522, DCN-00 & 01
20	10/02/06	BCS	JM	SPF	INCORP DCR 99-13, DCN-00
19	3/16/06	BCS	JM	DMO	INCORP DCR 99-13, DCN-00 (PARTIAL)
18	8/28/03	BCS	MPW	ERT	RE-INCORP ECA 99/14824
17	7/30/03	BCS	JM	MPW	RE-INCORP ECA 99/14824
16	1/7/02	BCS	JM	ERT	INCORP DCR 00-0004 DCN-00, 02
15	8/31/00	BCS	MPW	AJK	INCORP MSE 99-328 REV. 0, ECA 99/14824
14	6/2/98	DRL	MPW	VWS	INCORP MMOD 96-550 DCN 02 & MMOD 97-521 DCN 00
13	8/18/97	MPW	BCS	VWS	INCORP MMOD 96-550 DCN 01
12	6/7/97	MPW	DWS	BAB	INCORP DCR 96-31 DCN#02
11	3/28/94	DWS	BCL	JCM	INCORP DCR 920012 CA#0
10	4/17/92	MRB	DWS	RRB	INCORP MMOD 91-515 CA0
9	10/25/90	MRB	JM	ERT	INCORP. DRR 89-41 REV 1 DELETED OPEN ITEM ABOVE AND NOTES 11 & 13 PER REVISED NOTE 3 ADDED FLOW SWITCHES PER RES 88-427
8	6/23/89	MRB	PAL	ERT FOR RB	INCORPORATED DRR 89-41 REV 0 DELETED: FIRE HOSE LEGEND
7	10/7/88	GPM	APL	ERT	INCORP DCR 86-715 CA 02 ADDED: NOTE 14
6	5/16/88	DWS	GPM	ERT	ADDED: CHANGE ITEM-2 REVISED: VALVE NO'S FROM V8006, 7 TO V8540, 58. DELETED: NNS-1 DESIGNATION
5	9/8/87	GPM	MRJ	ERT	INCORP. DCR 87-270 REVISED: NOTE 5, CONT DWG NO. ADDED: NOTE 13, CHANGE ITEM 1, QR BOUNDARIES.
4	12/30/86	MPW	WRD	DCM	ADDED WPB SPRINKLER SYS. NO'S. PER FP-46830. REVISED DWG. CONTIN. REF'S REMOVED SPRINKLERS FOR CABLE SPREADING AREA. ADDED NOTES 11 & 12, AND REDREW ELEC. TUNNEL AND PAB PER ENG. COMMENTS CORRECTED DRAFTING ERRORS. ADDED VLV'S V8006, V8007 PER GRINNEL MANUAL, CONT. REF. LOCATIONS. CHANGED VALVE V587 FROM GATE TO PLUG AND ADDED CAP PER ERECTION ISO. DELETED NOTE 10.
3	9/2/86	MAP	PAL	RRC	INCORP ECA 03/114381A,99/117673A
2	6/27/86	JDM	BCL	RRC	INCORP. NCR 82/992C, ECA 99/109018B APPROVED CHANGE ITEM NUMBERS 2,3,4,5 BY DETAILING VENDOR PIPING ADDED VALVE NOS. & PI NOS.
1	1/22/86	WES	DWS	EWD	ISSUED FOR OPERATIONS GENERAL REVISIONS
0	10/16/84	CB	JNM	PEF	ISSUED FOR FIELD VERIFICATION

REF. DRAWING NO.	REV	TITLE
9763-F-805175	8	CONT. STRUCT. PIPING ZONE 26A
9763-F-604520	2	WASTE PROCESSING BLDG. FIRE PROT. SYS.
9763-F-604068	18	YARD FIRE PROTECTION P&ID
9763-F-604146	10	FIRE PROTECTION SYS. STANDPIPE DIAGRAMS
9763-F-604462	3	CHLOR. BLDG. FIRE PROTECTION PIPING

FPL ENERGY Seabrook Station

FIRE PROTECTION DETAILS

PID- 1-FP-B20271



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

NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION ARE PREFIXED "FP", UNLESS NOTED OTHERWISE.
2. WORK THIS DRAWING WITH DRAWINGS 20264, 20266 THRU 20275.
3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS
4. △ INDICATES REVISION LEVEL
5. N.I. INDICATES PIPING AND EQUIPMENT NOT INSTALLED.
6. F.P. STRAINERS ARE LOCATED INSIDE BUILDING, EXCEPT CONTAINMENT.
7. THESE DEVICES ARE PART OF UNIT 1.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
16	9/16/09	BCS	JTM	CM	INCORP. EC 12734
15	01/25/00	KCS	JM	PAL	INCORP. MMOD 87-522 DCN 00, 01
14	01/02/00	KCS	JM	PAL	PARTIAL INCORP. MMOD 87-522 DCN 00, 01
13	11/22/95	BCS	JM	RRB	INCORP DCR 93-002 DCN-00
12	5/8/02	MPW	JM	RRB	INCORP. MSE 02-074 REV. 00
11	6/22/00	DWS	MPW	JNC	INCORP DCR 99-008 DCN-00 & 05
10	6/2/98	DRL	BCS	VWS	INCORP. MMOD 97-521 DCN 00
9	10/22/97	DWS	MPW	SMC	INCORP MMOD 95R585 CAP 02
8	3/4/94	MRB	BCL	GRM	INCORP. MMOD 92-553 CA01
7	3/31/93	MRB	BCL	JCM	INCORP. MMOD 92-553 CA0
6	4/21/92	MRB	BCL	JEV	INCORP. MMOD 91 515 CA0,0;
5	12/2/91	MRB	RMC	ERT	INCORP. DCR 89-78 CA 16
4	5/24/91	MRB	JM	BCL	INCORP. MMOD 90-516 CA 0
3	2/28/90	MRB	APL	RB	INCORP DCR 87-733 CA 1 & MMOD 89-545 INCORP. FWS 89-001 CA00 REVISED: OPERATOR VALVE SYMBOL. DWG CONT CORRYS AND NOTE 2. ADDED: DWG CONT NO & COORD.
2	2/3/89	MRB	GPM	ERT	INCORPORATED DRH 88-15 CA0 DELETED: LEGEND INFORMATION REVISED: F, H, NO 12 TO 22 PER UE & C DRAWING
1	9/8/87	GPM	MPW	ERT	INCORP ECA 99/1161550, REVISED: PIPING CONFIG PER NER 87-00017, NOTE 3, ADDED: OR BOUNDARYS & CORRECTED DRAFTING ERRORS.
0	1-8-87	SNY	WRD	ERT	ISSUED FOR OPERATIONS

9763-F-684868	16	YARD FP P&ID
9763-F-684869	15	YARD & FIRE PUMPHOUSE FP P&ID
REF. DRAWING NO.	REV	TITLE

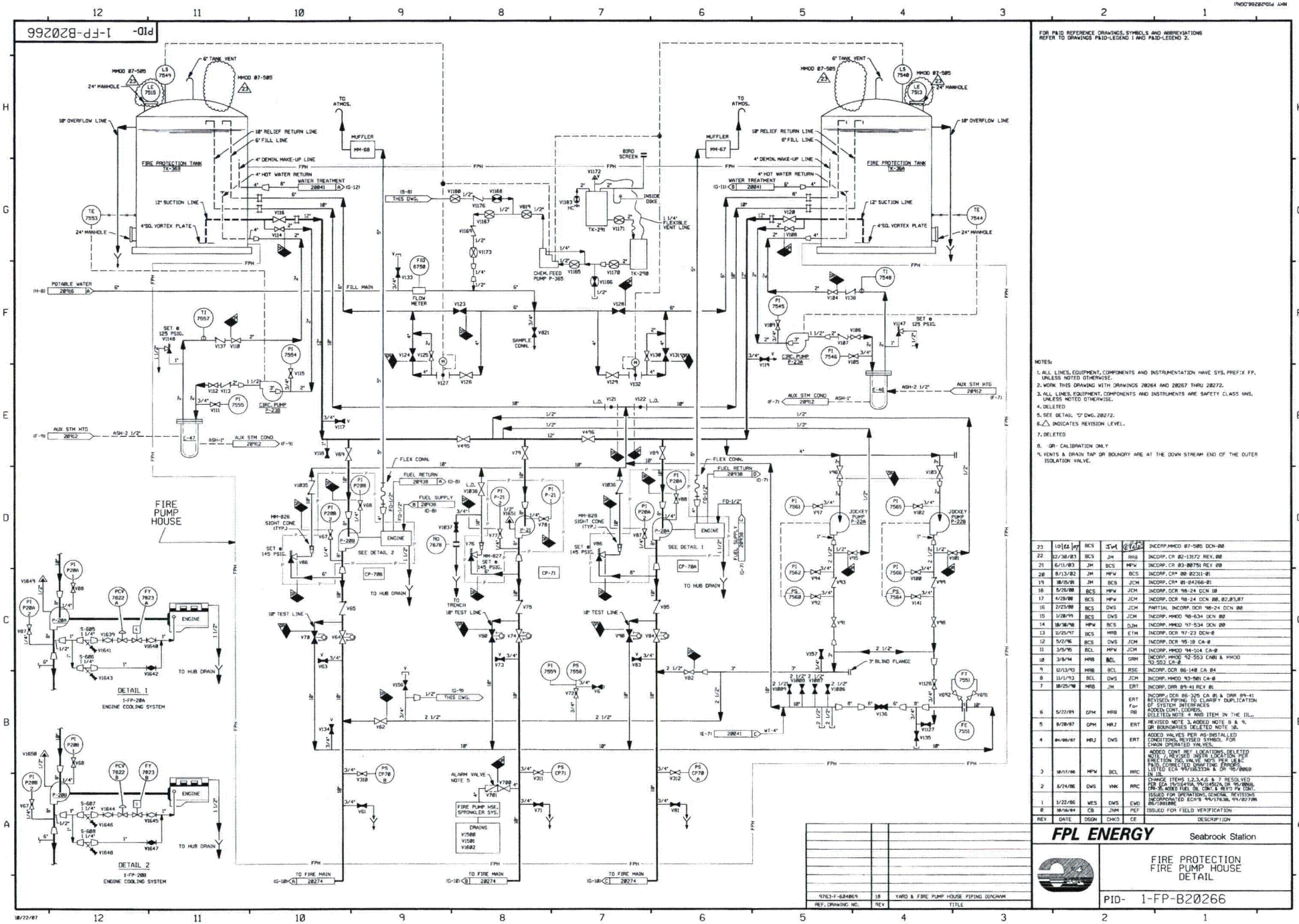
NEXTera ENERGY SEABROOK

SEABROOK STATION

FIRE PROTECTION YARD PIPING

PID- 1-FP-B20274

9/03/09



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 INSTRUMENTATION HAVE SYS. PREFIX FP, UNLESS NOTED OTHERWISE.
2. WORK THIS DRAWING WITH DRAWINGS 20264 AND 20267 THRU 20272.
3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
4. DELETED
5. SEE DETAIL "D" DWG. 20272.
6. △ INDICATES REVISION LEVEL.
7. DELETED
8. "CR" CALIBRATION ONLY
9. VENTS & DRAIN TAP OR BOUNDRY ARE AT THE DOWN STREAM END OF THE OUTER ISOLATION VALVE.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
23	10/22/07	BCS	JM	Reg	INCORP. MMOD 87-585 DCN-00
22	12/30/03	BCS	JM	Reg	INCORP. CR 02-13172 REV. 00
21	6/11/03	JM	BCS	MPW	INCORP. CR 03-00751 REV 00
20	8/13/02	JM	MPW	BCS	INCORP. CR# 00 02311-01
19	10/15/01	JM	BCS	JCM	INCORP. CR# 01-02266-01
18	5/26/00	BCS	MPW	JCM	INCORP. DCR 98-24 DCN 10
17	4/28/00	BCS	MPW	JCM	INCORP. DCR 98-24 DCN 00, 02, 03, 07
16	2/23/00	BCS	DWS	JCM	PARTIAL INCORP. DCR 98-24 DCN 00
15	1/20/99	BCS	DWS	JCM	INCORP. MMOD 98-634 DCN 00
14	10/30/98	MPW	BCS	DJM	INCORP. MMOD 97-534 DCN 00
13	11/25/97	BCS	MRB	ETM	INCORP. DCR 97-23 DCN-0
12	5/2/96	BCS	DWS	JCM	INCORP. DCR 95-18 CA-0
11	3/5/96	BCL	MPW	JCM	INCORP. MMOD 94-514 CA-0
10	3/8/94	MRB	BCL	GRM	INCORP. MMOD 92-553 CA01 & MMOD 93-553 CA-0
9	12/13/93	MRB	BCL	RSG	INCORP. DCR 86-148 CA 04
8	11/1/93	BCL	DWS	JCM	INCORP. MMOD 93-501 CA-0
7	10/25/90	MRB	JM	ERT	INCORP. DRR 89-41 REV 01.
6	5/22/89	GPM	MRB	ERT for PB	INCORP. DCR 86-325 CA 01 & DRR 89-41 REVISED PIPING TO CLARIFY DUPLICATION OF SYSTEM INTERFACES ADDED CONT. COORDS. DELETED NOTE 4 AND ITEM IN THE ITL.
5	8/20/87	GPM	MRJ	ERT	REVISED NOTE 3, ADDED NOTE 8 & 9. GR BOUNDARIES DELETED NOTE 10.
4	04/06/87	MRJ	DWS	ERT	ADDED VALVES PER AS-INSTALLED CONDITIONS, REVISED SYMBOL FOR CHAIN OPERATED VALVES.
3	10/17/86	MPW	BCL	MRC	ADDED CONT REF LOCATIONS, DELETED NOTE 7, REVISED INSTR LOCATION PER ERECTION ISO, VALVE NOS PER USE P&ID, CORRECTED DRAFTING ERRORS LISTED ECA 95/185338 & CR 95/20068 IN ITL
2	6/24/86	DWS	VNK	MRC	CHANGE ITEMS 1,2,3,4,6 & 7 RESOLVED PER ECA 19/116490A, 99/114512A, OR 95/20068, CR-95, ADDED FUEL OIL CONT. & REV'D PV CONT.
1	1/22/86	WES	DWS	EWD	ISSUED FOR OPERATIONS, GENERAL REVISIONS INCORPORATED ECN'S 99/17638, 99/20278A 86/18818A
0	10/10/84	CB	JNM	PEF	ISSUED FOR FIELD VERIFICATION

REF. DRAWING NO.	REV.	TITLE
9763-F-62406	18	YARD & FIRE PUMP HOUSE PIPING DIAGRAM

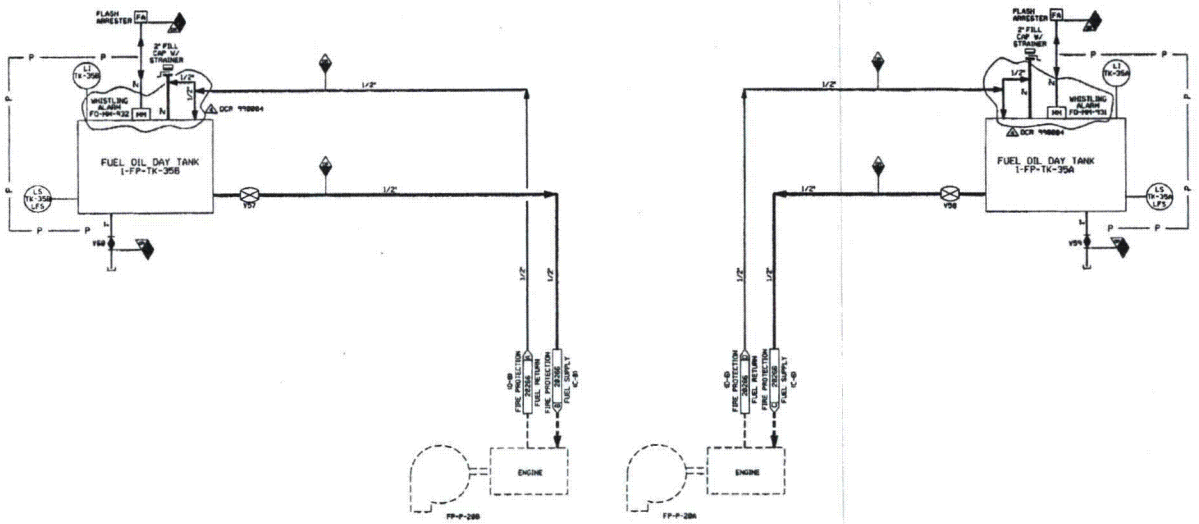
FPL ENERGY Seabrook Station

FIRE PROTECTION
FIRE PUMP HOUSE
DETAIL

PID- 1-FP-B20266

10/22/07

P10- 1-FO-B20938



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

NOTES:

1. THE PD IS A ONE DWG. SYSTEM AND AN OVERVIEW IS NOT REQUIRED.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SXTEM PREFIX FO UNLESS NOTED.
3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS 1NS UNLESS NOTED.

REV	DATE	DSGN	DRWN	CHKD	COG	SES	DESCRIPTION
4	11/16/07	DNS			DMR	MFV	INCORP OF DCR 98884 DCP98B
3	1/15/97	BCS				RFV	INCORP. MINOR TX-310 CA-8
2	9/22/87	GPH	JH	NRJ	BCL	ERT	REVISED: NOTE 3, BOUNDARY PIPING ADDED IN SEABROOK UNIT CONFIG. P&ID REF DWG NOTE, DUG CONT CHANGE
1	6/18/86	WES	WES	YHH	JMcS	RMC	UPDATED PER UEAC P&ID
0	9/9/85	WES	WES	JDH	DFH	AFD	ISSUED FOR OPERATIONS

REF. DRAWING NO.	REV	TITLE
9763-F-58084	16	YARD & FIRE PUMP-HOUSE FIRE PROTECTION

North Atlantic Energy Service Corporation

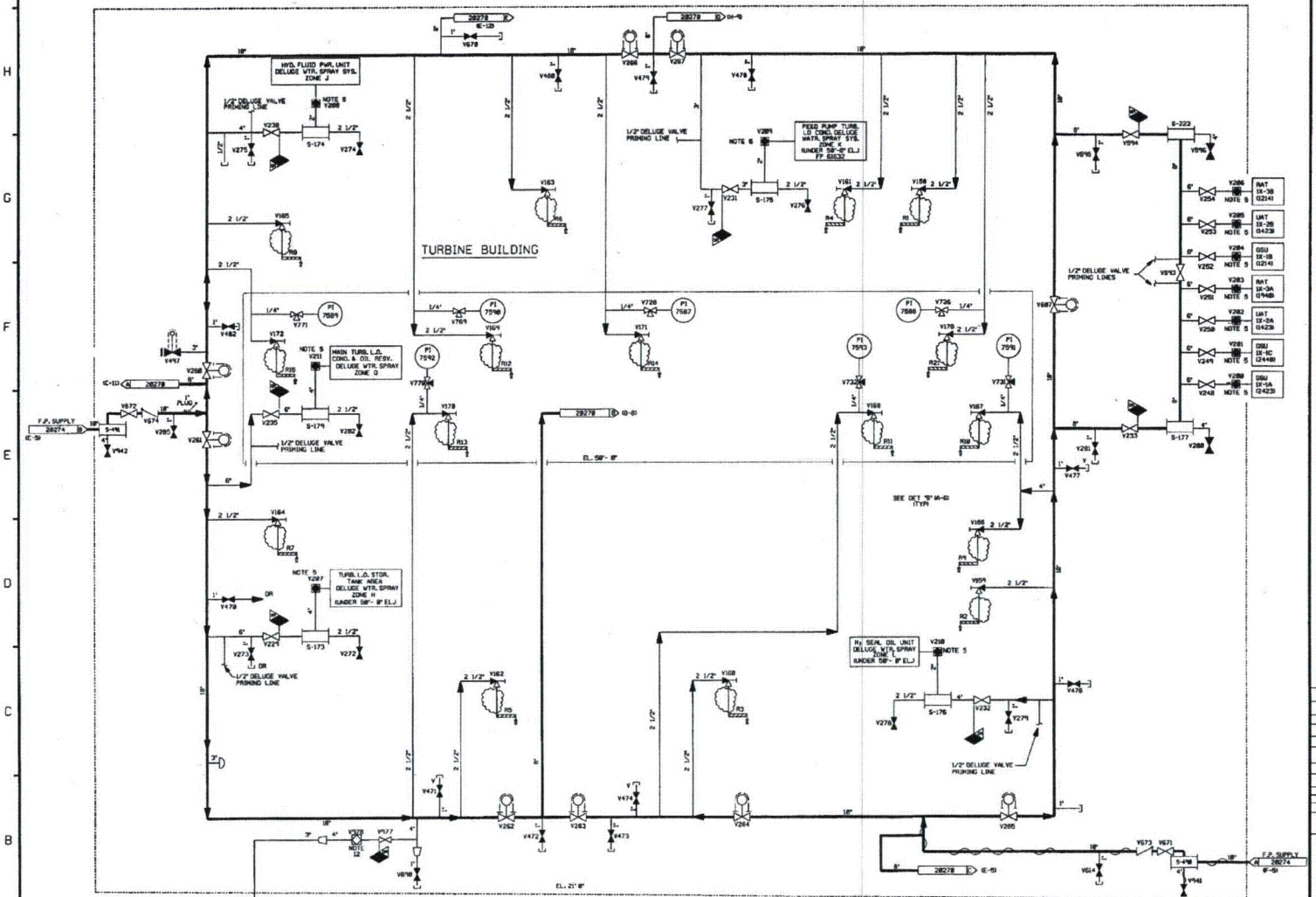
SEABROOK STATION

FUEL OIL SYSTEM

PID- 1-FO-B20938

04/07/08

P10- 1-FP-B20269



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 INSTRUMENTATION ARE PREFIXED "FP", UNLESS NOTED OTHERWISE.
2. WORK THIS DRAWING WITH DRAWINGS 28284, 28268, 28267, 28268, 28270, 28271 THRU 28274.
3. DELETED
4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
5. SEE DETAILS ON P10 FP-28272.
6. △ INDICATES REVISION LEVEL.
7. DELETED
8. DELETED
10. ◇ INDICATES DWG. CHANGE ITEM NUMBER.
11. VENT, DRAIN & INSTRUMENT TAPS OR BOUNDARY ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE.
12. SEE DETAIL "F" ON DWG 28272.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
15	07/16/08	BCS	JM	DMQ	INCORP. DCR 99-13 DCN-00
14	9/29/05	BCS	JM	RRB	INCORP. CR 05-09878 REV. 0
13	12/28/04	BCS	JM	RRB	INCORPORATED MM00 04-528 DCN-00
12	10/21/02	BCS	MPW	MKC	INCORPORATED DCR 00-014 DCN-00
11	5/21/02	MPW	BCS	DJH	INCORPORATED DCR '97-012 DCN 27
10	6/27/99	MPW	BCS	RWS	ADDED LINE SIZE PER FP 61632, REVISED NOTE 5 FOR GENERAL REFERENCE.
9	12/16/94	BCL	MPW	RSG	INCORPORATED MM00 94-540 CAR
8	3/24/94	MRB	BCL	WFZ	INCORPORATED MM00 92-553 CAR5 & DCR 93006 CAR8
7	3/3/93	MRB	BCL	JCH	INCORPORATED MM00 92-553 CAR
6	4/28/92	MRB	DWS	RRB	INCORPORATED MM00 91-515 CAR
5	9/28/87	MPW	DWS	RRC	INCORPORATED DCR 87-157
4	8/19/87	GPM	MPW	EAT	REVISED NOTE 4, REINCORPORATED ECA 74/113324E. ADDED DR BOUNDARIES DET. B, NOTES 5,10, CHANGE ITEMS 1&2.
3	12/30/86	MPW	WRD	DCM	REVISED CONT. REFS., LUBE OIL STORAGE ROOM SPRINKLER HEADER LOCATION PER FIELD WALKDOWN, REVISED CHAIN OPERATOR SYMBOL PER P&ID LEGEND ADDED NOTE 5, ADDED REF. DWG. LOCATIONS, DELETED NOTE 7, ADDED N.C. TO V497, PLUGS VENT AND DRAIN PIPING, CAPS, PLUGGED CONNECTIONS AND REVISED TIE-IN LOC. AND VALVE NO. PER ERECTION ISO.
2	6/23/86	WES	VNK	RRC	INCORP. NCR 82/*902C, ECA 74/113324E & CHG. ITEM 1 RESOLVED BY CPM-34 & UPDATE PER LATEST P&ID.
1	1/22/86	WES	DWS	EWD	ISSUED FOR OPERATIONS GENERAL REVISIONS
0	10/15/84	CB	JNM	PEF	ISSUED FOR FIELD VERIFICATION

