

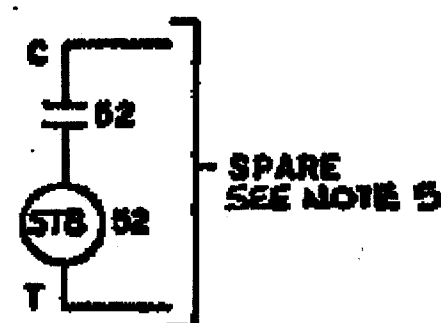
REV	DATE	DESCRIPTION	REV	DATE	DESCRIPTION
1			12	7/15/84	ULM
2			13	8/1/84	INCORP MAND 98-638 DCN-01
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NUCLEAR SAFETY RELATED  
A TRAIN LOAD GROUP  
CHANNEL III

REFERENCE DWG.	DESCRIPTION	LOAD	BKR TRIP (AMPS)	CKT NO.
310943 SH. E03a	NI-CP-16 NIS CONTROL PANEL	15	15	1
310943 SH. E03a	NI-CP-16 NIS INSTRUMENT POWER	15	15	3
—	SPARE	—	15	5
—	SPARE	—	15	7
BLANK				
310942 SH. E03/9	MM-CP-3 PPC CAB. SET III	30	30	9
—	SPARE	—	15	11
—	SPARE	—	15	13
BLANK				
SH. D30a	I-1C NORMAL SUPPLY	—	SEE NOTE 1	15

CKT NO.	BKR TRIP (AMPS)	LOAD	DESCRIPTION	REFERENCE DWG.
2	15	15	MM-CP-12 SSPS INPUT CAB. CHANNEL III	310949 SH. E01/2a
4	15	15	MM-CP-13 SSPS INPUT CAB. CHANNEL III	310949 SH. E02/4a
6	—	—	BLANK	—
8	15	—	SPARE	—
10	15	15	SPARE	—
12	15	—	PP-1C LOSS OF POWER	SH. E03/12
14	30	—	ED-PP-3C NON-VITAL INSTR. DISTR. PANEL 3C	SH. D30a
16	100	—	MAINTENANCE SUPPLY ED-X-31C	SH. D30a

100A, 120VAC, 10, 2W  
DISTRIBUTION PANEL  
E03  
CONTROL BLDG. ELEV. 21'-6", COL. 1A




# NOTES:

- 1- ALL BREAKERS ARE THERMAL MAGNETIC EXCEPT NORMAL SUPPLY BREAKER WHICH IS NON-AUTO.
- 2- FOR THREE LINE DIAGRAM SEE SH. D30a
- 3- FOR ARRO'T SEE P.P. 31876
- 4- — SEE SH. 3
- 5- SHUNT TRIP OPTIONAL
- 6- SEE CALCULATION 9763-3-ED-00-34-F FOR CIRCUIT LOAD AMPS.

1-NHY-310105 SH. E03a



- 1- ALL BREAKERS ARE THERMAL MAGNETIC EXCEPT NORMAL SUPPLY BREAKER WHICH IS NON-AUTO.
- 2- FOR THREE LINE DIAGRAM SEE SH. D23a
- 3- FOR ARRGT SEE F.P. 31077
- 4-  - SEE SH. 3
- 5- SHUNT TRIP OPTIONAL
6. SEE CALCULATION 9763-3-ED-00-34-F FOR CIRCUIT LOAD AMPS.

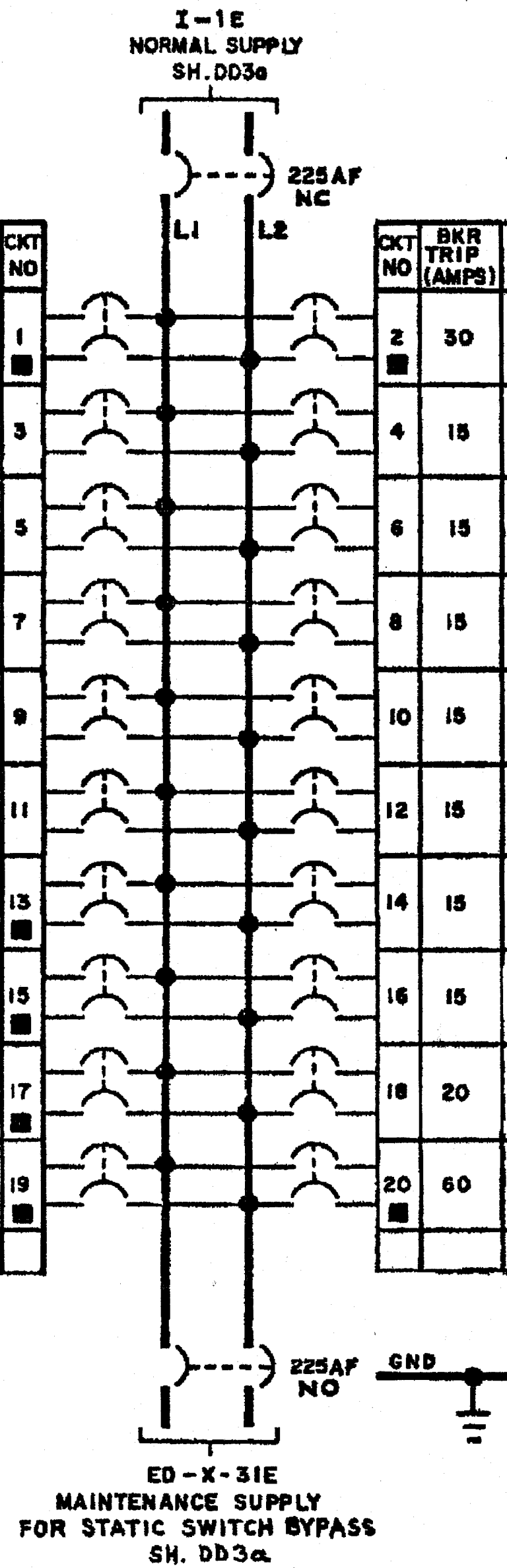
1-NHY-310105 SH. E04a

[illegible]

**NUCLEAR SAFETY RELATED  
A TRAIN LOAD GROUP**

REFERENCE DWG.	DESCRIPTION	LOAD	BKR. TRIP (AMPS)	CK NO.
310952 SH.EH9/1a	CP-152A BOP INSTRUMENTS	—	30	1
310951 SH.EH9/3a	PAN 1 & COOLING TOWER MONITOR LIGHTS - MCB BF	—	15	3
310107 SH.5a	125 VDC BUS 11A 1-SWG-11A 120 VAC AUX. BUS	—	15	5
SH.EH9b	MCB SETPOINT STATION PWR SUPPLY MCB-SECT. BF	—	15	7
310890 SH.EH9/9a	SI ACCUM. TANK ISOL. VLV. POS. IND.	—	15	9
310890 SH.EH9/11a	SI & RH SYSTEMS A TRAIN VALVE POSITION INDICATING LIGHTS	—	15	11
SH.DD3a	PP-11E VITAL INSTR. DISTR. PANEL 11E	—	60	13
M-310966 SH.EH9/15a	ISOLATION SYS CONTROL POWER	—	15	15
—	SPARE	—	20	17
310952 SH.EH9/19	MM-CP-297A BOP INSTRUMENTS	—	30	19
	SPACE			

225A, 120VAC, 1Ø, 2W  
DISTRIBUTION PANEL **EH9**  
CONTROL BLDG., ELEV. 21'-6", COL. 1B



CKT NO	BKR TRIP (AMPS)	LOAD	DESCRIPTION	REFERENCE DWG.
2	30	—	CP-108A SHUTDOWN PANEL	310952 SH. EH9/2
4	15	—	CP-180A RADIATION MONITORING	310956 SH. EH9/4
6	15	—	125VDC BUS 11C 1-SWG-11C 120VAC AUX. BUS	310107 SH. 5c
8	15	—	CP-58 SEISMIC MONITORING	310957 SH. EH9/8
10	15	—	SW A TRAIN AUX. CONTROL	301107 SH. EH9/10a
12	15	—	PP-1E LOSS OF POWER	SH. EH9/12
14	15	—	ED-CP-235 ORD. DETECTION CAB.	SH. EH9/14a
16	15	—	RC VALVES (Y-23 V-68) POSITION INDICATORS (FY-2894)	310882 SH. EH9/16
18	20	—	SPARE	—
20	60	—	ED-PP-12E NON-VITAL INSTR. DISTR. PANEL 12E	SH. DD3c
			SPACE	

## NOTES

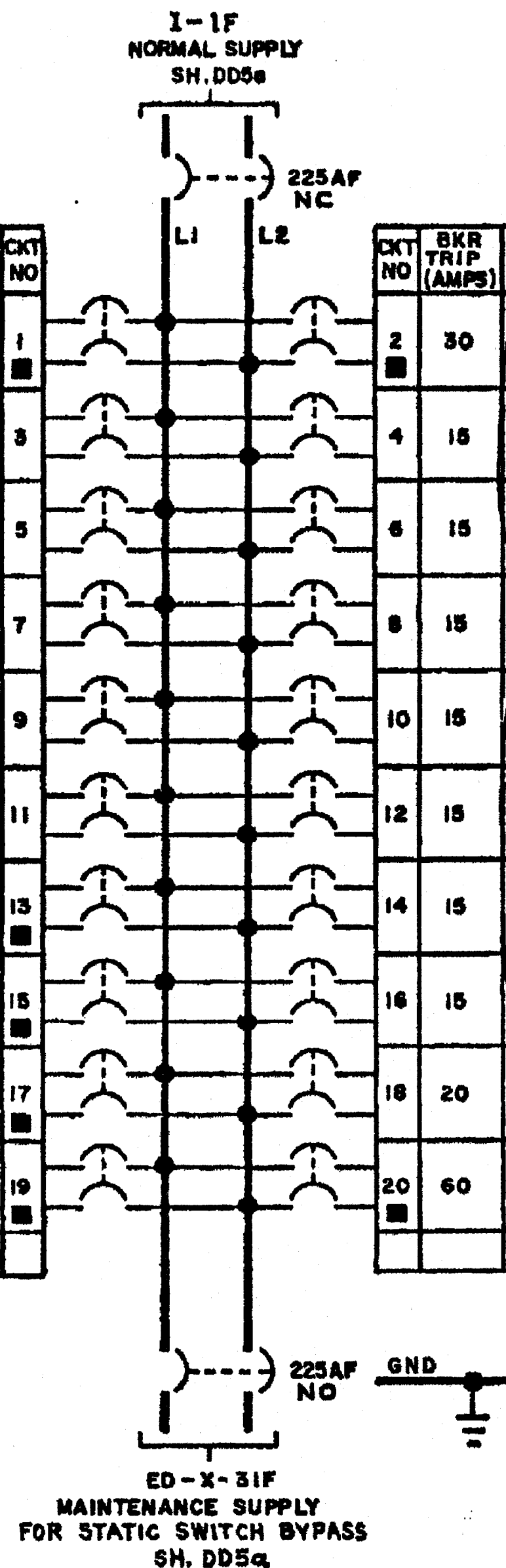
- 1- ALL BREAKERS ARE THERMAL MAGNETIC EXCEPT  
NORMAL SUPPLY BREAKER WHICH IS NON-AUTO.
- 2- ALL BREAKER ARE 100AF UNLESS OTHERWISE NOTED.
- 3- FOR ARRGT. SEE F.P. 33541.
- 4- FOR THREE LINE DIAGRAM SEE SH. DD3.
- 5- ☐ SEE SHEET 3
6. SEE CALCULAITON 9763-3-ED-00-34-F  
FOR CIRCUIT LOAD AMPS.

