1-NHY- 310042

NHY OLD:310042.DGN#1

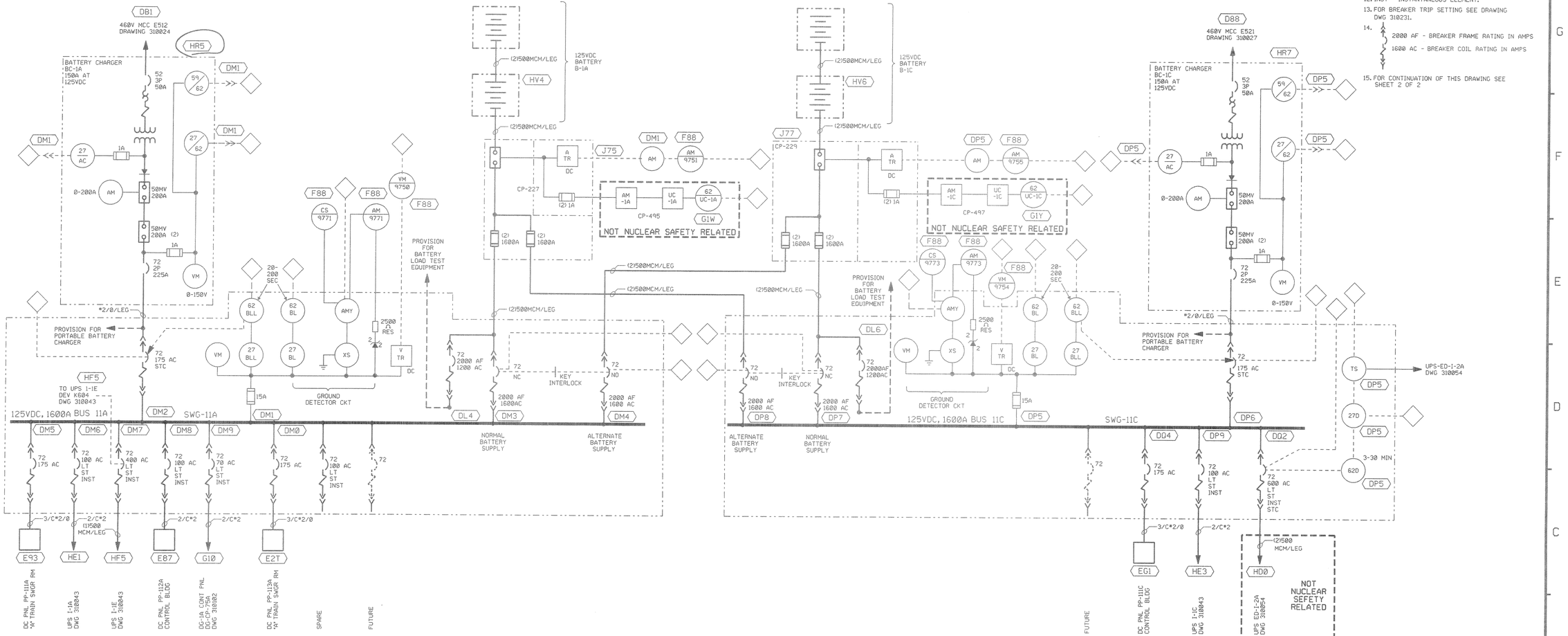
REFERENCE DRAWINGS:

DWG 310041 - 125VDC AND 120VAC INSTRUMENT BUSES KEY ONE LINE DIAGRAM

DWG 310059 - 125VDC NON-VITAL DISTRIBUTION SYSTEM ONE LINE DIAGRAM

NOTES:

1. FOR DEFINITION OF ALL SYMBOLS USED ON THIS DRAWING REFER TO ANSI Y32.2.
2. FOR 125VDC DISTRIBUTION SCHEMATICS SEE DRAWING DWG 310187.
3. FOR LEGEND SEE DRAWING DWG 300036.
4. ⬭ INDICATES EQUIPMENT DESIGNATION. (LOCATION)
5. ALL BREAKERS ARE 2 POLE UNLESS OTHER OTHERWISE NOTED.
6. THE SYSTEM PREFIX IS EDE UNLESS OTHERWISE NOTED.ALL EQUIPMENT AND DEVICES THAT HAVE TAG NUMBERS ARE TO BE PREFIXED WITH A SYSTEM NOTATION.
7. STC # - INDICATES SHUNT TRIP COIL PROVIDED BUT NOT USED.
8. ALL BREAKERS ARE 800AF UNLESS OTHERWISE NOTED.
9. ALL BREAKERS ARE MANUALLY OPERATED UNLESS OTHERWISE NOTED.
10. ALL INCOMING LINE AND FEEDER BREAKERS WILL BE LONG TIME (LT) AND SHORT TIME (ST) UNLESS OTHERWISE NOTED.
12. INST - INSTANTANEOUS ELEMENT.
13. FOR BREAKER TRIP SETTING SEE DRAWING DWG 310231.
14. 2000 AF - BREAKER FRAME RATING IN AMPS
    1600 AC - BREAKER COIL RATING IN AMPS
15. FOR CONTINUATION OF THIS DRAWING SEE SHEET 2 OF 2



TRAIN A

NUCLEAR SAFETY RELATED
"A" TRAIN LOAD GROUP
(EXCEPT AS NOTED)

A. ALL INSTRUMENTATION ASSOCIATED WITH THE D.C. SYSTEMS ARE "NOT NUCLEAR SAFETY RELATED"

B. ALL INPUTS TO STATION COMPUTER ARE: "NOT NUCLEAR SAFETY RELATED"

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
16	2/18/97	—	NFF	TPN	TPN	TWG	INCORP. DCR 97-010 DCN-00
15	2/14/95	—	JLM	NFF	NFF	NCD	INCORP. MMOD 94-553, CA-0
14	7/31/91	—	FCB	CCM	APL	VCP	MINOR CHANGE
13	4/3/87	—	NLM	AMR	TPN	RHG	REDRAWN ON CADD; NO TECHNICAL CHANGES; ADDED NOTE 15 & SHEET 2

North Atlantic Energy Service Corporation

SEABROOK STATION

125VDC VITAL DISTRIBUTION SYSTEM ONE LINE DIAGRAM
SHEET 1 OF 2

UNIT 1 1-NHY- 310042

7/17/95

NUCLEAR SAFETY RELATED
"B" TRAIN LOAD GROUP
(EXCEPT AS NOTED)

A. ALL INSTRUMENTATION ASSOCIATED WITH THE D.C. SYSTEMS ARE "NOT NUCLEAR SAFETY RELATED"

B. ALL INPUTS TO STATION COMPUTER ARE: "NOT NUCLEAR SAFETY RELATED"

NOTE: FOR CONTINUATION OF THIS DRAWING, NOTES AND REFERENCES SEE SHEET 1

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
3	4/30/96	—	TPN	NJJ	NJJ	NCD	INCORP. MINOR CHANGE
2	2/14/95	—	JLM	NFF	NFF	NCD	INCORP. MMOD 94-0553, CA-0
1	5/18/90	—	FCB	HP	APL	RHG	INCORP MMOD 89-537 REV 0
0	4/3/87	—	NLM	AMR	TPN	RHG	REDRAWN ON CADD: NO TECHNICAL CHANGES; ADDED SHEET 2, AND NOTE 15

North Atlantic Energy Service Corporation

SEABROOK STATION

125VDC VITAL DISTRIBUTION SYSTEM
ONE LINE DIAGRAM
SHEET 2 OF 2

UNIT 1 1-NHY- 310042

7/17/96

1-NHY- 310059

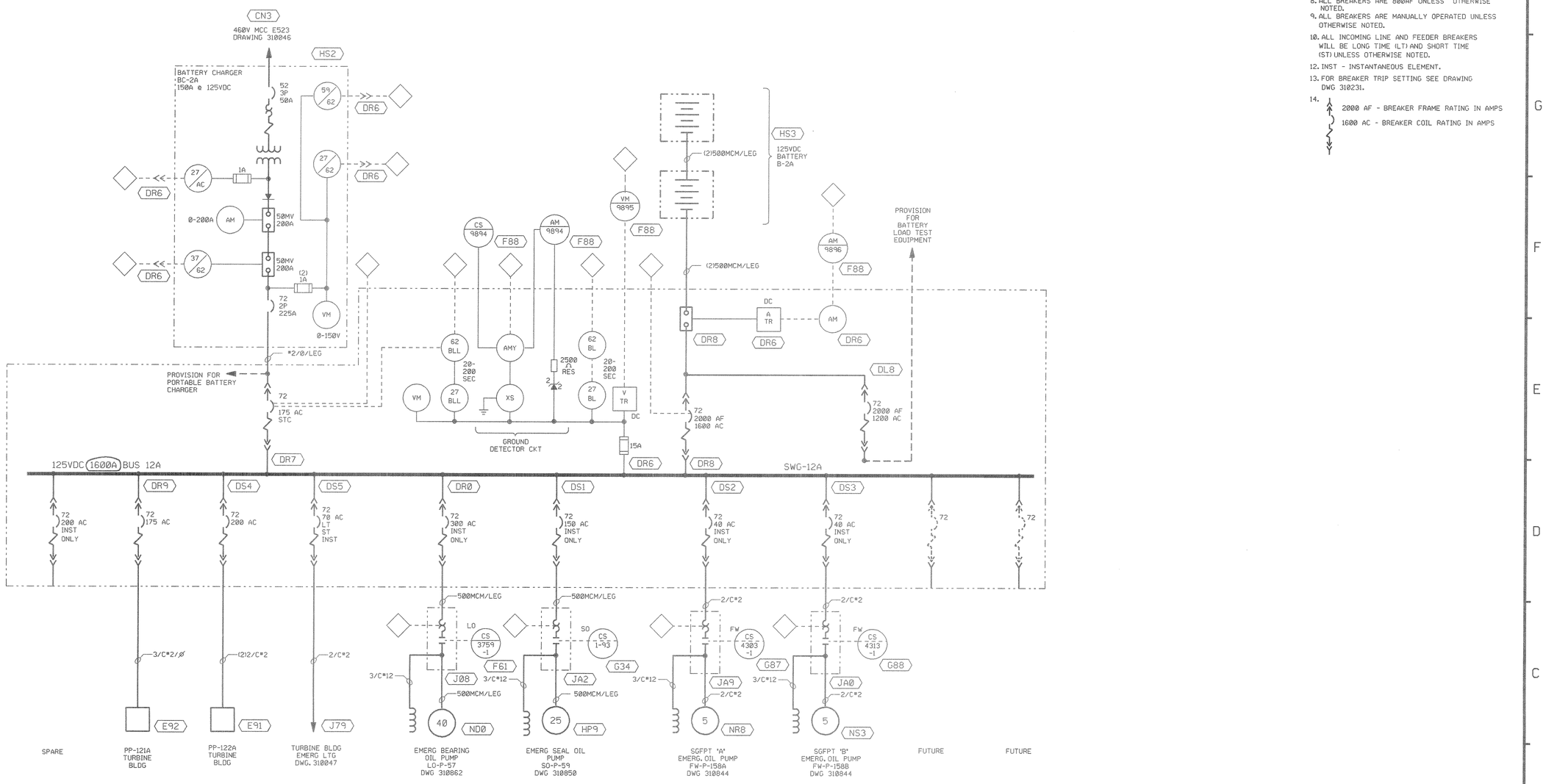
NHY OLD:310059.DGN#1

REFERENCE DRAWINGS:

DWG 310041 - 125 VDC AND 120 VAC INSTRUMENT BUSES KEY ONE LINE DIAGRAM
DWG 310042 - 125 VDC VITAL DISTRIBUTION SYSTEM ONE LINE DIAGRAM

NOTES:

1. FOR DEFINITION OF ALL SYMBOLS USED ON THIS DRAWING REFER TO ANSI Y32.2.
2. FOR 125VDC DISTRIBUTION SCHEMATICS SEE DRAWING 310107.
3. FOR LEGEND SEE DRAWING 300006.
4. ⬭ INDICATES EQUIPMENT DESIGNATION. (LOCATION)
5. ALL BREAKERS ARE 2 POLE UNLESS OTHER OTHERWISE NOTED.
6. THE SYSTEM PREFIX IS ED UNLESS OTHERWISE NOTED.ALL EQUIPEMNT AND DEVICES THAT HAVE TAG NUMBERS ARE TO BE PREFIXED WITH A SYSTEM NOTATION.
7. STC -INDICATES SHUNT TRIP COIL
8. ALL BREAKERS ARE 800AF UNLESS OTHERWISE NOTED.
9. ALL BREAKERS ARE MANUALLY OPERATED UNLESS OTHERWISE NOTED.
10. ALL INCOMING LINE AND FEEDER BREAKERS WILL BE LONG TIME (LT) AND SHORT TIME (ST) UNLESS OTHERWISE NOTED.
12. INST - INSTANTANEOUS ELEMENT.
13. FOR BREAKER TRIP SETTING SEE DRAWING DWG 310231.
14. 2000 AF - BREAKER FRAME RATING IN AMPS
    1600 AC - BREAKER COIL RATING IN AMPS