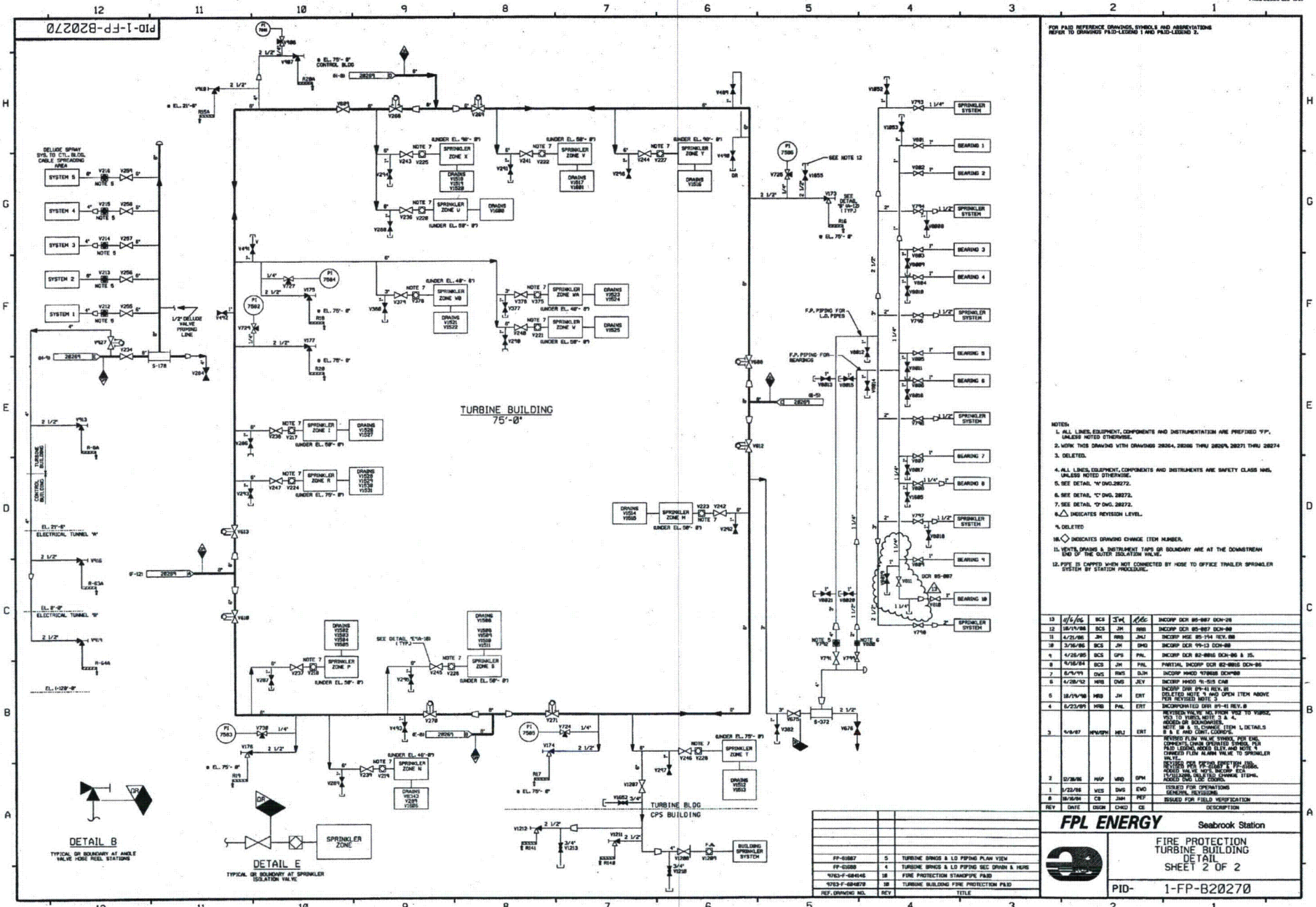
9763-F-504878	18	TURBINE BLDG FIRE PROTECTION P&ID
REF. DRAWING NO.	REV	TITLE

FPL ENERGY Seabrook Station

FIRE PROTECTION
TURBINE BUILDING
DETAIL
SHEET 1 OF 2

PID- 1-FP-B20269

03/15/06



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 INSTRUMENTATION ARE PREFIXED "F", UNLESS NOTED OTHERWISE.
2. WORK THIS DRAWING WITH DRAWINGS 28264, 28266 THRU 28269, 28271 THRU 28274
3. DELETED.
4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
5. SEE DETAIL "A" DWG. 28272.
6. SEE DETAIL "C" DWG. 28272.
7. SEE DETAIL "D" DWG. 28272.
8. △ INDICATES REVISION LEVEL.
9. DELETED
10. ◇ INDICATES DRAWING CHANGE ITEM NUMBER.
11. VENTS, DRAINS & INSTRUMENT TAPS OR BOUNDARY ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE.
12. PIPE IS CAPPED WHEN NOT CONNECTED BY HOSE TO OFFICE TRAILER SPRINKLER SYSTEM BY STATION PROCEDURE.

REV	DATE	DSGN	CHKD	QE	DESCRIPTION
13	6/6/06	BCS	JH	RRC	INCORP DCR 85-867 DCN-26
12	10/19/88	BCS	JM	RRB	INCORP DCR 85-867 DCN-88
11	4/21/88	JH	RRB	JHJ	INCORP MSE 85-194 REV. 88
10	3/16/88	BCS	JH	GMD	INCORP DCR 99-13 DCN-89
9	4/26/85	BCS	GPS	PAL	INCORP DCR 82-8816 DCN-86 & 15.
8	6/15/84	BCS	JH	PAL	PARTIAL INCORP DCR 82-8815 DCN-86
7	8/5/93	DWS	RWS	DJH	INCORP MMOD 970868 DCM-89
6	4/28/92	MRB	DWS	JEV	INCORP MMOD 91-515 CN#
5	10/19/90	MRB	JH	ERT	INCORP DRR 89-41 REV. 88 DELETED NOTE 4 AND OPEN ITEM ABOVE PER REVISED NOTE 3
4	6/23/89	MRB	PAL	ERT	INCORPORATED DRR 89-41 REV. 8
3	4/8/87	MPH/SPH	MRJ	ERT	REVISION VALVE NO. FROM V262 TO V1852, V263 TO V1853, NOTE 3 & 4, ADDED QR BOUNDARIES, NOTE 10 & 11, CHANGE ITEM 1, DETAILS B & E AND CONT. CORRES.
2	12/28/86	MAP	MRB	SPH	REVISED FLOW VALVE SYMBOL PER ENG. COMMENTS, CHAIN OPERATED SYMBOL PER P&ID LEGEND, ADDED ELEV. AND NOTE 4, CHANGED FLOW ALARM VALVE TO SPRINKLER VALVE. REVISED DES. PRESS./TEMP. (100, 150) TO (150, 200) PER DCR 85-1000, ADDED VALVE NOS. INCORP. ECN 15/21/BWNS, DELETED CHANGE ITEMS. ADDED DWG LIST ITEMS.
1	5/22/86	MES	DWS	EVO	ISSUED FOR OPERATIONS
0	10/15/84	CS	JHH	PEF	ISSUED FOR FIELD VERIFICATION

REF. DRAWING NO.	REV	TITLE
FP-01887	5	TURBINE BRNGS & LO PIPING PLAN VIEW
FP-01888	4	TURBINE BRNGS & LO PIPING SEC DRAIN & HDRS
9763-F-084145	18	FIRE PROTECTION STANDPIPE P&ID
9763-F-084870	18	TURBINE BUILDING FIRE PROTECTION P&ID

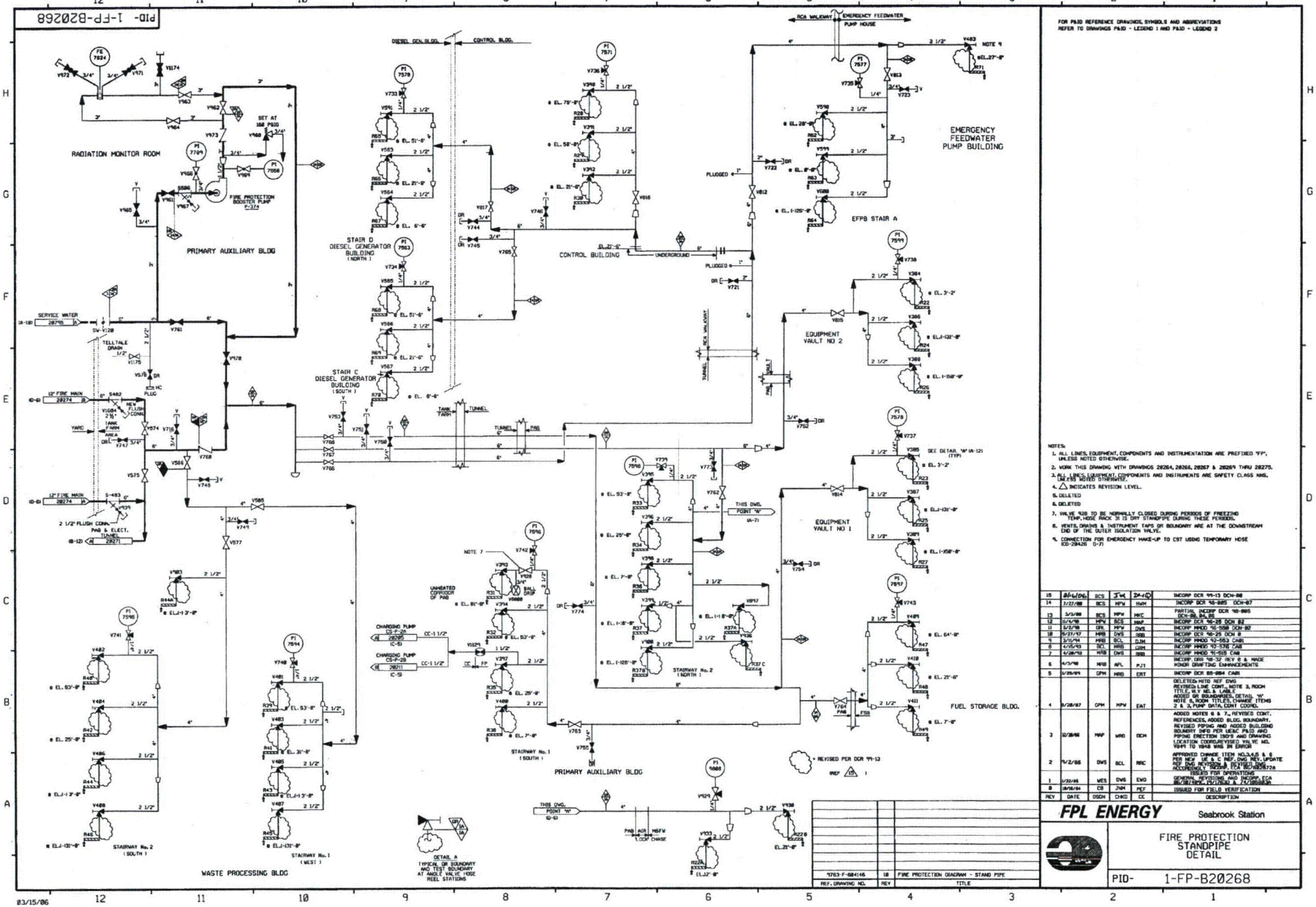
FPL ENERGY Seabrook Station

FIRE PROTECTION
TURBINE BUILDING
DETAIL
SHEET 2 OF 2

PID- 1-FP-B20270

11/06/06

PID-1-FP-B20270



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 INSTRUMENTATION ARE PREFIXED "FP", UNLESS NOTED OTHERWISE.
2. WORK THIS DRAWING WITH DRAWINGS 28264, 28266, 28267 & 28269 THRU 28275.
3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
4. △ INDICATES REVISION LEVEL.
5. DELETED
6. DELETED
7. VALVE 928 TO BE NORMALLY CLOSED DURING PERIODS OF FREEZING TEMP. HOSE RACK 31 IS DRY STANDPIPE DURING THESE PERIODS.
8. VENTS, DRAINS & INSTRUMENT TAPS OR BOUNDARY ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE.
9. CONNECTION FOR EMERGENCY MAKE-UP TO CST USING TEMPORARY HOSE (00-28426 0-7)

REV	DATE	DSGN	CHKD	DC	DESCRIPTION
15	04/06	BCS	JW	DA-C	INCORP DCR 99-13 DCN-00
14	1/27/00	BCS	MPM	HWM	INCORP DCR 98-885 DCN-07
13	3/3/00	BCS	MPM	MKC	PARTIAL INCORP DCR 98-885 DCN-06, 84, 85
12	11/4/98	MPM	BCS	MAP	INCORP DCR 98-28 DCN 83
11	5/2/98	SRL	MPM	DWS	INCORP MMOD 96-598 DCN 82
10	9/27/97	MRB	DWS	SBB	INCORP DCR 96-25 DCN 8
9	3/11/94	MRB	BCL	DJM	INCORP MMOD 92-553 CAR1
8	4/15/93	BCL	MRB	GRM	INCORP MMOD 92-378 CAR
7	4/28/92	MRB	DWS	SBB	INCORP MMOD 91-515 CAR
6	4/3/90	MRB	APL	PJT	INCORP DRR 98-32 REV 0 & MINOR DRAFTING ENHANCEMENTS
5	1/25/89	GPM	MRB	ERT	INCORP DCR 88-884 CAR1
4	9/28/87	GPM	MPM	EAT	DELETED NOTD REF DWG REVISED LINE CONT., NOTE 3, ROOM TITLE, VLV NO.'S, LABLE ADDED OR BOUNDARIES, DETAIL "W" NOTE 8, ROOM TITLES, CHANGE ITEMS 2 & 3, PUMP DATA, CONT COORD.
3	12/28/86	MAP	WRD	DCM	ADDED NOTES 6 & 7., REVISED CONT. REFERENCES, ADDED BLDG. BOUNDARY, REVISED PIPING AND ADDED BUILDING BOUNDARY INFO PER UE&C P&ID AND PIPING DIRECTION INDEX AND DRAWING LOCATION COORD, REVISED VALVE NO. V849 TO V848 WAS IN ERROR
2	9/2/86	DWS	BCL	RRC	APPROVED CHANGE ITEM NO.3,4,5 & 6 PER NEW UE & C REF. DWG REV. UPDATE REF. DWG REVISIONS & REVISED DWG ACCURDINGLY 1925-8, RCA 1857-B20272A
1	1/22/86	WES	DWS	EWO	ISSUED FOR OPERATIONS GENERAL REVISIONS AND INCORP. ECA 86/87/88/A-24/25/26/ & A-74/1858/5.20
B	10/16/84	CS	JNM	PEF	ISSUED FOR FIELD VERIFICATION

REV	TITLE
15	FIRE PROTECTION DIAGRAM - STAND PIPE

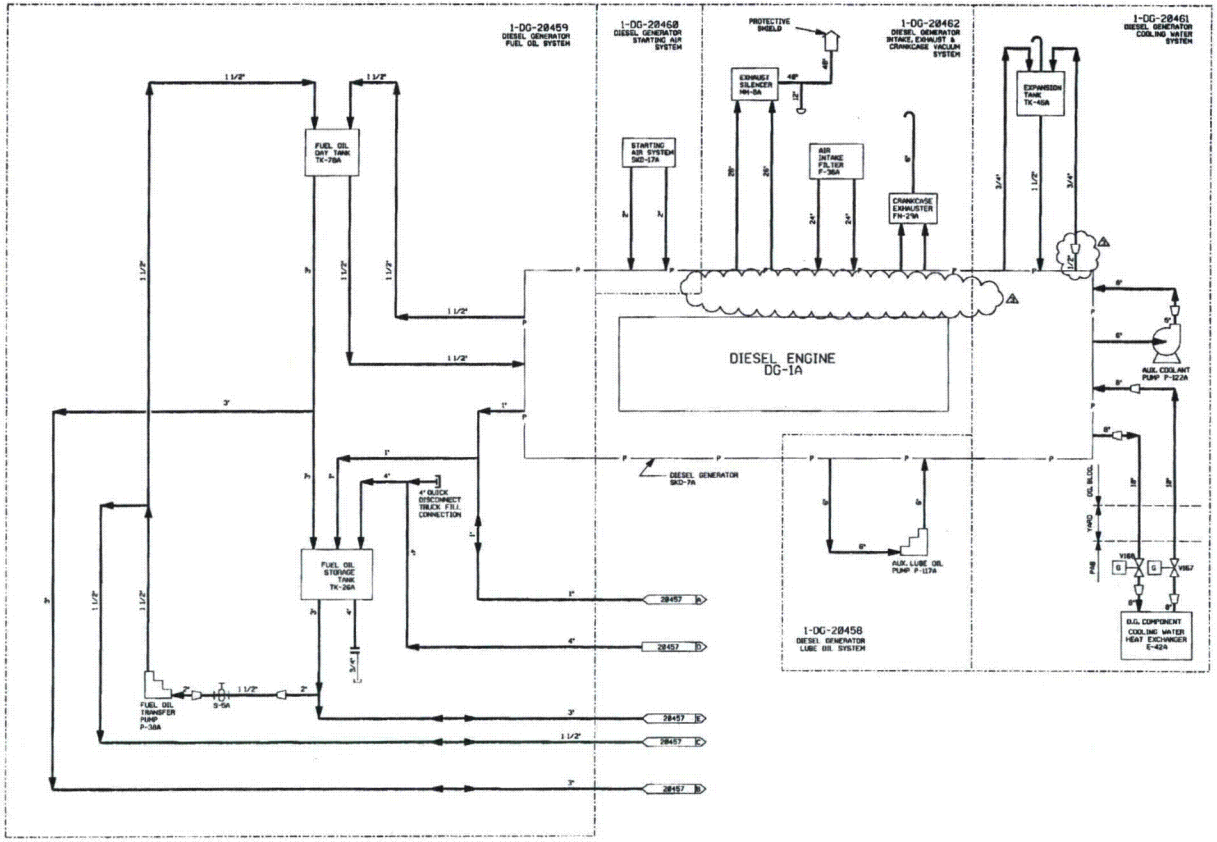
REF. DRAWING NO. 1763-F-884148

FPL ENERGY Seabrook Station

FIRE PROTECTION STANDPIPE DETAIL

PID- 1-FP-B20268

PID- 1-DG-B20456



NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28457, 28458, 28459, 28460, 28461 & 28462.
2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTATION HAVE SYSTEM PREFIX DG, UNLESS NOTED OTHERWISE.
3. △ -INDICATES REVISION LEVEL.

REF. DRAWING NO.	REV	TITLE
9763-F-282183	14	D.G. COOLING WATER -P&ID
9763-F-282181	13	D.G. AIR SYSTEM P&ID
9763-F-282182	18	D.G. FUEL & LUBE OIL P&ID

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
3	10/29/03	RCS	JJK	FPLE	ADMINISTRATIVE UPDATE
2	5/27/97	WDS	VRD	VWS	INCORP. ECA 96112805A, REVISED REF DWG REVISIONS, DELETED "F" FROM DWG NO'S IN NOTE 2, REVISED PER LATEST SYS. DWGS.
1	2/21/96	WAL	JDH	MTD	ISSUED FOR OPERATIONS
0	06/29/94	MNS	TSK	MTD	INCORP. ECA 93112805A
					ISSUED FOR FIELD VERIFICATION

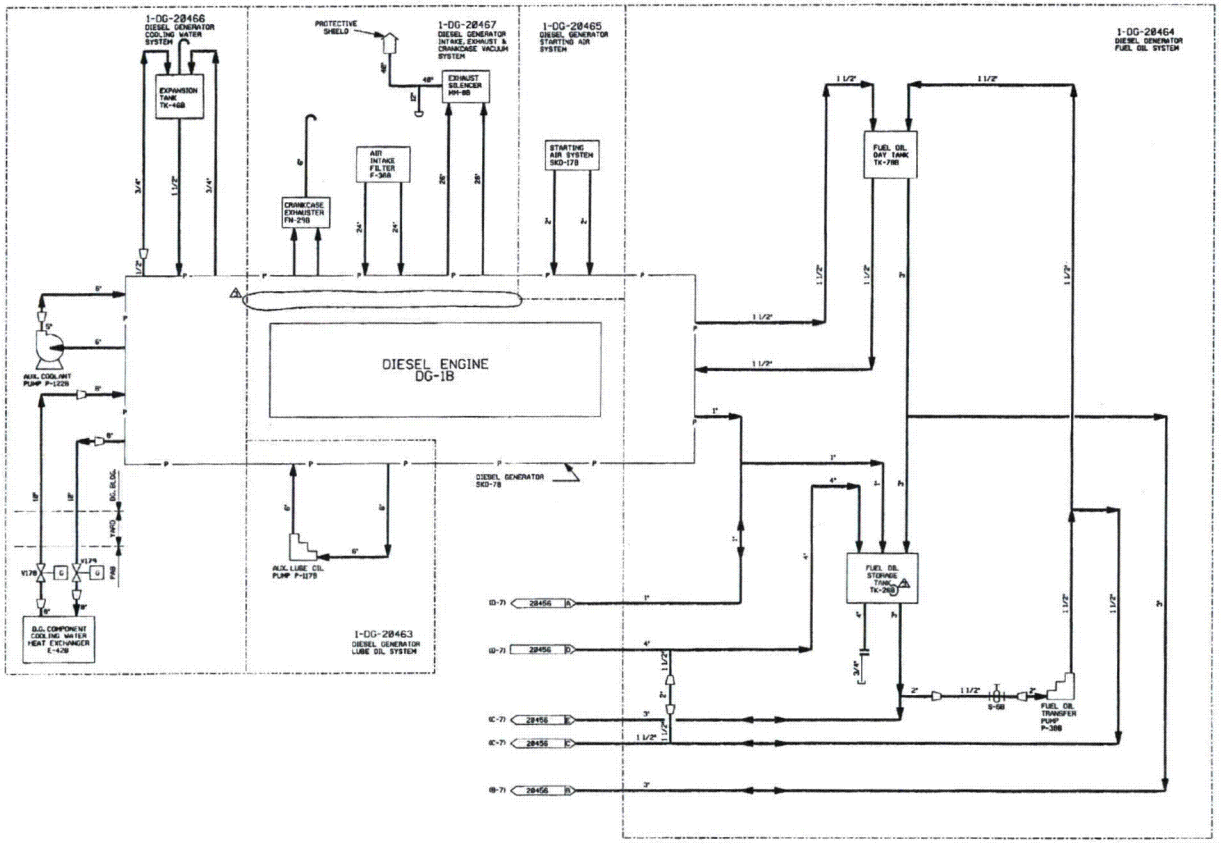
FPL ENERGY Seabrook Station

DIESEL GENERATOR TRAIN "A" OVERVIEW

PID- 1-DG-B20456

10/27/03

PID- 1-DG-B20457



NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28456, 28463, 28464, 28465, 28466 & 28467.
2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTATION HAVE SYSTEM PREFIX DG, UNLESS NOTED OTHERWISE.
3. △ INDICATES REVISION LEVEL.

