2998-G-274

PRESSURIZER HTR TRANSFS.
EACH 1501/1000 KVA, AA/FA 70°C, 3Φ 60Hz, DRY TYPE, VENTILATED
4536/4260/4160/4055/3962-480V
Z=6.15% ON 750 KVA BASE (2A-1)
Z=6.93% ON 750 KVA BASE (2B-1)

480V SWITCHGEAR 2A-1

STA SERV. TRANSF. 2A-1
1500/1725 KVA OA/FA 55°C
1680/1932 KVA OA/FA 65°C
3Φ 60HZ SILICONE FLUID
4360/4260/4160/4055/3950-480V
Z=8.54% ON 1500 KVA BASE
(SEE NOTE 8)

480V PRESSURIZER HTR BUS 2A-3

480V PRESSURIZER HTR BUS 2B-3

STA. SERV. TRANSF 2B-1
1500/1725 KVA OA/FA 55°C
1680/1932 KVA OA/FA 65°C
3Φ 60HZ SILICONE FLUID
4360/4260/4160/4055/3950-480V
Z=8.72% ON 1500 KVA BASE
(SEE NOTE 8)

480V SWITCHGEAR 2B-1

1600A BUS

480V TURBINE AREA COMMON MCC 2C

TO ST. LUCIE UNIT #1 (8770-2762)

480V MTRMUSH/URITE MCC 2A-10

480V TURBINE AREA MCC 2A-1

480V RADWASTE MCC 2A-2

480V INTAKE MCC 2A-3

480V INTAKE MCC 2B-3

480V RADWASTE MCC 2B-2

480V TURBINE AREA MCC 2B-1

480V MTRMUSH/URITE MCC 2B-10

480V SWITCHGEAR 2A-2(SA)

STA. SERV. TRANSF. 2A-2
1500/1725 KVA OA/FA 55°C; 1680/1932 KVA OA/FA 65°C; 3Φ, 60Hz, SILICON
4360/4260/4160/4055/3950-480V
Z=7.03% ON 1500 KVA BASE.
(SEE NOTE 8)

480V SWITCHGEAR 2AB (SAB)

STA. SERV. TRANSF 2B-2
1500/1725 KVA OA/FA 55°C
1680/1932 KVA OA/FA 65°C
3Φ 60HZ SILICON
4360/4260/4160/4055/3950-480V
Z=8.72% ON 1500 KVA BASE
(SEE NOTE 8)

480V SWITCHGEAR 2B-2(SB)

480V REACTOR AREA MCC 2A-5(SA)

480V REACTOR AREA COMMON MCC 2AB (SAB)

480V REACTOR AREA MCC 2B-5(SB)

480V DIESEL GENERATOR BLDG MCC 2A-7(SA)

480V DIESEL GENERATOR BLDG. MCC 2B-7(SB)

SYMBOLS

Δ	DENOTES CONTACTOR WILL BE TRIPPED BY LOSS OF NORMAL STATION VOLTAGE AND WILL BE RECLOSED MANUALLY
LP	LIGHTING PANEL
N/E	NORMAL / EMERGENCY
INT	INTERRUPTING CAPACITY
CLR	CURRENT LIMITING REACTOR
PP	POWER PANEL
⊕	NON-CLASS 1E EQUIPMENT

NOTES

1. ALL 480V SWGR. BKRS ARE 600VAC, 1200V & 1600V MOLDED CASE, INSTANT. TRIP, RECOGNIZE SYM. WITH FIXED INSTANT. TRAV. UNLESS OTHERWISE NOTED.
2. ALL 480V MCC COMBINATION STARTERS FOR RATED 25,000A SYM. UNLESS OTHERWISE NOTED. ALL 480V MCC THERMAL MAGNETIC MOLDED CASE BKRS ARE 100% FRAME RATED 22,000A SYM INTERRUPTING UNLESS OTHERWISE NOTED. ALL BCC BUSES ARE RATED 600A CONTINUOUS & 22,000A SYM MOMENTARY.
3. CLASS 1E EQUIPMENT NOTED-REFERS TO ESF CLASSIFICATION OF STRUCTURES.
4. SEE DWG. 2998-B-905 FOR ALL LOADS AND CABLES CONNECTED TO BUSES SHOWN ON THIS DWG.
5. THESE BCKR'S ARE NORMALLY OPEN. ALL OTHER BCKR'S ARE NORMALLY CLOSED.
6. SEE DWG. 2998-G-276 SH. 2 FOR 480V SWG MCC'S NOT SHOWN ON THIS DWG.
7. RELAY 27-1 DETECTS LOSS OF OFFSITE POWER. RELAY 27-2 DETECTS DEGRADED GRID VOLTAGE. REF. "PSB-1"
8. STATION SERVICE TRANSFORMERS 2A-1, 2B-1, 2A-2 & 2B-2 SHALL BE SET AT 4' (4095V TAP)
9. ALL POWER PANEL TRANSFORMERS SHALL BE SET AT + THE 468-V TAP
10. PRESSURIZER HEATER TRANSFORMERS SHALL BE SET AT 'B' (4095V TAP).

