

RASTER=437531-1-0.dgn
DUN 437531-0.dgn
CND User:ZNS4 Date: 11-16-2017

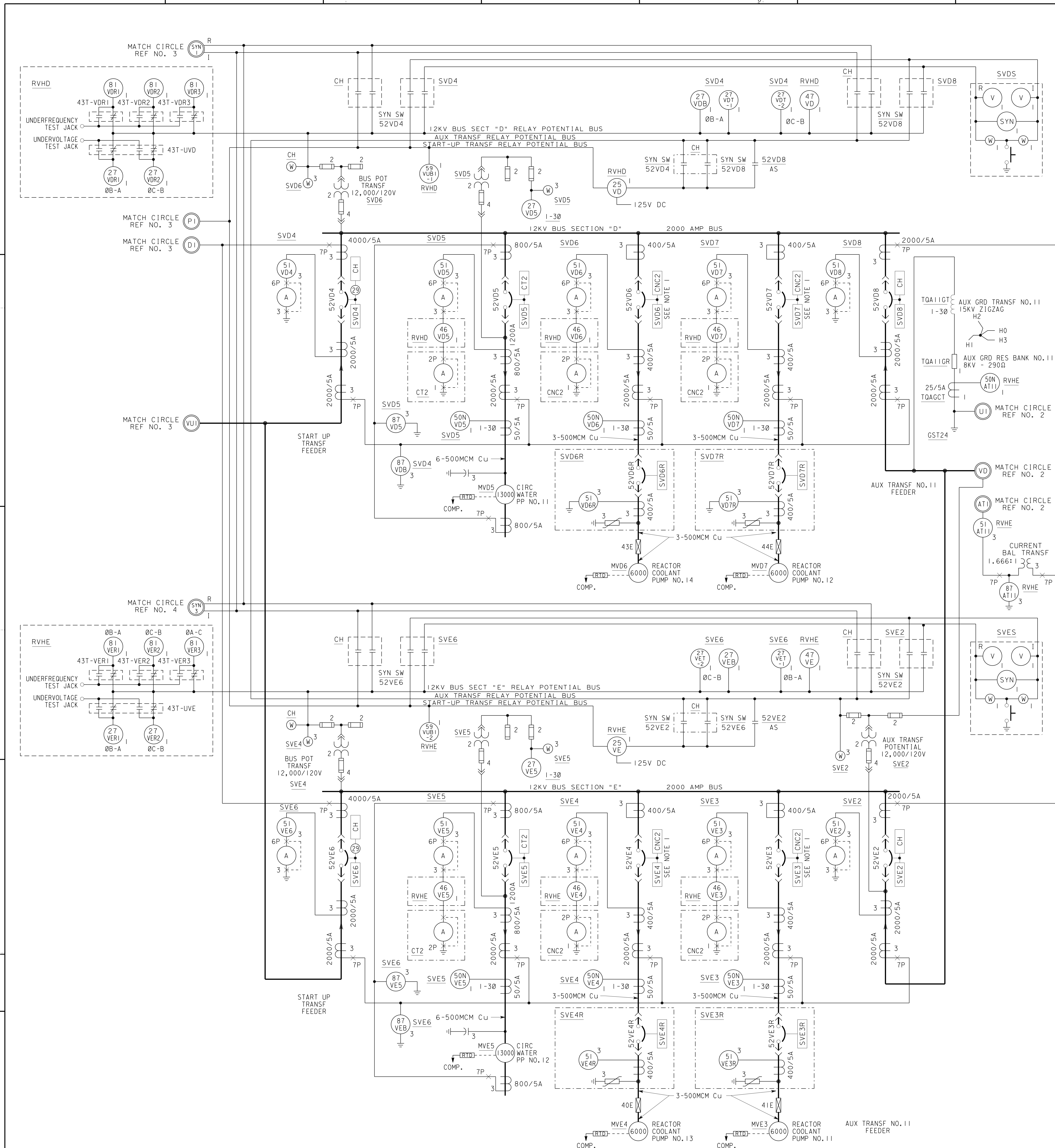


TABLE OF DEVICES									
DEVICE NO.	DESCRIPTION	RATING	SCALE OR RANGE	MFR	TYPE	CATALOG NO. OR REF. DWG. NO.	REMARKS		
A	AMMETER CELL VD6, VD7, VE3, VE4	5A	0-400A	GE CO	AB40	50103131LSSC2	AT SWGR		
A	AMMETER CELL VD5, VE5	5A	0-800A	GE CO	AB40	50103131LSSN2	AT SWGR		
A	AMMETER CELL VD4, VD8, VE6, VE2 (A0 & C0)	5A	0-2000A	GE CO	AB40	50103131LSTM2	AT SWGR		
A	AMMETER CELL VD6, VD7, VE3, VE4 (A0)	5A	0-400A	WE	GA-332	644B637A19	REACTOR COOLANT BD		
A	AMMETER CELL VD5, VE5	5A	0-800A	WE	GA-332	644B637A22	MISC SERVICE CONT BD		
A	AMMETER CELL VE2 (B0)	5A	0-2000A	YOKOGAWA	AB40	103131LSTM7	AT SWGR		
A	AMMETER CELL VE4 (C0 & B0)	5A	0-400A	YOKOGAWA	AB40	103131LSSC7	AT SWGR		
SYN	SYNCHROSCOPE	115V-60HZ		GE CO	AB-16	50-120452AAAA	AT SWGR		
V	VOLTMETER SYNCHRONIZING	150V	0-15KV	GE CO	AB-16	50-120021P2W2	AT SWGR		
25VD, VE	SYNCHRONISM CHECK RELAY	120V	10°-60°	GE CO	SLJ	12SLJ21A1A	30° ± 0.5 SEC		
27VD2, VE2	UNDERVOLTAGE TRIP REL 12KV BUS	60-140V		WE	SSV-T	1321D79A01			
27VD8, VEB	UNDERVOLTAGE RELAY 12KV BUS	25-50V		GE CO	RAV	12RAV11B2A	AUTO-TRANSFER		
27VD1, VET1	UNDERVOLTAGE TRIP REL 12KV BUS	55-140V		GE CO	IAV54	12IAV54F1A			
27VD1, VDR2	UNDERVOLTAGE RLY, REACT COOL PP	55-160V		BASLER	BE1	BE1-27	STYLE A30-E1J-NOR2F SEE NOTE 2(TYP)		
27VER1, VER2	UNDERVOLTAGE RLY, REACT COOL PP	55-160V		BASLER	BE1	BE1-27	STYLE A30-E1J-NOR2F SEE NOTE 2(TYP)		
27VD5, VE5	UNDERVOLTAGE COND CIRC WTR PP	25-50V		GE CO	RAV	12RAV11B2A			
46VD5, VE5	PHASE BALANCE CUR RLY CWP	1A, 125% SL		WE	CM	290B960A09	ALARM ONLY		
46VD6, 7, NVE3, 4	PHASE BALANCE CUR REAC COOLANT PP	1A, 125% SL		WE	CM	290B960A09	ALARM ONLY		
47VD, VE	AC VOLTAGE BALANCE RELAY	55-140V		WE	CVQ	293B146A09	ALARM ONLY		