REV	DATE	DSGN	CHKD	QE	DESCRIPTION
3		JM	BGE	JCB	ADMINISTRATIVE UPDATE
2	1/27/97	WDS	WAD	YWS	DELETED ECA'S UNDER INCOMPLETE ITEMS, REVISED PER LATEST SYSTEM DRAWINGS.
1	2/27/96	WAL	JDM	WFD	ISSUED FOR OPERATIONS
0	06/25/94	MHD	RSL	WFD	ISSUED FOR FIELD VERIFICATION

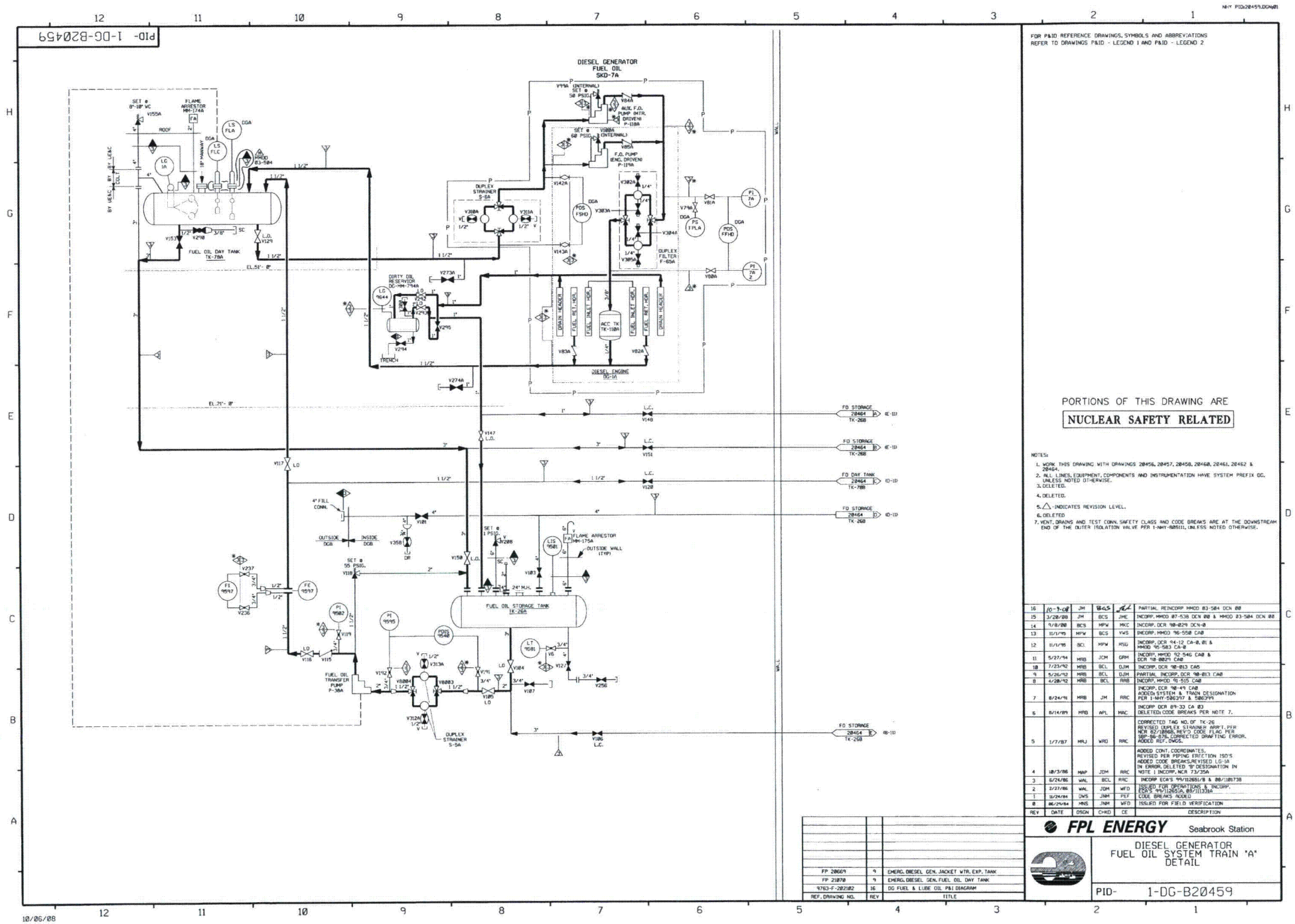
REF. DRAWING NO.	REV	TITLE
9763-F-282183	15	D.G. COOLING WATER - P&ID
9763-F-28218A	13	D.G. AIR SYSTEM P&ID
9763-F-282182	16	D.G. FUEL & LUBE OIL P&ID

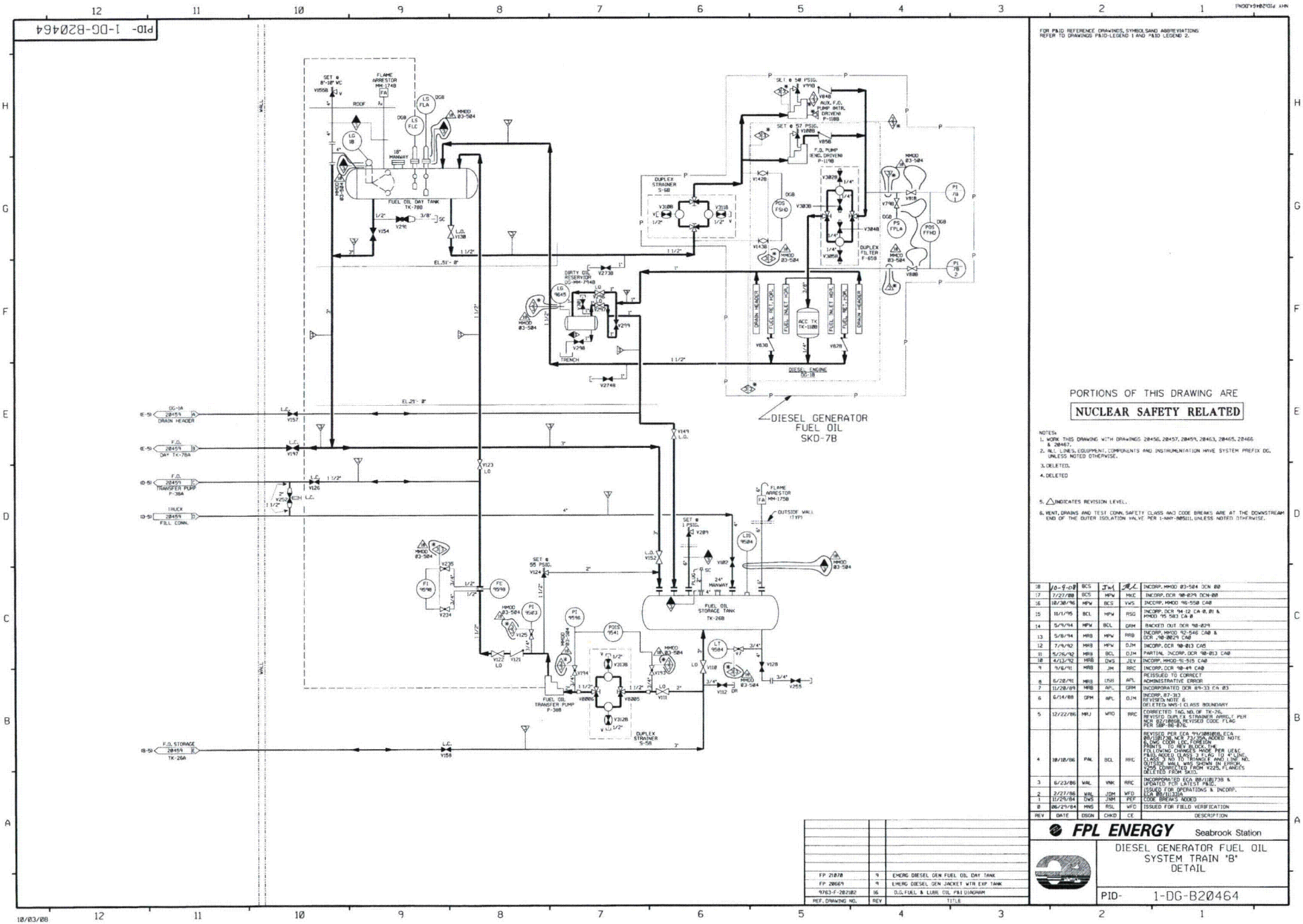
FPL ENERGY Seabrook Station

DIESEL GENERATOR TRAIN "B" OVERVIEW

PID- 1-DG-B20457

10/27/03


DIESEL GENERATOR
FUEL OIL
SKD-7A
FUEL OIL DAY TANK
TK-78A
FUEL OIL STORAGE TANK
TK-26A
FUEL OIL
TRANSFER
PUMP
P-30A
DUPLEX
STRAINER
S-5A
DUPLEX
STRAINER
S-8A
DUPLEX
FILTER
F-85A
DIESEL ENGINE
DG-1A
ACC TK
TK-118A
DIRTY OIL
RESERVOIR
DC-MH-744A
FLAME
ARRESTOR
MH-174A
FLAME ARRESTOR
MH-175A
FO STORAGE
20464
TK-26B
FO DAY TANK
20464
TK-78B
EL.51'- 8"
EL.21'- 8"
ROOF
TRENCH
OUTSIDE WALL (TYP)
WALL
PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED
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 20456, 20457, 20458, 20460, 20461, 20462 & 20464.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX DG, UNLESS NOTED OTHERWISE.
3. DELETED.
4. DELETED.
5. △-INDICATES REVISION LEVEL.
6. DELETED
7. VENT, DRAINS AND TEST CONN. SAFETY CLASS AND CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-605111, UNLESS NOTED OTHERWISE.
FP 20669 9 EMERG. DIESEL GEN. JACKET WTR. EXP. TANK
FP 21070 9 EMERG. DIESEL GEN. FUEL OIL DAY TANK
9763-F-202102 16 DG FUEL & LUBE OIL P&I DIAGRAM
REF. DRAWING NO. REV. TITLE
16 10-3-08 JM BCS JME PARTIAL REINCORP MMOD 83-584 OCN 00
15 3/28/08 JM BCS JME INCORP. MMOD 87-538 OCN 00 & MMOD 83-584 OCN 00
14 9/8/00 BCS MPW MKC INCORP. OCR 98-029 OCN-0
13 11/1/95 MPW BCS YWS INCORP. MMOD 96-550 CA0
12 11/1/95 BCL MPW MSD INCORP. OCR 94-12 CA-0,01 & MMOD 95-583 CA-0
11 5/27/94 MRB JCM GRM INCORP. MMOD 92-546 CA0 & OCR 98-0025 CA0
10 7/23/92 MRB BCL DJM INCORP. OCR 98-013 CA0
9 5/26/92 MRB BCL DJM PARTIAL INCORP. OCR 98-013 CA0
8 4/28/92 MRB BCL RNB INCORP. MMOD 91-515 CA0
7 8/24/91 MRB JM RRC INCORP. OCR 98-49 CA0 ADDED SYSTEM & TRAIN DESIGNATION PER 1-NHY-586297 & 586299
6 8/14/89 MRB APL MAC INCORP OCR 89-33 CA 03 DELETED; CODE BREAKS PER NOTE 7.
5 1/7/87 MRJ WRD RRC CORRECTED TAG NO. OF TK-26 REVISED DUPLEX STRAINER ARRT. PER NCR 87/1088B, REV'D CODE FLAC PER SBP-86-876, CORRECTED DRAFTING ERROR. ADDED REF. DWGS.
4 10/3/86 MAP JDM RRC ADDED CONT. COORDINATES, REVISED PER PIPING FRICTION ISO'S ADDED CODE BREAKS, REVISED LG-1A IN ERROR, DELETED "B" DESIGNATION IN NOTE 1 INCORP. NCR 73/35A
3 6/24/86 WAL BCL RRC INCORP ECA'S 99/112651/B & 00/1101738
2 2/27/86 WAL JDM WFD ISSUED FOR OPERATIONS & INCORP. ECA'S 99/112651A, 85/111338
1 11/24/84 DWS JNM PEF CODE BREAKS ADDED
0 06/29/84 MNS JNM WFD ISSUED FOR FIELD VERIFICATION
REV DATE DSGN CHKD CE DESCRIPTION
FPL ENERGY Seabrook Station
DIESEL GENERATOR
FUEL OIL SYSTEM TRAIN "A"
DETAIL
PID- 1-DG-B20459
PID- 1-DG-B20459
10/06/08



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 28456, 28457, 28459, 28463, 28465, 28466 & 28467.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX DG, UNLESS NOTED OTHERWISE.
3. DELETED.
4. DELETED
5. △ INDICATES REVISION LEVEL.
6. VENT, DRAINS AND TEST CONN. SAFETY CLASS AND CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NAH-80511, UNLESS NOTED OTHERWISE.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
18	10-9-08	BCS	JWJ	MLC	INCORP. MMOD #3-584 DCN #8
17	7/27/88	BCS	MPW	MKC	INCORP. DCR 98-029 DCN-#8
16	10/30/96	MPW	BCS	VWS	INCORP. MMOD 96-558 CA8
15	11/1/95	BCL	MPW	RSG	INCORP. DCR 94-12 CA #, #1 & MMOD 95-583 CA #.
14	5/9/94	MPW	BCL	GRM	BACKED OUT DCR 98-029
13	5/8/94	MRB	MPW	RRB	INCORP. MMOD 92-546 CA8 & DCR 98-029 CA8
12	7/9/92	MRB	MPW	DJM	INCORP. DCR 90-013 CA5
11	5/26/92	MRB	BCL	DJM	PARTIAL INCORP. DCR 90-013 CA8
10	4/13/92	MRB	DWS	JEV	INCORP. MMOD-91-515 CA8
9	9/6/91	MRB	JM	RRC	INCORP. DCR 90-49 CA8
8	6/28/91	MRB	LNR	APL	REISSUED TO CORRECT ADMINISTRATIVE ERROR
7	11/28/89	MRB	APL	GRM	INCORPORATED DCR 89-33 CA #3
6	6/14/88	GPM	APL	DJM	INCORP. 87-313 REVISED NOTE 6 DELETED NNS-1 CLASS BOUNDARY
5	12/22/86	MRJ	WTO	RRC	CORRECTED TAG NO. OF TK-26, REVISED DUPLEX STRAINER ARRGT. PER NCR 87-1080B, REVISED CODE FLAG PER SBP-86-076.
4	10/10/86	PAL	BCL	RRC	REVISED PER ECA 99-1081810, ECA 88-1081738, NCR 73-35A, ADDED NOTE 6, DWG. DCGN LOC. FOREIGN PRINTS - TO REV BLOCK. THE FOLLOWING CHANGES MADE PER UE&C P&ID, ADDED CLASS 3 FLAG TO 4" LINE, CLASS 2 NO TO TRIANGLE AND LINE NO. OUTSIDE WALL (TYP.) WAS SHOWN IN ERROR. VENT CONNECTED TO FROM V225, FLANGES DELETED FROM SKID.
3	6/23/86	WAL	WNK	RRC	INCORPORATED ECA 88-1081738 & UPDATED PER LATEST P&ID.
2	2/27/86	WAL	JDM	WFD	ISSUED FOR OPERATIONS & INCORP. ECA 88-1131314
1	11/25/84	DWS	JNM	PEF	CODE BREAKS ADDED
0	06/29/84	MNS	RSL	WFD	ISSUED FOR FIELD VERIFICATION

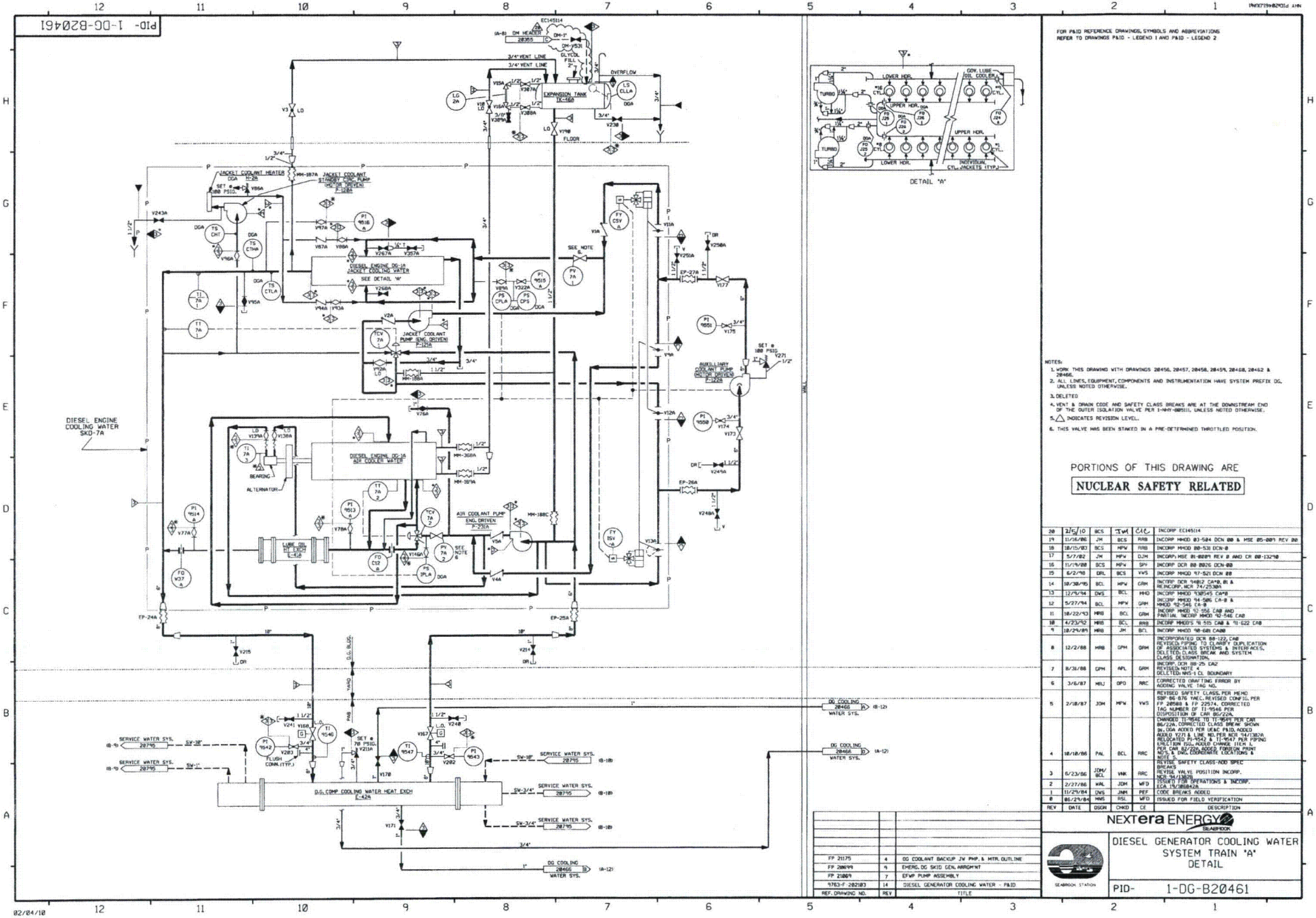
REF. DRAWING NO.	REV	TITLE
FP 21078	9	EMERG DIESEL GEN FUEL OIL DAY TANK
FP 28069	9	EMERG DIESEL GEN JACKET WTR EXP TANK
9763-F-282182	16	D.G. FUEL & LUBE OIL P&I DIAGRAM

FPL ENERGY Seabrook Station

DIESEL GENERATOR FUEL OIL SYSTEM TRAIN "B" DETAIL

PID- 1-DG-B20464

10/03/08



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 28456, 28457, 28458, 28459, 28460, 28462 & 28466.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX DG, UNLESS NOTED OTHERWISE.
3. DELETED
4. VENT & DRAIN CODE AND SAFETY CLASS BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-6MP111, UNLESS NOTED OTHERWISE.
5. △ INDICATES REVISION LEVEL.
6. THIS VALVE HAS BEEN STAKED IN A PRE-DETERMINED THROTTLED POSITION.

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
20	12/5/10	BCS	JWL	CAL	INCORP EC145114
19	11/16/98	JM	BCS	RAB	INCORP MMOD 83-584 DCN 00 & MSE 05-0089 REV 00
18	10/15/03	BCS	MPW	RAB	INCORP MMOD 00-531 DCN-0
17	5/7/02	JM	MPW	DJM	INCORP: MSE 01-0081 REV 0 AND CR 00-13298
16	11/19/00	BCS	MPW	SPY	INCORP DCR 00 0026 DCN-00
15	6/2/98	DRL	BCS	VWS	INCORP MMOD 97-521 DCN 00
14	10/30/95	BCL	MPW	GRM	INCORP DCR 94012 CA*0, 01 & REINCORP. MCR 74/2538A
13	12/9/94	DWS	BCL	MHD	INCORP MMOD 930545 CA*0
12	5/27/94	BCL	MPW	GRM	INCORP MMOD 94-586 CA-0 & MMOD 92-546 CA-0
11	10/22/93	MRB	BCL	GRM	INCORP MMOD 92-556 CA0 AND PAINTING INCORP MMOD 92-546 CA0
10	4/23/92	MRB	BCL	RAB	INCORP MMOD'S 91 515 CA0 & 91-522 CA0
9	10/29/89	MRB	JM	BCL	INCORP MMOD 90-681 CA00
8	12/2/88	MRB	GPH	GRM	INCORPORATED DCR 88-122, CA0 REVISED PIPING TO CLARIFY DUPLICATION OF ASSOCIATED SYSTEMS & INTERFACES, DELETED CLASS BREAK AND SYSTEM CLASS DESIGNATION.
7	8/31/88	GPH	APL	GRM	INCORP DCR 88-25 CA2 REVISED NOTE 6 DELETED: NNS-1 CL BOUNDARY
6	3/6/87	MRJ	DPO	RRC	CORRECTED DRAFTING ERROR BY ADDING VALVE TAG NO.
5	2/18/87	JDM	MPW	VWS	REVISED SAFETY CLASS, PER MEMO SBP-86-876 YNEC, REVISED CONFIG. PER FP 20580 & FP 22574, CORRECTED TAG NUMBER OF TI-9546 PER DISPOSITION OF CAR 86/22A.
4	10/10/86	PAL	BCL	RRC	CHANGED TI-9546 TO TI-9547 PER CAR 86/22A, CORRECTED CLASS BREAK SHOWN IN DGA ADDED PER USAC P&ID, ADDED ANNULUS V27A & LINE NO. PER MCR 84/1382A, REVISED P-128A, P-121A & P-122A PER PIPING ERRATUM 1504, ADDED CHANGE FIELD PER CAR 86/22A, ADDED FOREIGN PRINT NOTE 5, INCORPORATE LOCATORS & NOTE 5
3	6/23/86	JDM/ BCL	VNK	RRC	REVISE SAFETY CLASS-ADD SPEC BREAKS REVISE VALVE POSITION INCORP. NCR 84/1382B
2	2/27/86	WAL	JDM	WFD	ISSUED FOR OPERATIONS & INCORP. ECA 1%/3B4824A
1	11/29/84	DWS	JNM	PEF	CODE BREAKS ADDED
0	86/29/84	MWS	RSL	WFD	ISSUED FOR FIELD VERIFICATION

REF. DRAWING NO.	REV	TITLE
FP 21175	4	DG COOLANT BACKUP JW PMP. & MTR. OUTLINE
FP 20699	9	EMERG. DG SKID GEN. ARRGMNT
FP 21869	7	EFWP PUMP ASSEMBLY
9763-F-282183	14	DIESEL GENERATOR COOLING WATER - P&ID