REV	DATE	DSGN	DRWN	CHKD	CE	LOE	DESCRIPTION
10	3/17/88	—	NFF	TPN	TPN	TWG	INCORP. DCR 97-010, DCN-00
9	6/29/87	—	LP	APL	TPN	RHG	INCORP. ECA 03/1185988 & HP9 HP REV. DUE TO ERROR IN CONVERSION
8	4/3/87	—	NLM	AMR	TPN	RHG	REDRAWN ON CADD; NO TECHANICAL CHANGES. ADDED NOTE 15 TO SHEET 1 OF 2. AND ADDED SHEET 2

North Atlantic Energy Service Corporation

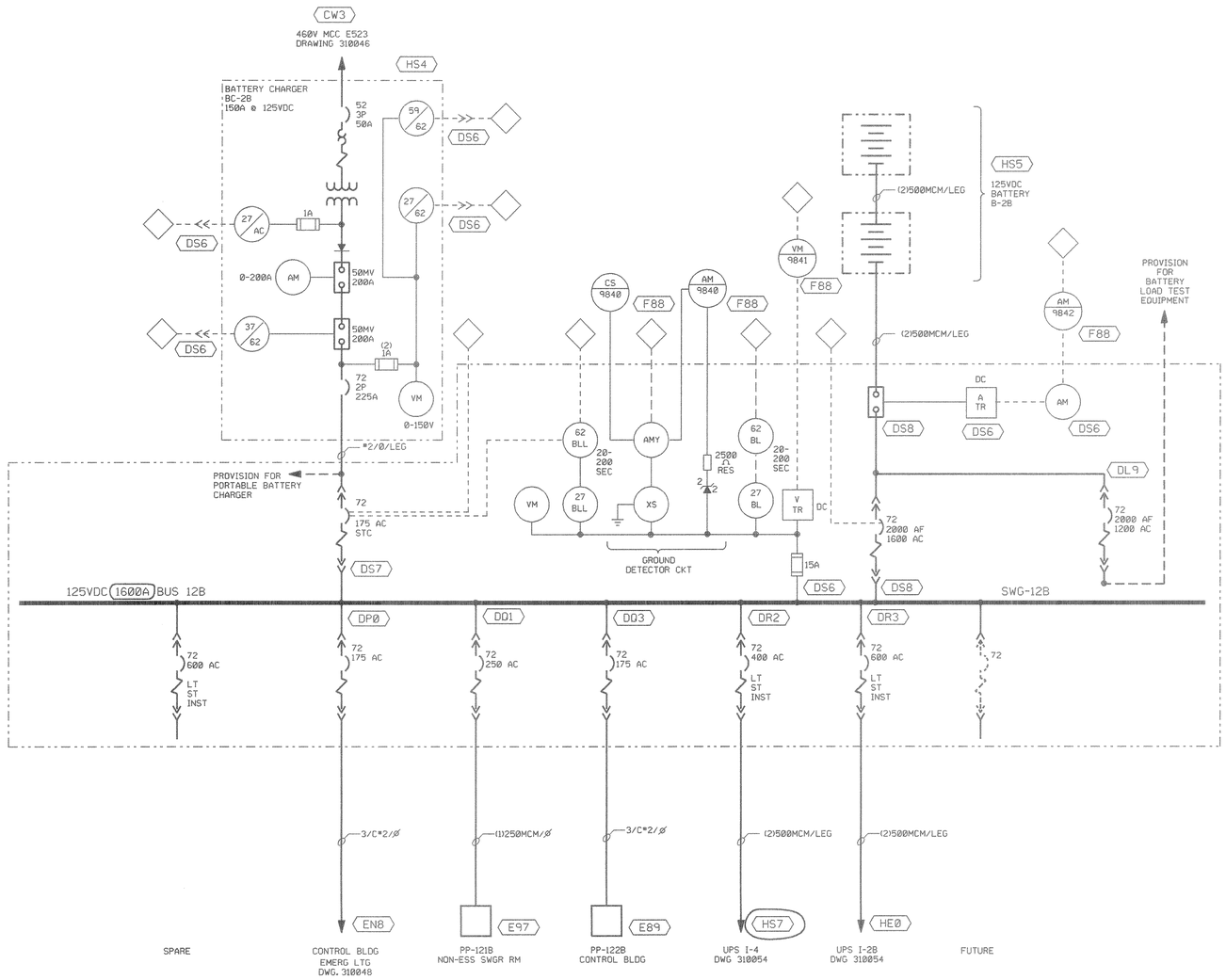
SEABROOK STATION

125VDC NON VITAL DISTRIBUTION SYSTEM ONE LINE DIAGRAM

SHEET 1 OF 2

UNIT 1 1-NHY- 310059

7/24/95



NOTE: FOR CONTINUATION OF THIS DRAWING, NOTES AND REFERENCES SEE SHEET 1.

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
1	3/18/97	—	NFF	TPN	TPN	TWG	INCORP. DCR 97-010, DCN-00
0	4/3/87	—	NLM	AMR	TPN	RHG	REDRAWN ON CADD; NO TECHNICAL CHANGES ADDED NOTE 15 TO SHEET 1 OF 2. AND ADDED SHEET 2

North Atlantic Energy Service Corporation

SEABROOK STATION

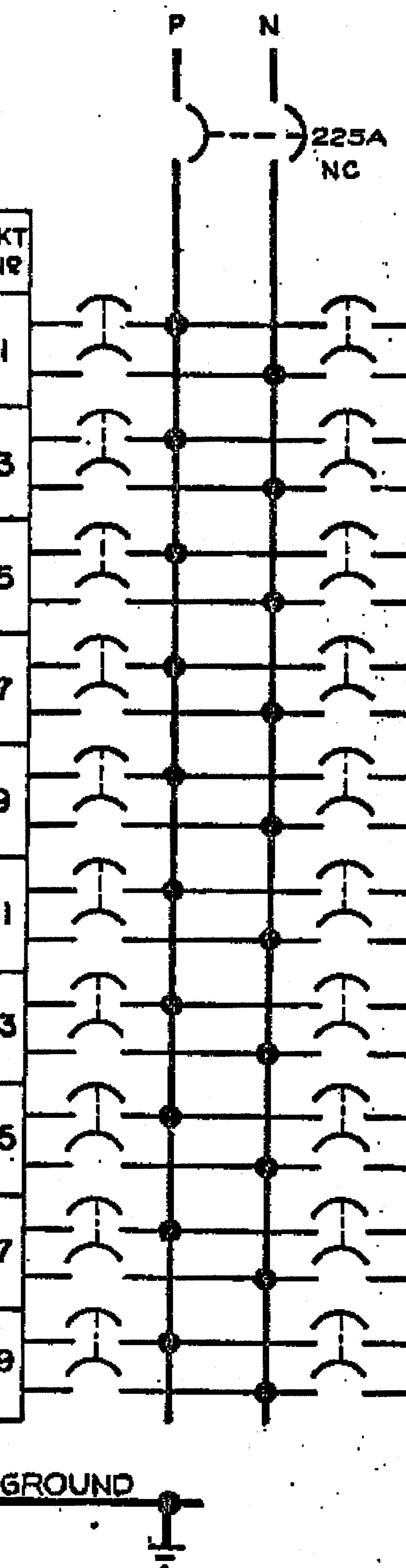
125VDC NON VITAL DISTRIBUTION SYSTEM ONE LINE DIAGRAM

SHEET 2 OF 2

UNIT 1 1-NHY- 310059

7/24/95

REFERENCE DWG	DESCRIPTION	LOAD (AMPS)	BKR TRIP (AMPS)	CKT Nº
310102 SH. 5h	4.16 KV BUS E5 125V DC AUXILIARY BUS *	—	80	1
310103 SH. 5n	480V BUS E52 125V DC AUXILIARY BUS	—	20	3
310108 SH. E93/5a	EMERGENCY POWER SEQUENCER	—	15	5
	SPARE	—	20	7
310944 SH. HD3a	CP-CP-111 REACTOR TRIP SWITCHGEAR *	—	15	9
310927 SH.-E93/11	ETA SYSTEM TRAIN 'A' AIR CONDITIONING	—	20	11
	SPARE	—	20	13
——	SPARE	—	15	15
——	SPARE	—	20	17
——	SPARE	—	20	19



CKT Nº	BKR TRIP (AMPS)	LOAD (AMPS)	DESCRIPTION	REFERENCE DWG
2	20	—	480V BUS E51 125V DC AUXILIARY BUS	310103 SH. 5m
4	20	—	480V BUS E53 125V DC AUXILIARY BUS	310103 SH. 5o
6	20	—	NG SYSTEM "A" TRAIN-VITAL CTL.	310868 E93/6
8	20	—	DG-1A CONTROL POWER	310857 SH. E93/8a
10	20	—	SPARE	
12	20	—	SPARE	
14	20	—	SB SYSTEM ISOLAT. VALVES CONTR.	310901 SH E93/14
16	20	—	SPARE	——
18	20	—	SPARE	——
20	15	—	LOSS OF POWER	SH-E93/20

225A, 125V DC, 2W DISTRIBUTION PANEL
(E93)
CONTROL BLDG. EL. 21'-6" COL. 3B

*- ONE MINUTE LOAD

NOTES:

1. FOR THREE LINE DIAGRAM SEE SH. DB1a.
2. FOR ARRG'T SEE F.P. 31883
3. ALL BREAKERS ARE THERMAL-MAGNETIC EXCEPT MAIN BREAKER WHICH IS NON-AUTO.
4. SEE CALCULATION 9763-3-ED-00-14-F FOR CIRCUIT LOAD AMPS.

REV	DATE	DRAWN	CHKD	DESCRIPTION
4	2-9-84		DK	CKT 19 MADE SPARE PER DCN 65/0120B
5	5-31-84		FL	REV. PER ECA 54/5788 B, DCN 65/0238A, DCN 63/0079A
6	8-30-85		E.G.	REV. PER ECA 03/104504 B, 03/104201C; 03/108202A & 98/108088B
7	2-24-86		[illegible]	REV PER ECA 03/804133B
8	5-9-86		AFB	REV PER ECA-03/114694B NCR 82/1380B
9	12/1/86	RRP	CCM	9763-M-310107 SH.E93a SUPERCEDES UE&C DWG.
10	11/9/88	HP	APL	INCORP DCR 88-125, CA-01
11	4/15/93	TPA		INCORP MMOD 92-517 CA-1
12	4-1-99	BMC	CMA	INCORP DCR 99-0002 DCN 00

NUCLEAR SAFETY RELATED 'A' TRAIN LOAD GROUP

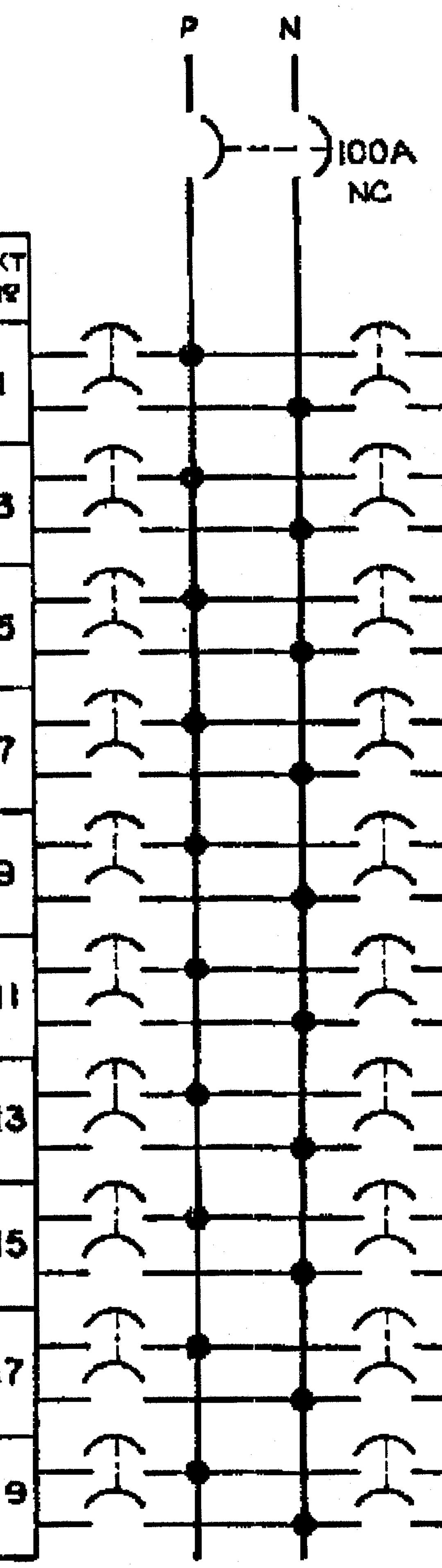
125V DC BUS 1-SWG-11A DISTR PANEL 1-PP-111A SCHEDULE SH. 90

PUBLIC SERVICE CO. OF NEW HAMPSHIRE SEABROOK STATION

United Engineers & Constructors Inc.