50NVD5, NVE5	GRD CUR SENSOR CWP	8A CONT	.4-40A	ITE	50D	46B52275	ALARM ONLY, TIMER RANGE 0.1 - 3 SEC, SET @ 0.5 SEC		
50NVD6, 7, NVE3, 4	GRD CUR SENSOR REACTOR COOLANT PP	0.177A-0.2A		S. DUNN		112XA111G10	ALARM ONLY		
50NAT11	GRD OC RELAY AUX TRANSF #11	1-4A		WE	SC	1876047	ALARM ONLY		
51VE3R, 4R	OVERCURRENT RELAY, RCP BACK-UP PROT			GE CO	1FC66B	(3)			
51VD6R, 7R	OVERCURRENT RELAY, RCP BACK-UP PROT			GE CO	1FC66B	(3)			
51VD4, VE6	OVERCURRENT RELAY, 12KV BUS	4-16A V. INV		GE CO	1AC53	121AC53A101A	NO 1.T. UNIT		
51VD5, VE5	OVERCURRENT RELAY, COND CWP	2-6A LT		WEST	COMS	287B456A15	20-80A INST NO		
51VD6, 7, VE3, 4	OVERCURRENT RELAY, REAC COOLANT PP	2-6A LT		WEST	COMS	289B456A15	30A 6 - DELAY		
51AT11	OVERCURRENT RELAY, AUX TRANSF #11	5-12A V. INV		WE	CO-9	1875383	NO 1.T. UNIT		
52VD5, 6 & 7	CKT BKR 12KV SWGR, BUS "D"	1200A		CH		AM 13.8-VR750TU-1200A	1C 1000 MVA		
52VE3, 4 & 5	CKT BKR 12KV SWGR, BUS "E"	1200A		CH		AM 13.8-VR750TU-1200A	1C 1000 MVA		
52VD4, 8	CKT BKR 12KV SWGR, BUS "D"	2000A		CH		AM 13.8-VR750TU-2000A	1C 1000 MVA		
52VE2, 6	CKT BKR 12KV SWGR, BUS "E"	2000A		CH		AM 13.8-VR750TU-2000A	1C 1000 MVA		
59VUB1-1, 2	OVERVOLTAGE RELAY ST-UP BUS	60-140V		WE	SSV-T	1321D79A01			
52VE3R, 4R	VAC CKT BKR, RCP BACK-UP OC PROT, BUS "E"	1200A		GE CO		VB 13.8-1000-3	1C 1000 MVA		
52VD6R, 7R	VAC CKT BKR, RCP BACK-UP OC PROT, BUS "D"	1200A		GE CO		VB 13.8-1000-3	1C 1000 MVA		
81VDRI, 2, 3	12KV BUS D REACT COOL PP UF RLY			BASLER	DIG FREQ	BE1-B1 0/U			
81VERI, 2, 3	12KV BUS E REACT COOL PP UF RLY			BASLER	DIG FREQ	BE1-B1 0/U			
87AT11	DIFF RELAY AUX TRANSF NO. 11	0.5 - 2.5A		WE	CO-9	1875376	10 -40A 1.T. (2 1.T. CONT)		
87VD5, VE5	DIFF RELAY COND CIRC WATER PP	5A 60HZ		GE CO	CFD	12CFD12B2A	0.2 AMP TARGET		
87VDB	DIFF RELAY 12KV BUS D	4-16A V. INV		GE CO	1AC53	121AC53A101A	NO 1.T. UNIT		
87VEB	DIFF RELAY 12KV BUS E	4-16A V. INV		GE CO	1AC53	121AC53A803A	NO 1.T. UNIT		