1-NHY-310105 SH.EH9a

[illegible]

**NUCLEAR SAFETY RELATED  
B TRAIN LOAD GROUP**

REFERENCE DWG.	DESCRIPTION	LOAD	BKR. TRIP (AMPS)	CK NO.
310952 SH.EHO/1a	CP-152B BOP INSTRUMENTS	—	30	1
310951 SH.EHO/3a	PAM 2 & COOLING TOWER MONITOR LIGHTS - MCB AR	—	15	3
310107 SH.5b	125 VDC BUS 11B 1-SWG-11B 120 VAC AUX. BUS	—	15	5
SH.EHO/b	MCB SETPOINT STATION PWR SUPPLY MCB-SECT. DR	—	15	7
310890 SH.EHO/9a	SI ACCUM. TANK ISOL. VLV. POS. IND.	—	15	9
310890 SH.EHO/11a	SI & RH SYSTEMS B TRAIN VALVE POSITION INDICATING LIGHTS	—	15	11
SH.EIT/a	PP-11F VITAL INSTR. DISTR. PANEL 11F	—	60	13
M-310966 SH.EHO/15a	ISOLATION SYS CONTROL POWER	—	15	15
—	SPARE	—	20	17
310952 SH.EHO/19	MM-CP-297B BOP INSTRUMENTS	—	30	19
	SPACE			



225A, 120VAC, 16, 2W  
DISTRIBUTION PANEL **EHO**  
CONTROL BLDG., ELEV. 21'-6", COL. 2D

- ## NOTES

- 1- ALL BREAKERS ARE THERMAL MAGNETIC EXCEPT NORMAL SUPPLY BREAKER WHICH IS NON - AUTO.
- 2- ALL BREAKER ARE 100AF UNLESS OTHERWISE NOTED.
- 3- FOR ARRG. SEE F.P..33542.
- 4- FOR THREE LINE DIAGRAM SEE SH. D05.
- 5- SEE SHEET 3
6. SEE CALCULATION 9763-3-ED-00-34-F FOR CIRCUIT LOAD AMPS.

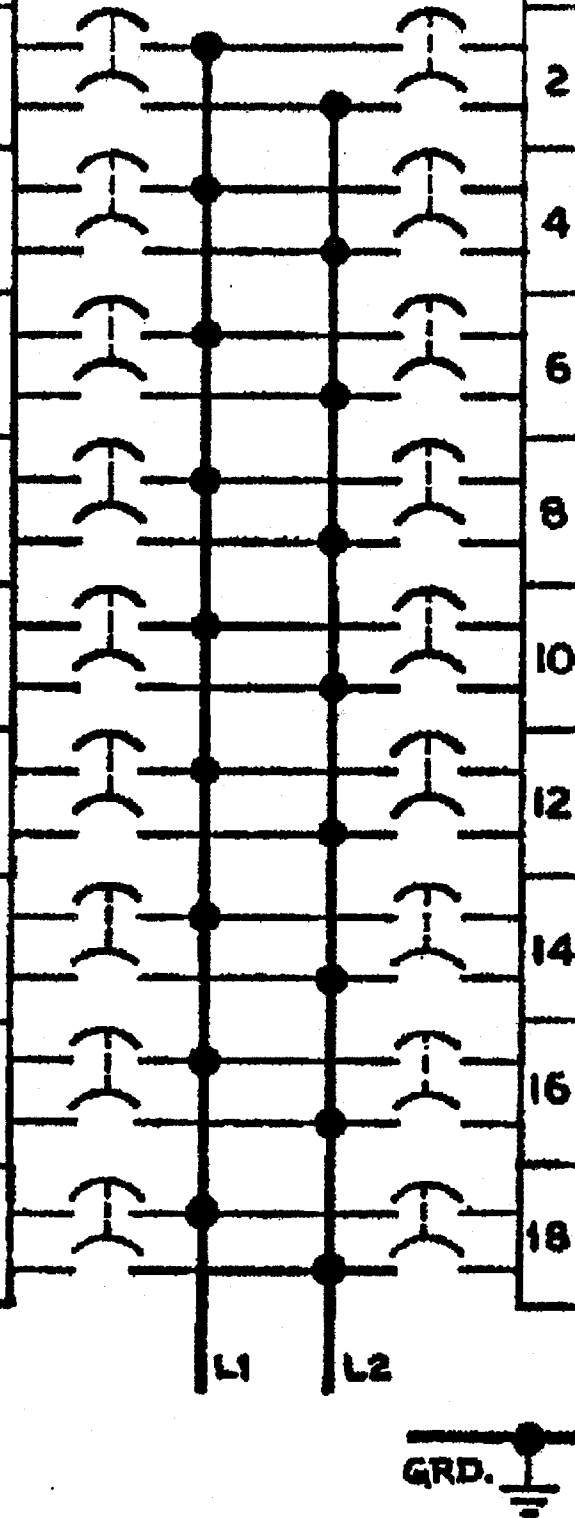
1-NHY-310105 SH.EH0a



[illegible]

REFERENCE DWG	DESCRIPTION	LOAD	BKR TRIP (AMPS)	KXT Nº		KXT Nº	BKR TRIP (AMPS)	LOAD	DESCRIPTION	REFERENCE DWG
310956 SH-EIS/1	RM-RM-6506A EAST AIR INTAKE RADIATION MONITOR	—	15	1		2	15	—	RM-RM-6507A WEST AIR INTAKE RADIATION MONITOR	310956 SH-EIS/2
310956 SH-EIS/3	RM-RM-6535A CNTMNT MANIPULATOR CRANE RADIATION MONITOR	—	15	3		4	15	—	MM-CP-108A REMOTE SHUTDOWN PNL. RECORDERS PWR. SUPPLY	310952 SH-EIS/4
310956 SH-EIS/5	RM-RM-6576A CONTAINMENT POST LOCA RADIATION MONITOR	—	15	5		6	15	—	DAN SYSTEM DAMPER DP-16A CONTROL	310928 SH-EIS/6a
310841 SH-EIS/7	MS ISOLATION VALVE V86 & V92	—	30A	7		8	15	—	CGC-CP-173 H <sub>2</sub> ANALYZER CONTROL PNL.	310897 SH-EIS/8
310841 SH-EIS/9	MS ISOLATION VALVE V88 & V90	—	30A	9		10	15	—	RM-RM-6527A CNTMNT. ON-LINE PURGE RADIATION MONITOR	310956 SH-EIS/10
310965 SH-EIS/11	RVLIS/HELB LOOP A PLASMA DISPLAY SYSTEM	—	15	11		12	15	—	LOSS OF POWER	SH-EIS/12
310943 SH-EIS/13	NI-NT-6690 EX-CORE NEUTRON FLUX MONITORING SYSTEM	—	15	13		14	15	—	NI-NM-6690 EX-CORE NEUTRON FLUX MONITORING SYSTEM	310943 SH-EIS/13
310943 SH-EIS/13	NI-NM-6690 J EX-CORE NEUTRON FLUX MONITORING SYSTEM	—	15	15		16	15	—	NI-NM-31G BORON DILUTION MONITOR TRAIN 'A'	310943 SH-FC6b
310965 SH-EIS/17	RVLIS/HELB CONTROL CABINET POWER SUPPLY	—	15	17		18	15	—	RVLIS/HELB LOOP A PLASMA DISPLAY SYSTEM	310965 SH-EIS/11

100A, 120VAC, 1Ø, 2W  
DISTRIBUTION PANEL  
(E15)  
CONTROL BLDG, ELEV. 21' 6", COL. B-1



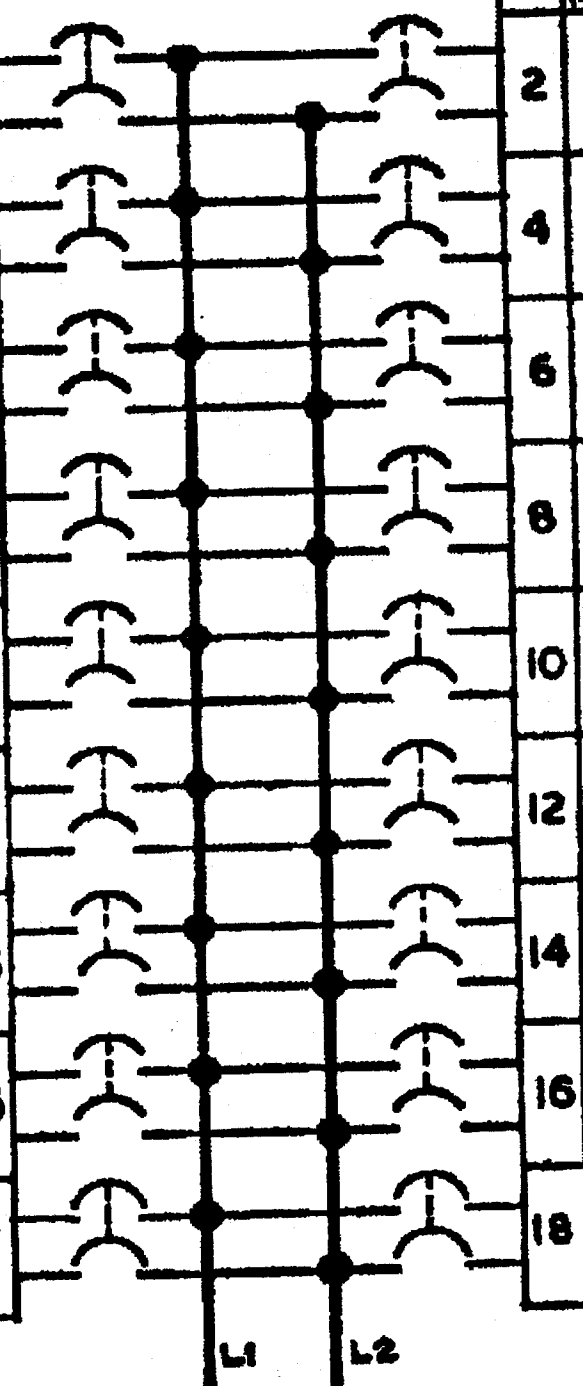
NOTE:

1. FOR THREE LINE DIAGRAM  
SEE 34.DD3a
2. FOR ARRGT. SEE FP-32667
3. SEE CALCULATION 9763-3-ED-00-34-F  
FOR CIRCUIT LOAD AMPS.