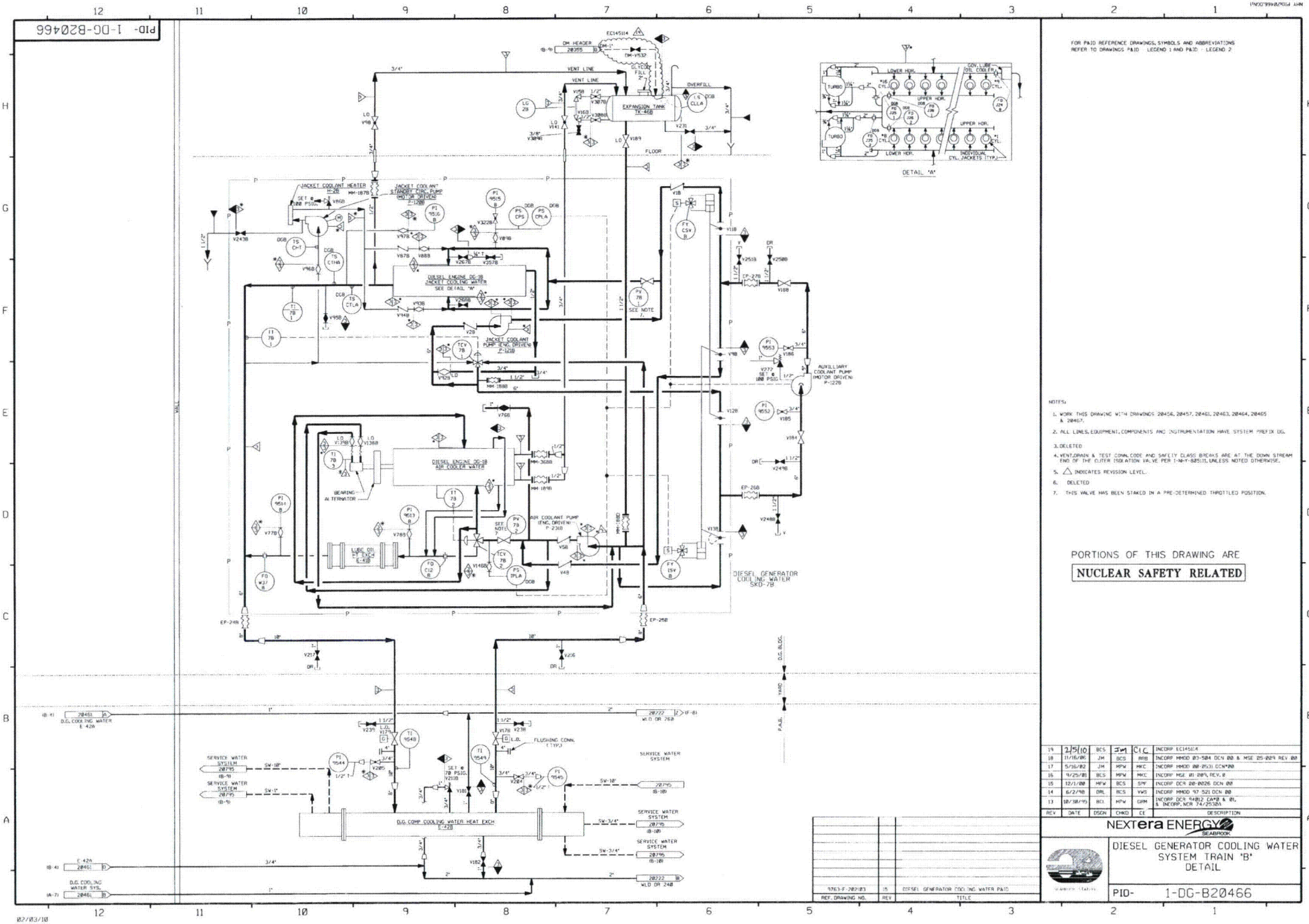
NEXTera ENERGY SEABROOK

SEABROOK STATION

DIESEL GENERATOR COOLING WATER SYSTEM TRAIN "A" DETAIL

PID- 1-DG-B20461

02/04/10



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 28456, 28457, 28461, 28463, 28464, 28465 & 28467.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX DG.
3. DELETED
4. VENT, DRAIN & TEST CONN, CODE AND SAFETY CLASS BREAKS ARE AT THE DOWN STREAM END OF THE OUTER ISOLATION VALVE PER 1-NH-Y-805111, UNLESS NOTED OTHERWISE.
5. △ INDICATES REVISION LEVEL.
6. DELETED
7. THIS VALVE HAS BEEN STAKED IN A PRE-DETERMINED THROTTLED POSITION.

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV.	DATE	DSGN	CHKD	CE	DESCRIPTION
19	2/5/10	BCS	JM	CIC	INCORP EC145114
18	11/16/06	JM	BCS	RAB	INCORP MMOD 03-584 DCN 00 & MSE 25-029 REV 00
17	5/16/02	JM	MPW	MKC	INCORP MMOD 00-253, DCN 00
16	9/25/01	BCS	MPW	MKC	INCORP MSE 01 209, REV. 0
15	12/1/00	MPW	BCS	SPF	INCORP DCR 00-0026 DCN 00
14	6/2/98	DRL	BCS	YWS	INCORP MMOD 97-521 DCN 00
13	10/30/95	RCI	MPW	GPM	INCORP DCR 94012 CAR2 & 01, & INCORP. NCR 74/2538A

NEXTera ENERGY SEABROOK

SEABROOK STATION

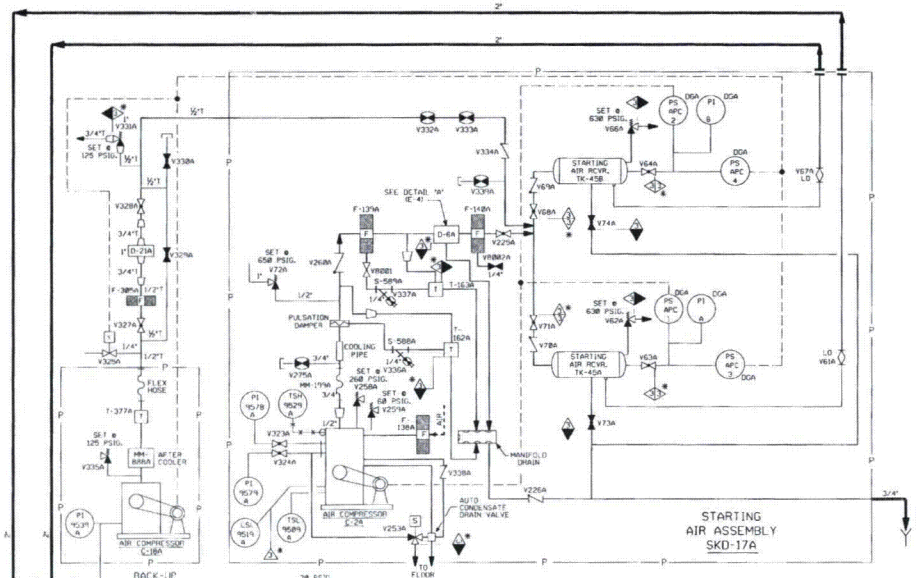
DIESEL GENERATOR COOLING WATER SYSTEM TRAIN 'B' DETAIL

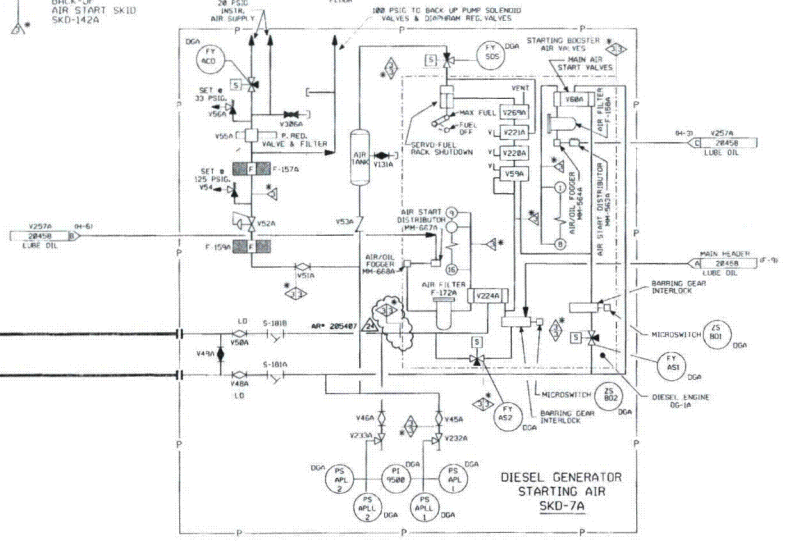
PID- 1-DG-B20466

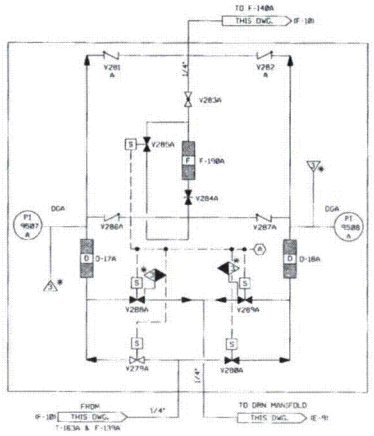
9763-F-202103	15	DIESEL GENERATOR COOLING WATER P&ID
REF. DRAWING NO.	REV	TITLE

02/03/10

PID- 1-DG-B20460







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 28456, 28457, 28458, 28459, 28461, & 28462.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX DG, UNLESS NOTED OTHERWISE.
3. DELETED
4. △-INDICATES REVISION LEVEL.
5. VENTS, DRAINS AND TEST CONN. CODE AND SAFETY CLASS BREAKS ARE AT THE DOWN STREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-AA511, UNLESS NOTED OTHERWISE.
6. INSTRUMENT REFERENCE
   (A) TO CONTROL PANEL ON SKD-17A, FP 22574.

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
24	12/30/09	BCS	JM		INCORP AR# 205407.
23	5-21-09	BCS	JM	DCA	INCORP AR# 187 (REF CR 09-1131)
22	3-26-07	BCS	JM	RRB	INCORP MMOD 03-584 DCN-02 & CR 07-02207 REV. 0
21	6/14/03	JM	BCS	MKC	INCORP CR 00-04158 REV 00 & CR 02-01823 REV 02
20	5/7/02	JM	MPW	MKC	INCORP MMOD 01-533 DCN#02
19	6/12/00	RCS	DWS	MKC	INCORP DCR 97-0845 DCN-08
18	10/7/99	BCS	MPW	MKC	INCORP DCR 97-0845 DCN-05, 06
17	7/14/99	BCS	MPW	DJM	INCORP MMOD 96-566 DCN-02, DCR 97-45 DCN.00, 02
16	6/19/97	MPW	DWS	RSG	INCORP DCR 94-44 CA#2, 8, 9 & 14
15	4/2/96	MPW	DWS	GRM	INCORP DCR 94-12 CA#3 & 7
14	5/30/95	DWS	MPW	JHR	INCORP MMOD 948572 CA#3
13	12/9/94	DWS	BCL	MHD	INCORP MMOD 930545 CA#3
12	6/1/94	BCL	WDS	GRM	INCORP. DCR 92-29 CA-2
11	5-27-94	BCL	MPW	GRM	INCORP. MMOD 94-586 CAN. #3 & MMOD 92-546 CA-1
10	10-22-93	MRB	BCL	GRM	INCORP. MMOD'S 92-546 CAN. 92-556 CA#3
9	9-17-92	DWS	BCL	IW	INCORP DCR 920841 CA#2
8	4-17-92	MRB	BCL	RRB	INCORP. MMOD 91-515 CA#3
7	10/5/89	MRB	APL	WFD	INCORP MMOD 89-567CA '8' REVISED PNCTR TAG PREFIX PER STS VERIFICATION
6	8/14/89	MTB	APL	MAC	INCORP. DCR 89-33 CA #3 INCORPORATES V2788 & V2596 VERIFIED INSTALLED AND TAGGED AS SHOWN.
5	1/22/87	JDM	PAL	RRC	ADDED TAG NUMBERS & EQUIPMENT I.D., ADDED DCA DESIGNATION TO INSTR. DEVICES, ADDED REVISED LUBE OIL SUPPLY PIPING, ADDED REVISED LUBE OIL RETURN PIPING TO MATCH MORE SYSTEM DETAIL, REVISED SAFETY CLASS PER MEMO SMP 86 876-TRE.
4	10/3/86	MAP	JDM	RRC	DELETED NOTE 5. INCORP. DR 82-2086, REVISED PER FP #20883, 20699 & PIPING ERECTION ISO'S. ADDED VALVE NO'S V8881 & V8882. INCORP. ECA 95-02617-M1.
3	6/19/86	JDM	DWS	RRC	INCORP NCR 74-3980A, ECA 19-802834A
2	2/27/86	WAL	JDM	WFD	ISSUED FOR OPERATIONS & INCORP. ECA'S 99-10125918 & 99-10125154
1	5/29/85	DWS	JNR	PEF	CODE BREAKS ADDED
0	08/29/84	MNS	RSL	WFD	ISSUED FOR FIELD VERIFICATION

REF. DRAWING NO.	REV	TITLE
FP-20883	12	EMERG.DIESEL STARTING AIR ASSEMBLY SKD-17A
FP-20699	13	DIESEL GENERATOR STARTING AIR SKD-7A
9763-F-20218	13	DIESEL GENERATOR-AIR SYSTEM P&ID

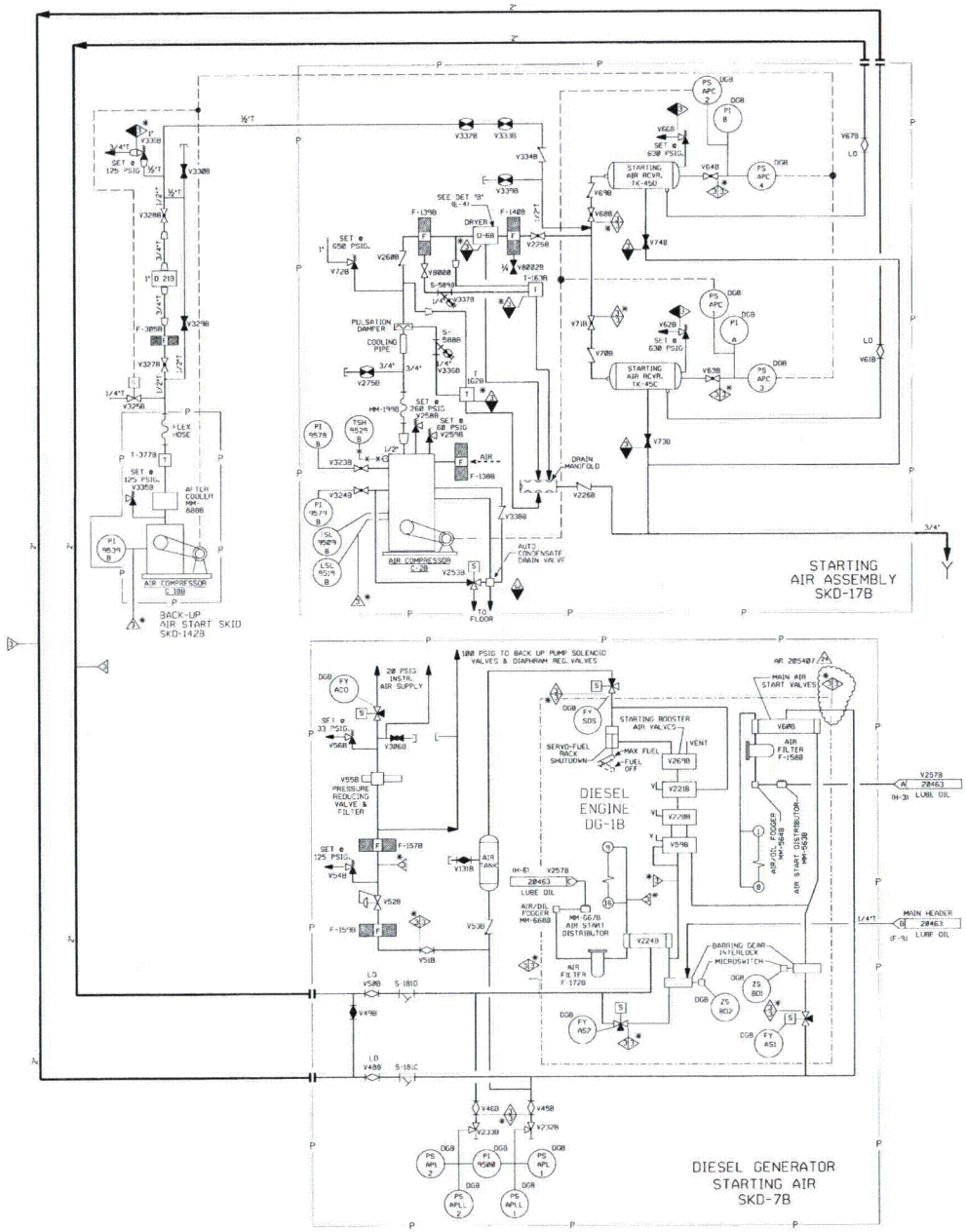
NEXTera ENERGY SEABROOK

SEABROOK STATION

DIESEL GENERATOR STARTING AIR SYSTEM TRAIN 'A' DETAIL

PID- 1-DG-B20460

PID- 1-DG-B20465



NOTES:

1. WORK THIS DRAWING WITH DRAWINGS 20456, 20457, 20463, 20464, 20466, AND 20467
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX DG, UNLESS NOTED OTHERWISE.
3. DELETED
4. △ INDICATES REVISION LEVEL.
5. VENTS, DRAINS AND TEST CONNECTIONS AND SAFETY CLASS BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-08511, UNLESS NOTED OTHERWISE.
6. INSTRUMENT REFERENCES:
   (A) TO CONTROL PANEL ON SKD-17B FP-22575

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
24	12/31/09	BCS	JM	TRF	INCORP AR 205407
23	11/4/86	BCS	JM	RRB	INCORP MMOD 83-584 DCN 00
22	12/31/03	JM	BCS	RRB	INCORP CR 00-04158 REV 00 & CR 02-01823 REV 00
21	12/19/02	JM	BCS	MKC	INCORP CR 02-12483 REV 00
20	8/21/02	BCS	JM	MKC	INCORP DCR 97-0845 DCN-00
19	5/16/02	MPW	JM	MKC	INCORP MMOD 01-533 DCN 00
18	11-17-99	BCS	MPW	MKC	INCORP DCR 97 845 DCN-86
17	8-26-99	BCS	MPW	WFZ	INCORP MMOD 96-566 DCN 00, DCR 97-45 DCN-8,25
16	5-26-97	MPW	JWS	WFZ	INCORP DCR 94-44 DCN-0, 8, 9 & 14
15	4-2-96	BCS	DWS	GRM	INCORP DCR 94-12 CA-0, 01
14	5 15 95	BCL	MPW	JPS	INCORP MMOD 94-572 CA*0
13	12-9-94	DWS	BCL	MRD	INCORP MMOD 930545 CA*0
12	6/1/94	BCL	WDS	GRM	INCORP DCR 90-029 CA-02
11	5-10-94	BCL	MPW	RRB	INCORP MMOD 94-586 CA0, 3 & MMOD 92-546 CA01
10	10-22-93	MRB	BCL	GRM	INCORP MMOD 92-546 CA0, 92-556 CA 0
9	10 3-93	DWS	MRD	RSG	INCORP DCR 920841 CA*0
8	4/19/92	MRD	BCL	JFY	INCORP MMOD 90525 CA*0
7	11/20/91	MRB	PAL	GRM	INCORPORATED DCR 89-33 CA03 & MMOD 89-561, ADDED NOTE 5 & 6.
6	9/8/88	MRW	BCL	RRC	ADDED VALVE PER WORK REQUEST 87 W001928 AND CONT. COORDINATES
5	1/22/87	JDM	WFD	RRC	ADDED TAG NUMBERS & EQUIPMENT I.D., INCORP ECA 99/B00870A0, REVISED LOCATION OF FILTER & FOGGER PER F.P.20870, ADDED LUBE OIL SUPPLY TO PROVIDE MORE SYSTEM DETAIL, REVISED SAFETY CLASS PER MEMO SBP-86-076-YAEC.
4	10/3/86	PAL	MPW	RRC	REVISED PER ECA 99/B00870A AND 99/UFSAR/04, INCORP ECA 99/15295, ADDED NCR 87/305, WAS IN ERROR, ADDED VALVE V-2578 PER F.P.20863, F.P.20863 AND TAGGED 1-DG-B-20465 REV 03 END CONNS ON FLEX HOSE PER FP 20595, ADDED FOR GEM PRINTS TO REF BLOCK, ADDED DCR TO INSTR PER UE&C P&ID, ADDED P&ID LEGEND NOTE.
3	6/16/86	JDM	DWS	RRC	INCORP ECA 99/12515E INCORP. NCR 87/335 & 74/3581
2	02/27/86	WAL	JDM	WFD	ISSUED FOR OPERATIONS & INCORP. ECAS. 99/10939B & 99/12415A
1	11/29/84	DWS	JNM	PEF	CODE BREAKS ADDED
0	06/29/84	MNS	JNM	WFD	ISSUED FOR FIELD VERIFICATION

REF. DRAWING NO.	REV	TITLE
FP 20863	11	EMERG DG AIR ASSY GEN ARRANGEMENT
FP 20091	9	EMERG DG SKID UNIT
FP 20591	15	EMERG DG START AIRCONT SCHEM AND LEGEND
9763 F 28201	13	DIESEL GENERATOR - AIR SYSTEMS P&ID

NEXTera ENERGY SEABROOK

SEABROOK STATION

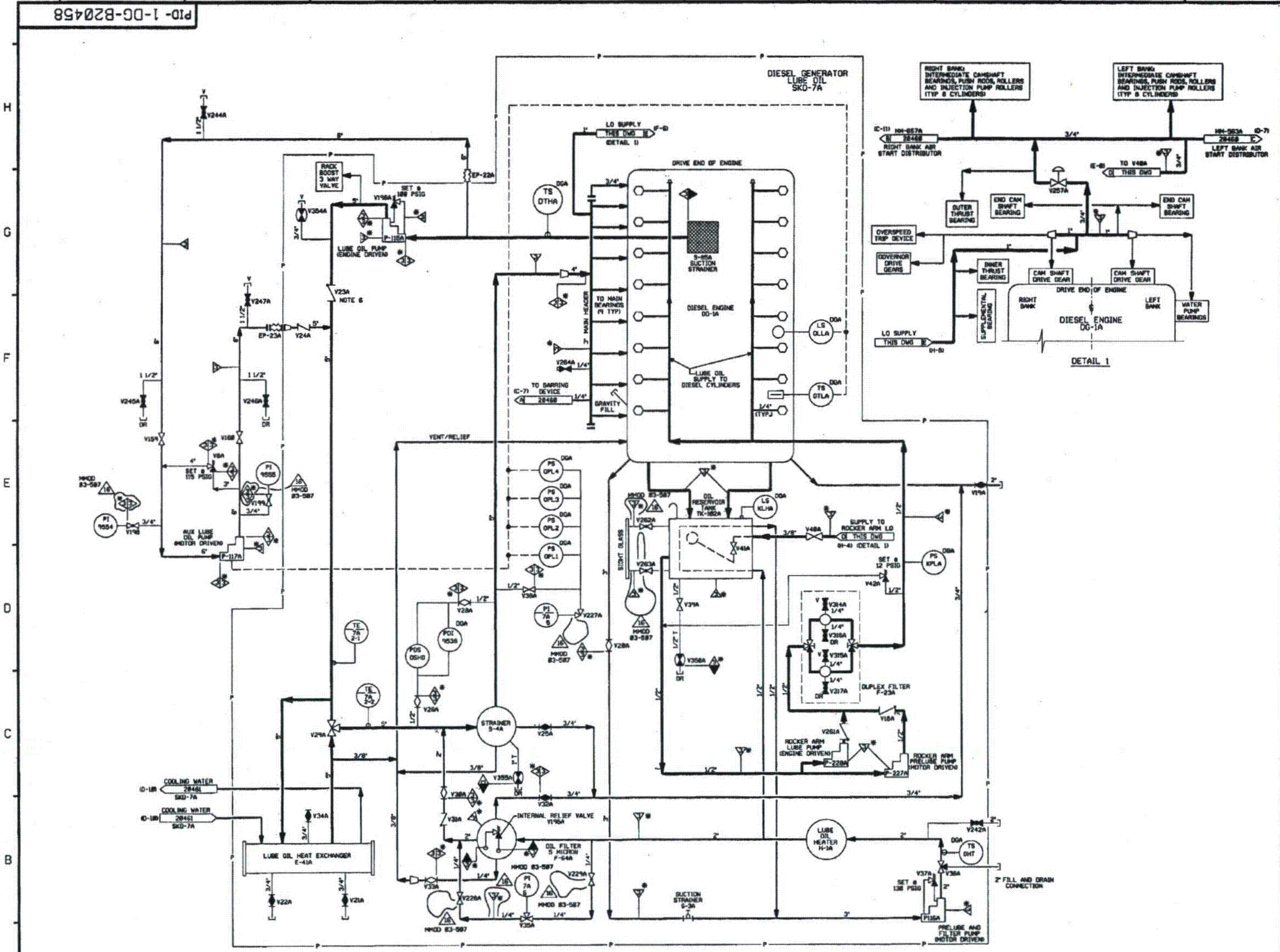
DIESEL GENERATOR STARTING AIR SYSTEM TRAIN "B" DETAIL