REFERENCE DRAWINGS

AUXILIARY ONE LINE DIAGRAM SH 2	2998-G-274 SH 2
MAIN ONE LINE WIRING DIAGRAM	2998-G-272
CONTROL WIRING DIAGRAMS	2998-B-837
CABLE & CONDUIT LIST	2998-B-925
PHASING DIAGRAM	2998-G-229
480V MISC. 125 VDC & 1Φ VITAL AC ONE LINE POWER DISTN. & MOTOR DATA	2998-G-552
LIGHTING PANEL DETAILS	2998-G-535
COMBINED MAIN & AUXILIARY ONE-LINE DIAGRAM	2998-B-922
	2998-G-272A

INFORMATION ONLY
VERIFY WITH A CONTROLLED COPY BEFORE USE.

BEST PRINT POSSIBLE

NUCLEAR SAFETY RELATED

NO	DATE	REVISION	BY	CH	APPROVED
13	8-19-98	REVISED: (B3, B5, BG, B14, B15, BG, B17, B19, G10, H3, H5, HG, H12, H13, HG) TRIP ELEMENT RATING; (C4) DESCRIPTION. ADDED: (H2, H17) TRIP ELEMENT & CT RATING (G4) CABLE SIZE; (K18) NOTE PER PCM 940-2880 (F)	BG	DER	
12	4-30-91	ADDED: (K18) REF. DWG. PER PCM 091-2880	VB	DER	
11	3-25-91	REVISED: (J18) NOTE 8. ADDED: (J18) NOTE 10. PER DER-SLE-01-044 (F)	EO	DER	
10	10-18-89	REVISED: EQUIPMENT DESCRIPTION (A9-A11) PER PCM 144-288	V.G.	TJC	
9	4-14-89	REVISED: STA SERVICE TRANSF. 2A-1 (A-G) & 2B-1 (A-14) PER PCM 056-287	V.G.	TJC	
8	12-1-87	REVISED: FUSE RATINGS (M1, L17) PER PCM 026-285	R. CONTE		
7	8-6-87	ADDED: FUSES (M2, K4, K5, K6, K8, K10, K12, K13, K14, K15, L16, L18, M1); RELOCATED: BKRS. (FR. K5 TO M1, FR. K13 TO L17); PER PCMs 015-283, 41-287	T.P. BARTON	RALLIS	
6	9-18-83	A SCHILDKRAUT, PEO 29986 ADDED: MCC FEEDERS (E1, K4, K13) EQUIPMENT (L4, L14), NOTES (G6, G14, G17, G11, J16) REVISED: CT (H15), CABLES (C1, C9) DELETED: FEEDERS (H5, H14)	J.C. CRAWFORD		
5	7-23-82	ADDED: REFERENCE DWG. (J19) PP-248 (F1) & PP-249 (F19) UNDERVOLTAGE RELAYS ON 480V BUS 2A-2 (H2) AND 480V BUS 2B-2 (H16) INCLU. ASSOC. PTS AND FUSES, NOTES 6 & 7 (J19) REVISED: AUTO TRANSFER SWITCH-MCC-2C (D7). XFMR. RATINGS (J6, A14, G7, D11) DELETED: LP5 (F14, F19), MCC 2A6 (K3) MCC 2B6 (L1) MCC 2B6 (M14) MCC 1BB6 (K17) (SEE DWG G-274 SH.2)	D. RAMOS		
4	1-14-80	ADDED: BKR (B1, B11, E9, K4, K10, K13, M5, M14) MCC (E1, E9) REVISED: BKR (D2, D18, F3, F5, F15, F19, K6, K11, K18, K19, L5, N7, N15) DELETED: BKR (H7, M12, M13, (5))	J.C. CRAWFORD		