1-NHY-310105 SH. E1Sa

[illegible]

REFERENCE DWG	DESCRIPTION	LOAD	BKR TRIP (AMPS)	CKT NO
310956 SH-EIT/1	RM-RM-6506B EAST AIR INTAKE RADIATION MONITOR	—	15	1
310956 SH-EIT/3	RM-RM-6535-B CONTMNT MANIPULATOR CRANE RADIATION MONITOR	—	15	3
310956 SH-EIT/5	RM-RM-6576-B CONTAINMENT POST LOCA RADIATION MONITOR	—	15	5
310841 SH-EIT/7	MS ISOLATION VALVES V86 & V92	—	30	7
310841 SH-EIT/9	MS ISOLATION VALVES V88 & V90	—	30	9
310182 SH-EIT/11a	ANNUNCIATORS MM-UA-51 & 55	—	15	11
310943 SH-EIT/13	NI-NT-6691 EX-CORE NEUTRON FLUX MONITORING SYS	—	15	13
310943 SH-EIT/15	NI-NM-6691 J EX-CORE NEUTRON FLUX MONITORING SYS	—	15	15
310965 SH-EIT/17	RVLIS/HELB CONTROL CABINET POWER SUPPLY	—	15	17



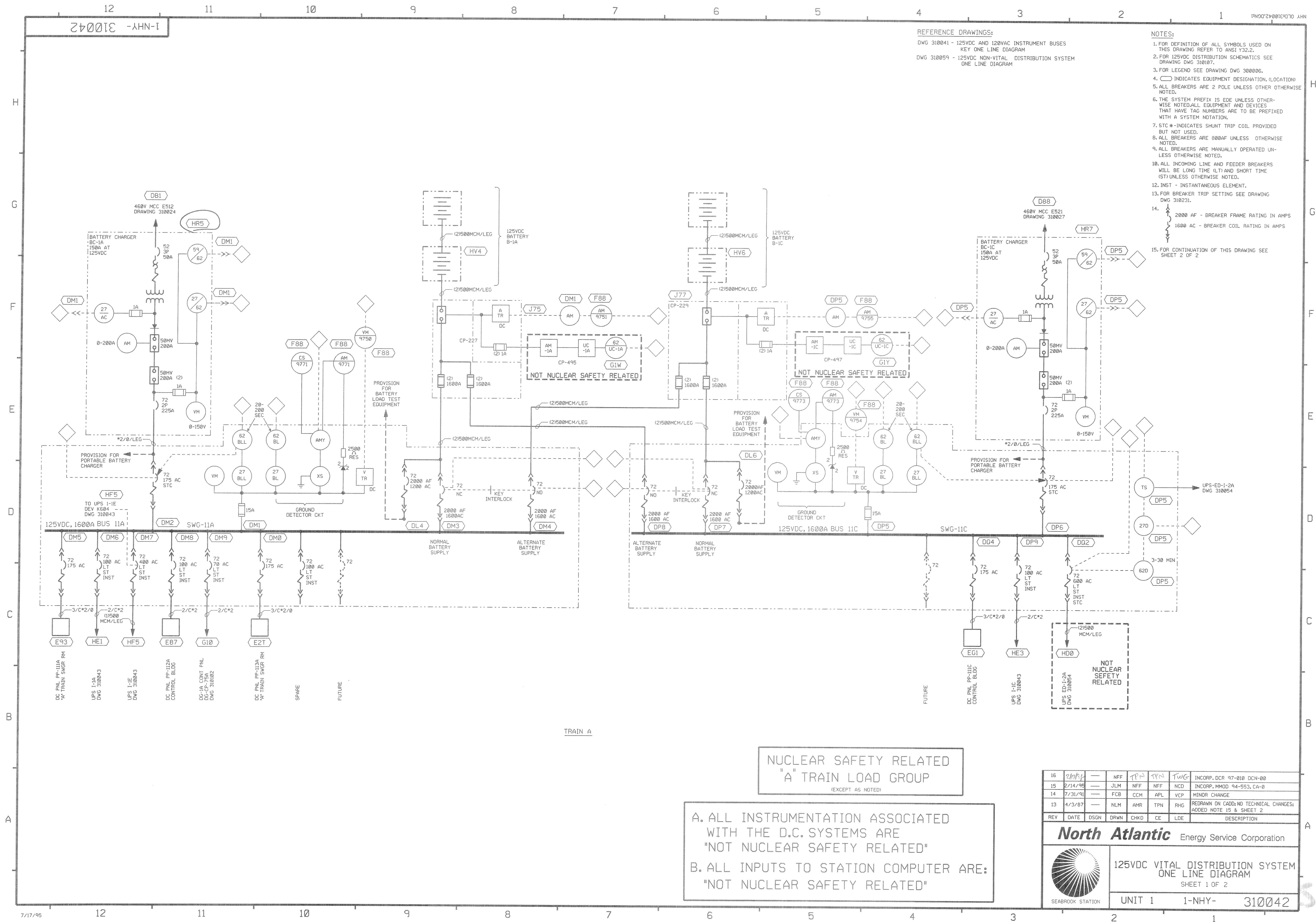
CKT N <sup>o</sup>	BKR TRIP (AMPS)	LOAD	DESCRIPTION	REFERENCE DWG
2	15	—	RM-RM-650T-8 WEST AIR INTAKE RADIATION MONITOR	310986 SH-EIT/8
4	15	—	MM-CP-108B SAFE SHUTDOWN PANEL RECORDERS PWR. SUPPLY	310952 SH-EIT/4
6	15	—	DAH SYSTEM DAMPER DP-16B CONTROL	310928 SH-EIT/6a
8	15	—	CGC-CP-174 H <sub>2</sub> ANALYZER CONTROL PHL.	310897 SH-EIT/8
10	15	—	RM-RM-6527B CONTIN. ON-LINE PURGE RADIATION MONITOR	310956 SH-EIT/10
12	15	—	LOSS OF POWER	SH-EIT/12
14	15	—	NI-NM-6691 EX-CORE NEUTRON FLUX MONITORING SYS	310943 SH-EIT/13
16	15	—	NI-NM-32G BORON DILUTION MONITOR TRAIN 'B'	310943 SH-FGTB
18	15	—	SPARE	—

100A, 120VAC, 1Ø, 2W  
DISTRIBUTION PANEL  
EIT  
CONTROL BLDG, ELEV. 21' 6", COL D-2

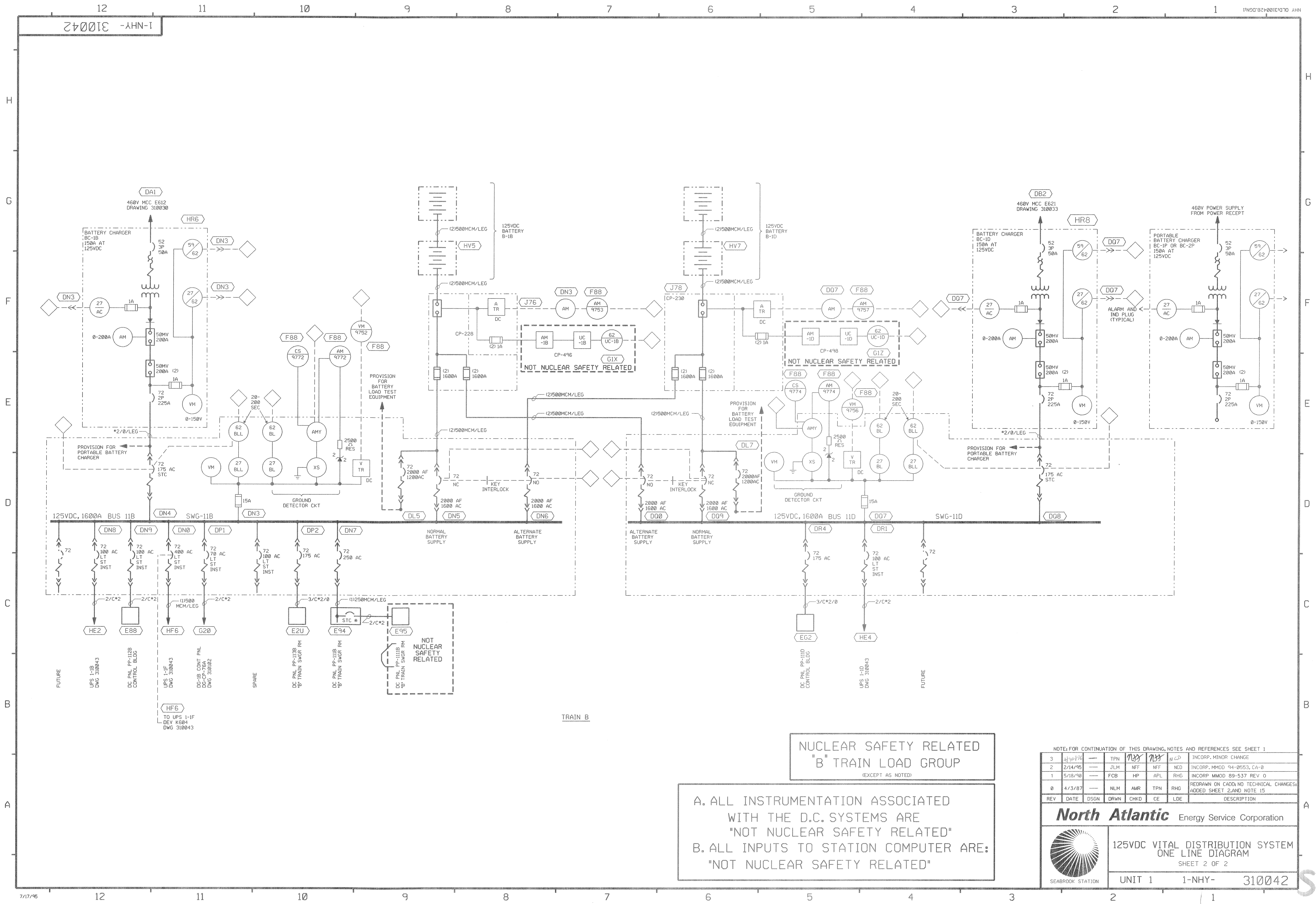
## NOTES

- NOTES**
1. FOR THREE LINE DIAGRAM  
SEE 3H:DD5a
  2. FOR ARRGT, SEE PF-32668
  3. SEE CALCULATION 9763-3-ED-00-34-F  
FOR CIRCUIT LOAD AMPS

1-NHY-310105 SH E1Ta







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"