PID- 1-DG-B20465

12/16/09

PID- 1-DG-B20458

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 20456, 20457 & 20459 THRU 20462.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX DG, UNLESS NOTED OTHERWISE.
3. DELETED.
4. VENT AND DRAIN CODE AND SAFETY CLASS BREAKS ARE AT THE DOWNSTEAM END OF THE OUTER ISOLATION VALVE PER DESIGN STANDARD 1-NHY-005111, UNLESS NOTED OTHERWISE.
5. △ INDICATES REVISION LEVEL
6. VALVE DISC DRILLED WITH 1/4" ORIFICE TO ALLOW BACKFLOW WITH ENGINE IN STANDBY.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
16	[illegible]	JM	[illegible]	[illegible]	INCORP MMOD 03-504 DCN 00
15	1/18/05	JM	BCS	MR	INCORP DCR 04-018 - DCN 00
14	10/15/03	BCS	MPV	RRB	INCORP MMOD 02-541 DCN-0.2 & MSE 03-160 REV.0
13	6/18/02	JM	BCS	MKC	INCORP CR 00-04158 REV. 00, MMOD 01-531 DCN-00, 01
12	1/30/02	BCS	MPV	MKC	INCORP MSE 01-0005 REV. 01
11	10/6/99	BCS	MPV	CWE	INCORP MMOD 98-554 DCN-00,01
10	7/30/97	MPV	BCS	VWS	INCORP MMOD 96-550 DCN 01
9	4/1/96	BCL	MPV	GRM	INCORP. DCR 94-12 CA0, 01
8	5/27/94	MPV	BCL	GRM	INCORP. MMOD 92-546 CA0, DCR 90-29 CA-0
7	5/19/92	MRB	BCL	GRM	INCORP. MMOD 91-622 CA0
6	10/29/90	MRB	JM	BCL	INCORP. MMOD 90-601 CA00 REVISED NOTE 4
5	02/10/87	JDM	PAL	VWS	REVISED PRESSURE SWITCH TIE-IN PER FP-20598. COMPLETE REDRAW TO CLARIFY LAYOUT FOR BETTER FLOW DIA UTILIZATION. ADD LINE SIZES TO SKID PIPING.
4	10/16/86	MAP	WRD	RRC	REVISED PER PIPING ERECTION ISO. ADDED LOCATION COORD'S.
3	6/23/86	WAL	VNK	RRC	UPDATED PER LATEST P&ID & INCORP NCR 93/220C
2	2/27/86	WAL	JDM	WFD	ISSUED FOR OPERATIONS
1	11/29/84	DWS	JNM	PEF	CODE BREAKS ADDED
0	5/29/84	MHS	JNM	WFD	ISSUED FOR FIELD VERIFICATION

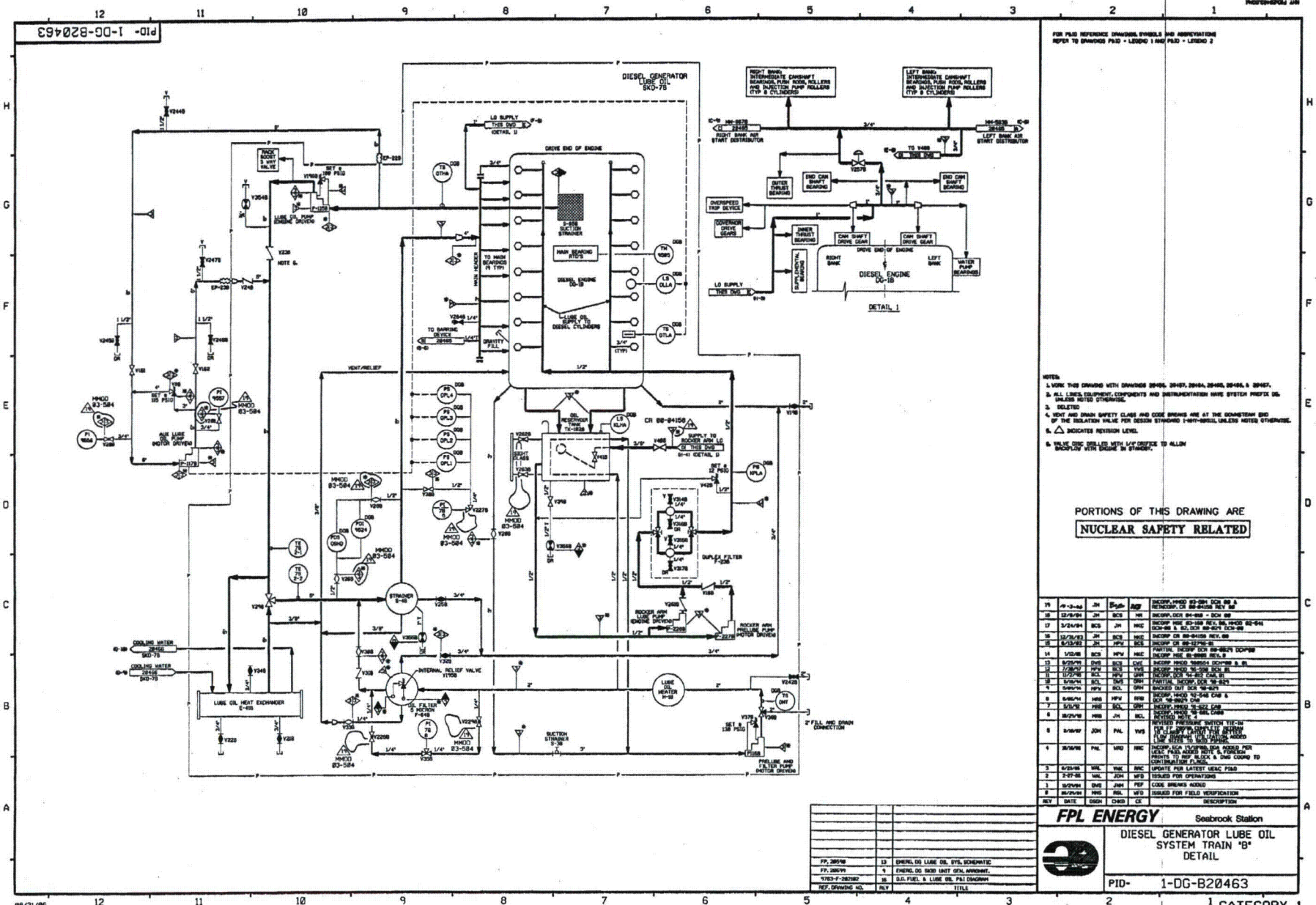
REF. DRAWING NO.	REV	TITLE
9763-F-202102	16	DIESEL GENERATOR FUEL & LUBE OIL P&ID

FPL ENERGY Seabrook Station

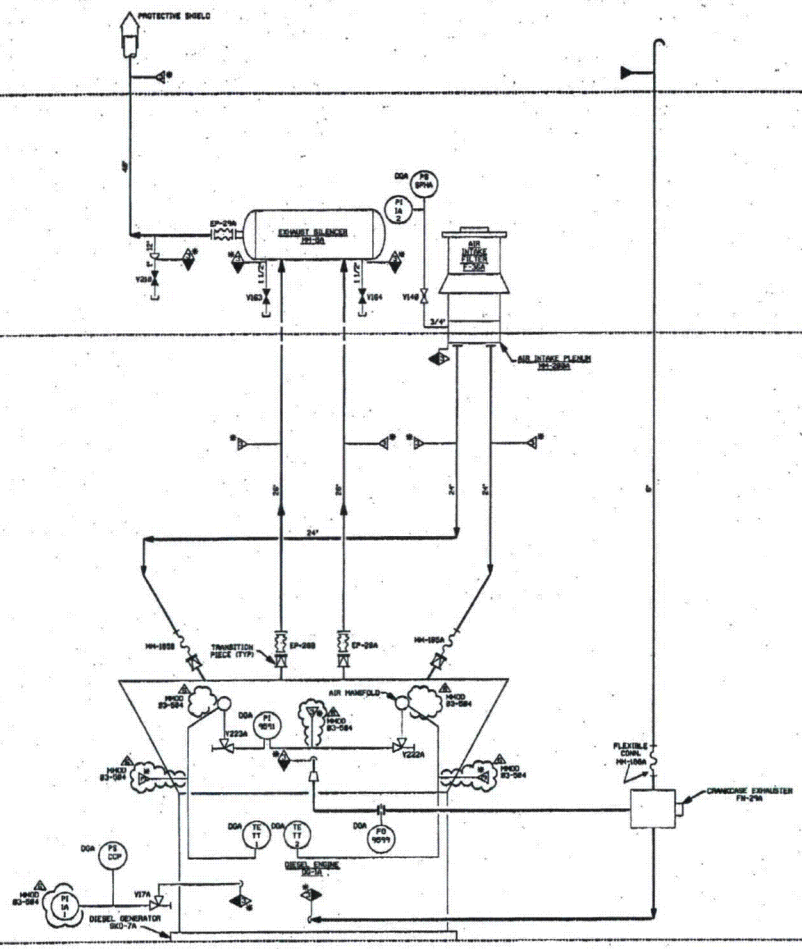
DIESEL GENERATOR LUBE OIL SYSTEM TRAIN "A" DETAIL

PID- 1-DG-B20458

08/07/06


DIESEL GENERATOR LUBE OIL SKD-7B
DRIVE END OF ENGINE
DIESEL ENGINE DG-1B
DETAIL 1
LUBE OIL HEAT EXCHANGER E-41B
DUPLEX FILTER F-42B
STRAINER S-4B
SUCTION STRAINER S-3B
INTERNAL RELIEF VALVE Y170B
ROCKER ARM PRELUBE PUMP MOTOR DRIVEN
PRELUBE AND FILTER PUMP MOTOR DRIVEN
LUBE OIL PUMP ENGINE DRIVEN
RIGHT BANK AIR START DISTRIBUTOR
LEFT BANK AIR START DISTRIBUTOR
PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED
FPL ENERGY
Seabrook Station
DIESEL GENERATOR LUBE OIL SYSTEM TRAIN "B" DETAIL
PID- 1-DG-B20463
CATEGORY 1

P10- 1-DG-B20462



PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20456, 20457, 20458, 20459, 20460, & 20461.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX DG, UNLESS OTHERWISE NOTED.
3. DELETED
4. VENT AND DRAIN CODE AND SAFETY CLASS BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER DESIGN STANDARD 1-NMT-0005LL UNLESS NOTED OTHERWISE.
5. △ INDICATES REVISION LEVEL.

REV	DATE	DSGN	CHKD	EE	DESCRIPTION
8	11-16-98	JH	BAS	WRB	INCORP MMOD 83-584 DCN 88
5	08/6/97	BCS	MPW	CWE	INCORP MMOD 960554 DCN-88JR
4	7/30/97	MPW	BCS	YNS	INCORP MMOD 960559 DCN 81
3	4/2/96	BCL	MPW	GRM	INCORP. DCR 94-12 CAB & ADDED NOTE 5.
2	10/1/86	PAL	MAP	BRC	ADDED FOR 1 CAP FOR ERECTION TBD. ADDED DCR FOR VENT & DRAIN ADDED FOREIGN PRINTS TO REF BLOCK
1	02/27/86	VAL	JDH	WPD	ISSUED FOR OPERATIONS
0	05/29/84	HWS	REL	WPD	ISSUED FOR FIELD VERIFICATION

REF. DRAWING NO.	REV	TITLE
FP20569	89	EMERG DG INTK, EXT 4 & CRNC SCHEM
FP20583	86	EMERG DG AIR INLET FILTER (DRY TYPE)
FP20648	87	EMERG DG EXHAUST SIL.48 INCH 28"OUTLETS
9763-F-26218	13	DIESEL GENERATOR AIR SYSTEM P&ID

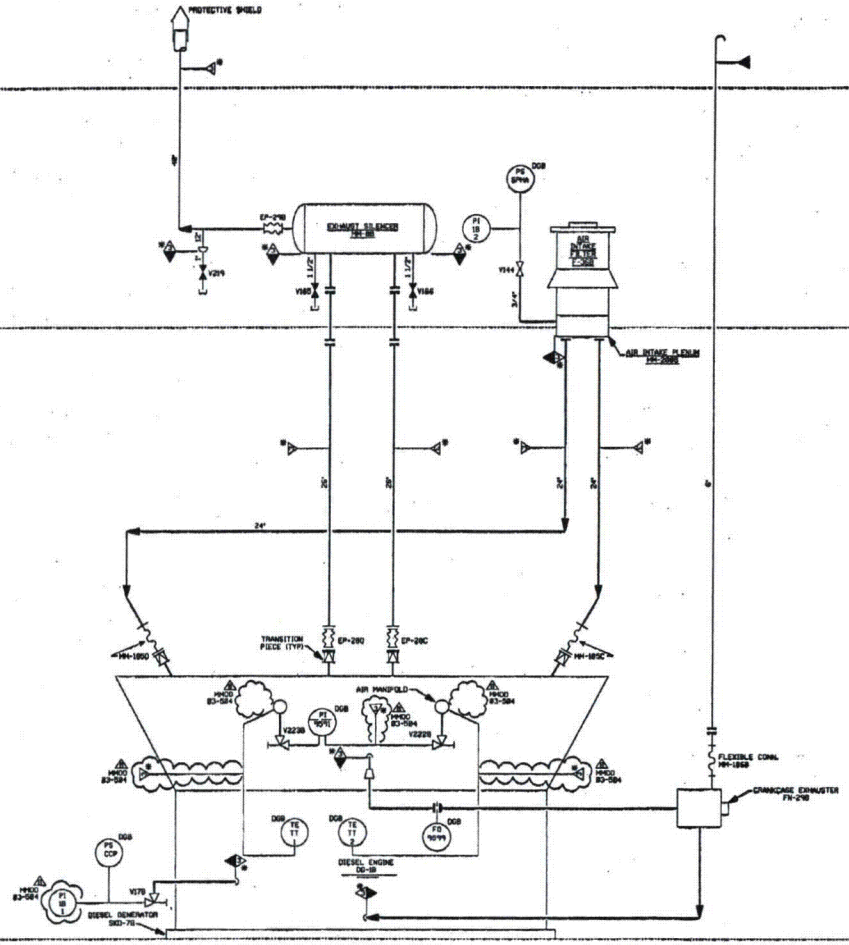
FPL ENERGY Seabrook Station

DIESEL GENERATOR INTAKE, EXHAUST & CRANKCASE VACUUM SYSTEM TRAIN "A" DETAIL

PID- 1-DG-B20462

11/06/06

PID- 1-DG-B20467



PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28456, 28457, 28463, 28464, 28465, & 28466.
2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX DG, UNLESS NOTED OTHERWISE.
3. DELETED.
4. △ INDICATES REVISION LEVEL.
5. VENT AND DRAIN CODE AND SAFETY CLASS BREAKS ARE AT THE EXHAUST END OF THE OUTER ISOLATION VALVE PER DESIGN STANDARD 1-NM-B0511, UNLESS NOTED OTHERWISE.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
8	[illegible]	JM	[illegible]	[illegible]	INCORP MM00 83-584 DCN 89
7	6/25/99	DMS	BCS	CVE	INCORP MM00 1998554 DCMPRS & ER
6	7/28/97	MDV	BCS	YVS	INCORP MM00 96-958 DCN 81
5	11/2/96	BCL	MDV	DRH	INCORP DCR 96-028 CMB A, CMB
4	5/31/95	MRR	BCL	DRH	INCORP MM00 94-620 CMB REVISED PID TITLE, DESCRIPTION, NOTES 3, 4, & 5, ADDED VENT & DRAIN CODE BREAK, ADDED NOTE 6, DELETED NOTE 2, REVISED NOTE 1, ADDED NOTE 5, REVISED LEGEND NOTE.
3	10/3/88	MRP	BCL	MRC	
2	6/29/88	WAL	YNK	MRC	UPDATED PER LATEST U.E.&C. P&ID.
1	02/27/86	WAL	JDH	WFD	ISSUED FOR OPERATIONS
P	05/21/84	MMS	BSL	WFD	ISSUED FOR FIELD VERIFICATION

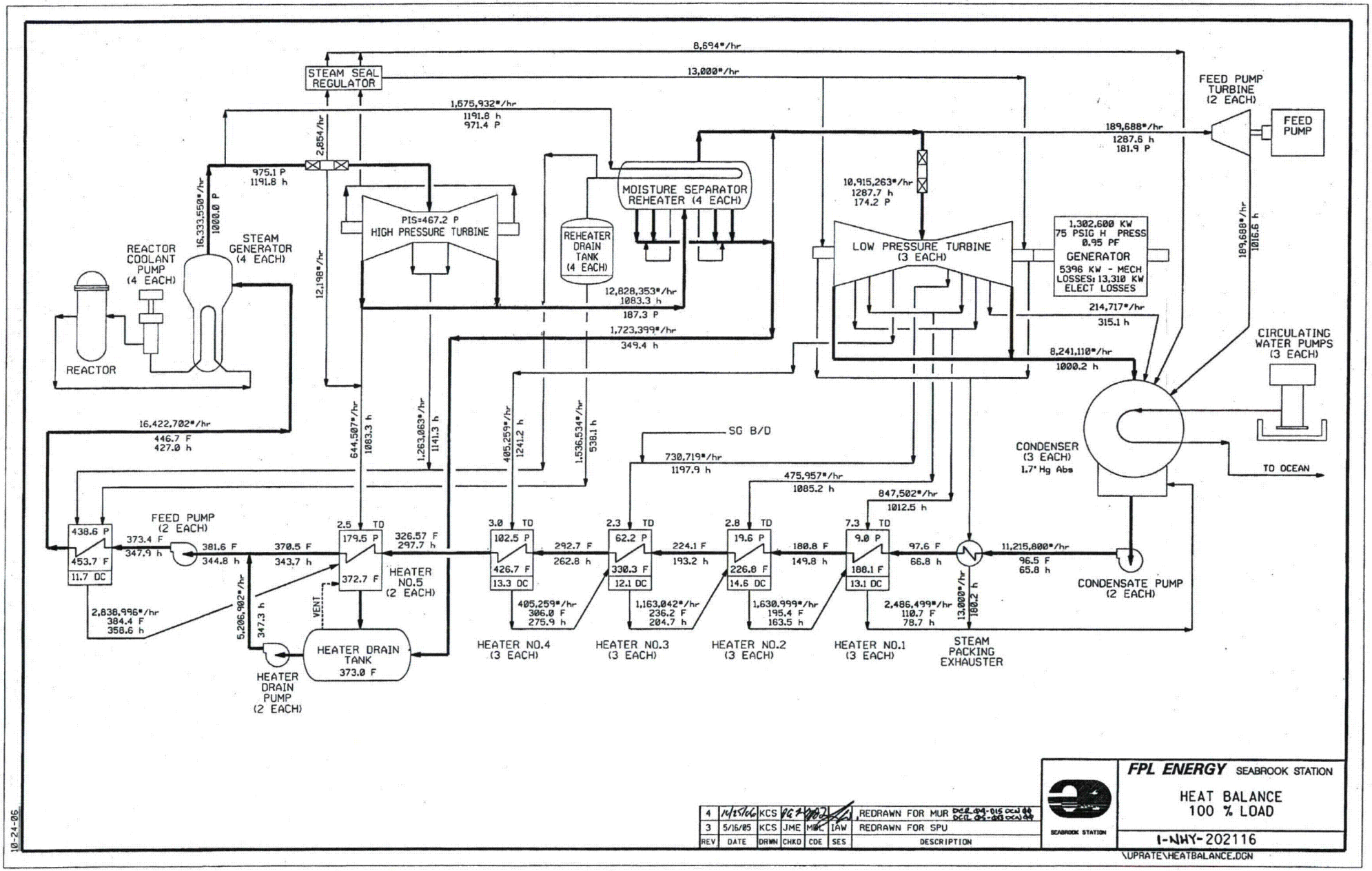
REF. DRAWING NO.	REV	TITLE
9763-F-28218	13	D.G. AIR SYS. P&ID
FP 28969	E	EMERG DG EXHAUST SILENCER#B 24"-20" INLET
FP 28968	G	EMERG DG AIR INLET FILTER (DRY TYPE)
FP 28969	9	EMERG DG INTK, EXH & CRANKCASE VACUUM SYS

FPL ENERGY Seabrook Station

DIESEL GENERATOR
INTAKE, EXHAUST & CRANKCASE
VACUUM SYSTEM, TRAIN 'B'
DETAIL

PID- 1-DG-B20467

11/06/86



REV	DATE	DRWN	CHKD	CDE	SES	DESCRIPTION
4	11/15/06	KCS	[illegible]			REDRAWN FOR MUR DCP 04-015 OCN 00 DCP 05-003 OCN 00
3	5/16/05	KCS	JME	MWC	IAW	REDRAWN FOR SPU