1-NHY- 310107 SH.E93a

REFERENCE DWG	DESCRIPTION	LOAD (AMPS)	BKR TRIP (AMPS)	CKT Nº
	SPARE	—	20	1
310920 SH. E87/3a	COP SYSTEM CONTROL POWER	—	20	3
301216 SH-E87/5a	WLD SYSTEM CONTROL POWER	—	20	5
310890 SH. E87/7b	SI SYSTEM CONTROL POWER	—	20	7
310901 SH. E87/9a	SB SYSTEM CONTROL POWER	—	20	9
	SPARE	—	20	11
310841 SH. E87/13a	MS SYSTEM RSS CIRCUITS	—	20	13
	SPARE	—	20	15
	SPARE	—	20	17
310882 SH.-E87/19a	RC SYSTEM RSS CIRCUITS	—	20	19



CKT Nº	BKR TRIP (AMPS)	LOAD (AMPS)	DESCRIPTION	REFERENCE DWG
2	20	—	RHR TRAIN A VITAL CONTROL POWER	310887 SH. E87/2a
4	20	—	SW SYSTEM TRAIN-A TOWER ACTUATION LOGIC	301107 SH. E87/4a
6	20	—	FW SYSTEM CONTROL POWER	310844 SH E87/6a
8	20	—	CBS SYSTEM CONTROL POWER	310900 SH. E87/8a
10	20	—	CC SYSTEM CONTROL POWER	310895 SH. E87/10a
12	20	—	CC SYSTEM RSS CIRCUITS	310895 SH. E87/12a
14	20	—	MS SYSTEM ISO. VALVE MS-V-86	310841 SH. E87/14a
16	20	—	CAP SYSTEM CONTROL POWER	310899 SH. E87/16a
18	20	—	MS SYSTEM ISO VALVE MS-V-92	310841 SH. E87/18a
20	15	—	LOSS OF POWER	SH-E87/20

100A, 125V DC, 2W
DISTRIBUTION PANEL
(E87)
CONTROL BLDG. EL. 21'-6" COL. 28

NOTES:

1. FOR THREE LINE DIAGRAM SEE SH. DB1a.
2. FOR ARRG'T SEE F.P 31878
3. ALL BREAKERS ARE THERMAL-MAGNETIC EXCEPT MAIN BREAKER WHICH IS NON-AUTO.
4. TYPE ED-FRAME CAN <u>NOT</u> BE USED TO REPLACE E-FRAME BRANCH BREAKERS IN THIS PANEL
5. SEE CALCULATION 9763-3-ED-00-14-F FOR CIRCUIT LOAD AMPS.

REV	DATE	DRWN	CHKD	DESCRIPTION
16	5/24/06	TPN	JTW	REFERENCE CR 06-4510
15	4/1/99	RMC	CMF	INCORP DCR 99-002 DCN 00
14	6/23/98	RMC	RJS	INCORP DCR 90-051DCN 00
13	6/20/97	RJS	TPN	INCORP DCR 97-04 DCN 00
12	8/18/94	TPN	NFF	INCORP MMOD 91-640 CA 0

NUCLEAR SAFETY RELATED
"A" TRAIN LOAD GROUP

125V DC BUS 1-SWG-11A
DISTR. PANEL 1-PP-112A
SCHEDULE

New Hampshire Yankee
Seabrook Station

SH. 78

1-NHY-310107 SH.E87a

1-NHY-310107 SH.E87a

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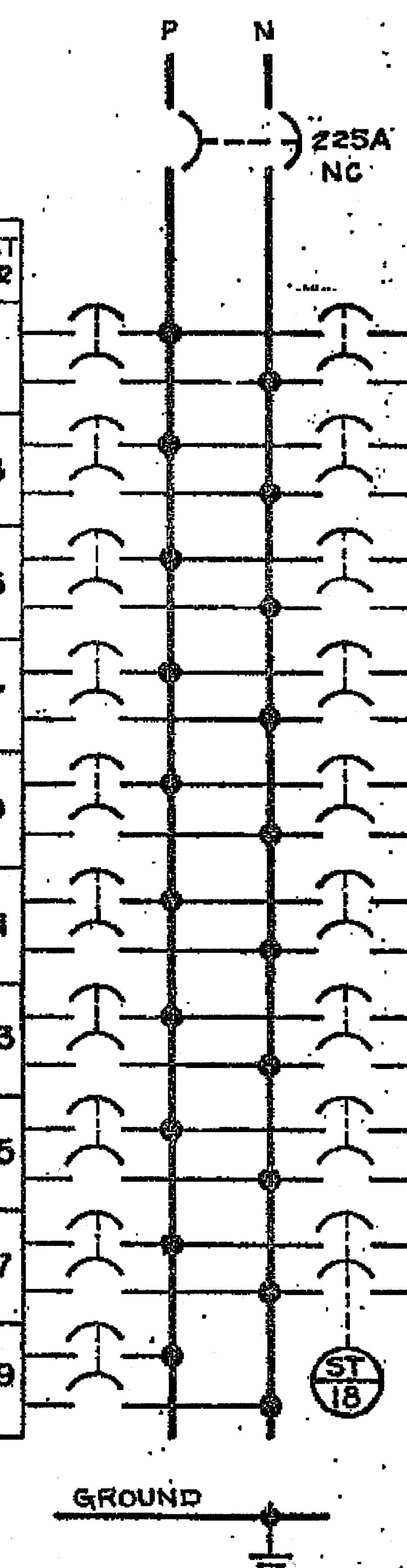
REFERENCE DWG	DESCRIPTION	LOAD (AMPS)	BKR TRIP (AMPS)	CKT NO
310102 SH. 5l	4.16KV BUS E6 125 V DC AUXILIARY BUS *	—	80	1
310103 SH. 5r	480V BUS E62 125V DC AUXILIARY BUS	—	20	3
310108 SH.E94/5a	EMERGENCY POWER SEQUENCER	—	15	5
—	SPARE	—	20	7
310944 SH. HD2a	CP-CP-111 REACTOR TRIP SWITCHGEAR *	—	15	9
310927 SH- E94/11	ETA SYSTEM TRAIN 'B' AIR CONDITIONING	—	20	11
	SPARE	—	20	13
	SPARE	—	15	15
310103 SH. 5t	480V BUS E64 125V DC AUXILIARY BUS	—	20	17
—	SPARE	—	20	19

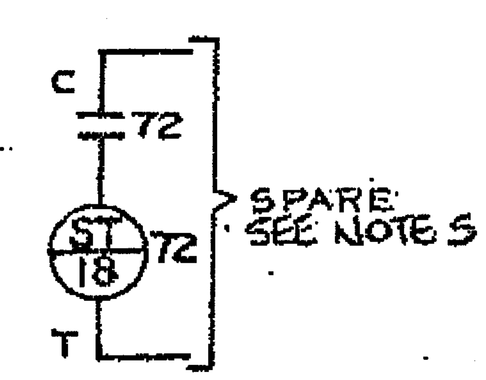


CKT NO	BKR TRIP (AMPS)	LOAD (AMPS)	DESCRIPTION	REFERENCE DWG
2	15 SEE NOTE 4	—	480V BUS E61 125V DC AUXILIARY BUS	310103 SH. 5q
4	20	—	480V BUS E63 125V DC AUXILIARY BUS	310103 SH. 5s
6	20	—	NG SYSTEM "B" TRAIN-VITAL CTL.	310868 SH-E94/6
8	20	—	DG-1B CONTROL POWER	310857 SH. E94/8a
10	20	—	SPARE	
12	20	—	SPARE	
14	15	—	LOSS OF POWER	SH-E94/14
16	20	—	CS SYSTEM CONTROL POWER	310891 SH. E94/16a
18	100	—	ED-PP-1111B 125VDC DISTRIBUTION PANEL 1111B	SH.E95a
20		—	SPACE	

225A, 125V DC, 2W DISTRIBUTION PANEL (E94)

CONTROL BLDG. EL. 21'-6" COL. 3D

*- ONE MINUTE LOAD



NOTES:

1. FOR THREE LINE DIAGRAM SEE SH. DA1a.
2. FOR ARRG'T SEE F.P. 31884
3. ALL BREAKERS ARE THERMAL-MAGNETIC EXCEPT MAIN BREAKER WHICH IS NON-AUTO.
4. IF FUTURE E.O. BREAKERS ON THIS BUS ARE ACTIVATED, CHANGE THIS BREAKER TO 20 AMPS AND REVISE CABLE SIZE ACCORDINGLY.
5. ~~SHUNT TRIP OPTIONAL~~
6. SEE CALCULATION 9763-3-ED-00-14-F FOR CIRCUIT LOAD AMPS.

REV	DATE	DESCRIPTION	DRWN	CHKD
5	2-9-84	CKT 19 MADE SPARE PER DCN 63/0046A	DK	
6	5-31-84	ASSIGN'D CKT 12 TO SS SYS. & REV. PER DCN 63/0079A	FL	
7	8-30-85	REV. PER ECA 03/104604B & 99/108088B	EG	
8	2-24-86	REV PER ECA 03/113230, 03/113124C & 03/604613B		
9	5-9-86	REV PER ECA-03/114694B NCR 82/1380B	AFB	
11	9/6/87	INCORPORATE AS-BUILT COMMENTS	NFF	APL
12	11/9/88	INCORP. DCR 88-125, CA-01	HP	APL
13	5/24/89	INCORP. DCR 87-264, CA-09	HP	
14	4/15/93	INCORP. MMOD 92-517, CA-1	TPN	
15	11/18/95	INCORP. DCR 95-48, CA-01	TXY	JLM
16	4-1-99	INCORP. DCR 99-002 DEV 00	RMC	

NUCLEAR SAFETY RELATED
'B' TRAIN LOAD GROUP

125V DC BUS 1-SWG-11B
DISTR PANEL 1-PP-111B
SCHEDULE SH. 23

New Hampshire Yankee
Seabrook Station

1-NHY- 310107 SH.E94a

1-NHY- 310107 SH.E94a

REV	DATE	DRWN	CHKD	DESCRIPTION
17	4-1-99	RMC	[illegible]	INCORP DCR 99-002 DCN 00
16	8/23/98	RMC	RJS	INCORP DCR 98-051 DCN 00
15	6/20/97	RJS	TPN	INCORP DCR 97-04 DCN 00
14	11/8/94	SAC	MAS	INCORP DRR 94-055 REV 0
REV	DATE	DRWN	CHKD	DESCRIPTION

REFERENCE DWG	DESCRIPTION	LOAD (AMPS)	BKR TRIP (AMPS)	CKT NO
310882 SH. E88/19	REACTOR HEAD VENT SOL. VLV. RC-FV-2881	—	20	1
310920 SH. E88/3a	COP SYSTEM CONTROL POWER	—	20	3
301216 SH. E88/5a	WLD SYSTEM CONTROL POWER	—	20	5
310890 SH. E88/7a	SI SYSTEM CONTROL POWER	—	20	7
310841 SH. E88/9a	MS SYSTEM ISO VALVE MS-V-92	—	20	9
310898 SH. E88/11a	RMW SYSTEM CONTROL POWER	—	20	11
310841 SH. E88/13a	MS SYSTEM CONTROL POWER	—	20	13
	SPARE	—	20	15
	SPARE	—	20	17
310882 SH-E88/19a	RC SYSTEM RSS CIRCUITS	—	20	19

P N

CKT NO	BKR TRIP (AMPS)	LOAD (AMPS)	DESCRIPTION	REFERENCE DWG
2	20	—	RHR TRAIN B VITAL CONTROL POWER	310887 SH. E88/2a
4	20	—	SW SYSTEM TRAIN-B TOWER ACTUATION LOGIC	301107 SH. E88/4a
6	20	—	FW SYSTEM CONTROL POWER	310844 SH E88/6a
8	20	—	CBS SYSTEM CONTROL POWER	310900 SH. E88/8a
10	20	—	CC SYSTEM CONTROL POWER	310895 SH. E88/10a
12	20	—	CC SYSTEM RSS CIRCUITS	310895 SH. E88/12a
14	20	—	MS SYSTEM ISO. VALVE MS-V-86	310841 SH. E88/14a
16	20	—	CAP SYSTEM CONTROL POWER	310899 SH. E88/16a
18	20	—	SB SYSTEM CONTROL POWER	310901 SH. E88/18a
20	15	—	LOSS OF POWER	SH-E88/20

100A, 125V DC, 2W
DISTRIBUTION PANEL
(E88)
CONTROL BLDG. EL. 21'-6" COL. E-2

GROUND

NOTES:

1. FOR THREE LINE DIAGRAM SEE SH. DA1a.
2. FOR ARRG'T SEE FIP 31879
3. ALL BREAKERS ARE THERMAL-MAGNETIC
4. TYPE ED-FRAME CAN NOT BE USED TO REPLACE E-FRAME BRANCH BREAKERS IN THIS PANEL
5. SEE CALCULATION 9763-3-ED-00-14-F FOR CIRCUIT LOAD AMPS.