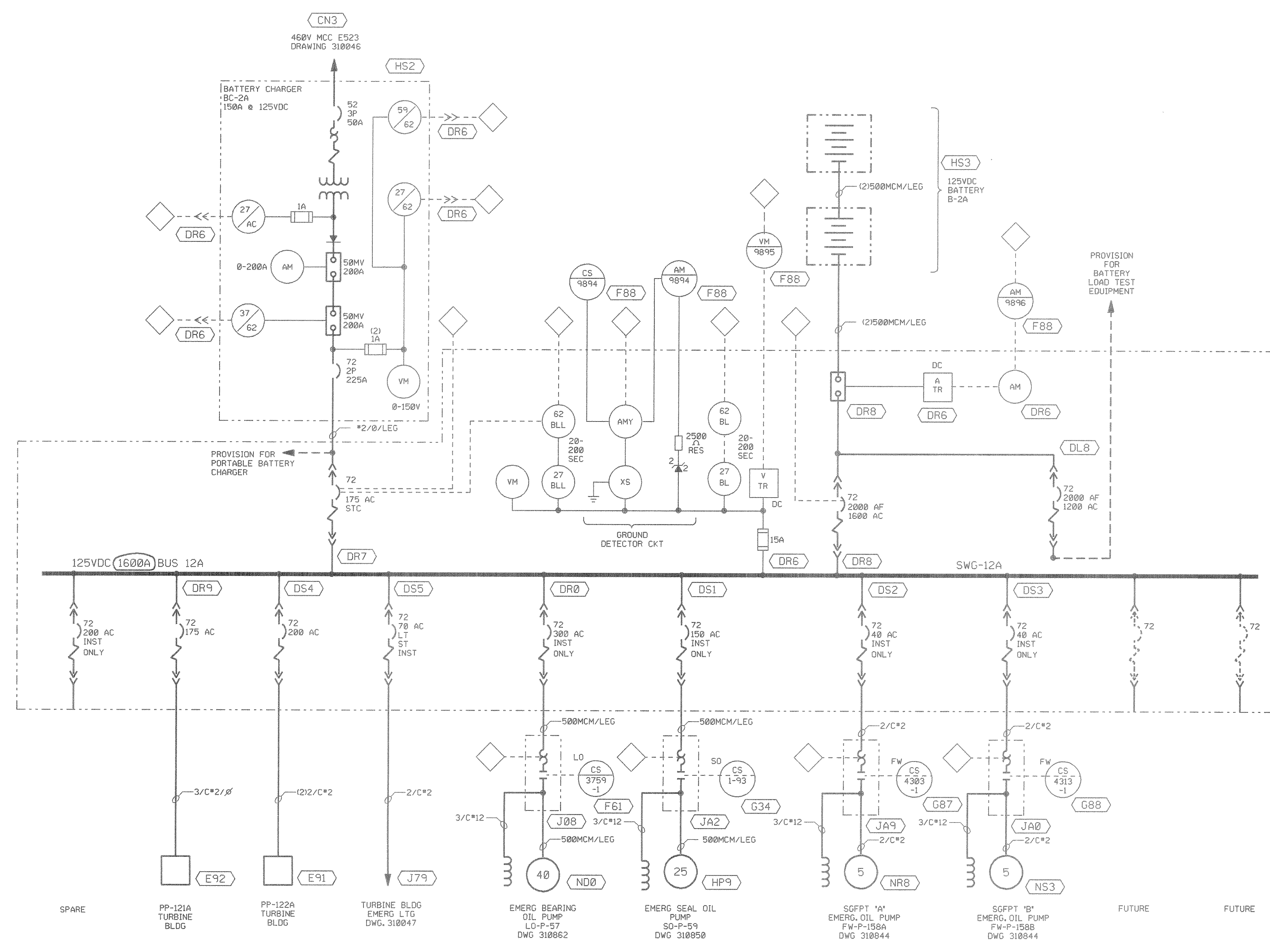
NOTES FOR CONTINUATION OF THIS DRAWING, NOTES AND REFERENCES SEE SHEET 1									
3	4/30/96	TPN	NFF	NFF	NCD	INCORP. MINOR CHANGE			
2	2/14/95	JLM	NFF	NFF	NCD	INCORP. MMOD 94-0553, CA-0			
1	5/18/90	FCB	HP	APL	RHG	INCORP. MMOD 89-537 REV. 0			
0	4/3/87	NLM	AMR	TPN	RHG	REDRAWN ON CADD; NO TECHNICAL CHANGES; ADDED SHEET 2 AND NOTE 15			
REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION		
							<b>North Atlantic</b> Energy Service Corporation		
							125VDC VITAL DISTRIBUTION SYSTEM ONE LINE DIAGRAM		
							SHEET 2 OF 2		
							UNIT 1 1-NHY- 310042		



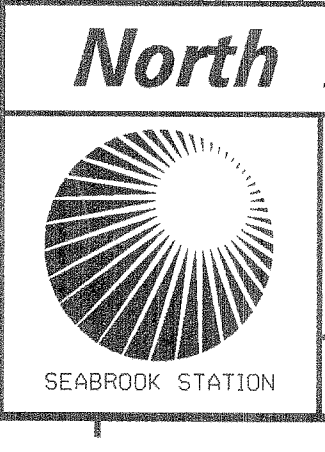
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REFERENCE DRAWINGS:  
DWG 310041 - 125 VDC AND 120 VAC INSTRUMENT BUSES  
KEY ONE LINE DIAGRAM  
DWG 310042 - 125 VDC VITAL DISTRIBUTION SYSTEM  
ONE LINE DIAGRAM

- 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 OTHERWISE NOTED.
  6. THE SYSTEM PREFIX IS ED 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.
  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



10	2/7/88	—	NFF	TPN	TPN	TWG	INCCORP. OCR 97-010, DCN-00
9	6/29/87	—	LP	APL	TPN	RHG	INCCORP. ECA 03/1105900 & HP9 HP REV. DUE TO ERROR IN CONVERSION.
8	4/3/87	—	NLM	AMR	TPN	RHG	REDRAWN ON CADD; NO TECHNICAL CHANGES. ADDED NOTE 15 TO SHEET 1 OF 2.
REV	DATE	DSGN	DRWN	CHKD	CE	LOE	DESCRIPTION

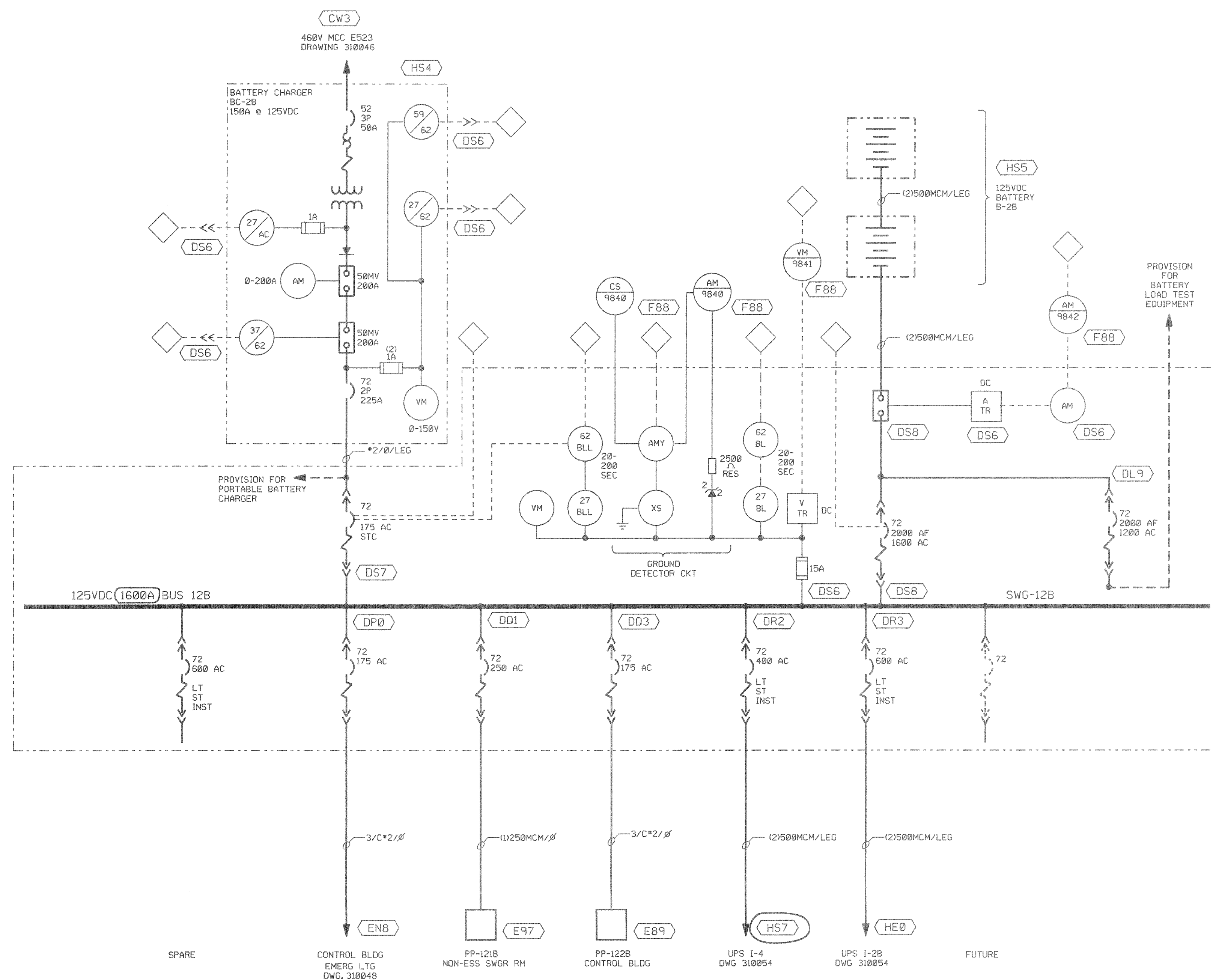


**North Atlantic** Energy Service Corporation

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

UNIT 1 1-NHY- 310059

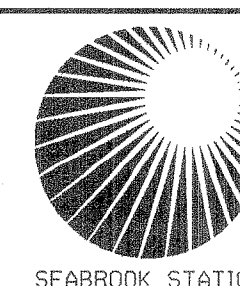
650013 -AHN-1



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

REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION
1	4/1/87	---	NFF	TPN	TPN	TWG	INCRP. 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



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

UNIT 1 1-NHY- 310059





[illegible]

REFERENCE DWG	DESCRIPTION	LOAD (AMPS)	BKR TRIP (AMPS)	CKT Nº	CKT Nº	BKR TRIP (AMPS)	LOAD (AMPS)	DESCRIPTION	REFERENCE DWG
	SPARE	—	20	1	2	20	—	RHR TRAIN A VITAL CONTROL POWER	310887 SH. E87/2a
310920 SH. E87/3a	COP SYSTEM CONTROL POWER	—	20	3	4	20	—	SW SYSTEM TRAIN-A TOWER ACTUATION LOGIC	301107 SH. E87/4a
301216 SH. E87/5a	WLD SYSTEM CONTROL POWER	—	20	5	6	20	—	FW SYSTEM CONTROL POWER	310844 SH. E87/6a
310890 SH. E87/7b	SI SYSTEM CONTROL POWER	—	20	7	8	20	—	CBS SYSTEM CONTROL POWER	310900 SH. E87/8a
310901 SH. E87/9a	SB SYSTEM CONTROL POWER	—	20	9	10	20	—	CC SYSTEM CONTROL POWER	310895 SH. E87/10a
	SPARE	—	20	11	12	20	—	CC SYSTEM RSS CIRCUITS	310895 SH. E87/12a
310841 SH. E87/13a	M5 SYSTEM RSS CIRCUITS	—	20	13	14	20	—	M5 SYSTEM ISO. VALVE M5-V-86	310841 SH. E87/14a
	SPARE	—	20	15	16	20	—	CAP SYSTEM CONTROL POWER	310899 SH. E87/16a
	SPARE	—	20	17	18	20	—	M5 SYSTEM ISO VALVE M5-V-92	310841 SH. E87/18a
310882 SH. E87/19a	RC SYSTEM RSS CIRCUITS	—	20	19	20	15	—	LOSS OF POWER	SH-E87/20

100A,125V DC,2W  
DISTRIBUTION PANEL  
EB7  
CONTROL BLDG.EL.21'-6" COL.2B



**NOTES:**

1. FOR THREE LINE DIAGRAM  
SEE SH. DB1a.
2. FOR ARGST SEE FP 3187a
3. ALL BREAKERS ARE THERMAL-MAGNETIC  
EXCEPT MAIN BREAKER WHICH IS NON-AUTO.
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.

