

2000720-RP-1	PLANT AC AUXILIARY POWER SYSTEM - SINGLE LINE
500740-EB	ELECTRICAL SYSTEM EB - LAYOUTS
2000740-RP	SWGR CRT ARRANGEMENT TYPICAL SCHEMATIC
2000750-EB	SYSTEM EB - CONTROL & LOGIC DIAGRAM

SWITCHGEAR MANUFACTURER'S 1-1-E IMPERIAL CORPORATION
 CONTRACT NUMBER 7545-45503

- NOTES:
1. A MANUAL TRANSFER IS INITIATED BY A SINGLE CLOSE COMMAND TO THE SELECTED BREAKER. THE COMMAND WILL SIMULTANEOUSLY TRIP THE CLOSED SUPPLY BREAKER AND COMPLETE THE CLOSE CIRCUIT OF THE SELECTED BREAKER. IF ANY ABNORMAL CONDITION EXISTS WHICH INHIBITS THE CLOSE COMMAND, THE TRIP SIGNAL IS SUPPRESSED, AND THE BUS WILL REMAIN ON THE CLOSED SUPPLY.
 2. AUTOMATIC TRANSFER IS INITIATED AND SUPERVISED BY UNDERVOLTAGE RELAYS. AUTOMATIC TRANSFER IS FROM NORMAL TO ALTERNATE SUPPLY ONLY. RETURN TO NORMAL SUPPLY IS MANUAL.
 3. PARALLELING OF THE NORMAL AND ALTERNATE SUPPLIES UNDER MANUAL OR AUTOMATIC TRANSFER IS INHIBITED BY INTERLOCKS.
 4. 66 RELAYS IN MOTOR FEEDER CIRCUITS TRIP AND LOCK OUT THEIR RESPECTIVE CIRCUIT BREAKERS.
 5. ALL SUPPLY BREAKERS ARE RATED AT 2000 AMPERES CONTINUOUS 500 MVA INTERRUPTING, 7.2KV NOMINAL, 80,000 AMPERES MOMENTARY AND 77,000 AMPERES CLOSE AND LATCH.
 6. ALL FEEDER BREAKERS ARE RATED THE SAME AS SUPPLY BREAKERS EXCEPT 1200 AMPERES CONTINUOUS.
 7. THE SWITCHGEAR MAIN BUS IS RATED AT 2000 AMPERES CONTINUOUS, 80,000 AMPERES MOMENTARY AND 7.2KV NOMINAL.
 8. FOR A COMPLETE DEFINITION OF THE UNIQUE IDENTIFICATION NUMBERS (UNID) EACH RELAY ASSOCIATED WITH THE SWGR IS AND THE NORMAL OR ALTERNATE SUPPLY BREAKERS IS PART OF THE 400 VOLT AC AUXILIARY POWER DISTRIBUTION SYSTEM WITH SYSTEM DESIGNATION EB. THE DEVICE UNID IS PROMPTED BY THE DESIGNATION SHOWN ON THE DRAWING WITH ZEB EXCEPT AS NOTED ON DRAWING. ALL FEEDER BREAKERS WITH THEIR ASSOCIATED RELAYS ARE PART OF THE 575 V WHICH THEIR SUPPLY. THE COMPLETE UNID IS OBTAINED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DRAWING WITH THE UNIT AND SYSTEM DESIGNATOR SHOWN IN THE HEADLINE SYMBOL.
 9. RELAYS SHALL BE THE TYPE SHOWN ON THIS DRAWING.

- SYMBOLS:
- UNIT & SYSTEM DESIGNATION
 - INTERFACE WITH DECONTAMINATION SYSTEM
 - INTERFACE FOR REMOTE CONTROL
 - INTERFACE WITH STATUS ENVIRONMENTAL ALARM MONITORING SYSTEM (SEAMS)
 - RED INDICATING LIGHT
 - CONNECTION FOR REMOTE METERING
 - THIS FUNCTION IS TO BE MONITORED BY ONE OR MORE ANNUNCIATOR OR ALARM SYSTEMS