NUCLEAR SAFETY RELATED
"B" TRAIN LOAD GROUP

125V DC BUS 1-SWG-11B
DISTR. PANEL 1-PP-112B
SCHEDULE

New Hampshire Yankee — Seabrook Station

SH. 80

1-NHY-310107 SH. E88a

1-NHY-310107 SH. E88a

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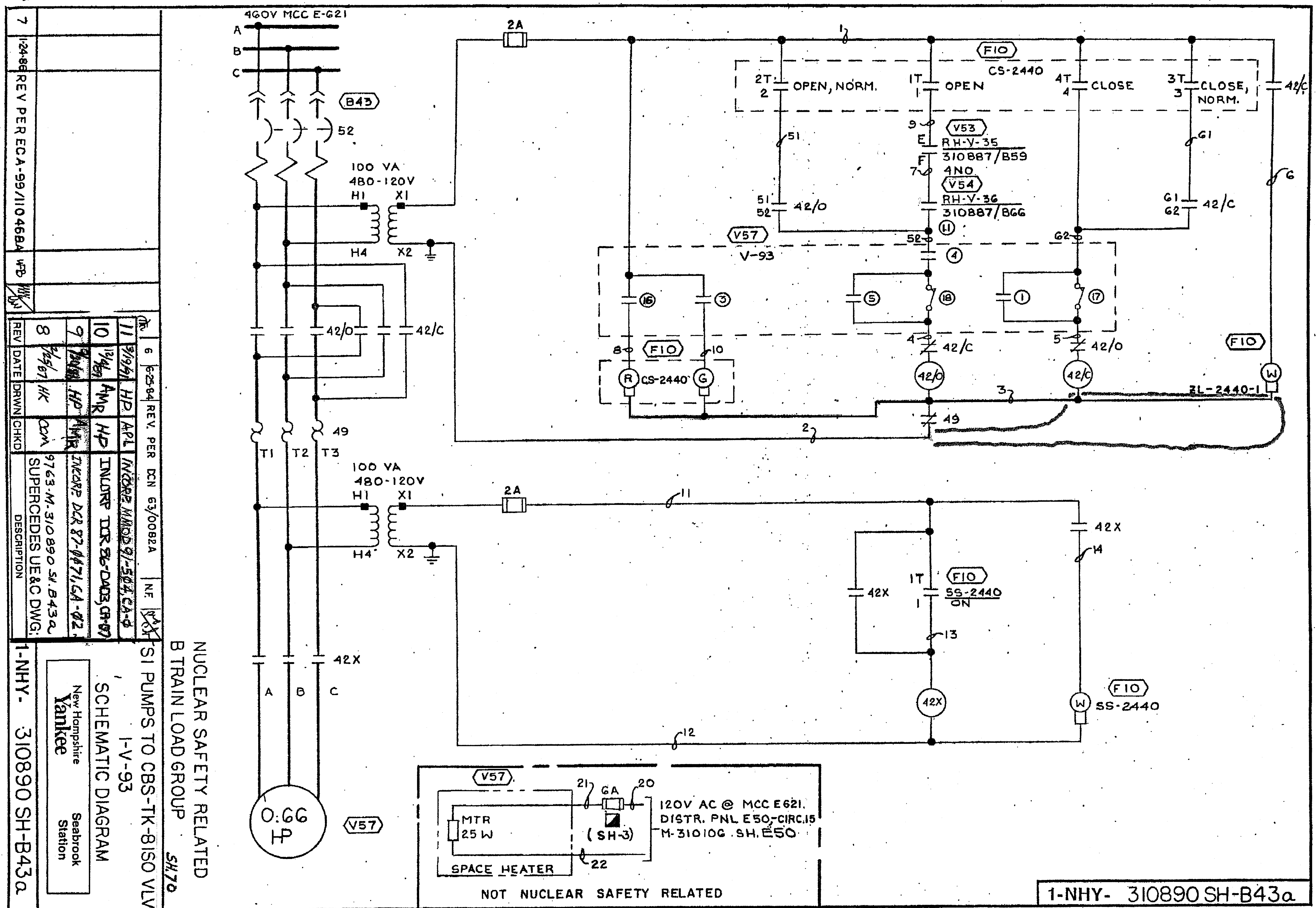


460V MCC E-621
2A
CS-2440
OPEN, NORM.
OPEN
CLOSE
CLOSE, NORM.
RH-V-35
310887/B59
4NO
RH-V-36
310887/B66
V-93
CS-2440
ZL-2440-1
100 VA
480-120V
42/O
42/C
49
42X
SS-2440
ON
0.66 HP
MTR
25 W
SPACE HEATER
(SH-3)
120V AC @ MCC E621.
DISTR. PNL E50-CIRC.15
M-310106 SH. E50
NOT NUCLEAR SAFETY RELATED
NUCLEAR SAFETY RELATED
B TRAIN LOAD GROUP
SI PUMPS TO CBS-TK-8150 VLV
1-V-93
SCHEMATIC DIAGRAM
New Hampshire Yankee
Seabrook Station
REV PER ECA-99/110468A
REV. PER DCN 63/0082A
9763-M-310890 SH.B43a
SUPERCEDES UE&C DWG.
REV
DATE
DRWN
CHKD
DESCRIPTION
1-NHY- 310890 SH-B43a

SAFETY INJECTION SIGNAL
DIESEL GEN. BREAKER OPEN
EMERGENCY BUS ENERGIZED
RAT SOURCE ENERGIZED
EMERG BUS LOSS OF VOLTAGE 1.2 SEC TIME DELAY
UAT BREAKER OPEN
RAT BREAKER OPEN
MAN OVERRIDE PUSHBUTTON DEPRESSED
SEQUENCER INPUTS

TD 0.1 SEC
TD 1 SEC
TD 0.1 SEC
TD 1SEC
TD 1 SEC

STEP TIME DELAYS
1 TD 5 SEC
2 TD 10 SEC
3 TD 15 SEC
4 TD 20 SEC
5 TD 25 SEC
6 TD 30 SEC
7 TD 35 SEC
8 TD 40 SEC
9 TD 100 SEC

TD 1SEC

PR1X CLOSE DG BREAKER
R2X START "D" STEP LOADS
RA SI LOCKOUT
PR1 START DG
STEP 1 LATCHED CONTACTS "LR1"
STEP 1 "SR1"
STEP 2 "SR2"
STEP 3 "SR3"
STEP 4 "SR4"
STEP 5 "SR5"
STEP 6 "SR6"
STEP 7 "SR7"
STEP 8 "HR8"
STEP 8 LATCHED CONTACTS "LR8"
STEP 9 "HR9" MAINTAINED CONTACTS
STEP 9 "HR9X" MOMENTARY CONTACTS
"RMO" MANUAL OVERRIDE

SEQUENCER OUTPUT RELAYS

R2X RA PR1 STEP 1 STEP 2 STEP 3 STEP 4 STEP 5 STEP 6 STEP 7 STEP 8 STEP 9 RMO

MAIN CONTROL BOARD STATUS MONITOR

L.O.P. (LOSS OF POWER) SIGNAL ONLY BOTH UAT & RAT BKRS. TRIPPED
L.O.P. WITH S.I. (SAFETY INJECTION) SIGNAL S.I. OCCURS DURING L.O.P. SEQUENCING

EPS OUTPUT RELAY	REF. POINT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	3	4	5	6	7	4	5	6	7
	EPS CONDITION	EPS DE-ENERGIZED	EPS ENERGIZED	1 / 0 DG BKR. CLOSURE PERMIT / UV INITIATE	±12 START LOAD SEQUENCE	SEQ. STEP 1	SEQ. STEP 2	SEQ. STEP 3	SEQ. STEP 4	SEQ. STEP 5	SEQ. STEP 6	INITIAL SEQ. COMP. & SEQ. STEP 7	SEQ. COMPLETE 9	MANUAL OVERRIDE PB DEPRESSED	UAT/RAT BKR. CLOSED	1 / 0 DG BKR. CLOSURE PERMIT / UV INITIATE	±12 START LOAD SEQUENCE	SEQ. STEP 1	SEQ. STEP 2	SEQ. STEP 3	SI SIGNAL RECEIVED	RE-START LOAD SEQ.	SEQ. STEP 1	SEQ. STEP 2	SEQ. STEP 3
	STEP TOTAL TIME (SEC.)	1 / 0			0	5	17	22	27	32	37	42	47	52	120		0	17	22	27		0	5	10	15
	STEP INTERVAL TIME (SEC.)				0	5	5	5	5	5	5	5	5	68	100		0	5	5	5		0	5	5	5
R2X																									
RA																									
PR1																									
PR1X																									
SR1																									
SR2																									
SR3																									
SR4																									
SR5																									
SR6																									
SR7																									
LR1																									
LR8																									
HR8																									
HR9																									
HR9X																									
RMO																									

RELAY BAR CHART

DE-ENERGIZED
ENERGIZED

NOTES:
1. FOR DURATION OF L.O.P. WITH S.I. CYCLE, RELATING TO REFERENCE POINTS 8-15, OPERATION OF E.P.S. OUTPUT RELAYS WILL BE SAME AS SHOWN FOR L.O.P. ONLY CYCLE.
2. THIS DRAWING IS ALSO UFSAR FIGURE 8.3-46

LEGEND

- INDICATOR LAMP
- TIME DELAY PICKUP OUTPUT EXIST AT TIME "T" AFTER INPUT ("T")
- OR
- AND
- NOT

REV	DATE	DRWN	DSGN	CHKD	CE	LDE	DESCRIPTION
3	1/9/02	CMF		TPN	TPN	RCJ	REDRAWN PER CR 01-11081

North Atlantic Energy Service Corporation

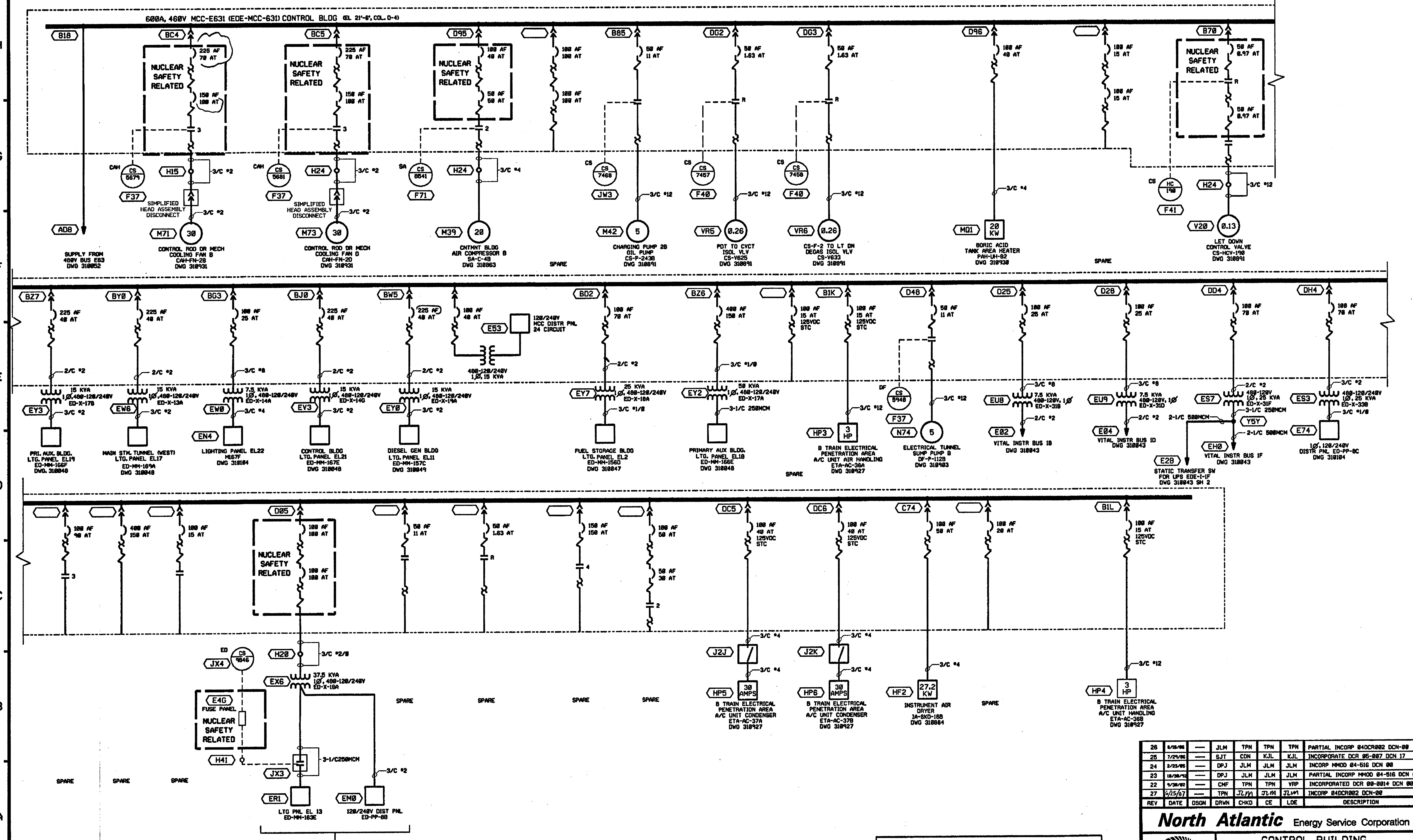
SEABROOK STATION

EMERGENCY POWER SEQUENCER SYSTEM, OUTPUT RELAY STATUS BAR CHART & LOGIC DIAGRAM

SH. 5

1-NHY-310108 SH. 5a

FIGURE 8.3-46



NOTE:

1. FOR GENERAL NOTES SEE DWG 310039

NUCLEAR SAFETY RELATED "B" TRAIN LOAD GROUP (AS NOTED)

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
26	8/18/08	—	JLM	TPN	TPN	TPN	PARTIAL INCORP 04DCR002 DCN-00
25	7/29/06	—	SJT	CDN	KJL	KJL	INCORPORATE DCR 05-007 DCN 17
24	2/23/05	—	DPJ	JLM	JLM	JLM	INCORP MMOD 04-516 DCN 00
23	10/30/92	—	DPJ	JLM	JLM	JLM	PARTIAL INCORP MMOD 04-516 DCN 00
22	9/30/02	—	CMF	TPN	TPN	VRP	INCORPORATED DCR 00-0014 DCN 00
27	6/25/07	—	TPN	JLM	JLM	JLM	INCORP 04DCR002 DCN-00

North Atlantic Energy Service Corporation

SEABROOK STATION

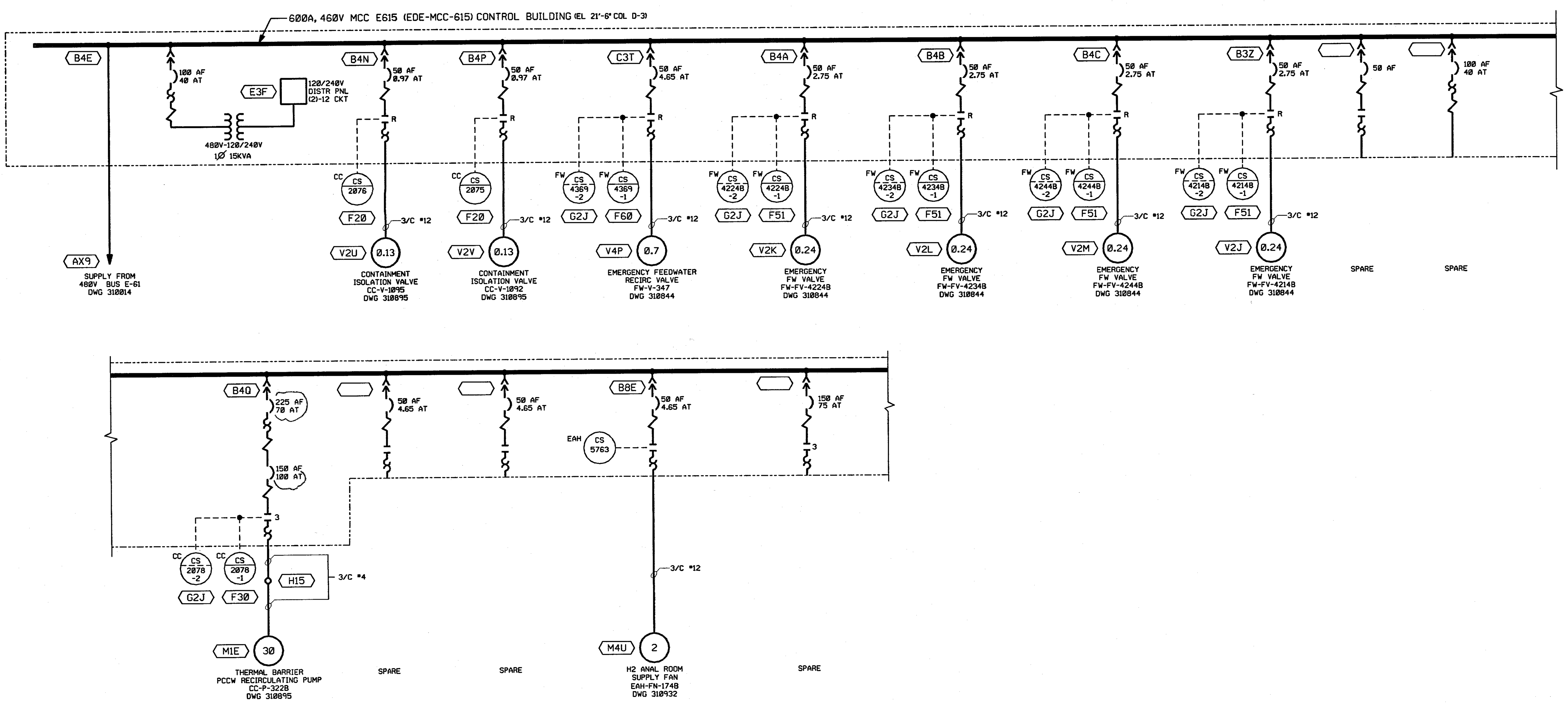
CONTROL BUILDING
460V MOTOR CONTROL CENTER
1-E631
ONE LINE DIAGRAM

UNIT 1 1-NHY- 310032

3/22/99

1-NHY-310067

NOTE:
FOR GENERAL NOTES SEE
DWG 310039



REV	DATE	DSGN	DRWN	CHKD	CE	LOE	DESCRIPTION
9	7/16/07	—	JLM	TWG	TWG	TWG	INCORP. 04DCR002 DCN-00
8	1/13/89	—	RMC	HP	APL	KJL	INCORP. DCR 88-195, CA-0
7	4/3/87	—	WES	AMR	TPN	RHG	REDRAWN ON CADD; NO TECHNICAL CHANGES

NUCLEAR SAFETY RELATED
"B" TRAIN LOAD GROUP

North Atlantic Energy Service Corporation

SEABROOK STATION

CONTROL BUILDING
460V MOTOR CONTROL CENTER 1-E615
ONE LINE DIAGRAM

UNIT 1 1-NHY- 310067

7/24/95

1-NHY- 310026

600A., 460V. MCC-E531 (EDE-MCC-531) CONTROL BLDG. (EL.21'-6", COL. B-4)

NOTE:
1. FOR GENERAL NOTES SEE DWG 310039

B12 — 225 AF 70 AT — NUCLEAR SAFETY RELATED — 150 AF 100 AT — 3

CAH CS 5678 — H18 — 3/C *2 — F36 — SIMPLIFIED HEAD ASSEMBLY DISCONNECT — 3/C *2 — M70 — 30 — AB8
SUPPLY FROM 480V BUS E53 DWG 310051
CONTROL ROD DR. MECH. COOLING FAN A CAH-FN-2A DWG 310931

B86 — 100 AF 60 AT — 100 AF 60 AT — H19 — 3/C *2 — J9R
604 POWER RECEPTACLE CONTAINMENT DWG 310104

BK4 — 50 AF 18 AT — CBA CS 5550 — 3/C *8 — N26 — 10
CABLE SPREADING ROOM SUPPLY FAN CBA-FN-17 DWG 310926

BK3 — 50 AF 18 AT — CBA CS 5551 — 3/C *8 — N27 — 10
CABLE SPREADING ROOM RETURN FAN CBA-FN-18 DWG 310926

BK5 — 50 AF 18 AT — CBA CS 5558 — FK3 — 3/C *8 — N36 — 10
CABLE TUNNEL EXHAUST FAN CBA-FN-22 DWG 310926

D94 — 100 AF 100 AT — 3/C *1/0 — M1U — 69.6 AMPS
COMPUTER ROOM A/C UNIT CBA-AC-78 DWG 310926

D93 — 100 AF 40 AT — NUCLEAR SAFETY RELATED — 50 AF 50 AT — 2 — SA CS 8531 — F71 — H19 — 3/C *4 — M38 — 20
CNTMNT BLDG. AIR COMPRESSOR A SA-C-4A DWG 310863

B80 — 50 AF 11 AT — CS CS 7467 — JW2 — 3/C *12 — M41 — 5
CHARGING PUMP 2A OIL PUMP CS-P-243A DWG 310891

DH3 — 100 AF 40 AT — 3/C *4 — ES2 — 15 KVA 1Ø,480-120/240V ED-X-33A — 3/C *2 — A53 — 10.5 KW
4160V SWGR BUS E5 AUXILIARY BUS DWG 310104

B0M — 100 AF 70 AT — 100 AF 15 AT — 100 AF 15 AT — 2/C *2 — EG4 — 25 KVA 1Ø,480-120/240V ED-X-14J — 3/C *1/0 — E9L
120/240V. DIST. PNL. ED-PP-8J
SPARE

D1A — 100 AF 15 AT — 50 AF 6.5 AT — 50 AF 6.5 AT — 3/C *8 — M1T — 10.2 AMPS
COMPUTER ROOM DRY COOLER CBA-AC-79 DWG 310926
SPARE

B4S — 50 AF 7.76 AT — R — FW CS 4261 — F60 — 50 AF 6.5 AT — 3/C *12 — V3L — 1.6
START-UP FD PP TO EMERG FW HEADER VLV FW-V156 DWG 310844
SPARE

50 AF 6.5 AT

B68 — 50 AF 2.75 AT — R — 50 AF 2.75 AT — NUCLEAR SAFETY RELATED — RC CS 7312 — F40 — H18 — 3/C *12 — V03 — Ø.7
SPARE
REACTOR COOL. LOOP 3 LETDOWN TO REGEN. HEAT EXCHANGE ISOLATION VALVE RC-V81 DWG 310882

50 AF 1.63 AT — R — 50 AF 1.63 AT
SPARE

D61 — 50 AF 11 AT — DF CS 5955 — F36 — 3/C *12 — N61 — 5
ELECTRICAL TUNNEL SUMP PUMP A DF-P-112A DWG 310903

BG9 — 225 AF 40 AT — 2/C *2 — 15 KVA 1Ø,480-120/240V ED-X-14B — 3/C *2 — EX1 — EN5
LIGHTING PANEL EL23 MM-167G DWG 310104

BZ1 — 225 AF 40 AT — 2/C *2 — 15 KVA 1Ø,480-120/240V ED-X-14C — 3/C *2 — EX2 — EM2
LIGHTING PANEL EL20 MM-167D DWG 310104

BZ2 — 225 AF 40 AT — 2/C *2 — 15 KVA 1Ø,480-120/240V ED-X-13B — 3/C *2 — EW7 — E49
LIGHTING PANEL EL8 MM-165B DWG 310104

BZ3 — 100 AF 25 AT — 2/C *2 — 7.5 KVA 1Ø,480-120/240V ED-X-13D — 3/C *4 — EW9 — E1M
MAIN STM. TUNNEL (EAST) LTG. PANEL EL16 ED-MM-168A DWG 310048

100 AF 15 AT 125VDC STC
SPARE

B1B — 100 AF 40 AT — 2/C *2 — 15 KVA 1Ø,480-120/240V RM-X-45 — 3/C *2 — E1J — E1M
PAB & FSB. RAD. MON DISTR. PNL RM-PP-170 DWG 310956

B1C — 100 AF 40 AT — 2/C *2 — 15 KVA 1Ø,480-120/240V RM-X-46 — 3/C *2 — E1K — E1N
WPB RAD. MON DISTR. PNL RM-PP-171 DWG 310956

DU2 — 100 AF 40 AT — 3/C *4 — MANUAL CONTROLLER FP-CP-509 — G8J — 3/C *4 — MC7 — 20
FIRE PROTECTION BOOSTER PUMP FP-P-374 DWG 300933