1-NHY-310107 SH.E87a

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ELECT:310107-E87a.tif

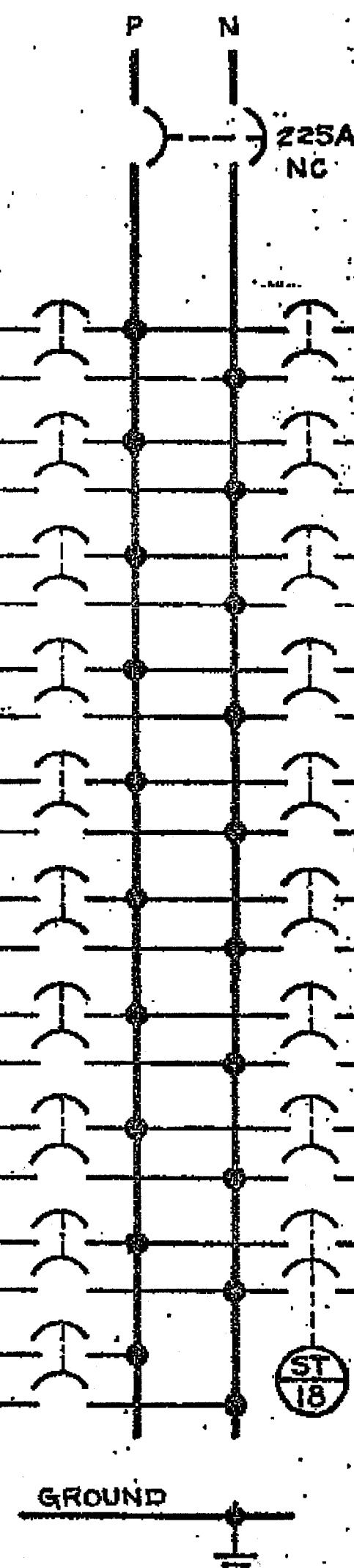
5	2-9-84	CKT 19 MADE SPARE PER DCN 63/0046A	DK	REV DATE	DRWN	CHKD	DESCRIPTION
6	5-31-84	ASSIAN D CKT 12 TO 55 SYS. REV PER DCN 63/0079A	FL	15	11/28/85	12/7/87	INCORP DCE 99-002 DEW 00
7	8-30-85	REV PER ECA 03/104604B 1	EG	11	9/25/87	12/7/87	INCORP DCE 99-002 DEW 00
8	2-24-86	REV PER ECA 03/104604B 2	EG	12	11/28/85	12/7/87	INCORP DCE 99-002 DEW 00
9	5-9-86	REV PER ECA-03/114697B NCR 82/1980B	AFB	13	5/24/86	11/28/85	INCORP DCE 99-002 DEW 00

1-NHY- 310107 SHE94a	125V DC BUS 1-SWG-11B	DISTR PANEL 1-PP-111B	SCHEDULE SH. 23
New Hampshire Yankee	Seabrook Station		

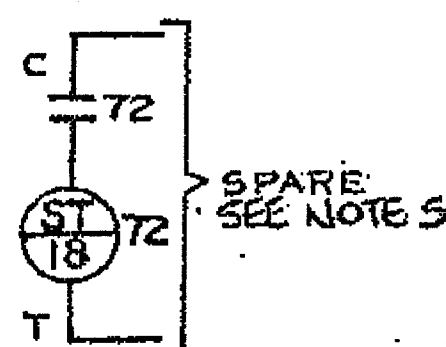
NUCLEAR SAFETY RELATED  
B TRAIN LOAD GROUP

REFERENCE DWG	DESCRIPTION	LOAD (AMPS)	BKR TRIP (AMPS)	CKT NO
310102 SH. 52	4.16KV BUS E6 125V 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. 5c	480V BUS E64 125V DC AUXILIARY BUS	20	17	
—	SPARE	20	19	



225A, 125V DC, 2W  
DISTRIBUTION PANEL  
(E94)  
CONTROL BLDG. EL. 2'-6" COL. 3D

\* - ONE MINUTE LOAD



SPARE  
SEE NOTE 5

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	

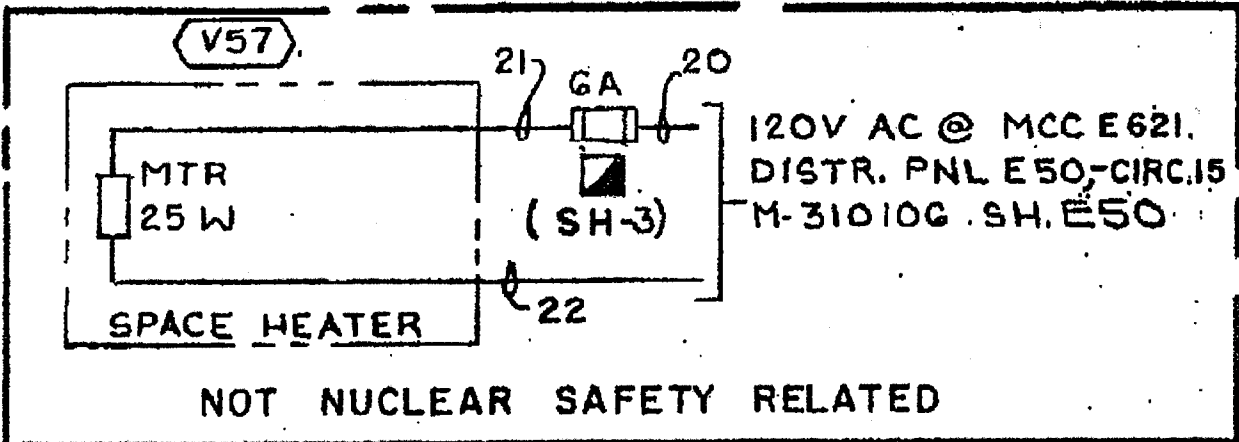
NOTES:

- FOR THREE LINE DIAGRAM SEE SH. DA10.
- FOR ARRGT SEE RP 31884
- ALL BREAKERS ARE THERMAL-MAGNETIC EXCEPT MAIN BREAKER WHICH IS NON-AUTO.
- IF FUTURE E.O. BREAKERS ON THIS BUS ARE ACTIVATED, CHANGE THIS BREAKER TO 20 AMPS AND REVISE CABLE SIZE ACCORDINGLY.
- SHUNT TRIP OPTIONAL
- SEE CALCULATION 9763-3-ED-00-14-F FOR CIRCUIT LOAD AMPS.

1-NHY- 310107 SH.E94a

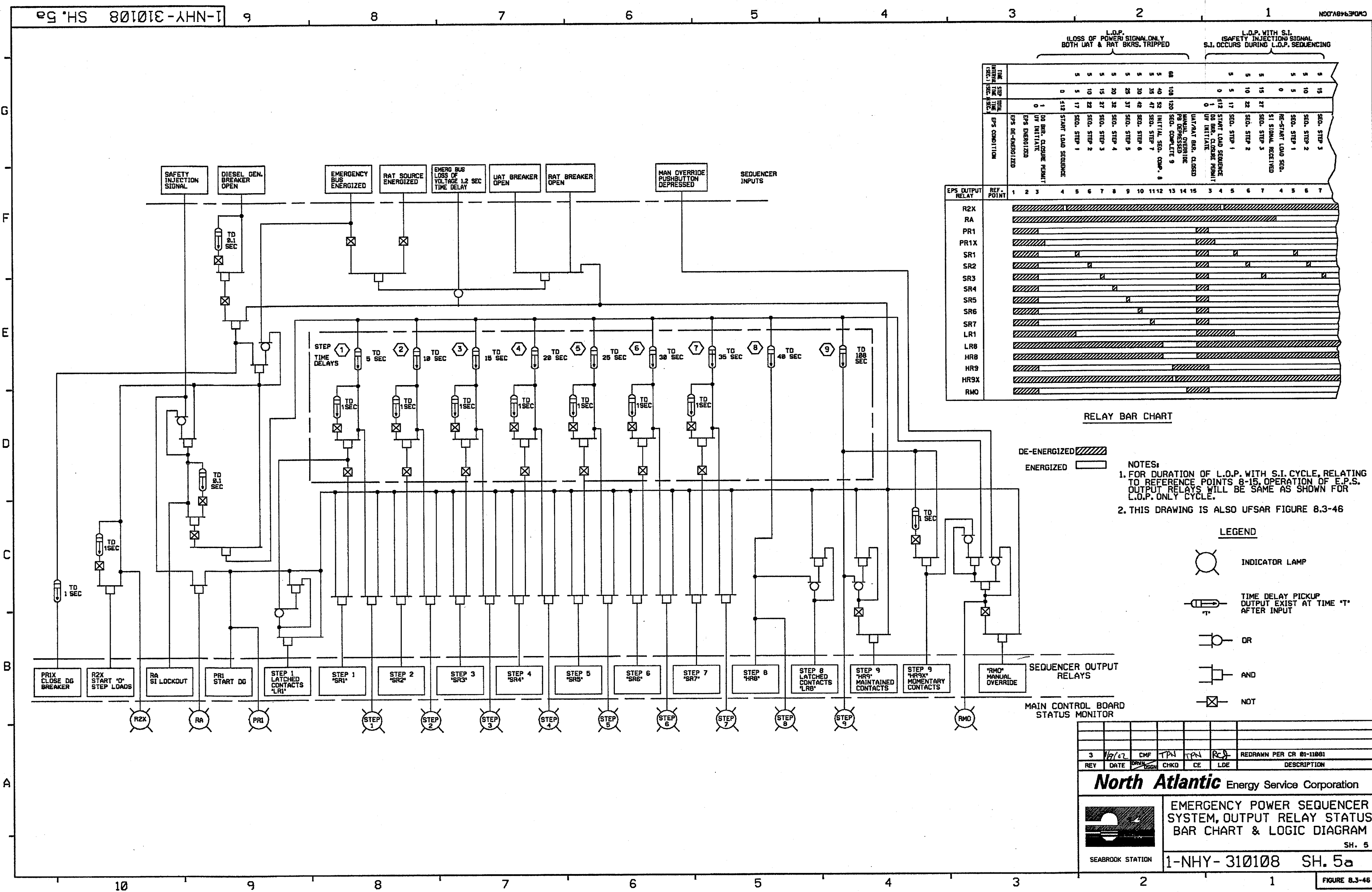






1-NHY- 310890 SH-B43a

[illegible]