SEABROOK STATION

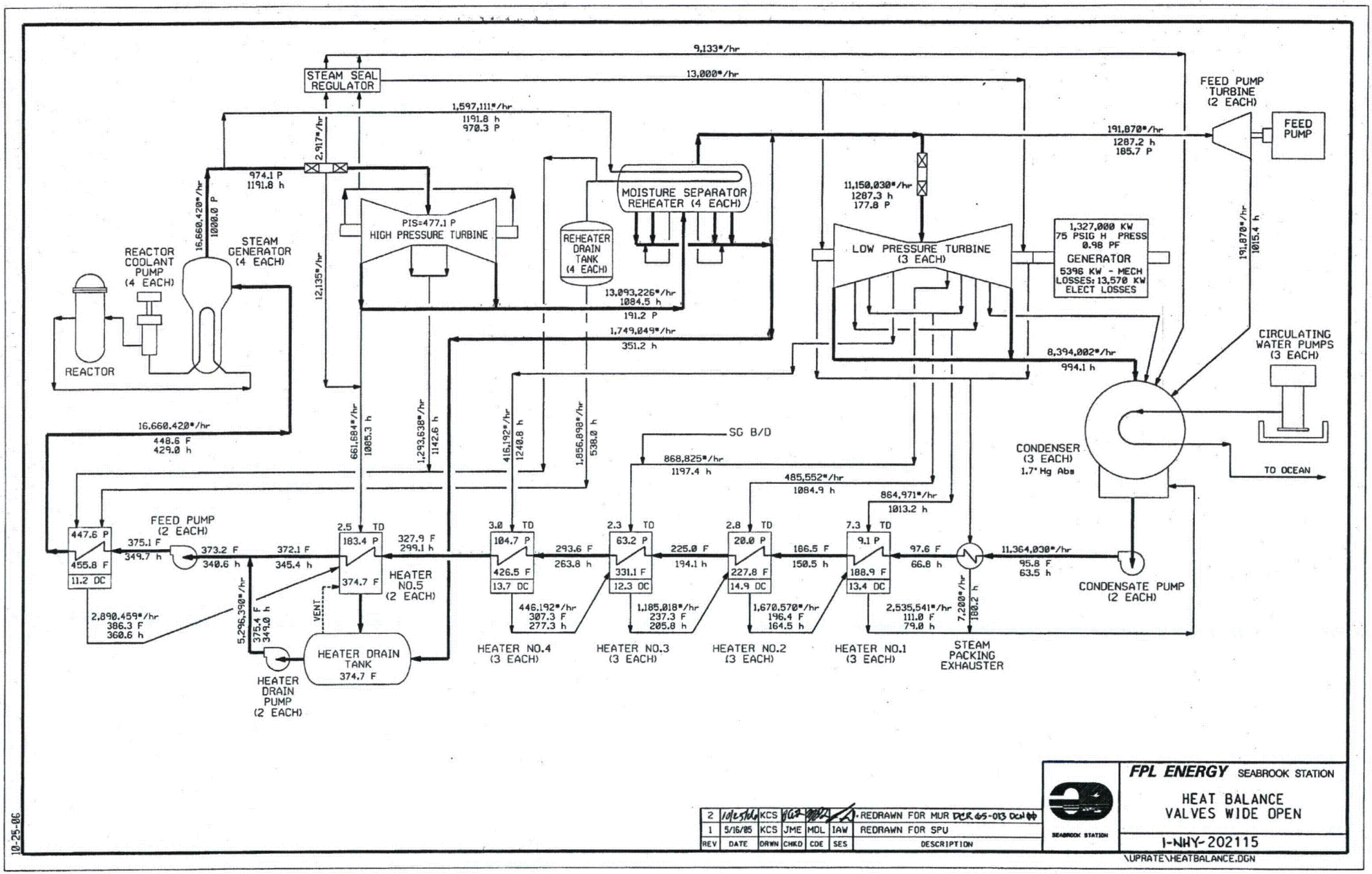
FPL ENERGY SEABROOK STATION

HEAT BALANCE
100 % LOAD

1-NHY-202116

\UPRATE\HEATBALANCE.DGN

10-24-06



REV	DATE	DRWN	CHKD	CDE	SES	DESCRIPTION
2	10/25/06	KCS	JME	MDL	IAW	REDRAWN FOR MUR DCR 05-013 Rev 00
1	5/16/05	KCS	JME	MDL	IAW	REDRAWN FOR SPU

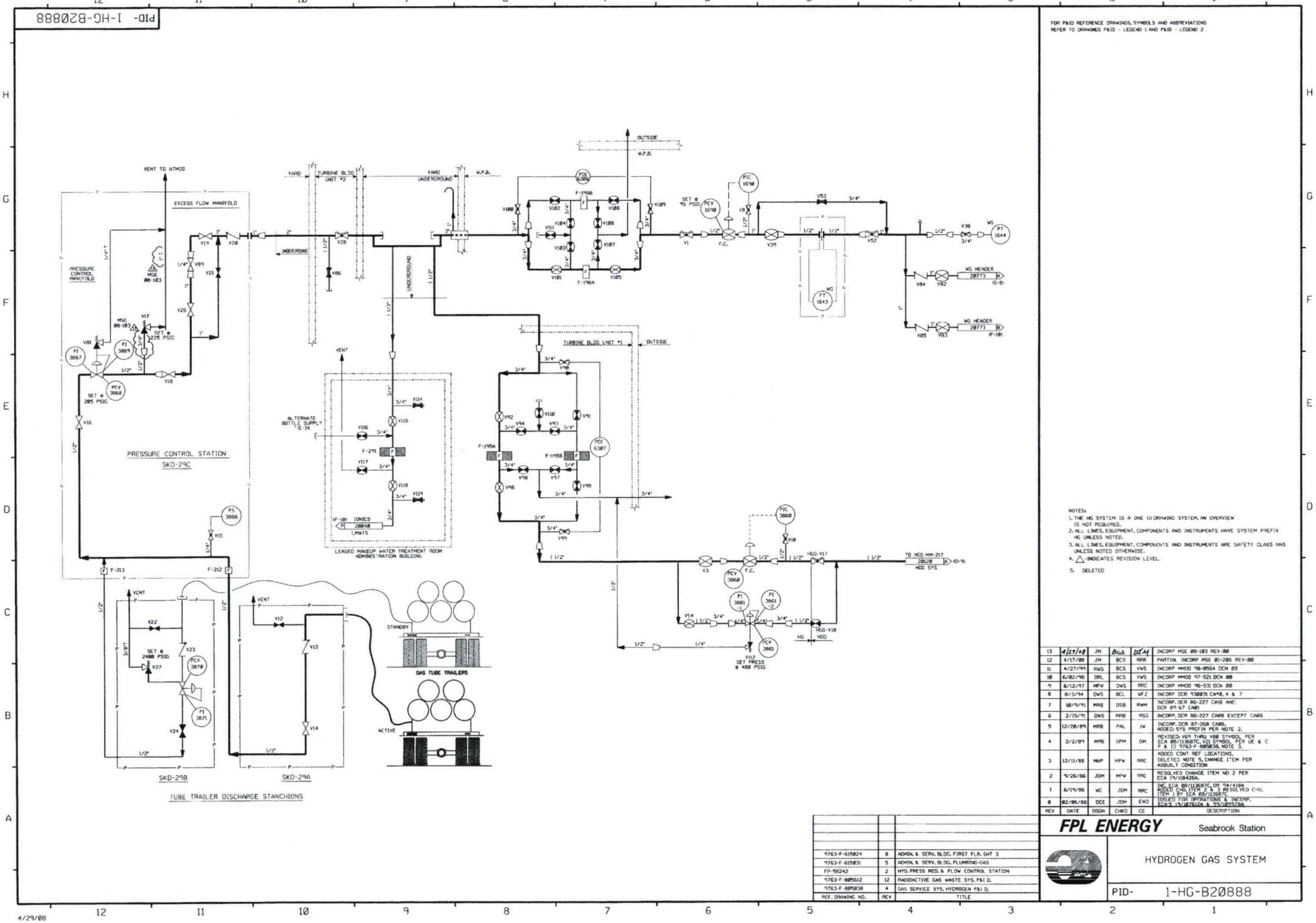
FPL ENERGY SEABROOK STATION

HEAT BALANCE VALVES WIDE OPEN

1-NHY-202115

\UPRATE\HEATBALANCE.DGN

10-25-06



REV	DATE	DSGN	CHKD	CE	DESCRIPTION
13	4/27/08	JM	BCS		INCORP MSE 88-183 REV-00
12	4/17/08	JM	BCS	RRB	PARTIAL INCORP MSE 81-286 REV-00
11	4/27/99	RWS	BCS	VWS	INCORP MMOD 98-0564 DCN 02
10	6/02/98	DRL	BCS	VWS	INCORP MMOD 97-521 DCN 00
9	6/12/97	MPW	DWS	RRC	INCORP MMOD 96-531 DCN 00
8	8/3/94	DWS	BCL	WFZ	INCORP DCR 93083I CA*8, 4 & 7
7	10/9/91	MRB	DSB	RWM	INCORP. DCR 86-227 CA16 AND DCR 89-67 CA01
6	2/15/91	DWS	MRB	RSG	INCORP. DCR 86-227 CA08 EXCEPT CA06
5	12/28/89	MRB	PAL	IW	INCORP. DCR 87-268 CA06. ADDED SYS PREFIX PER NOTE 2.
4	2/2/89	MRB	GPM	GM	REVISED VER THRU V88 SYMBOL PER ECA 88/113607C, V21 SYMBOL PER UE & C F & ID 9763-F-805838, NOTE 3.
3	12/11/88	MAP	MPW	RRC	ADDED CONT REF LOCATIONS. DELETED NOTE 5, CHANGE ITEM PER ASBUILT CONDITION
2	9/26/88	JDM	MPW	RRC	RESOLVED CHANGE ITEM NO 2 PER ECA 19/118426A.
1	6/19/86	WC	JDM	RRC	INC ECA 88/113607C, DR 94/4184 ADDED DCL ITEM 2 & 3. RESOLVED CHG. ITEM 1 BY ECA 88/113607C
0	02/06/86	DEE	JDM	EWO	ISSUED FOR OPERATIONS & INCORP. ECA'S 19/118426A & 99/118978A

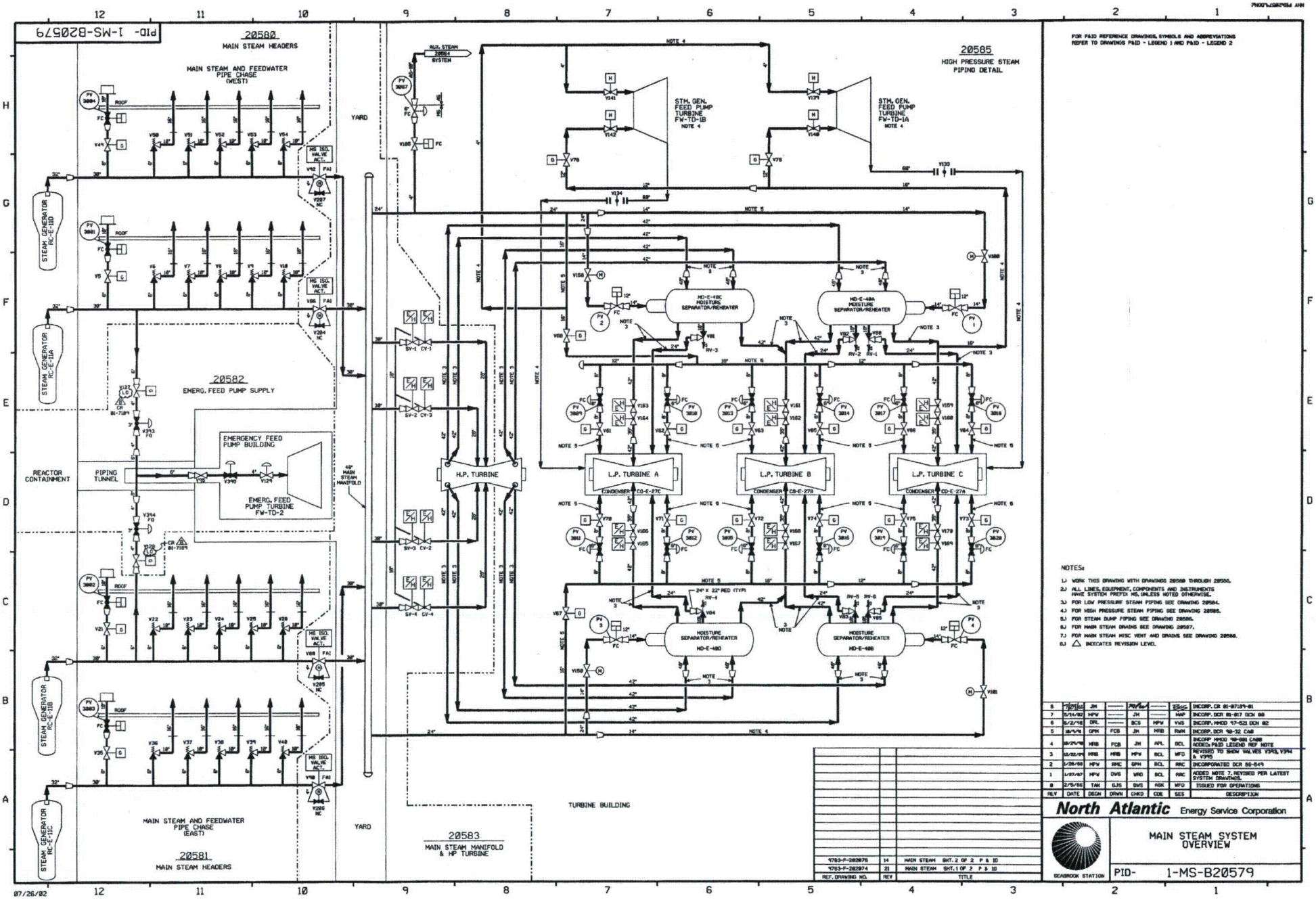
9763-F-615824	8	ADMIN. & SERV. BLDG. FIRST FLR. SHT 3
9763-F-615831	5	ADMIN. & SERV. BLDG. PLUMBING-GAS
FP-56242	2	HYD. PRESS RED. & FLOW CONTROL STATION
9763-F-805612	12	RADIOACTIVE GAS WASTE SYS. P&I D.
9763-F-805838	4	GAS SERVICE SYS. HYDROGEN P&I D.
REF. DRAWING NO.	REV	TITLE

FPL ENERGY Seabrook Station

HYDROGEN GAS SYSTEM

PID- 1-HG-B20888

4/29/08



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 20580 THROUGH 20586.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX MS, UNLESS NOTED OTHERWISE.
3. FOR LOW PRESSURE STEAM PIPING SEE DRAWING 20584.
4. FOR HIGH PRESSURE STEAM PIPING SEE DRAWING 20585.
5. FOR STEAM DUMP PIPING SEE DRAWING 20586.
6. FOR MAIN STEAM DRAINS SEE DRAWING 20587.
7. FOR MAIN STEAM MISC VENT AND DRAINS SEE DRAWING 20588.
8. △ INDICATES REVISION LEVEL

REF. DRAWING NO.	REV	TITLE
4763-F-282975	14	MAIN STEAM SHT. 2 OF 2 P & ID
4763-F-282974	21	MAIN STEAM SHT. 1 OF 2 P & ID

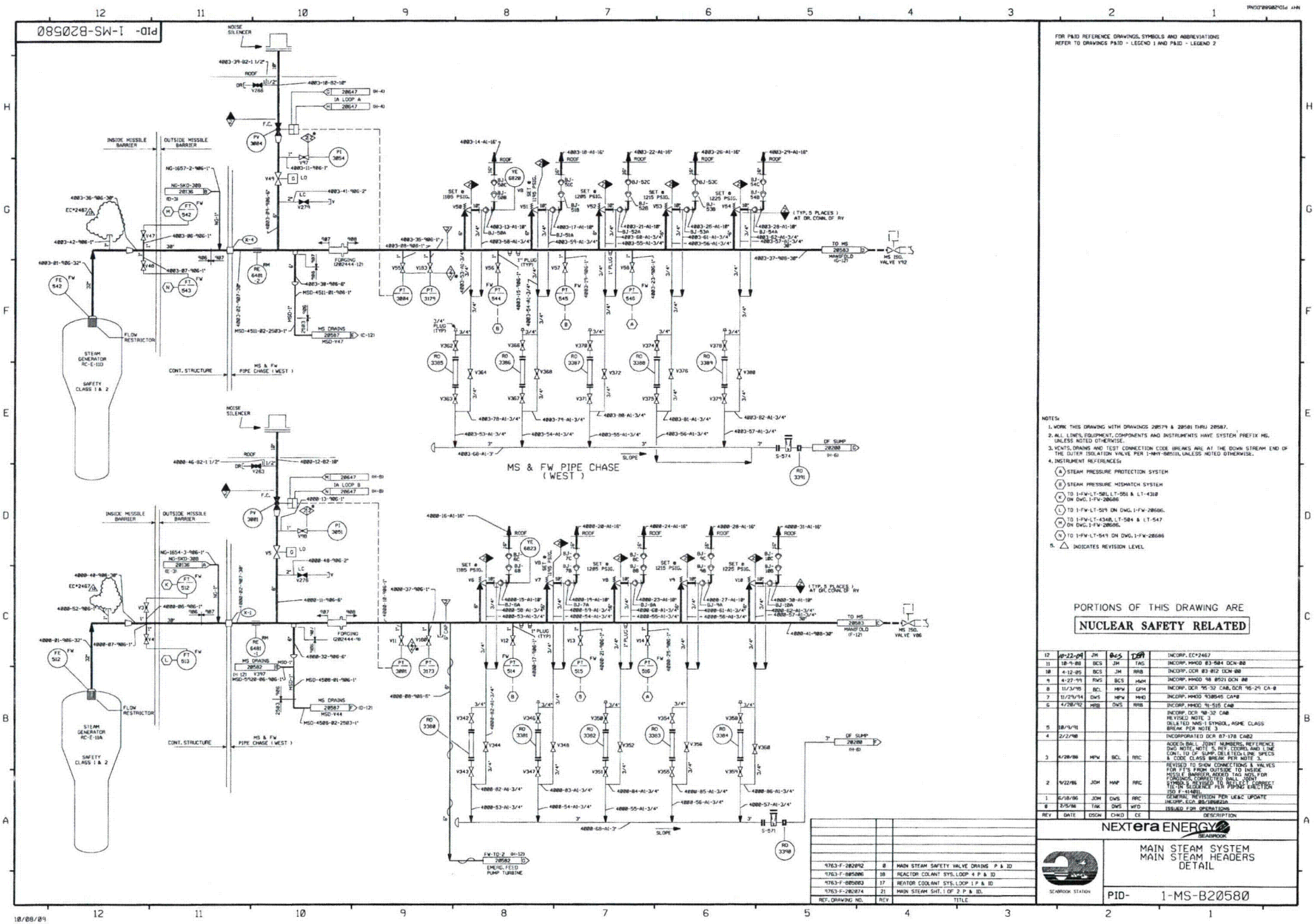
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
8	2/5/96	TAK	GJS	DVS	ASK	MFD	ISSUED FOR OPERATIONS
1	1/27/97	MFW	DVS	WRD	BCL	RRC	ADDED NOTE 7. REVISED PER LATEST SYSTEM DRAWINGS.
2	1/28/98	MFW	RHC	GPH	BCL	RRC	INCORPORATED DCR 98-549
3	10/22/99	MRB	MRB	MFW	BCL	MFD	REVISED TO SHOW VALVES V345, V394 & V395
4	10/25/99	MRB	FCB	JM	APL	BCL	INCORP MMOD 98-081 CAR8 ADDED P&ID LEGEND REF NOTE
5	4/4/01	GPH	FCB	JM	MRB	RWM	INCORP. DCR 98-32 CAR
6	5/22/02	MFW	DRL	———	BCS	MFW	INCORP. MMOD 97-523 DCN 02
7	5/14/02	MFW	———	———	JM	———	INCORP. DCR 01-017 DCN 03
8	7/26/02	JM	———	———	———	———	INCORP. CR 01-07189-01

North Atlantic Energy Service Corporation

SEABROOK STATION

MAIN STEAM SYSTEM OVERVIEW

PID- 1-MS-B20579



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 1-MHY-6851II, 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-20686
   - (L) TO 1-FW-LT-519 ON DWG. 1-FW-20686.
   - (M) TO 1-FW-LT-4340, LT-504 & LT-547 ON DWG. 1-FW-20686.
   - (N) TO 1-FW-LT-549 ON DWG. 1-FW-20686
5. △ INDICATES REVISION LEVEL

PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
12	10-22-09	JM	BCS	TAG	INCORP. EC*2467
11	10-9-08	BCS	JM	TAG	INCORP. MMOD 83-584 DCN-08
10	4-12-05	BCS	JM	RRB	INCORP. DCR 03-012 DCN-08
9	4-27-99	RWS	BCS	MWM	INCORP. MMOD 98 8521 DCN 08
8	11/3/95	BCL	MPW	GPM	INCORP. DCR 95-32 CAB, DCR 95-29 CA-8
7	11/29/94	DWS	MPW	MHD	INCORP. MMOD 930545 CA#8
6	4/28/92	MRB	DWS	RRB	INCORP. MMOD 91-515 CA8
5	10/9/91				INCORP. DCR 90-32 CAB REVISED NOTE 3 DELETED NNS-1 SYMBOL, ASME CLASS BREAK PER NOTE 3
4	2/2/90				INCORPORATED DCR 87-178 CA#3
3	4/28/88	MPW	BCL	RRC	ADDED BAL'L JOINT NUMBERS, REFERENCE DWG NOTE, NOTE 5, REF. COORD. AND LINE CONT. TO OF SUMP, DELETED P/L SPECS & CODE CLASS BREAK PER NOTE 3.
2	9/22/86	JDM	MAP	RRC	REVISED TO SHOW CONNECTIONS & VALVES FOR FT'S FROM OUTSIDE TO INSIDE MISSILE BARRIER, ADDED TAG NOS. FOR FORGINGS, CORRECTED BALL JOINT NUMBERS, ADDED NOTE 5, REVISED CONNECT WITH REVISED P/L PIPING ERECTION ISO F-614811.
1	6/18/86	JDM	DWS	RRC	GENERAL REVISION PER UE&C UPDATE
0	2/5/86	TAK	DWS	WFD	INCORP. ECR 85-128R2DA

REF. DRAWING NO.	REV	TITLE
9763-F-202892	8	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-202874	21	MAIN STEAM SHT. 1 OF 2 P & ID.

NEXTera ENERGY SEABROOK

SEABROOK STATION

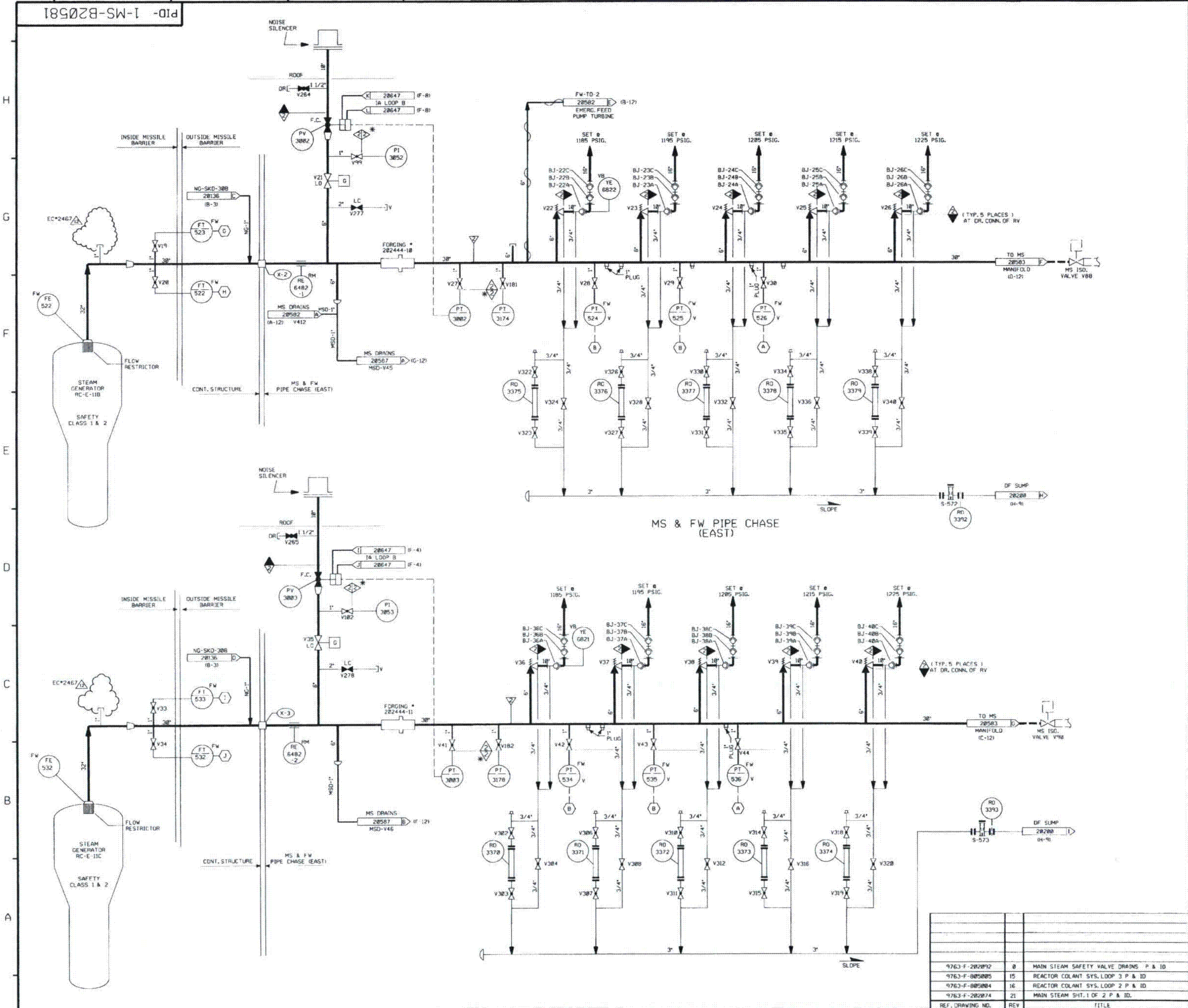
MAIN STEAM SYSTEM
MAIN STEAM HEADERS
DETAIL

PID- 1-MS-B20580

10/08/09

PID- 1-MS-B20581

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, 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-530 & LT-503 ON DWG. 1-FW-20686.
   - (J) TO 1-FW-LT-539, LT-4330 ON DWG. 1-FW-20686
5. △ INDICATES REVISION LEVEL.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
12	10-22-09	JM	BCS	DBA	INCORP. EC*2467
11	7/31/06	BCS	JM	RRB	INCORP MMOD 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 MMOD 98 0521 DCN 00
8	7/30/97	MPW	BCS	VWS	INCORP MMOD 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 MMOD 930545 CA*0
5	4/14/92	MRB	DWS	JEV	INCORP, MMOD 91-515 CA0
4	10/9/91	GPM	JM	RWM	INCORP. DCR 90-32 CA0 REVISED NOTE 3
3	2/2/90	MRB	APL	IW	INCORP DCR 87-178 CA 02.
2	9/8/88	MPW	GPM	RRC	REVISED: 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	RRC	INCORP ECA 19/3783A, 08/1137128 & 02/687C. REVISED BUILDING BOUNDRY, CONTINUATION REFERENCES & ADDED FORGING TAG NUMBERS.
0	2/5/86	TAK	DWS	WFD	ISSUED FOR OPERATIONS

REF. DRAWING NO.	REV	TITLE
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.