4	6/24/51	4	7/1/51	5	7/1/51	6	7/1/51	7	7/1/51	8	7/1/51	9	7/1/51	10	7/1/51	11	7/1/51	12	7/1/51	13	7/1/51	14	7/1/51	15	7/1/51	16	7/1/51	17	7/1/51	18	7/1/51	19	7/1/51	20	7/1/51	21	7/1/51	22	7/1/51	23	7/1/51	24	7/1/51	25	7/1/51	26	7/1/51	27	7/1/51	28	7/1/51	29	7/1/51	30	7/1/51	31	7/1/51	32	7/1/51	33	7/1/51	34	7/1/51	35	7/1/51	36	7/1/51	37	7/1/51	38	7/1/51	39	7/1/51	40	7/1/51	41	7/1/51	42	7/1/51	43	7/1/51	44	7/1/51	45	7/1/51	46	7/1/51	47	7/1/51	48	7/1/51	49	7/1/51	50	7/1/51	51	7/1/51	52	7/1/51	53	7/1/51	54	7/1/51	55	7/1/51	56	7/1/51	57	7/1/51	58	7/1/51	59	7/1/51	60	7/1/51	61	7/1/51	62	7/1/51	63	7/1/51	64	7/1/51	65	7/1/51	66	7/1/51	67	7/1/51	68	7/1/51	69	7/1/51	70	7/1/51	71	7/1/51	72	7/1/51	73	7/1/51	74	7/1/51	75	7/1/51	76	7/1/51	77	7/1/51	78	7/1/51	79	7/1/51	80	7/1/51	81	7/1/51	82	7/1/51	83	7/1/51	84	7/1/51	85	7/1/51	86	7/1/51	87	7/1/51	88	7/1/51	89	7/1/51	90	7/1/51	91	7/1/51	92	7/1/51	93	7/1/51	94	7/1/51	95	7/1/51	96	7/1/51	97	7/1/51	98	7/1/51	99	7/1/51	100	7/1/51
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POWERHOUSE-TURBINE BUILDING
 UNIT 2
 SINGLE LINE DIAGRAM
 6900V SWGR-2TB
 2EB-EMVS-04

BELLEFONTE NUCLEAR PLANT
 TENNESSEE VALLEY AUTHORITY
 DIVISION OF ENGINEERING DESIGN

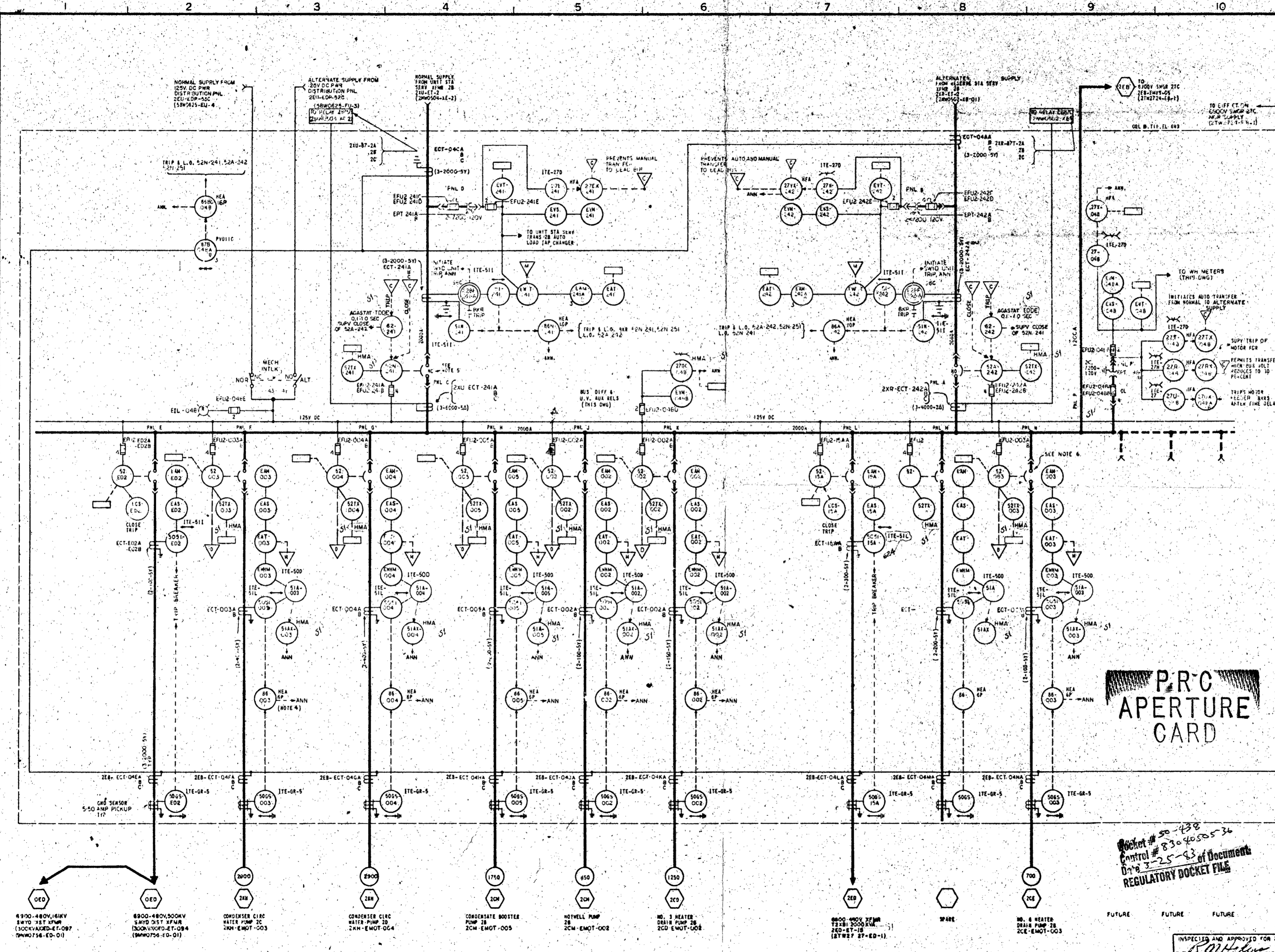
SUBMITTED: B.M. Maxwell, T. S. ...
 RECOMMENDED: J. S. ...
 APPROVED: J. S. ...