3	1/8/82	CWF	TPN	TPN	RC	REDRAWN PER CR 81-11881
REV	DATE	DESIGN	CHKD	CE	LDE	DESCRIPTION

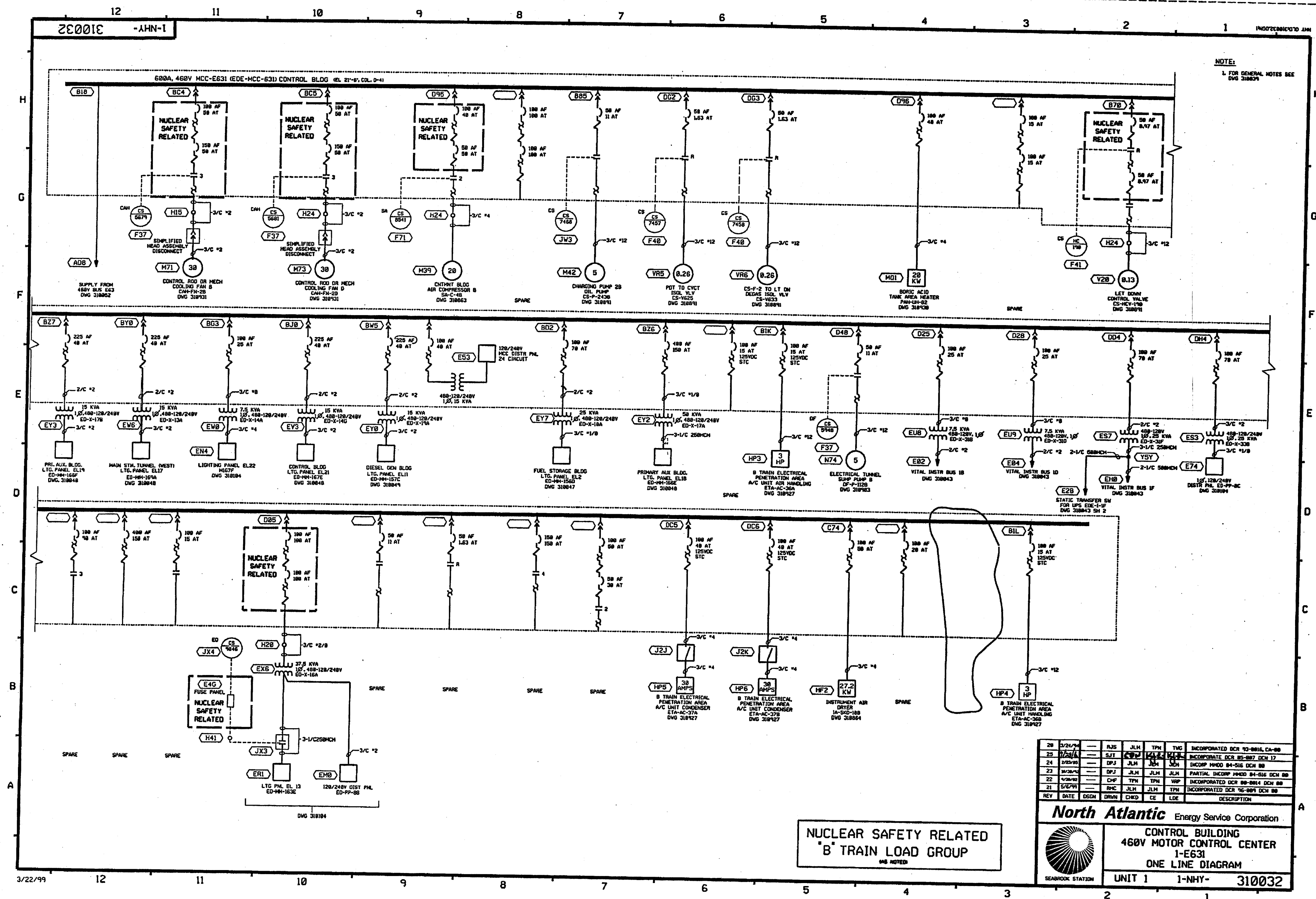
**North Atlantic** Energy Service Corporation

