



DIFFERENTIAL RELAY ZONES:

- fa- PRIMARY EAST 230KV BUS
- fb- PRIMARY WEST 230KV BUS
- a1- PRIMARY MAIN TRANSFORMER BUS #1
- a2- PRIMARY MAIN TRANSFORMER BUS #2
- m1- PRIMARY STARTUP TRANSFORMER BUS 'A'
- m2- PRIMARY STARTUP TRANSFORMER BUS 'B'
- na- SECONDARY EAST 230KV BUS
- nb- SECONDARY WEST 230KV BUS
- b1- SECONDARY MAIN TRANSFORMER BUS #1
- b2- SECONDARY MAIN TRANSFORMER BUS #2
- r1- SECONDARY STARTUP TRANSFORMER BUS 'A'
- r2- SECONDARY STARTUP TRANSFORMER BUS 'B'

NOTES:

1. ALL BAY #4 230KV DISCONNECT SWITCHES ARE 2500A, TO 000A MOMENTARY MINIMUM, 900KV BIL WITH 1300KV BIL INSULATORS, UNLESS OTHERWISE NOTED.
2. CCVTs ARE 132.0KV, 115/66.4V, 1050 BIL, 205" CREEP, 0.803 MFD WITH CORONA RINGS & CARRIER ACCESSORIES.
3. SWITCHYARD BUSES ARE OF COPPER TUBE (4" MAIN AND 3" BAY BUSES) 1000KV BIL INSULATORS.
4. THE INTERRUPTING RATING OF BREAKERS BW169, BW216, BW192, BW23, BW49, BW52, BW55, BW61, BW64, BW67 IS SHOWN AS 50KA BUT CAN BE UPGRADED TO 63KA WITH THE USE OF SHORT LINE CAPACITORS.
5. FOR FIBER COMMUNICATION CONNECTIONS SEE E-224097.

REFERENCE DRAWINGS:

- A-69570 LIST OF DRAWINGS (SWITCHYARD)
- E-57953 OPERATING DIAGRAM - 230KV SWITCHYARD E-71924 TRIPPING SCHEDULE
- 8770-A-146 LIST OF DRAWINGS (UNIT #1)
- 8770-G-372 MAIN ONE LINE DIAGRAM (UNIT #1)
- 8770-B-327 CONTROL WIRING DIAGRAM (UNIT #1)
- 8770-G-420 230KV SWITCHYARD PLAN
- 8770-G-329 PHASING & VOLTAGE VECTOR DIAGRAM (UNIT #1)
- 2996-A-146 LIST OF DRAWINGS (UNIT #2)
- 2996-G-372 MAIN ONE LINE DIAGRAM (UNIT #2)
- 2996-G-329 PHASING & VOLTAGE VECTOR DIAGRAM (UNIT #2)

0526	32/7/10	20103154-REPLD SWITCHES 2EW & 3ME W/3000A SWITCHES.	ALP	SK	9551/38	20142600 ADDED BAY #6. REPLD BARS BW40 & BW45. CHANGED MIDWAY #3 LINE TO TREASURE. REVD CTS ON BAR 3M FOR TREASURE LINE SUPPL RELAY INSTALL.	ST	DATE 4/6/70	SCALE	APPROVED	REVISION 38	DR BRETT ER	COR	W. WALLACE
0526	32/10/5/10	20102397 REVISED TO REMOVE 3000A SWITCH REPLACEMENT FOR 2EW, 3EW & 3ME	Ph	SKP	37 7-30-14	20142490, REPLD UNIT #2 SYNCH PT WITH THREE CCVTs.	MT			APPROVED	REVISION 39	DR BRETT ER	COR	W. WALLACE
0520	31/3/10	20092749 REMOVED TRAPS ON MIDWAY #1, #2 & #3 TERMINALS & ADDED FO ON MIDWAY #2 & #3. REPLACED 17 SWITCHES WITH 3000A UNITS BAYS #1, #2 & #3 AND REMOVED 8G32 AND BUS THROUGH	Ph	SKP	35 9-24-12	20122476, AS INSTD REPLACED 17 SWITCHES WITH 3000A UNITS BAYS #1, #2 & #3.	MT			APPROVED	REVISION 37	DR BRETT ER	COR	W. WALLACE
0543		REVISED CTS ON BREAKERS 2W, 2E, 4M AND 4E	Ph	SKP	54 7-5-12	20122111, REPLACED BREAKER BW50, 37-420055-1 WITH 37-420284-0. AS INSTD REPLACED BREAKER BW50, 37-420055-5 WITH 37-420282-0.	MT			APPROVED	REVISION 36	DR BRETT ER	COR	W. WALLACE

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