3	7-26-79	ADDED: NOT RELEASED (B3, B18); TURB BLDG CRANE #2 FOR (C3); SPARE BKR (CM); XFMR (E1); LP-233 ASSOC. XFMR 4 BKR (E3, F5); XFMR 8 ASSOC BKR (EM) MCC 2A9 & ASSOC BKRS (F5); MCC 2B9 & ASSOC. BKRS (C14); PP-213 & ASSOC. XFMR & BKR (P19); PP-258 ASSOC. XFMR & BKR (L19); LP-SW, LP-247 ASSOC. XFMR & BKRS (F11); SEP DISCH. (GZ, J18); PP-250 XFMR & BKR (EX); XFMR (E13); BKR FOR MAINT. SUPPLY XFMR (EG6 E1); LP-247 & ASSOC. XFMR (U2K); PP-251 ASSOC. XFMR & BKR (EK); LP-231, ASSOC. XFMR & BKR (L5, M3); PP-204, PP-220, ASSOC. XFMRS & BKRS (L1); W/E (M2, M17); PP-210, & ASSOC. XFMR & BKR (M6); LP-230, ASSOC. XFMR & BKR (M4) REVISED PRESS. HTR. AMPS SEE 8 CLC. TYPE (A9, A10); BUS RATING (B3 & BG, B11, F9, G8, G5, G13, G16); FOR SIZE (C2, C18); BKR. FRAME SIZE (B1); PNL. TYPE ASSOC. BKR. FRAME & TRIP SIZE (E1); PNL. TYPE & ASSOC. BKR KVA & BKR. TRIP SIZE (E2, F19, K1, K2, K6, K12, K13, K17, K18); LC, L1, M11, M13); PNL. NO. ASSOC. XFMR & BKR. TRIP SIZE (E4, F4, K5) PP-209, XFMR & BKR TRIP SIZE (E18); NOTE (H18); PNL. NO. & ASSOC. BKR TRIP SIZE (L5); BKR TRIP SIZE (L11, K14, L2, L17); BKR (G16). DELETED: SPARE BKR (L13); WTR. TREATMENT MCC 2A-4 (E4, F4); WTR. TREATMENT MCC 2B-4A (E16); PP-211, ASSOC. XFMR & TRANSFER, SWITCH (FW, BKR CHOLD & CT RATING (N2, H17), REF. DWG (J18); LP-2-2C & ASSOC. BKR (M1); P 2-2D & ASSOC. BKR (M11); PP-123 (F18); PP-206 (F18)	J. LEVINE		
2	5-13-76	ADDED: (RP-284 (L10)			
1	7-1-74	ADDED: (K5, L3) BKRS & XFMRS (E9, K4, L2, L17) BKRS & XFMR) TRANSFER SWITCH & PANEL REVISED (B1 THRU B7, B13 THRU B17, H3 THRU H8) TRIP DEVICES (G4, J5) SYMBOL (K1, K2, K3, K4, K5, K6, K7, K8, K12, K17, C6, K15, L4) STARTERS, RELOCATED (E6) TRANSFER SWITCH & CC DELETED (G18) SYMBOL.	R. DAVIES		

NO	DATE	REVISION	BY	CH	APPROVED
1	7-1-74	ADDED: (RP-284 (L10)			
2	5-13-76	ADDED: (K5, L3) BKRS & XFMRS (E9, K4, L2, L17) BKRS & XFMR) TRANSFER SWITCH & PANEL REVISED (B1 THRU B7, B13 THRU B17, H3 THRU H8) TRIP DEVICES (G4, J5) SYMBOL (K1, K2, K3, K4, K5, K6, K7, K8, K12, K17, C6, K15, L4) STARTERS, RELOCATED (E6) TRANSFER SWITCH & CC DELETED (G18) SYMBOL.	R. DAVIES		

THIS DESIGN INFORMATION FOR THE CHANGE SHOWN ON THIS REVISION HAS BEEN ENGINEERED BY FLORIDA POWER & LIGHT COMPANY.

WILLIAM J. ROW — CERTIFICATE No. 15106 — STATE OF FLORIDA — REGISTERED PROFESSIONAL ENGINEER

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FLORIDA POWER & LIGHT COMPANY
ST. LUCIE PLANT
(1983-890 MW(e) EXTENSION-UNIT NO.2
AUXILIARY ONE LINE DIAGRAM
SH. 1

EBASCO SERVICES INCORPORATED NEW YORK

SCALE	NONE
APPROVED	William J. Row
DWG. NO.	2998-G-274
DR. J. PAUTZ	
CH. R. FERGUSON	

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