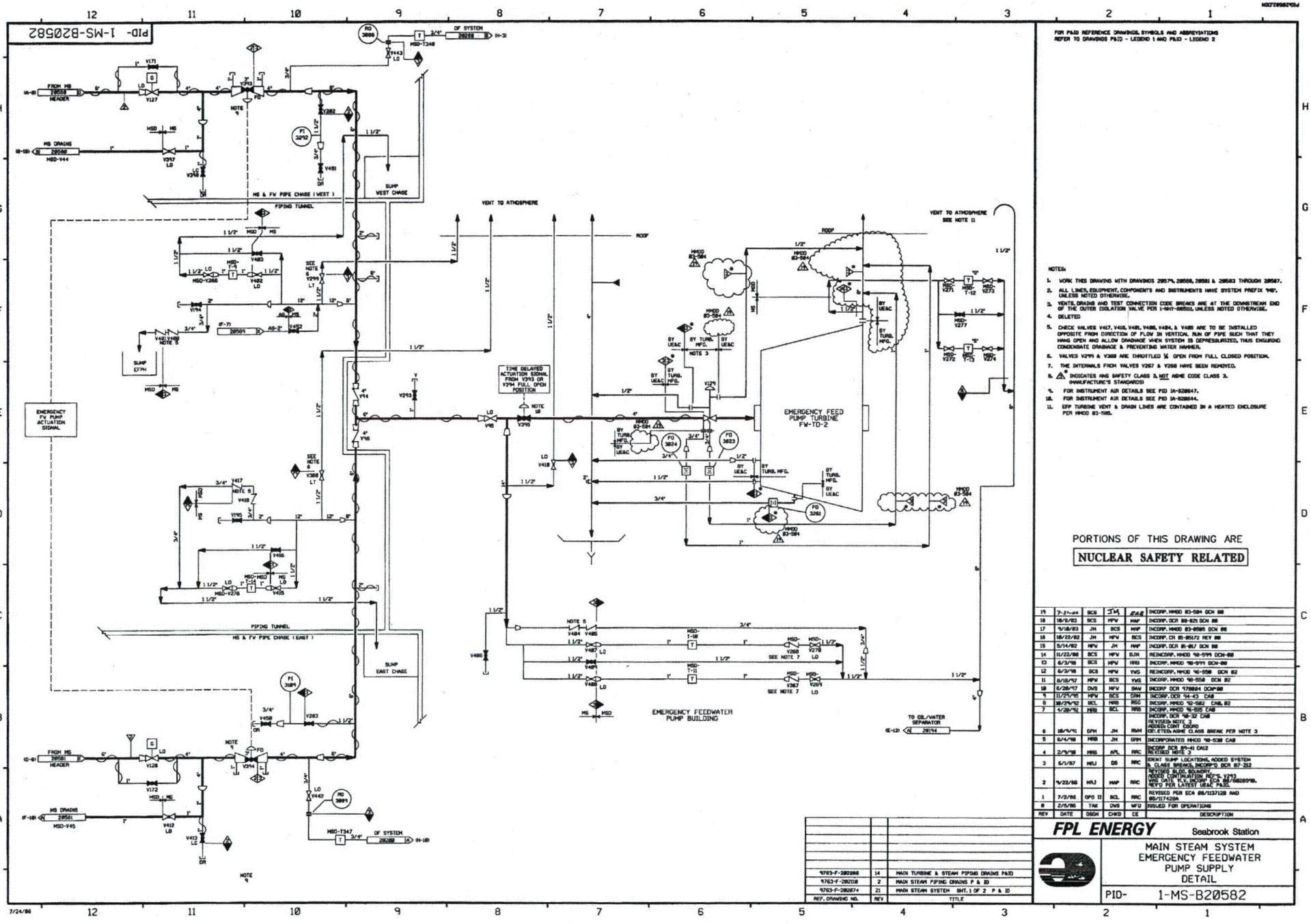
NEXTera ENERGY SEABROOK

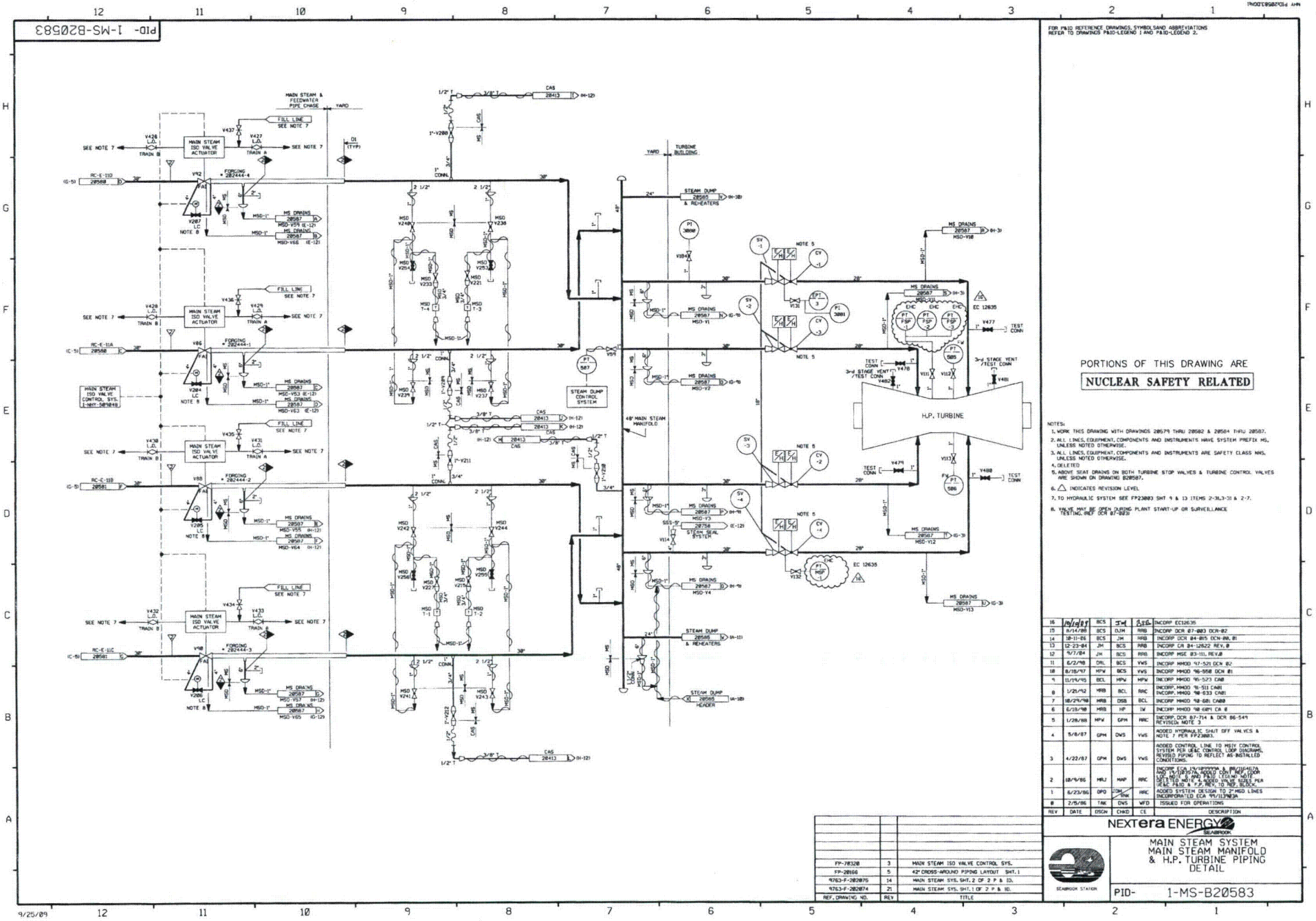
SEABROOK STATION

MAIN STEAM SYSTEM
MAIN STEAM HEADERS DETAIL

PID- 1-MS-B20581

10/09/09


PID- 1-MS-B20582
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 28574, 28588, 28581 & 28583 THROUGH 28587.
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 DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-SHT-3MSIII, UNLESS NOTED OTHERWISE.
4. DELETED
5. CHECK VALVES V417, V418, V481, V488, V484, & V485 ARE TO BE INSTALLED OPPOSITE FROM DIRECTION OF FLOW IN VERTICAL RUN OF PIPE SUCH THAT THEY WILL OPEN AND ALLOW DRAINAGE WHEN SYSTEM IS DEPRESSURIZED, THUS ENSURING CONDENSATE DRAINAGE & PREVENTING WATER HAMMER.
6. VALVES V299 & V388 ARE THROTTLED ¼ OPEN FROM FULL CLOSED POSITION.
7. THE INTERNALS FROM VALVES V267 & V268 HAVE BEEN REMOVED.
8. INDICATES ANS SAFETY CLASS 3, NOT ASME CODE CLASS 3. (MANUFACTURER'S STANDARD)
9. FOR INSTRUMENT AIR DETAILS SEE P&ID 1A-B28647.
10. FOR INSTRUMENT AIR DETAILS SEE P&ID 1A-B28644.
11. EFP TURBINE VENT & DRAIN LINES ARE CONTAINED IN A HEATED ENCLOSURE PER MMOD 83-585.
PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED
EMERGENCY FEED PUMP TURBINE FW-TD-2
EMERGENCY FEEDWATER PUMP BUILDING
VENT TO ATMOSPHERE
VENT TO ATMOSPHERE SEE NOTE 11
ROOF
PIPING TUNNEL
MS & FW PIPE CHASE (WEST)
MS & FW PIPE CHASE (EAST)
SUMP WEST CHASE
SUMP EAST CHASE
SUMP EFPH
TIME DELAYED ACTUATION SIGNAL FROM V393 OR V394 FULL OPEN POSITION
EMERGENCY FW PUMP ACTUATION SIGNAL
FROM MS HEADER
MS DRAINS
TO OIL/WATER SEPARATOR
OF SYSTEM
MSD-T348
MSD-T347
MSD-V44
MSD-V45
MSD-V273
MSD-V277
MSD-V272
MSD-V274
MSD-V276
MSD-V278
MSD-V269
MSD-V267
MSD-T-10
MSD-T-11
MSD-T-12
MSD-T-13
MSD-V268
MMOD 83-584
MMOD 83-585
9763-F-282866 14 MAIN TURBINE & STEAM PIPING DRAINS P&ID
9763-F-282118 2 MAIN STEAM PIPING DRAINS P & ID
9763-F-282874 21 MAIN STEAM SYSTEM SHT. 1 OF 2 P & ID
REF. DRAWING NO. REV TITLE
19 7-21-04 BCS JM EAS INCORP. MMOD 83-584 DCN 88
18 10/8/03 BCS MPW MAP INCORP. DCR 99-821 DCN 88
17 9/18/03 JH BCS MAP INCORP. MMOD 83-585 DCN 86
16 10/22/02 JH MPW BCS INCORP. CR 01-05172 REV 88
15 5/14/02 MPW JH MAP INCORP. DCR 01-817 DCN 88
14 11/22/00 BCS MPW DJH REINCORP. MMOD 98-599 DCN-88
13 6/3/98 BCS MPW MRB INCORP. MMOD 98-599 DCN-88
12 6/3/98 BCS MPW YWS REINCORP. MMOD 96-558 DCN 82
11 8/18/97 MPW BCS YWS INCORP. MMOD 96-558 DCN 82
10 6/26/97 DWS MPW BAW INCORP DCR 178884 DCN*88
9 11/21/95 MPW BCS GRH INCORP. DCR 94-43 CA8
8 10/24/92 BCL MRB RSG INCORP. MMOD 92-582 CA8, 82
7 4/28/92 MRB BCL MRB INCORP. MMOD 96-595 CA8
6 10/4/91 GPH JM RWH INCORP. DCR 98-32 CA8 REVISED NOTE 3 ADDED CONT DSGND DELETED ASME CLASS BREAK PER NOTE 3
5 8/14/90 MRB JM GPH INCORPORATED MMOD 98-538 CA8
4 2/9/90 MRB APL RRC INCORP. DCR 89-41 CA12 REVISED NOTE 2
3 8/1/87 MRJ DS RRC ADDNT SUMP LOCATIONS, ADDED SYSTEM & CLASS BREAKS, INCORP'D DCR 87-212
2 9/22/86 MRJ MWP RRC REVISED PER ECA 86-00093, ADDED CONTINUATION PIPING V283 AND V284 TO V394, PER ECA 86/0828018. REV'D PER LATEST UE&C P&ID.
1 7/3/86 GPO II BCL RRC REVISED PER ECA 86/1137128 AND 86/1174208
0 2/5/86 TAK DWS WFU ISSUED FOR OPERATIONS
REV DATE DSGN CHKD CE DESCRIPTION
FPL ENERGY Seabrook Station
MAIN STEAM SYSTEM EMERGENCY FEEDWATER PUMP SUPPLY DETAIL
PID- 1-MS-B20582
7/24/86



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 MNS, 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 2-3L,3-3I & 2-7.
8. VALVE MAY BE OPEN DURING PLANT START-UP OR SURVEILLANCE TESTING, PER DCR 87-2031

REF. DRAWING NO.	REV.	TITLE
FP-78328	3	MAIN STEAM ISO VALVE CONTROL SYS.
FP-28166	5	42" CROSS-AROUND PIPING LAYOUT SHT. 1
9763-F-282075	14	MAIN STEAM SYS. SHT. 2 OF 2 P & ID.
9763-F-282074	21	MAIN STEAM SYS. SHT. 1 OF 2 P & ID.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
16	10/19/87	BCS	JM	RAB	INCORP EC12635
15	8/14/87	BCS	DJM	RAB	INCORP DCR 87-003 DCR-02
14	10-11-86	BCS	JM	RAB	INCORP DCR 84-815 DCN-RN, 01
13	12-23-84	JM	BCS	RAB	INCORP CA 84-12622 REV. 0
12	9/7/84	JM	BCS	RAB	INCORP MSE 83-111, REV.0
11	6/2/98	DRL	BCS	YWS	INCORP MMOD '97-521 DCN 02
10	8/18/97	MPW	BCS	YWS	INCORP MMOD '96-558 DCN 01
9	11/19/95	BCL	MPW	MPW	INCORP MMOD '95-523 CA0
8	1/21/92	MRB	BCL	RAC	INCORP. MMOD '91-511 CA01 INCORP. MMOD '90-633 CA01
7	10/29/90	MRB	DSB	BCL	INCORP MMOD '90-681 CA00
6	6/18/90	MRB	HP	IW	INCORP MMOD '90-681 CA 0
5	1/28/88	MPW	GPM	RAC	INCORP. DCR 87-714 & DCR 86-549 REVISION NOTE 3
4	5/8/87	GPM	DWS	YWS	ADDED HYDRAULIC SHUT OFF VALVES & NOTE 7 PER FP23003.
3	4/22/87	GPM	DWS	YWS	ADDED CONTROL LINE TO MSIV CONTROL SYSTEM PER SE&C CONTROL LOOP DIAGRAMS. REVISED PIPING TO REFLECT AS-INSTALLED CONDITIONS.
2	10/9/86	MRJ	MAP	RAC	INCORP ECA 19/1899004A & 8901SF-1672A AND INCORP ECA 19002 CH 1 & 2 FOR FLOOR AND WALL PENETRATIONS. ADDED NOTE 8, DELETED NOTE 4, ADDED VALVE SIZES PER SE&C P&ID & F.P. REV. 10 REF. SCHED.
1	6/23/86	DPG	JDM/MK	RAC	ADDED SYSTEM DESIGN TO 2" MSD LINES INCORPORATED ECA 99/113M3A
0	2/5/86	TAK	DWS	WFD	ISSUED FOR OPERATIONS

NEXTera ENERGY SEABROOK

SEABROOK STATION

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

PID- 1-MS-B20583

9/25/09

PID- 1-MS-B20584

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 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 NNS, NON-SEISMIC, CATEGORY I UNLESS NOTED OTHERWISE.
4. △ INDICATES REVISION LEVEL

MOISTURE SEPARATOR/REHEATER MD-E-40C (MSR-2)
MOISTURE SEPARATOR/REHEATER MD-E-40A (MSR-1)
MOISTURE SEPARATOR/REHEATER MD-E-40B (MSR-3)
MOISTURE SEPARATOR/REHEATER MD-E-40B (MSR-4)
H.P. TURBINE
L.P. TURBINE A MM-TG-1
L.P. TURBINE B MM-TG-1
L.P. TURBINE C MM-TG-1
CONDENSER CO-E-27C
CONDENSER CO-E-27B
CONDENSER CO-E-27A

MSR PRESSURE INSTR VALVE NUMBERS

	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

DETAIL 'A'

REV	DATE	DSGN	CHKD	QE	DESCRIPTION
10	10/10/89	BCS	JM	RAB	INCORP EC 12635
9	10/15/88	BCS	JM	RAB	INCORP CR 88-03527 REV 00
8	4/13/88	BCS	JM	RAB	INCORP MMOD 84-SUB DCN-00, DCR 83-010 DCN-00, 02 ADDED LEGEND REF NOTE.
7	2/23/87	BCS	JM	RAB	INCORP CR 84-07482 REV 00
6	1/7/87	JM	MPW	BCS	INCORP CR 86-01867 REV 00
5	5/3/99	DWS	BCS	SD	INCORP MMOD 970618 DCN*00
4	3/21/95	MRB	BCL	DAS	INCORP DCR 92-004 CAB
3	5/8/92	MRB	MPW	BCL	INCORP MMOD 91-SU1 CAB/CAN REV NOTE 3 PER ENG DESIGN STD. 37100 SEC 3.8
2	9/17/86	PAL	MAP	RFC	REVISED TO INCORP FP 21702 & 20166 (DETAILS OF CE CROSS AROUND PIPING) ADDED CONTINUATION REF, ADDED NOTE 4
1	6/18/86	BLL	DWS	RFC	ADDED CONTINUATIONS
0	2/3/86	TAK	DWS	WFO	ISSUED FOR OPERATIONS

REF. DRAWING NO.	REV	TITLE
FP 20166		CROSS-AROUND PIPING OUTLINE SHT.1
9763-F-202081	7	MOISTURE SEP.DRAINS & VENT SYS. P & ID
9763-F-202075	14	MAIN STEAM SHT.2 OF 2 P & ID

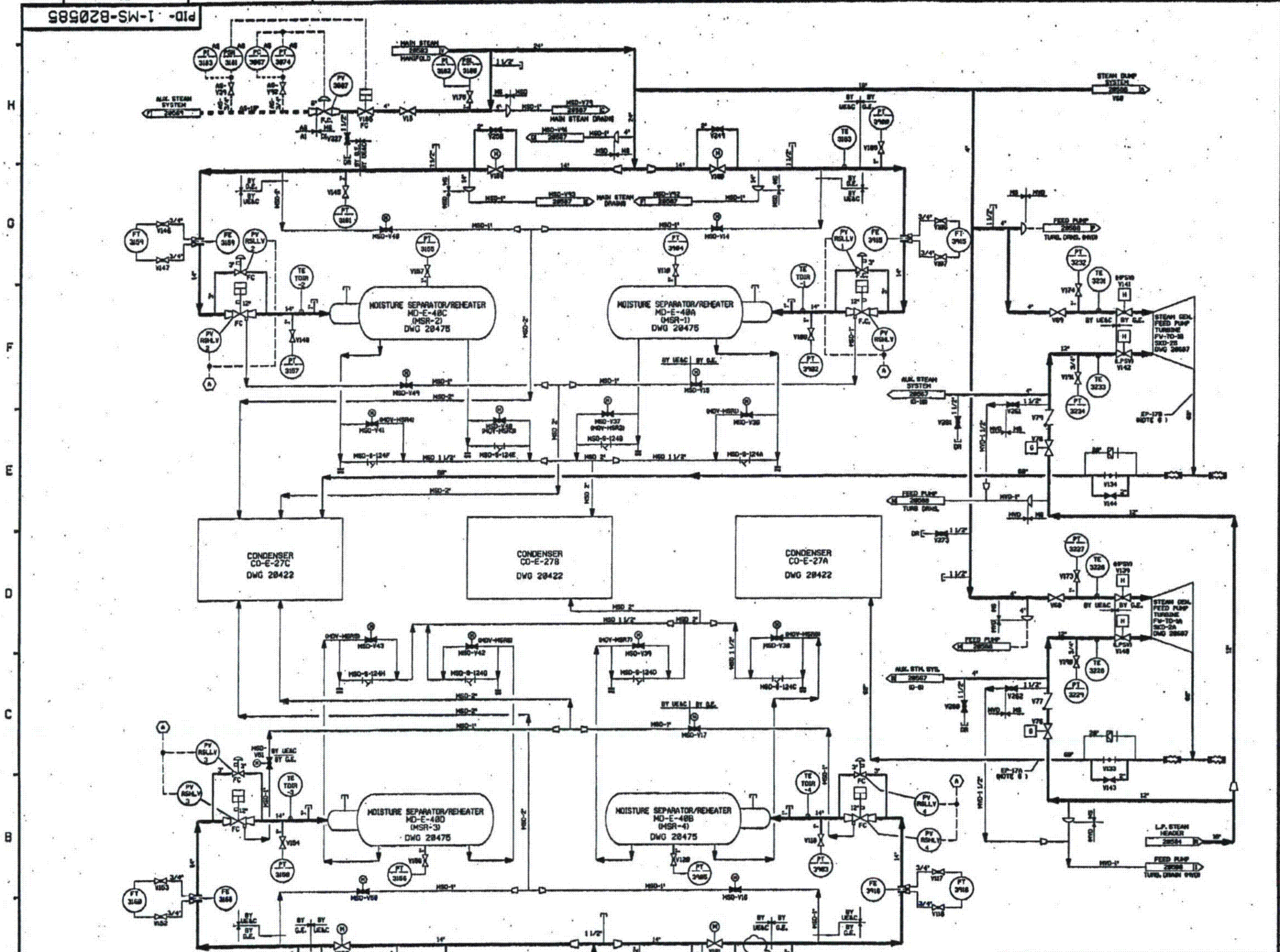
NEXTera ENERGY SEABROOK

SEABROOK STATION

MAIN STEAM SYSTEM
LOW PRESSURE STEAM PIPING
DETAIL

PID- 1-MS-B20584

9/22/89



9763-F-202066	14	MAIN TURBINE & STEAM PIPING DRWG P & ID
9763-F-202075	14	MAIN STEAM SHT.2 OF 2 P & ID
REF. DRAWING NO.	REV	TITLE