BZ9 — 100 AF 70 AT — 3/C *1/0 — 25 KVA 1Ø,480-120/240V ED-X-11E — 3/C *1/0 — EV2
WASTE PROCESS BLDG. LTG. PANEL EL14 ED-MM-164D DWG 310049

BZ8 — 400 AF 100 AT — 3-1/C 250 MCM — 37.5 KVA 1Ø,480-120/240V ED-X-11A — 3-1/C 250 MCM — EV8
WASTE PROCESS BLDG. LTG. PANEL EL15 ED-MM-164E DWG 310049

BN0 — 225 AF 40 AT — 2/C *2 — 15 KVA 1Ø,480-120/240V ED-X-20A — 3/C *2 — EZ1
DIESEL GEN. BLDG. LTG. PANEL EL12 ED-MM-157D DWG 310049

D91 — 100 AF 40 AT — CS HC 189 — F40 — 3/C *4 — MP0 — 20 KW
BORIC ACID TANK AREA HEATER PAH-UH-81 DWG 310930

B69 — 50 AF 0.97 AT — R — 50 AF 0.97 AT — H19 — 3/C *12 — V19 — Ø.13
LET DOWN CONTROL VALVE CS-HCV-189 DWG 310891

100 AF 70 AT — E45 — 120/240V MCC DISTR. PNL 24 CIRCUIT — 480V-120/240V 1Ø,25 KVA
NUCLEAR SAFETY RELATED

DC2 — 100 AF 20 AT 125V DC STC — 3/C *8 — J2L — 3/C *8 — HN8 — 11.8 AMPS
A TRAIN ELECTRICAL PENETRATION AREA A/C UNIT CONDENSER ETA-AC-31A DWG 310927

DC3 — 100 AF 20 AT 125V DC STC — NUCLEAR SAFETY RELATED — 3/C *8 — J2M — 3/C *8 — HP2 — 11.8 AMPS — ETA-AC-31B — ED — CS 9845 — JX4 — E4E FUSE PANEL — H36
A TRAIN ELECTRICAL PENETRATION AREA A/C UNIT CONDENSER ETA-AC-31B DWG 310927

BY1 — 100 AF 100 AT — 100 AF 100 AT — H25 — 3/C *2/0 — 37.5 KVA 1Ø 480-120/240V ED-X-16H — EN2 — JX2 — 3-1/C 250MCM — EV5
LTG. PNL. EL 26 MM-163H
DWG 310104

B9T — 400 AF 150 AT — ALTERNATE SUPPLY MCC 211 DWG 310053 — 3/C *2/0 — E3H
460V,3 Ø PWR DISTR PNL ED-PP-181 NORMAL SUPPLY DWG 310104

D68 — 100 AF 70 AT — 2/C *2 — 25 KVA 1Ø,480-120/240V ED-X-36 — 3-1/C *1/0 — EU2
ADMIN. BLDG. ELEC. RM. LTG. PANEL ELP1 DWG. 312002

D24 — 100 AF 25 AT — 3/C *8 — 480-120V. 1Ø,7.5 KVA ED-X-31C — 2/C *2 — EU6 — E03
VITAL INST. BUS 1C DWG 310043

D29 — 100 AF 25 AT — 3/C *8 — 480-120V. 1Ø,7.5 KVA ED-X-31A — 2/C *2 — EU7 — E01
VITAL INST. BUS 1A DWG 310043

DD2 — 100 AF 70 AT — 2/C *2 — 480-120V. 1Ø,25 KVA ED-X-31E — ES6 — 3-1/C 250MCM — Y5J — 2-1/C 500 MCM — E1Y — 3-1/C 250MCM — EH9
STATIC TRANSFER SW FOR UPS EDE-1-1E DWG 310043 SH 1
VITAL INST. BUS 1E DWG 310043

D31 — 400 AF 125 AT — 4 — 3/C *1/0 — 480-120V/208V. 3 Ø,75 KVA ED-X-32A — EU4 — 4-1/C 500MCM — HD0
STATIC TRANSFER SW FOR UPS ED-1-2A DWG 310054

100 AF 50 AT — 150 AF 75 AT — 3
SPARE

C3V — 50 AF 50 AT — 2 — C2U — 3/C *4 — ALTERNATE SUPPLY MCC-141 DWG. 310017 — J9E — 60A A/C UNIT TRANSFER SW. — 3/C *4 — H2S — 30.9 AMPS
COMPUTER ROOM A/C UNIT TAH-AC-73 NORMAL SUPPLY DWG 310924

B7N — 100 AF 25 AT — 3/C *8 — E1P — 480-120/240V 1 Ø,7.5 KVA RM-X-72 — 3/C *8 — HN1
PLANT VENT WIDE-RANGE GAS RAD. MONITOR RM-P-248-1 & 2 DWG 310956

B1H — 100 AF 15 AT 125VDC STC — 3/C *12 — 1 HP — HN6
A TRAIN ELECTRICAL PENETRATION AREA A/C UNIT AIR HANDLING ETA-AC-30A DWG 310927

B1J — 100 AF 15 AT 125VDC STC — 3/C *12 — 1 HP — HN7
A TRAIN ELECTRICAL PENETRATION AREA A/C UNIT AIR HANDLING ETA-AC-30B DWG 310927

NUCLEAR SAFETY RELATED
"A" TRAIN LOAD GROUP
(AS NOTED)

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
26	4/8/99	—	RMC	CMF	CMF	CMF	INCORP. DCR 96-009, DCN 00
25	5/7/94	—	JLM	DRF	NFF	NFF	INCORPORATE DCR 93-0040, CA-05
24	4/15/93	—	JLM	NFF	TPN	RHG	INCORPORATE MMOD 92-517 CA-1
23	10/30/92	—	NFF	JLM	TPN	RCJ	INCORPORATE MMOD 92-517 CA-0
22	12/12/89	—	RMC	HP	CCM	KJL	INCORP. DCR 86-481, CA-10
32	7/21/07	—	JLM	TWG	TWG	TWG	INCORP. 04DCR002 DCN-00
31	4/21/05	—	DPJ	JLM	JLM	JLM	INCORP. DCR 05-009 DCN 00
30	2/23/05	—	DPJ	JLM	JLM	JLM	INCORP MMOD 04-516 DCN 00
29	2/16/05	—	DPJ	JLM	JLM	JLM	PARTIAL INCORP MMOD 04-516 DCN 00
28	10/21/04	—	SP	JLM	JLM	NCD	INCORP. MMOD 03-0512, DCN 00
27	1/10/02	—	ASP	CMF	CMF	NCD	INCORP. DCR 01-002, DCN 06

North Atlantic Energy Service Corporation

SEABROOK STATION

CONTROL BUILDING
460V MOTOR CONTROL CENTER 1-E531
ONE LINE DIAGRAM

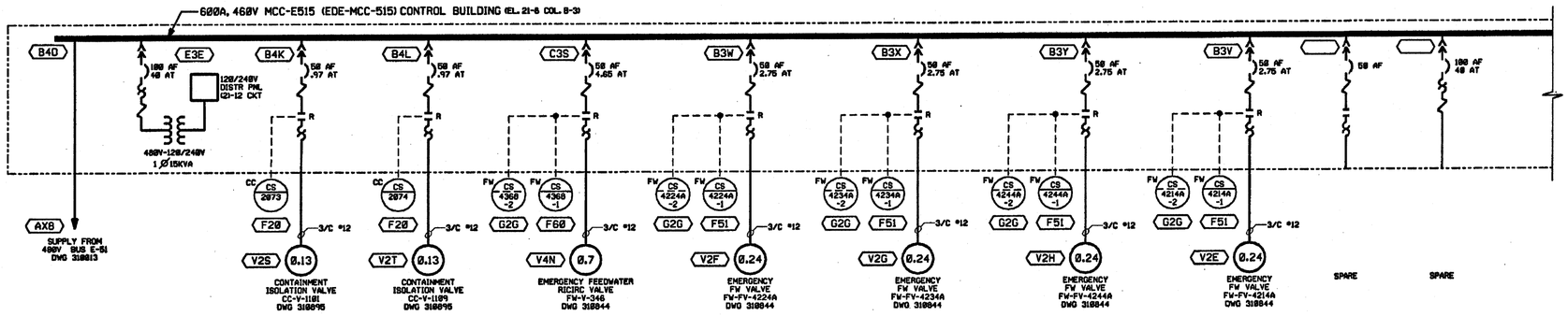
UNIT 1 1-NHY- 310026

03/22/99

NHY OLD:310026.DGN1

1-NHY- 310066

NOTE:
1. FOR GENERAL NOTES SEE DWG. 318838



NUCLEAR SAFETY RELATED
"A" TRAIN LOAD GROUP

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
9	4/12/07	—	TPN	JLM	JLM	JLM	INCORP DCR 84-882 DCN 88
8	1/13/89	—	RMC	MP	APL	KJL	INCORP DCR 88-145, CA-8
7	4/3/87	—	WES	AMR	TPN	RHG	REDRAWN ON CADD NO TECHNICAL CHANGES

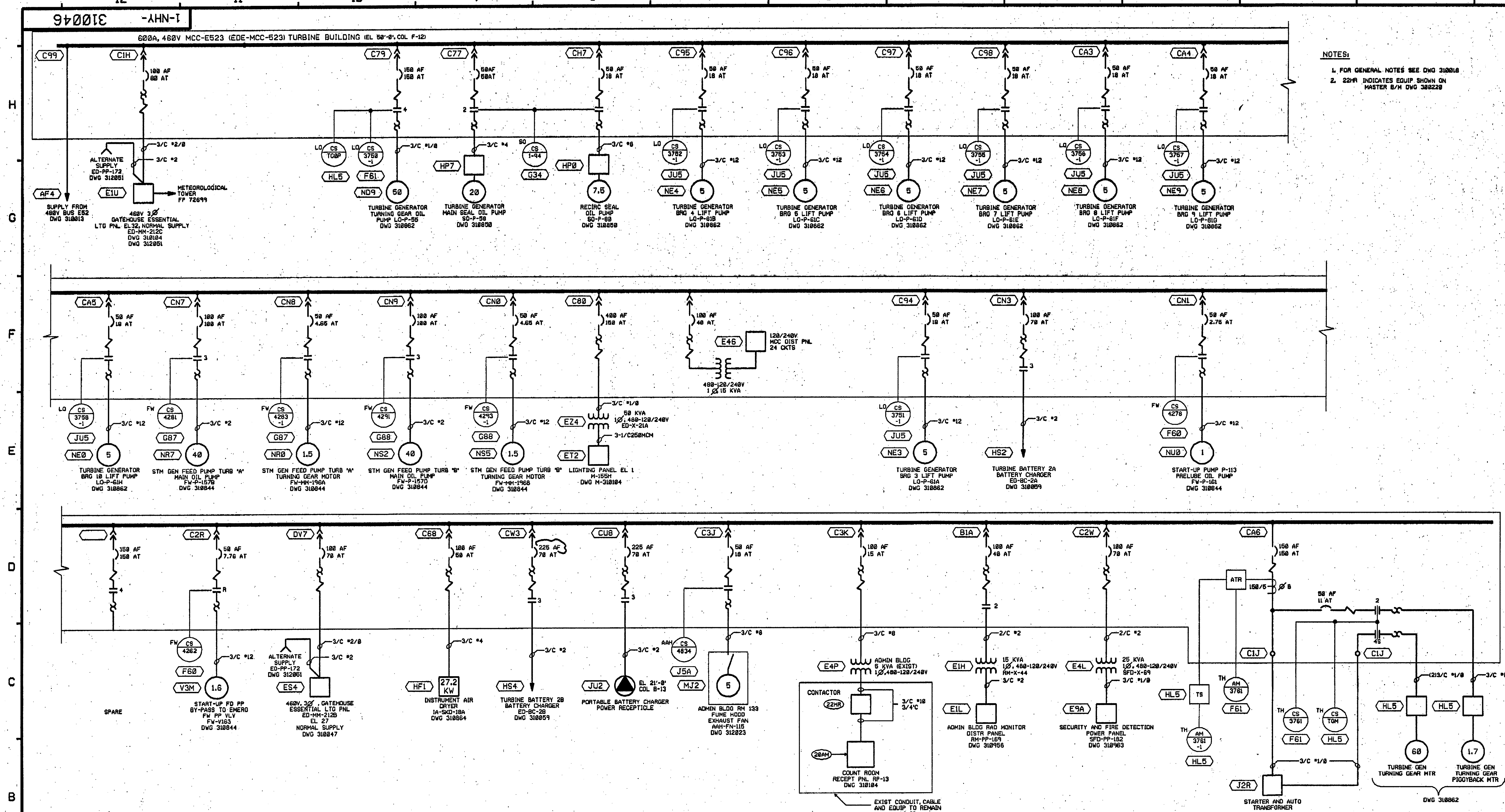
North Atlantic Energy Service Corporation