LOCATIONS

CNC2	CONTROL BOARD REACTOR COOLANT
CT2	CONTROL BOARD TURBINE AUX
CH	CONTROL BOARD STA ELECTRIC
SVD5	12KV SWGR BUS D CUBICLE 5
RVHD & E	RELAY BOARD STATION ELECTRIC
TQAI1GT	AUX GRD TRANSF #11 DISC SW CAB
TQAI1GT	AUX GRD TRANSF #11 CABINET
TQAGCT	GROUNDING CT 12, 14 CABINET
TQAI1GR	AUX GRD RESISTOR BANK #1
GST24	GROUNDING STATION T24
SVD6R	12KV SWGR BUS D CUB 6R, BACK UP OC

LEGEND

✕	TEST SWITCH
⓪	LAMP INDICATING WHITE
CH	CONTROL STATION AT LOC CH
RTD	RESISTIVE TEMPERATURE DEVICE
COMP	COMPUTER
44E	CONTAINMENT PENETRATION WITH PENETRATION NUMBER
29	ISOLATION SWITCH AT SWITCHGEAR (DISC BKR CONTROL FROM CONTROL ROOM)

REFERENCES

- DESCRIPTION OF ELECT SCHEM DIAGRAM SYMBOLS & EQUIP LOCATION NO'S 050003
- SINGLE LINE MTR & RLY DIAG GEN & MAINT TRANSF 437529
- SINGLE LINE MTR & RLY DIAG START-UP SYS UNITS 1 & 2 437530
- SINGLE LINE MTR & RLY DIAG 4160V SYS BUS SECT D & E 437532
- DELETED
- SCHEMATIC DIAG CIRCULATING WATER PUMPS 437565
- SCHEMATIC DIAG REACTOR COOLANT PUMP 11 477846
- SCHEMATIC DIAG REACTOR COOLANT PUMP 12 477847
- SCHEMATIC DIAG REACTOR COOLANT PUMP 13 477848
- SCHEMATIC DIAG REACTOR COOLANT PUMP 14 477849
- MAIN CONTROL BOARD MATERIAL LIST 101941
- SCHEMATIC DIAG BUS POTENTIAL & SYNCHRONIZING 12KV SYS 437612

NOTES

- BACK-UP BREAKER TO BE CLOSED BEFORE CLOSING PRIMARY BREAKER.
- FOR ELECTRICAL DEVICES TECH DATA AND SETPOINTS SEE PIMS COMPONENT DATABASE.

KEY DWG. SECTION IC

DATE	REVISION DESCRIPTION	UNIT 1	DWG SCALES
11-16-2017	Revised Per DFT-7#4321	ELECTRICAL	BILL OF MATL:
D.O. ZNS4		SINGLE LINE METER AND RELAY DIAG	SUPDS:
R.E. FXC2		12KV SYSTEM	SUPSD BY:
J.V. N/A			DRAWING
P.E. N/A			SHEET
			PAGE
			REV
			437531
			1
			0
			28