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

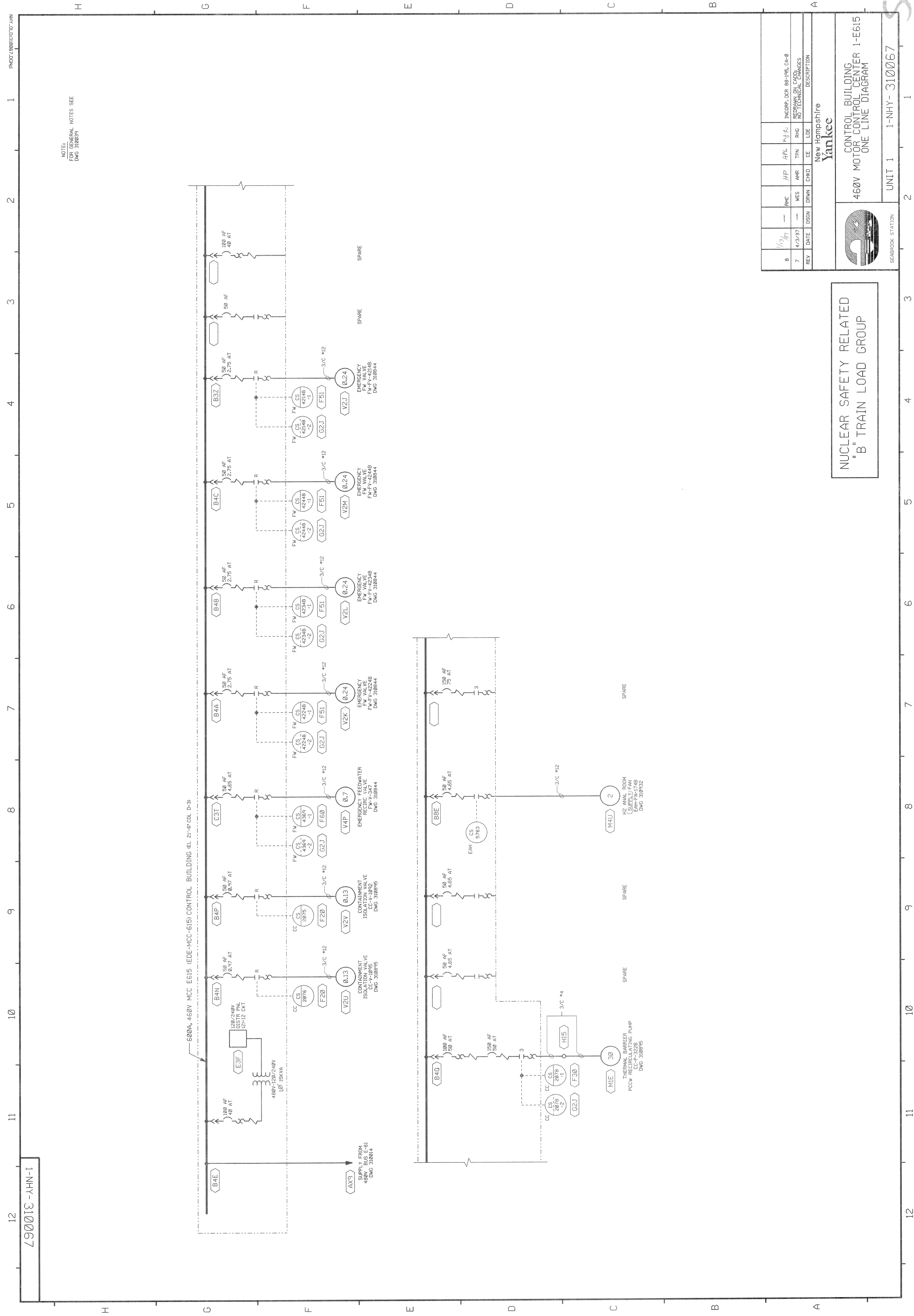
SH. 5

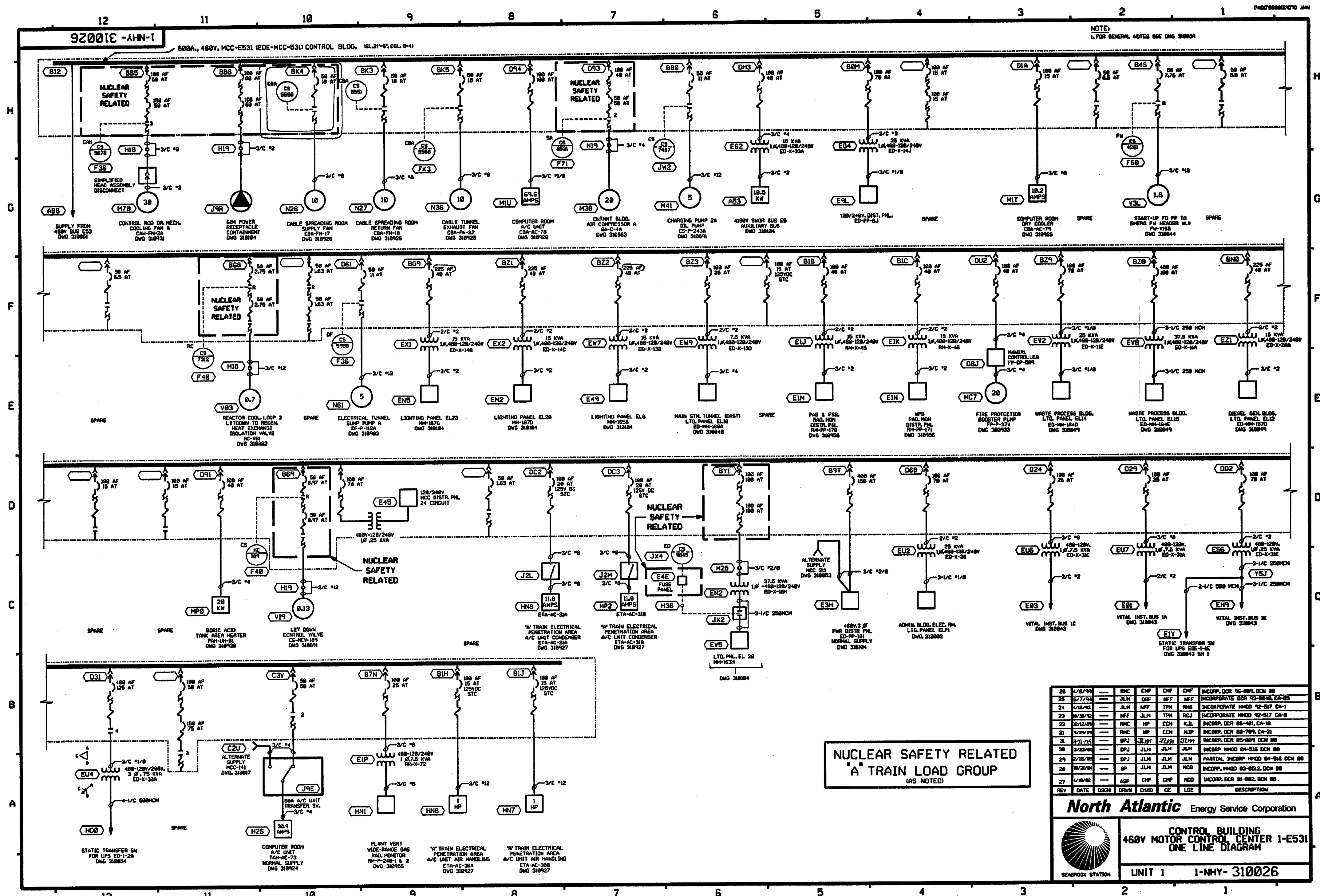
SEABROOK STATION 1-NHY- 310108 SH. 5a

FIGURE 8.3-46









REV	DATE	DSGN	DRWN	CHGD	CE	LDE	DESCRIPTION
28	1/8/99		BMC	CHF	CHF	CHF	INCORP. DCR 95-094, DCM 88
25	5/7/94		JLM	DRF	NFF	NFF	INCORPORATE DCR 93-0646, CA-05
24	1/15/93		JLM	NFF	TPN	RJD	INCORPORATE MADD 92-517 CA-1
23	8/28/92		NFF	JLM	TPN	RCJ	INCORPORATE MADD 92-517 CA-0
22	12/12/91		RMC	HP	ECN	KLL	INCORP. DCR 88-481, CA-10
21	1/24/91		RMC	HP	ECN	NJP	INCORP. DCR 88-789, CA-21
3	4/1/75		DPJ	JLM	JLM	JLM	INCORP. DCR 65-099, DCM 88
36	2/23/88		DPJ	JLM	JLM	JLM	INCORP. MADD 84-516 DCM 88
29	2/18/85		DPJ	JLM	JLM	JLM	PARTIAL INCORP. MADD 84-516 DCM 88
28	8/2/84		SP	JLM	JLM	NCD	INCORP. MADD 83-052, DCM 88
27	1/18/82		ASP	CHF	CHF	NCD	INCORP. DCR 81-082, DCM 88

**North Atlantic** Energy Service Corporation

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

**UNIT 1 1-NHY-310026**



12

11

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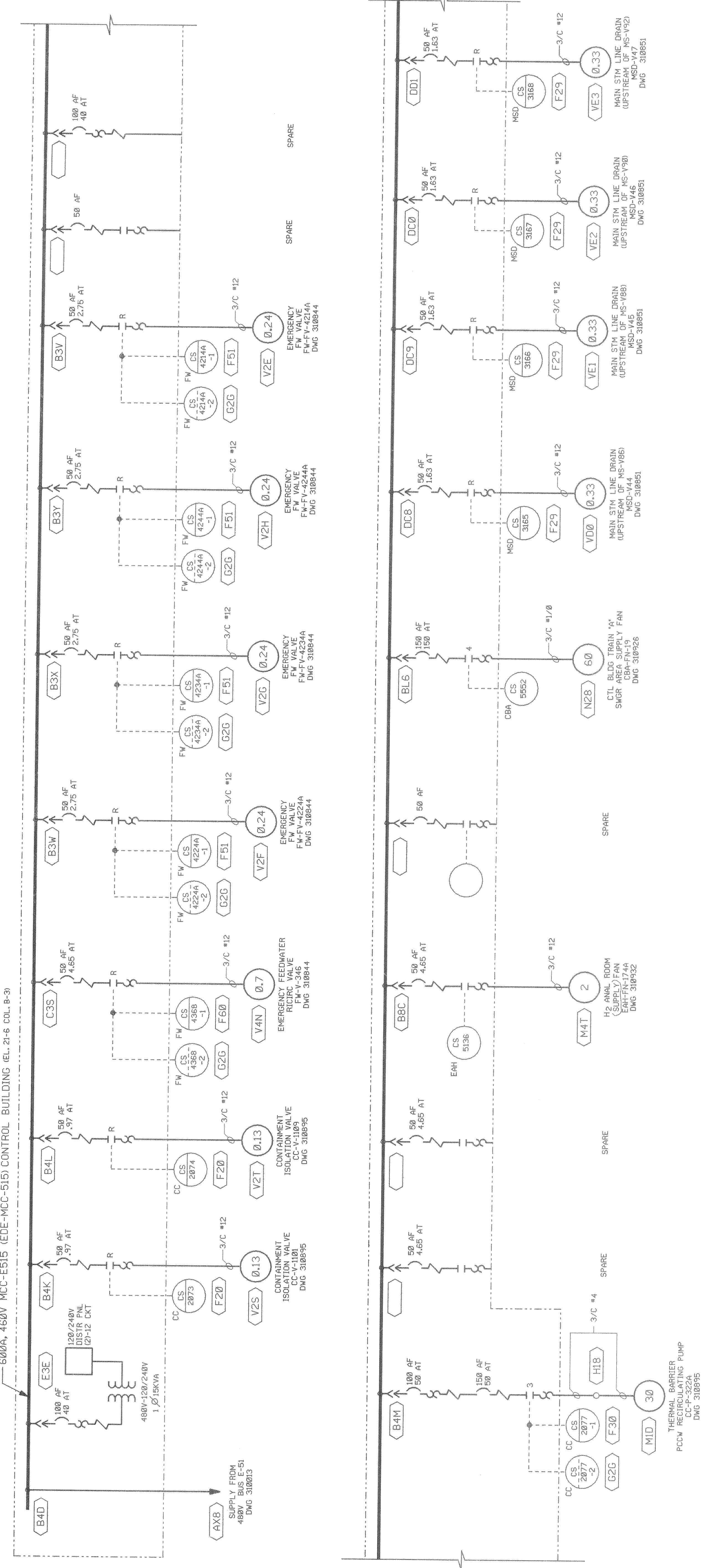
2

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99001E -AHN-I

NOTE:  
1. FOR GENERAL NOTES SEE DWG. 310038



NUCLEAR SAFETY RELATED  
"A" TRAIN LOAD GROUP

8	1/1/89	RMC	APL	INCORP. DCR 88-195, CA-8
7	4/3/87	WES	TPN	REDRAWN ON EADO
6		WES	TPN	RNG NO TECHNICAL CHANGES
5		WES	TPN	RNG NO TECHNICAL CHANGES
4		WES	TPN	RNG NO TECHNICAL CHANGES
3		WES	TPN	RNG NO TECHNICAL CHANGES
2		WES	TPN	RNG NO TECHNICAL CHANGES
1		WES	TPN	RNG NO TECHNICAL CHANGES
DESCRIPTION				
New Hampshire				
Yankee				
CONTROL BUILDING				
460V MOTOR CONTROL CENTER				
1-E515				
ONE LINE DIAGRAM				
UNIT 1 1-NHY- 310066				

SEABROOK STATION



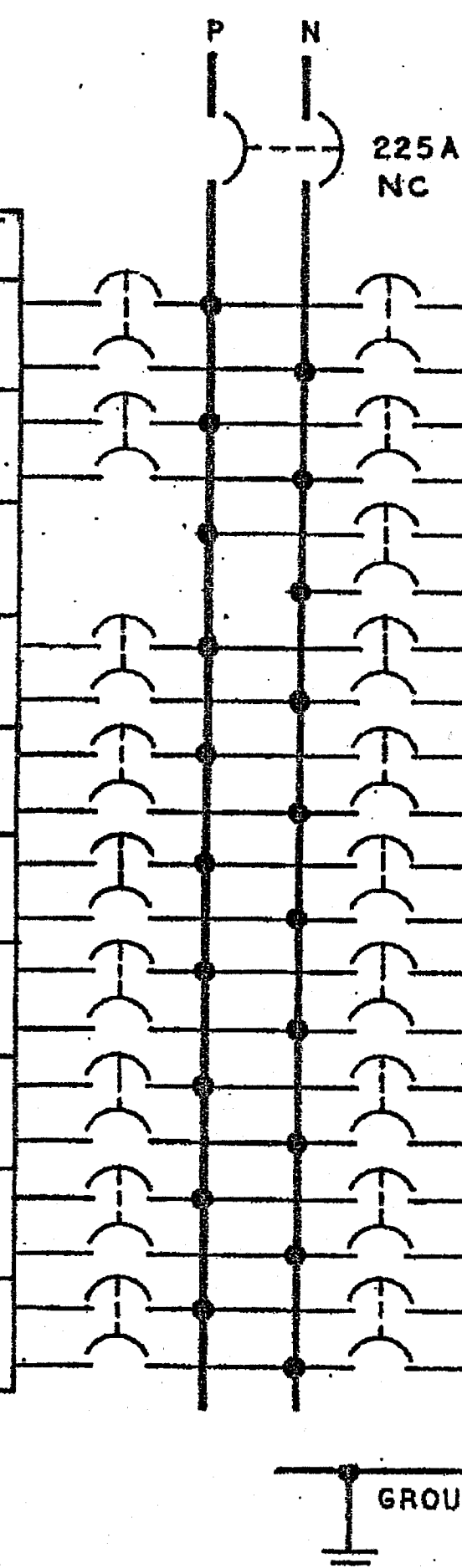


SECURITY-RELATED INFORMATION – WITHHELD UNDER 5 U.S.C. SECTION 552(b)(4) AND 5 U.S.C. SECTION 552(b)(7)(F)