NOTES:

1. WORK THIS DRAWING WITH DRAWINGS 20579 THRU 20584 & 20586 AND 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, NON-SEISMIC, CATEGORY I UNLESS NOTED OTHERWISE.
4. △ INDICATES REVISION LEVEL.
5. INSTRUMENT REFERENCES
   (A) VALVES CONTROLLED AS FUNCTION OF TURBINE LOAD & REHEAT SYSTEM PRESSURE.
6. 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. FP 25420

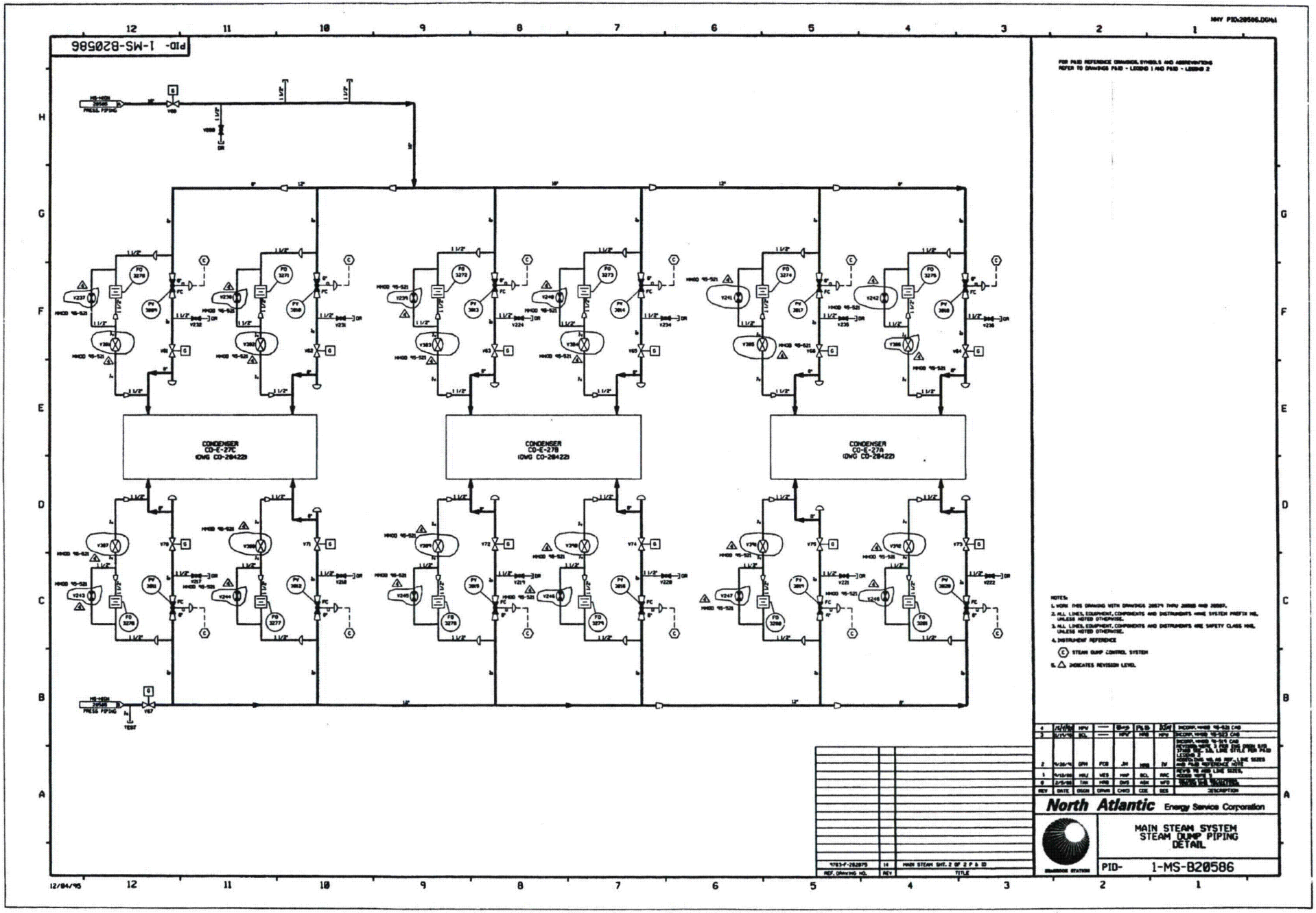
REV	DATE	DSGN	CHKD	CE	DESCRIPTION
10	12/15/06	BCS	[signature]	[signature]	INCORP. MSE 86-060 REV. 00
9	11/2/04	BCS	JH	RRG	INCORP. CR 04-11828 REV. 0
8	10/14/03	BCS	MPV	SAK	INCORP. MMOD 02-544 DCN-0
7	[illegible]	BCL	MPV	MPV	INCORP. MMOD 95-523 CAB
6	[illegible]	MRB	BCL	GAM	INCORP. MMOD 92-553 CAB
5	[illegible]	MRB	BCL	JV	INCORP. DCR 92-004 CAB
4	[illegible]	MRB	MPV	BCL	INCORP. MMOD 91-511 CAB
3	[illegible]	MRB	DSB	BCL	INCORP. MMOD [illegible] CABS REVISED NOTE 3 PER [illegible] ENG DESIGN STANDARD [illegible] AND VALVE LIST. ADD DWG REF INFO.
2	4/12/86	MAJ	MAP	RRC	REVISED PER PIPING ERECTION ISO'S [illegible] REVISED CONTINUATION REF'S, ADDED NOTE 4.
1	[illegible]	DPD	JDN	RRC	ADDED PIPING CONFIGURATION AT MD-E-40A, B, C & D, ADDED CONT. DWG NUMBERS, APPROVED CHG ITEM #5 PER 202075 REV. 14
0	[illegible]	TAC	DWS	WPD	ISSUED FOR OPERATIONS

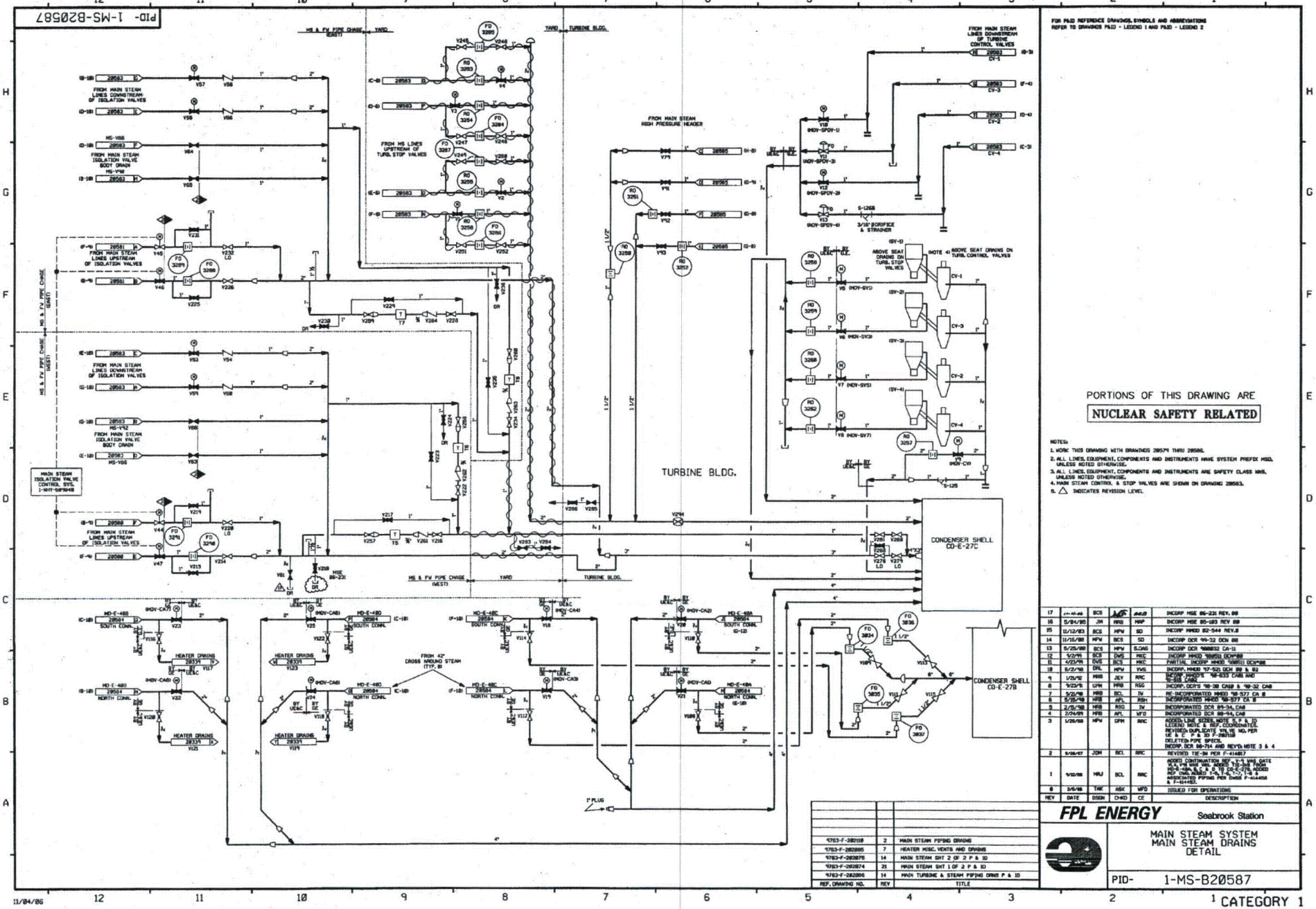
FPL ENERGY Seabrook Station

MAIN STEAM SYSTEM
HIGH PRESSURE STEAM PIPING
DETAIL

PID- 1-MS-B20585

12/15/06


PID- 1-MS-B20586
CONDENSER CO-E-27C (DWG CO-28422)
CONDENSER CO-E-27B (DWG CO-28422)
CONDENSER CO-E-27A (DWG CO-28422)
North Atlantic Energy Service Corporation
MAIN STEAM SYSTEM STEAM DUMP PIPING DETAIL
PID- 1-MS-B20586



PORTIONS OF THIS DRAWING ARE

NUCLEAR SAFETY RELATED

NOTES:

1. WORK THIS DRAWING WITH DRAWINGS 28579 THRU 28586.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX MSO, 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 28583.
5. △ INDICATES REVISION LEVEL

REF. DRAWING NO.	REV	TITLE
9763-F-282118	2	MAIN STEAM PIPING DRAINS
9763-F-282885	7	HEATER MISC. VENTS AND DRAINS
9763-F-282875	14	MAIN STEAM SHT 2 OF 2 P & ID
9763-F-282874	21	MAIN STEAM SHT 1 OF 2 P & ID
9762-F-282886	14	MAIN TURBINE & STEAM PIPING DRNS P & ID

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
17	11-14-05	BCS	MCC	0440	INCORP MSE 99-231 REV. 00
16	5/24/00	JM	MRB	MAP	INCORP MSE 95-183 REV 00
15	11/12/03	BCS	MPV	SD	INCORP MMOD 02-544 REV.0
14	11/15/00	MPV	BCS	SD	INCORP DCR 99-32 DCN 00
13	5/25/00	BCS	MPV	S.DAS	INCORP DCR 980032 CA-11
12	9/2/99	BCS	DWS	MCC	INCORP MMOD 980051 DCN*00
11	4/23/99	DWS	BCS	MCC	PARTIAL INCORP MMOD 980051 DCN*00
10	6/2/98	DRL	MPV	YMS	INCORP. MMOD 97-501 DCN .00 & .02
9	1/25/92	MRB	JEV	RRC	INCORP MMOD'S 90-833 CA#5 AND 91-055 CA#2
8	9/23/91	DPH	MRB	RSG	INCORP. DCR'S 90-38 CA#8 & 90-32 CA#8
7	9/20/91	MRB	BCL	IV	RE-INCORPORATED MMOD 90-577 CA #8
6	5/15/91	MRB	AFL	RBH	INCORPORATED MMOD 90-577 CA 8
5	2/5/90	MRB	RSG	IV	INCORPORATED DCR 89-34, CA#8
4	2/24/89	MRB	AFL	WFD	INCORPORATED DCR 88-44, CA8
3	1/26/88	MPV	DPH	RRC	ADDED LINE SIZES, NOTE 5, P & ID LEGEND NOTE 8. REF'S COORDINATED. REVISED DUPLICATE VALVE NO. PER UE & C P & ID F-2401SB DELETED PIPE SPECS. INCORP. DCR 86-74 AND REV'D NOTE 3 & 4
2	9/26/87	JDM	BCL	RRC	REVISED TIE-IN PER F-414817
1	9/10/86	MAJ	BCL	RRC	ADDED CONTINUATION REF 1-1-1 VMS GATE VALVES MS VB1, MSE 86-231 THRU MSV-48A, B, C, D TO EX-C-27B, ADDED REF'S 1-MS-B20587 & 1-FW-B20588 INDICATED PIPING PER DWGS F-414458 & F-414482.
0	3/5/86	TMC	RBK	WFD	ISSUED FOR OPERATIONS

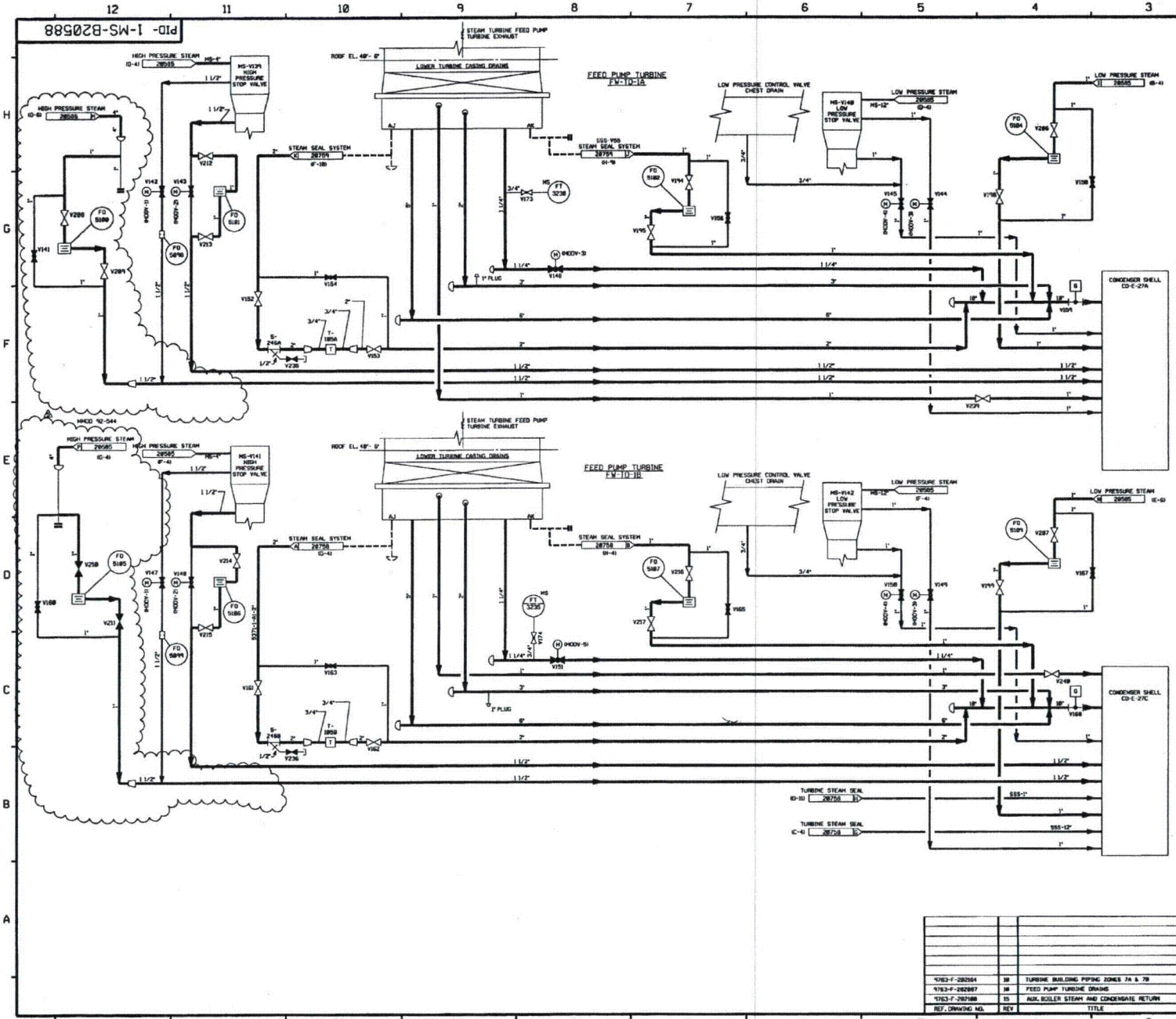
FPL ENERGY Seabrook Station

MAIN STEAM SYSTEM
MAIN STEAM DRAINS
DETAIL

PID- 1-MS-B20587

11/04/06

CATEGORY 1



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 THRU 20587.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX MVL 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. △ INDICATES REVISION LEVEL

REV	DATE	DSGN	CHKD	QE	DESCRIPTION
5	10-11-03	BCL	MWW	EEB	INCORP. MMOD 02-544 DCN 00 & 01
4	5/25/92	MRB	BCL	RRB	INCORP. MMOD 91-555 CAB
3	9/23/98	MRB	APL	DJH	INCORP. MMOD 98-577 CAM
2	5/5/89	MRB	GPM	GRM	REVISED NOTE 4 AND PIPING TO CLARIFY DUPLICATION OF SYSTEM & INTERFACES, ADDED LEGEND REFERENCE NOTE, CONTINUATION COORDINATES, NOTE 5. DELETED NUCLEAR SFTY. RELATED STAMP
1	9/17/86	MRJ	MAP	RRC	REV TO ADD RACK MOUNTED DESIGNATION TO FV-3235 FROM LOCAL MOUNT IN ERROR REVISED CONTINUATION REFERENCES.
0	6/5/86	DPD	DVS	WFD	ISSUED FOR OPERATIONS

REF. DRAWING NO.	REV	TITLE
9763-F-282164	38	TURBINE BUILDING PIPING ZONES 7A & 7B
9763-F-282987	38	FEED PUMP TURBINE DRAINS
9763-F-282188	15	AUX. BOILER STEAM AND CONDENSATE RETURN

FPL ENERGY Seabrook Station

MAIN STEAM SYSTEM MISC. VENTS AND DRAINS DETAIL

PID- 1-MS-B20588

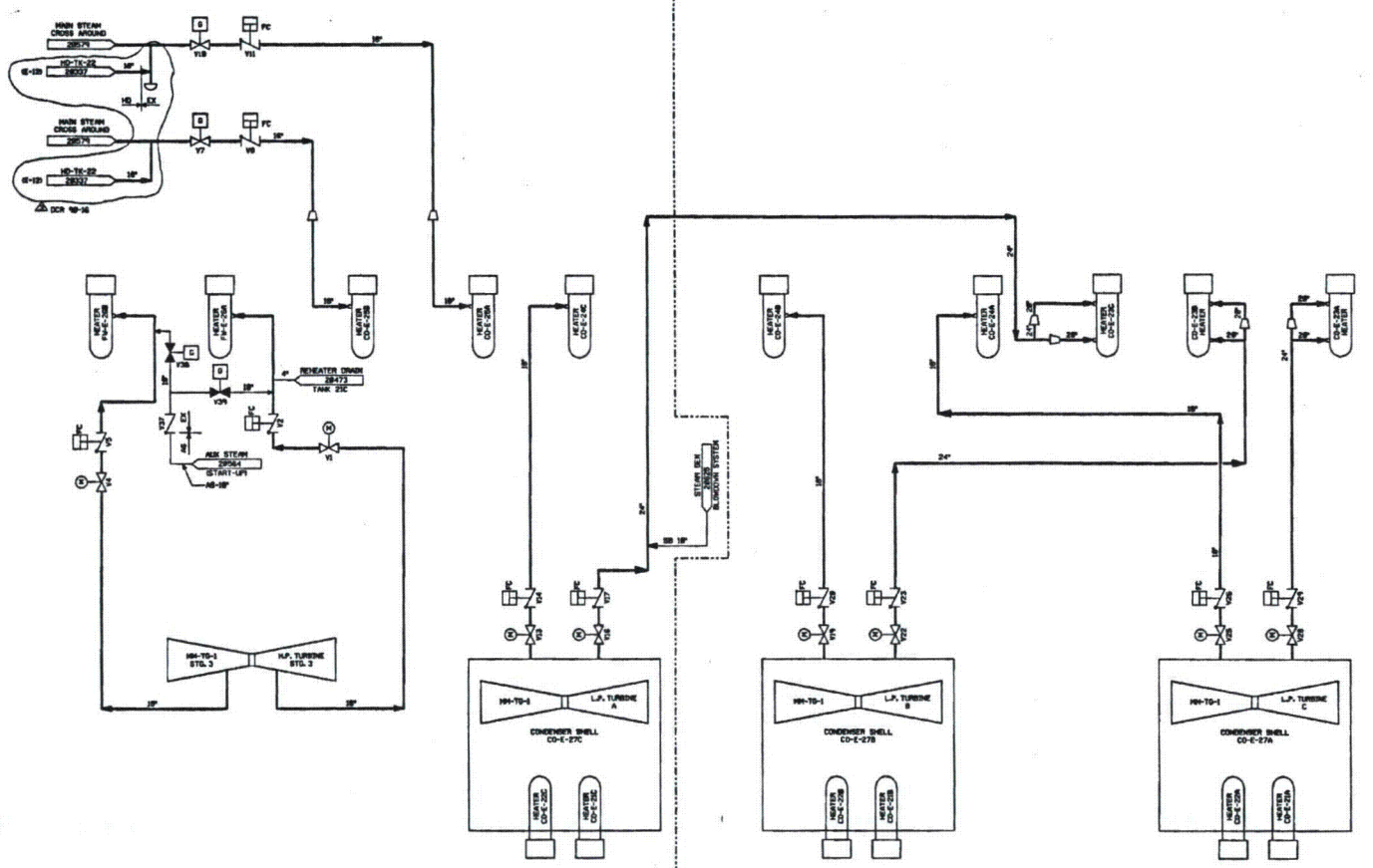
10/10/03

P10- 1-EX-B20324

20326

20327

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 "EX", UNLESS NOTED OTHERWISE.
2. WORK THIS DRAWING WITH DRAWINGS 20326, 20327 & 28328
3. △ INDICATES REVISION LEVEL.

1763-F-282986	14	MAIN TURBINE & STM PIPING DRAIN P & ID	
1763-F-282988	12	EXTRACTION STEAM P & ID	
REF. DRAWING NO.	REV	TITLE	

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
3	4/4/96	MRB	RMC	FCB	BCL		INCORPORATED DCR 98-0016, CA 92 ADDED LEGEND NOTE
2	1/27/97	VDB	GPD	WFD	BCL	VNS	ADDED NOTE 3, REVISED PER LATEST STD. REV.
1	1/24/96	DEE	SKN	DWS	DHF	WFD	ISSUED FOR OPERATIONS
0	7/25/94	SD	RI	RSL	DHF	WFD	ISSUED FOR FIELD VERIFICATION

PSNH PUBLIC SERVICE OF NEW HAMPSHIRE

SEABROOK STATION

EXTRACTION STEAM OVERVIEW

PID- 1-EX-B20324

05/13/98