SEABROOK STATION

CONTROL BUILDING
460V MOTOR CONTROL CENTER
1-E515
ONE LINE DIAGRAM

UNIT 1 1-NHY- 310066

7/24/95


1-NHY- 310046
600A, 460V MCC-E523 (EDE-MCC-523) TURBINE BUILDING
NOTES:
1. FOR GENERAL NOTES SEE DWG 310018
2. 22HR INDICATES EQUIP SHOWN ON MASTER B/M DWG 300228
SUPPLY FROM 480V BUS E52 DWG 310013
460V 3Ø GATEHOUSE ESSENTIAL LTG PNL
METEOROLOGICAL TOWER
TURBINE GENERATOR TURNING GEAR OIL PUMP LO-P-55
TURBINE GENERATOR MAIN SEAL OIL PUMP
RECIRC SEAL OIL PUMP
TURBINE GENERATOR BRG 4 LIFT PUMP
TURBINE GENERATOR BRG 5 LIFT PUMP
TURBINE GENERATOR BRG 6 LIFT PUMP
TURBINE GENERATOR BRG 7 LIFT PUMP
TURBINE GENERATOR BRG 8 LIFT PUMP
TURBINE GENERATOR BRG 9 LIFT PUMP
TURBINE GENERATOR BRG 10 LIFT PUMP
STM GEN FEED PUMP TURB "A" MAIN OIL PUMP
STM GEN FEED PUMP TURB "A" TURNING GEAR MOTOR
STM GEN FEED PUMP TURB "B" MAIN OIL PUMP
STM GEN FEED PUMP TURB "B" TURNING GEAR MOTOR
LIGHTING PANEL EL 1
120/240V MCC DIST PNL 24 CKTS
TURBINE GENERATOR BRG 3 LIFT PUMP
TURBINE BATTERY 2A BATTERY CHARGER
START-UP PUMP P-113 PRELUBE OIL PUMP
SPARE
START-UP FD PP BY-PASS TO ENERG FW PP VLV
460V, 3Ø, GATEHOUSE ESSENTIAL LTG PNL
INSTRUMENT AIR DRYER
TURBINE BATTERY 2B BATTERY CHARGER
PORTABLE BATTERY CHARGER POWER RECEPTICLE
ADMIN BLDG RM 133 FUME HOOD EXHAUST FAN
CONTACTOR
COUNT ROOM RECEPT PNL
EXIST CONDUIT, CABLE AND EQUIP TO REMAIN AS IS
ADMIN BLDG RAD MONITOR DISTR PANEL
SECURITY AND FIRE DETECTION POWER PANEL
TURBINE GEN TURNING GEAR MTR
TURBINE GEN TURNING GEAR PIGGYBACK MTR
DWG 310862
STARTER AND AUTO TRANSFORMER

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
17	3/24/94	—	RJS	JLM	TPN	TWG	INCORPORATED DCR 93-0016, CA-00
23	12-18-07	—	MLT	TPN	TPN	TPN	PARTIAL INCORP DCR 04-002 DCN-00
22	11/26/07	—	JLM	MLT	MLT	MLT	PARTIAL INCORP 04DCR002 DCN-00
21	5/30/07	—	TPN	JLM	JLM	JLM	INCORP MMOD 03-513 DCN 26
20	11/25/05	—	DPJ	JLM	JLM	JLM	INCORPORATED 04 MMOD 504 DCN 00
19	8/12/04	—	SP	TPN	TPN	TPN	INCORPORATED DCR 03-008 DCN 00
18	12/17/02	—	CMF	JLM	JLM	NCD	INCORPORATED DCR 00-0014 DCN 15

North Atlantic Energy Service Corporation

SEABROOK STATION

TURBINE BUILDING
460V MOTOR CONTROL CENTER
1-E523
ONE LINE DIAGRAM

UNIT 1 1-NHY- 310046

07/21/95

310046.dgn 12/18/2007 8:49:20 AM

SECURITY-RELATED INFORMATION – WITHHELD UNDER 5 U.S.C. SECTION 552(b)(4) AND 5 U.S.C. SECTION 552(b)(7)(F)

REV	DATE	DRWN	CHKD	DESCRIPTION
8	4-1-99	RMC	DMM	INCORP DCR 99-002 DCN 0
7	4/15/93	TPN	MMK	INCORP MMOD 92-517 CA-1
6	12-15-89	HP	APL	INCORP MMOD 89-605 CA-0
5	11/28/88	HP	APL	INCORP. 88-125, CA-01
4	12/11/86	RRP	CSM	9763-M-310107 SH. EG1a SUPERCEDES UE&C DWG.

REV.	DATE	DESCRIPTION*	DWN. BY	CKD. BY
0	11/2/81	FIRST ISSUE DCN 03/10162	NP	
1	9-30-82	ADDED FP REFERENCE	NP	
2	5-31-84	REV. PER DCN 63/00794	FL	
3	8-30-85	REV. PER ECA 03/101312B	EG	

P N

225A
NC

REFERENCE DWG	DESCRIPTION	AMPS LOAD	BKR TRIP	CKT NO.
—	SPARE	—	20	■ 1
—	SPARE	—	20	■ 3
—	SPACE	—		5
—	SPARE	—	20	7
—	SPARE	—	20	9
M-310882 SH. A091	REACTOR COOLANT PUMP RC-P-1C UNDERVOLTAGE & UNDERFREQUENCY CKT	—	20	11
—	SPARE	—	20	13
—	SPARE	—	20	15
—	SPARE	—	15	17
—	SPARE	—	15	19

CKT NO.	BKR TRIP	AMPS LOAD	DESCRIPTION	REFERENCE DWG
■ 2	20	—	SPARE	—
■ 4	20	—	SPARE	—
6	30	—	SPARE	—
8	20	—	SPARE	—
10	20	—	SPARE	—
12	20	—	SPARE	—
14	20	—	SPARE	—
16	20	—	SPARE	—
18	15	—	SPARE	—
20	15	—	LOSS OF POWER	SH. EG1/20

GROUND

225A, 125V DC, 2W
DISTRIBUTION PANEL

(EG1)

CONTROL BLDG. EL. 21'-6" COL. A-2

NOTES:

1. FOR THREE LINE DIAGRAM SEE SH. D88a.
2. FOR ARRG'MT. SEE FP-33145
3. ■ SEE SH. 3
4. ALL BREAKERS ARE THERMAL-MAGNETIC EXCEPT MAIN BREAKER WHICH IS NON-AUTO.
5. SEE CALCULATION 9763-3-ED-00-14-F FOR CIRCUIT LOAD AMPS.

NUCLEAR SAFETY RELATED
'A' TRAIN LOAD GROUP

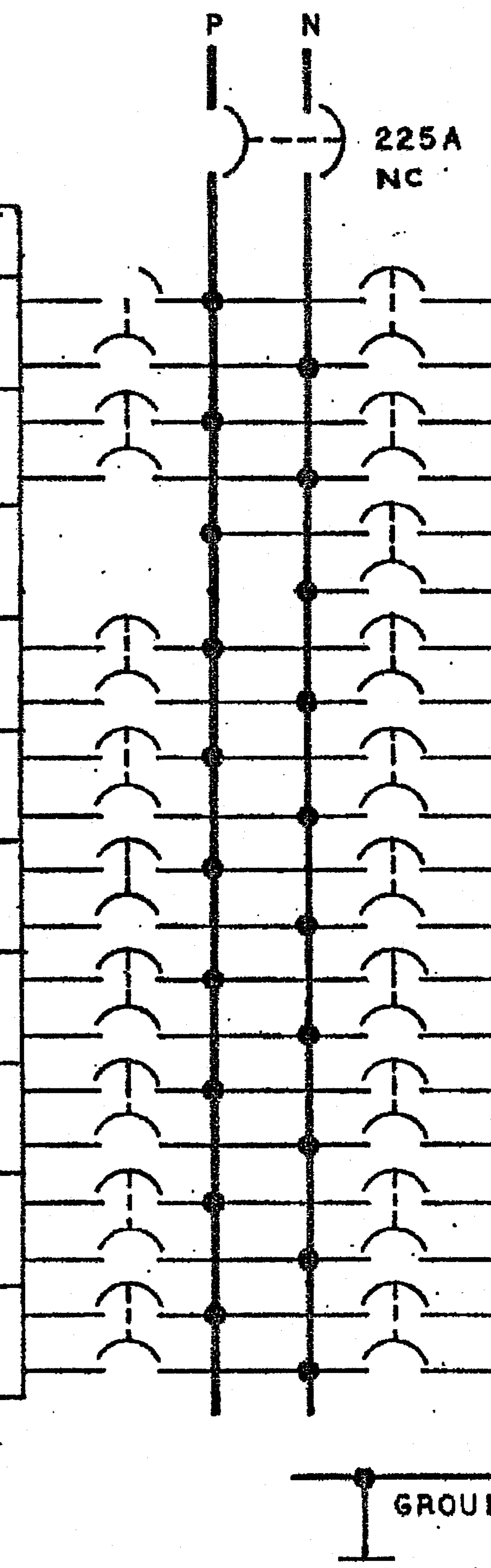
125V DC BUS 1-SWG-11C
DISTR. PNL. 1-PP-111C
SCHEDULE SH. 68

New Hampshire Yankee
Seabrook Station

1-NHY- 310107 SH. EG1a

1-NHY- 310107 SH. EG1a

REFERENCE DWG	DESCRIPTION	AMPS LOAD	BKR TRIP	CKT NO.
——	SPARE	——	20	■ 1
——	SPARE	——	20	■ 3
——	SPACE	——		5
——	SPARE	——	20	7
——	SPARE	——	20	9
M 310882 SH. A241	REACTOR COOLANT PUMP RC-P-1D UNDERVOLTAGE & UNDERFREQUENCY CKT	——	20	11
——	SPARE	——	20	13
——	SPARE	——	20	15
——	SPARE	——	15	17
——	SPARE	——	15	19



CKT NO.	BKR TRIP	AMPS LOAD	DESCRIPTION	REFERENCE DWG
■ 2	20	——	SPARE	——
■ 4	20	——	SPARE	——
6	30	——	SPARE	——
8	20	——	SPARE	——
10	20	——	SPARE	——
12	20	——	SPARE	——
14	20	——	SPARE	——
16	20	——	SPARE	——
18	15	——	SPARE	——
20	15	——	LOSS OF POWER	SH. EG2/20

225A, 125V DC, 2W
DISTRIBUTION PANEL
EG2
CONTROL BLDG. EL. 21'-6" COL. E-2

NOTES:
1. FOR THREE LINE DIAGRAM SEE SH. DB2a.
2. FOR ARRG'MT. SEE FP-33146
3. ■ SEE SH. 3
4. ALL BREAKERS ARE THERMAL-MAGNETIC EXCEPT MAIN BREAKER WHICH IS NON-AUTO.
5. SEE CALCULATION 9763-3-ED-00-14-F FOR CIRCUIT LOAD AMPS.

REV	DATE	DRWN	CHKD	DESCRIPTION
8	4-1-99	RMC	DMM	INCORP DCR 99-002 DSN 00
7	4/15/93	TPN		INCORP MMOD 92-517 CA-1
6	10-15-89	HP	APL	INCORP MMOD 89-605, CA-0
5	11/9/88	HP	APL	INCORP DCR 88-125, CA-01
4	11/11/86	RRP	CCM	9763-M-310107 SH.EG2a SUPERCEDES UE&C DWG.