REV	DATE	DRWN	CHKD	DESCRIPTION	REV	DATE	DESCRIPTION	DWN.	BY	CKD.	BY	1-NHY-310107 SH. EGIa
8	4-1-79	DMC	DMH	INCORP DCR 99-002 DCMO								
7	4/15/80	TPN	TPN	INCORP MMOD 92-517 CA-1	3	8-30-85	REV. PER ECA 03/101312B	EG	EG			125V DC BUS 1-SWG-11C
6	12-5-80	HP	APL	INCORP MMOD 89-605 CA-0	2	5-31-84	REV. PER DCN 63/0079A	FL	FL			DISTR. PNL. 1-PP-111C
5	11/1/80	HP	APL	INCORP 88-125, CA-0	1	4-30-82	ADDED FP REFERENCE	NP	NP			SCHEDULE SH. 168
4	11/1/80	RRP	CCM	9763-M-310107 SH. EGIa SUPERCEDES UE&C DWG:	0	11/2/81	FIRST ISSUE DCN 03/1016B	NP	NP			New Hampshire Yankee Seabrook Station

NUCLEAR SAFETY RELATED  
A. TRAIN LOAD GROUP

REFERENCE DWG	DESCRIPTION	AMPS LOAD	BKR TRIP	CKT NO.	CKT NO.	BKR TRIP	AMPS LOAD	DESCRIPTION	REFERENCE DWG
—	SPARE	—	20	1	2	20	—	SPARE	—
—	SPARE	—	20	3	4	20	—	SPARE	—
—	SPACE	—		5	6	30	—	SPARE	—
—	SPARE	—	20	7	8	20	—	SPARE	—
—	SPARE	—	20	9	10	20	—	SPARE	—
M-310882 SH. A091	REACTOR COOLANT PUMP RC-P-1C UNDERVOLTAGE & UNDERFREQUENCY CKT	—	20	11	12	20	—	SPARE	—
—	SPARE	—	20	13	14	20	—	SPARE	—
—	SPARE	—	20	15	16	20	—	SPARE	—
—	SPARE	—	15	17	18	15	—	SPARE	—
—	SPARE	—	15	19	20	15	—	LOSS OF POWER	SH. EGI/20



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

# NOTES:

- FOR THREE LINE DIAGRAM SEE SH. D88a.
- FOR ARR'GT. SEE FP-33145
- SEE SH. 3
- ALL BREAKERS ARE THERMAL-MAGNETIC EXCEPT MAIN BREAKER WHICH IS NON-AUTO.
- SEE CALCULATION 9763-3-ED-00-14-F FOR CIRCUIT LOAD AMPS.

1-NHY-310107 SH. EGIa





5 225A, 125V DC E2T/20/11/31/22E

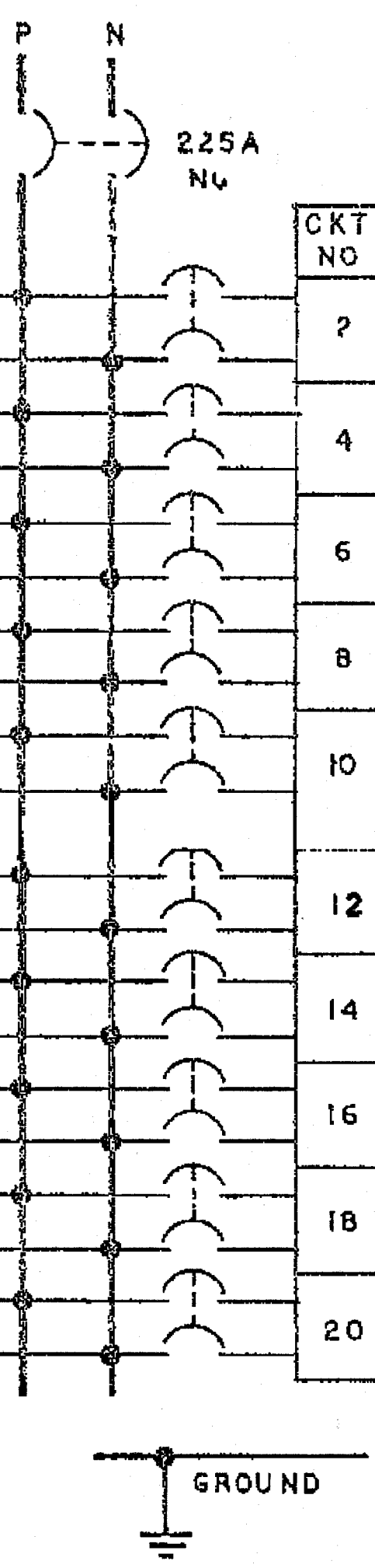
125V DC BUS 1-SMG-11A  
DISTR PNL 1-PP-113A  
SCHEDULE SH 74

New Hampshire  
Yankee  
Seabrook  
Station

1-NHY-310107 SH E2T<sub>a</sub>

NUCLEAR SAFETY RELATED  
A' TRAIN LOAD GROUP

REFERENCE DWG	DESCRIPTION	AMPS LOAD	BKR TRIP	CKT NO	CKT NO	BKR TRIP	AMPS LOAD	DESCRIPTION	REFERENCE DWG
M-301107 SH-E2T/1a	SW SYSTEM SW PUMP PERMISSIVE TRAIN A (RV-54)	—	20	1	2	20	—	SW SYSTEM TRAIN-A SW VALVE (SW-V16)	M-301107 SH-E2T/2a
M-310895 SH-E2T/3a	CC SYSTEM HX-E17A TEMP CTL VLV's CC TV-2171-1 & 2	—	20	3	4	20	—	CC SYSTEM LP-A INBD RET & SUPPLY ISO VLV'S CC-V121 & V57	M-310895 SH-E2T/4a
	SPARE	—	20	5	6	20	—	CC SYSTEM LP B OUTBD SUPPLY & RET ISO VLV'S CC-V175 & V257	M-310895 SH-E2T/6a
M-310890 SH-E2T/7a	SI SYSTEM SI-FV-2482, 83, 95 & FV 2496	—	20	7	8	20	—	MS SYSTEM ATMOS RELIEF VALVE MS-FV-3001	M-310841 SH-E2T/8a
M-310895 SH-E2T/9a	CC SYS-PCCW LOOP A LIQUID RADIATION MON'T'R SAMPLE VALVES V-975 & V-1298	—	20	9	10	20	—	MS SYSTEM ATMOS RELIEF VALVE MS-FV-3003	M-310841 SH-E2T/10a
M-310882 SH-A051	REACTOR COOLANT PUMP RC P 1A UNDERVOLTAGE & UNDERFREQUENCY CKT	—	20	11	12	20	—	MS SYSTEM MAIN STM ISO VALVE MS-V-88	M-310841 SH-E2T/12a
	SPARE	—	20	13	14	20	—	MS-SYSTEM MAIN STEAM ISO VALVE MS-V-90	M-310841 SH-E2T/14a
M-310841 SH-E2T/15	MS SYSTEM ATMOS RELIEF VLV MS-PV-3002	—	20	15	16	20	—	MS SYSTEM ATMOS RELIEF VLV MS-PV-3004	M-310841 SH-E2T/16a
	SPARE	—	20	17	18	20	—	SPARE	
	SPARE	—	20	19	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 081b
  - 2 FOR ARR'G'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

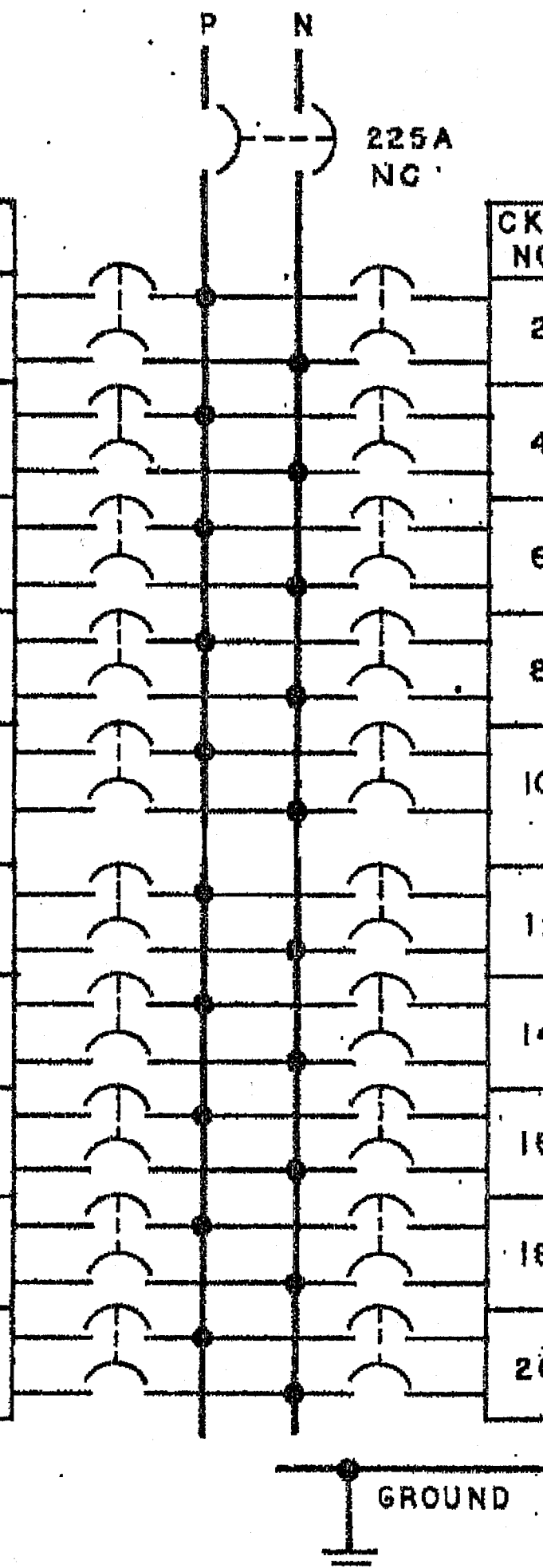
1-NHY-310107 SH E2T<sub>a</sub>

9	4/15/93	TPN	1/93	INCORP M MOD 92-517, CA-1	4	1-23-86	REV PER ECA 03/11/08/08	LW/	2/2
8	11/1/88	HP	APL	INCORP DCR 88-125, CA-01	3	8-30-85	REV. PER ECA 99/10/39/85	EG	0/1
7	9/15/87	NFT	APL	INCORPORATE AS-BUILT COMMENTS	2	5-31-84	REV. PER DCN 85/02/39/A	FL	0/1
6	12/1/86	RKP	CCM	9763-M-310107 SH-E2Ua SUPERCEDES UE&C DWG.	11	6/8/86	INCORP DCR 00-020 DCN-00	JLM	0/1
5	12/24/86	REV PER ECA 03/11/12/22	DESCRIPTION	REV. DATE	DESCRIPTION	DWN. BY	CHKD. BY	1-NHY- 310107 SH-E2Ua	

NUCLEAR SAFETY RELATED  
B. TRAIN LOAD GROUP

125V DC BUS 1-SWG-11B.  
DISTR. PNL. 1-PP-113B  
SCHEDULE SH.7b  
New Hampshire  
Yankee  
Seabrook  
Station

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 HX E17B TEMP CTL. VLV'S CC-TV-2271-1&2	—	20	13
M-310841 SH-E2U/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 ARR'G'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.

1-NHY- 310107 SH-E2Ua