REV.	DATE	DESCRIPTION	DWN. BY	CKD. BY
3	8-30-85	REV. PER ECA 03/101312B	EG	
2	5-31-84	REV. PER DCN 63/0079A	FL	
1	9-30-82	ADDED FP REF.	NP	
0	11/2/81	FIRST ISSUE DCN 03/1016B	NP	

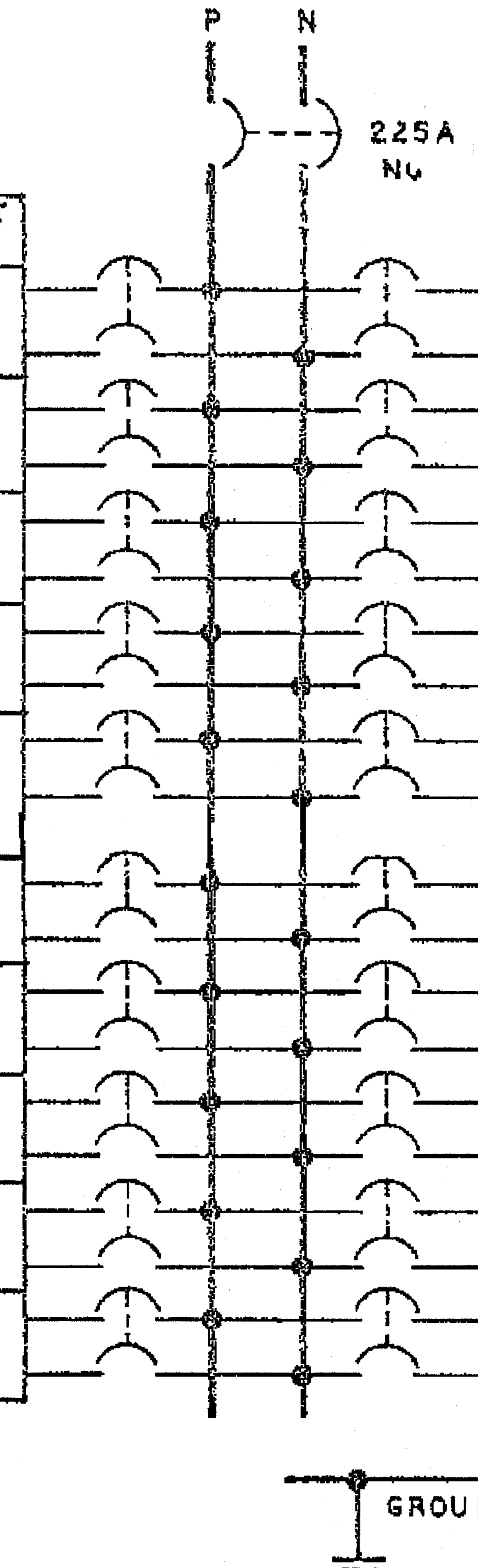
NUCLEAR SAFETY RELATED
'B' TRAIN LOAD GROUP
125V DC BUS 1-SWG-11D
DISTR. PNL. 1-PP-111D
SCHEDULE SH.70

New Hampshire Yankee
Seabrook Station

1-NHY- 310107 SH. EG2a

1-NHY- 310107 SH.EG2a

REFERENCE DWG	DESCRIPTION	AMPS LOAD	BKR TRIP	CKT NO
M-301107 SH-E2T/1a	SW SYSTEM SW PUMP PERMISSIVE TRAIN A (RY-54)	—	20	1
M-310895 SH-E2T/3a	CC SYSTEM HX-E17A TEMP CTL VLV'S CC TV-2171-1 & 2	—	20	3
	SPARE	—	20	5
M-310890 SH-E2T/7a	SI SYSTEM SI-FV-2482,83,95 & FV 2496	—	20	7
M-310895 SH E2T/9a	CC SYS-PCCW LOOP A LIQUID RADIATION MONT'R SAMPLE VALVES V-975 & V-1298	—	20	9
M 310882 SH A051	REACTOR COOLANT PUMP RC P 1A UNDERVOLTAGE & UNDERFREQUENCY CKT	—	20	11
—	SPARE	—	20	13
M 310841 SH E2T/15	MS SYSTEM ATMOS RELIEF VLV MS PV-3002	—	20	15
—	SPARE	—	20	17
—	SPARE	—	20	19



CKT NO	BKR TRIP	AMPS LOAD	DESCRIPTION	REFERENCE DWG
2	20	—	SW SYSTEM TRAIN A SW VALVE (SW-V16)	M-301107 SH-E2T/2a
4	20	—	CC SYSTEM LP-A INBD RET & SUPPLY ISO VLV'S CC-V121 & V57	M-310895 SH-E2T/4a
6	20	—	CC SYSTEM LP B OUTBD SUPPLY & RET ISO VLV'S CC-V175 & V257	M-310895 SH-E2T/6a
8	20	—	MS SYSTEM ATMOS RELIEF VALVE MS-PV-3001	M-310841 SH-E2T/8a
10	20	—	MS SYSTEM ATMOS RELIEF VALVE MS-PV-3003	M-310841 SH-E2T/10a
12	20	—	MS SYSTEM MAIN STM ISO VALVE MS-V-88	M-310841 SH-E2T/12a
14	20	—	MS-SYSTEM MAIN STEAM ISO VALVE MS-V-90	M 310841 SH E2T/14a
16	20	—	MS SYSTEM ATMOS RELIEF VLV MS-PV 3004	M 310841 SH E2T/16
18	20	—	SPARE	—
20	15	—	LOSS OF POWER	SH-E2T/20

225A, 125V DC 2W DISTRIBUTION PANEL

E2T

CONTROL BLDG EL 21 6" COL A-3

NOTES

1 FOR THREE LINE DIAGRAM SEE SH 0816
2 FOR ARRG'MT SEE FP-33307
3 ALL BREAKERS ARE THERMAL-MAGNETIC EXCEPT MAIN BREAKER WHICH IS NON AUTO
4 SEE CALCULATION 9763-3-ED-00-14-F FOR CIRCUIT LOAD AMPS

REV	DATE	DRWN	CHKD	DESCRIPTION
5	2/18/...			REV PER ECA 03/113122E
10	4-1-99	RMC	DMJ	INCORP DCR-99 002 DCN 00
9	11 8 94	SAC	MNS	INCORP DRR 94-0... REV 0
8	4/15/93	TPN	TPN	INCORP MMOD 92-517 CA-1
12	3/21/06	JLM	TPN	REF. CR 06-03171
11	6/17/02	JLM	TPN	INCORP DCR 00-020 DCN-00

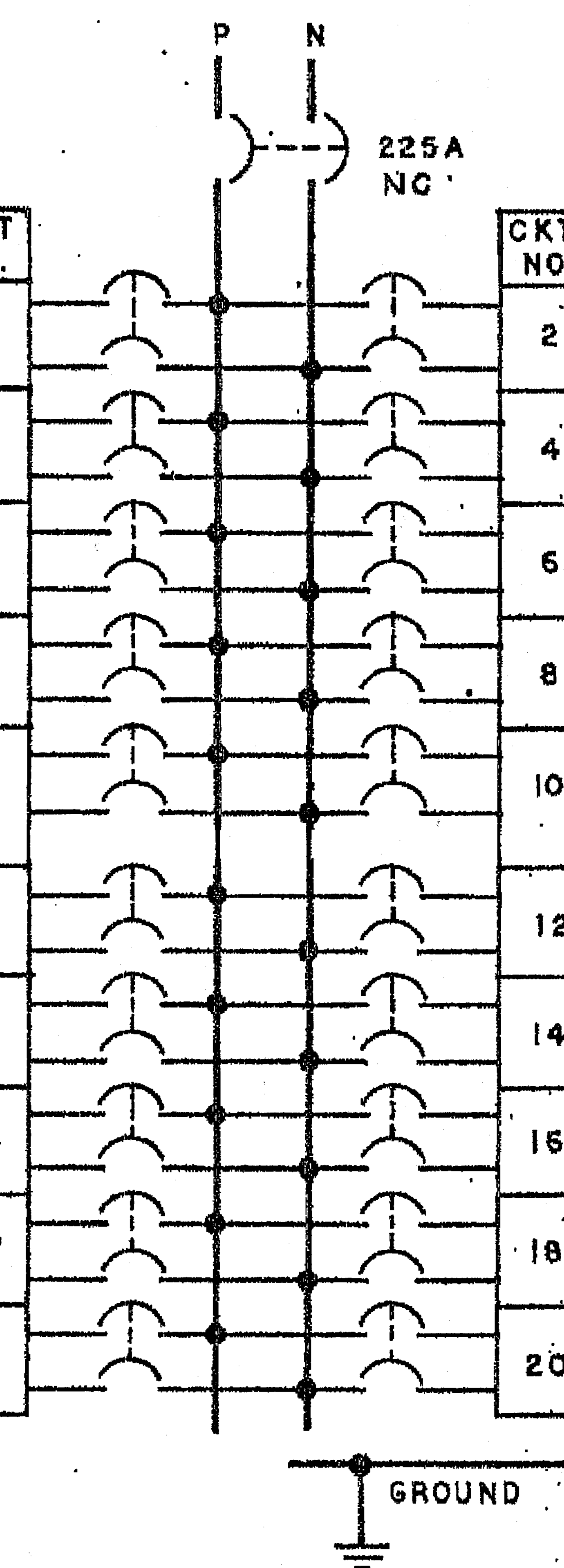
NUCLEAR SAFETY RELATED 'A' TRAIN LOAD GROUP

125V DC BUS 1-SNG-11A DISTR PNL 1-PP-113A SCHEDULE SH 74

New Hampshire Yankee Seabrook Station

1-NHY-310107 SH E2Ta

1-NHY-310107 SH E2Ta



REFERENCE DWG	DESCRIPTION	AMPS LOAD	BKR TRIP	CKT NO.
M-301107 SH-E2U/1a	SW SYSTEM SW PUMP PERMISSIVE TRAIN-B (RV-25)	—	20	1
M-310895 SH-E2U/3a	CC SYSTEM HX E17B TEMP. CTL. VLV'S. CC-TV-2271-1 & 2	—	20	3
	SPARE	—	20	5
M-310890 SH-E2U/7a	SI SYSTEM SI-FV-2475,76,77 & FV-2486	—	20	7
M-310895 SH-E2U/9a	CC SYS - PCCW LOOP-B LIQUID RADIATION MONT'R. SAMPLE VAVLES V-986 & V-1301	—	20	9
M-310882 SH. A201	REACTOR COOLANT PUMP RC-P-1B UNDERVOLTAGE & UNDERFREQUENCY CKT	—	20	11
M-310895 SH. E2U/3a	CC SYSTEM HIX E17B TEMP. CTL. VLVS CC-TV-2271-1&2	—	20	13
M-310841 SHE2U/15a	MS SYSTEM ATMOS. RELIEF VLV. MS-PV-3001	—	20	15
—	SPARE	—	20	17
—	SPARE	—	20	19

CKT NO.	BKR TRIP	AMPS LOAD	DESCRIPTION	REFERENCE DWG
2	20	—	SW SYSTEM TRAIN-B SW VALVE (SW-V18)	M-301107 SH-E2U/2a
4	20	—	LOOP-B CNTMNT. STRUCT. RTN. & SUPPLY ISOL. VLV'S. CC-V256 & V176	M-310895 SH-E2U/4a
6	20	—	LOOP-A CNTMNT. STRUCT. RTN. & SUPPLY ISOL. VLV'S. CC-V122 & V168	M-310895 SH-E2U/6a
8	20	—	MS SYSTEM ATMOS. RELIEF VLV. MS-PV-3002	M-310841 SH-E2U/8a
10	20	—	MS SYSTEM ATMOS. RELIEF VLV. MS-PV-3004	M-310841 SH-E2U/10a
12	20	—	MS SYSTEM MAIN STM. ISO. VALVE MS-V-88	M-310841 SH-E2U/12a
14	20	—	MS SYSTEM MAIN STM ISO VLV MS-V-90	M-310841 SH E2U/14a
16	20	—	MS SYSTEM ATMOS RELIEF VLV. MS-PV-3003	M-310841 SH. E2U/16a
18	20	—	SPARE	—
20	15	—	LOSS OF POWER	SH.-E2U/20

225A, 125V DC, 2W DISTRIBUTION PANEL

(E2U)

CONTROL BLDG. EL. 21'-6" COL.

NOTES:

1. FOR THREE LINE DIAGRAM SEE SH. DA1b
2. FOR ARRG'MT. SEE FP-33309
3. ALL BREAKERS ARE THERMAL-MAGNETIC EXCEPT MAIN BREAKER WHICH IS NON-AUTO.
4. SEE CALCULATION 9763-3-ED-00-14-F FOR CIRCUIT LOAD AMPS.

REV	DATE	DRWN	CHKD	DESCRIPTION
9	4/15/93	TPN		INCORP MMOD 92-517, CA-1
8	11/19/88	HP	APL	INCORP DCR 88-125, CA-01
7	9/25/87	NFF	APL	INCORPORATE AS-BUILT COMMENTS
6	12/11/86	RRP	CCM	9763-M-310107 SH. E2Ua SUPERCEDES UE&C DWG.
5	2-24-86			REV PER ECA 03/113122E

REV.	DATE	DESCRIPTION	DWN. BY	CKD. BY
4	1-23-86	REV PER ECA 03/110810B & 03/180416B	LW	RAC
3	8-30-85	REV. PER ECA 99/103998 B ECA 03/101312 B	EG	
2	5-31-84	REV. PER DCN 63/0079A & DCN 65/0239A	FL	
11	6/6/00	INCORP DCR 00-020 DCN-00	JLM	
10	4-1-99	INCORP DCR 99-002 DCN 00	RMC	

NUCLEAR SAFETY RELATED
B' TRAIN LOAD GROUP

125V DC BUS 1-SWG-11B
DISTR. PNL. 1-PP-113B
SCHEDULE SH.76

New Hampshire Yankee
Seabrook Station

1-NHY- 310107 SH. E2Ua

1-NHY- 310107 SH. E2Ua