INSPECTED AND APPROVED FOR ISSUE: S. M. ...
 DESIGN PROJECT MANAGER

KNOXVILLE 2-19-74 88 2TW2723-EB-1
 45W726-2

UNID'S KEYS TO BUS
 87B-04BA THRU C
 87X-04BA THRU B
 EVM-04BA THRU B
 EFU2-04BA THRU E
 EPT-04BA THRU B

UNID'S KEYS TO PANEL
 ECT-04AA THRU C
 ECT-04CA THRU C
 ECT-04EA THRU C
 ECT-04FA THRU C
 ECT-04GA THRU C
 ECT-04HA THRU C
 ECT-04IA THRU C
 ECT-04JA THRU C
 ECT-04KA THRU C
 ECT-04LA THRU C
 ECT-04MA THRU C
 ECT-04NA THRU C



PRINTS REQUIRED

NO.	DESCRIPTION	QTY
1	AS SHOWN	1
2	FOR RECORD	1
3	FOR ARCHIVE	1
4	FOR CONSTRUCTION	1
5	FOR OPERATIONS	1
6	FOR MAINTENANCE	1
7	FOR TRAINING	1
8	FOR REVISIONS	1
9	FOR TESTING	1
10	FOR COMMISSIONING	1
11	FOR STARTUP	1
12	FOR SHUTDOWN	1
13	FOR REPAIR	1
14	FOR OVERHAUL	1
15	FOR RE-TESTING	1
16	FOR RE-COMMISSIONING	1
17	FOR RE-EVALUATION	1
18	FOR RE-DESIGN	1
19	FOR RE-CONSTRUCTION	1
20	FOR RE-OPERATION	1
21	FOR RE-MAINTENANCE	1
22	FOR RE-TRAINING	1
23	FOR RE-REVISIONS	1
24	FOR RE-TESTING	1
25	FOR RE-COMMISSIONING	1
26	FOR RE-EVALUATION	1
27	FOR RE-DESIGN	1
28	FOR RE-CONSTRUCTION	1
29	FOR RE-OPERATION	1
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31	FOR RE-TRAINING	1
32	FOR RE-REVISIONS	1
33	FOR RE-TESTING	1
34	FOR RE-COMMISSIONING	1
35	FOR RE-EVALUATION	1
36	FOR RE-DESIGN	1
37	FOR RE-CONSTRUCTION	1
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43	FOR RE-COMMISSIONING	1
44	FOR RE-EVALUATION	1
45	FOR RE-DESIGN	1
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50	FOR RE-REVISIONS	1
51	FOR RE-TESTING	1
52	FOR RE-COMMISSIONING	1
53	FOR RE-EVALUATION	1
54	FOR RE-DESIGN	1
55	FOR RE-CONSTRUCTION	1
56	FOR RE-OPERATION	1
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59	FOR RE-REVISIONS	1
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64	FOR RE-CONSTRUCTION	1
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69	FOR RE-TESTING	1
70	FOR RE-COMMISSIONING	1
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77	FOR RE-REVISIONS	1
78	FOR RE-TESTING	1
79	FOR RE-COMMISSIONING	1
80	FOR RE-EVALUATION	1
81	FOR RE-DESIGN	1
82	FOR RE-CONSTRUCTION	1
83	FOR RE-OPERATION	1
84	FOR RE-MAINTENANCE	1
85	FOR RE-TRAINING	1
86	FOR RE-REVISIONS	1
87	FOR RE-TESTING	1
88	FOR RE-COMMISSIONING	1
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91	FOR RE-CONSTRUCTION	1
92	FOR RE-OPERATION	1
93	FOR RE-MAINTENANCE	1
94	FOR RE-TRAINING	1
95	FOR RE-REVISIONS	1
96	FOR RE-TESTING	1
97	FOR RE-COMMISSIONING	1
98	FOR RE-EVALUATION	1
99	FOR RE-DESIGN	1
100	FOR RE-CONSTRUCTION	1

Rockwell # 50-438
 Control # 83040505-36
 Draw # 3-25-83 of Document
 REGULATORY DOCKET FILE

- 4900-480V/16KV 3WY0 XST XPM (300VACED-ET-087 (MHW756-EP-01)
- 6900-480V/500KV 3WY0 XST XPM (300VACED-ET-084 (MHW756-EP-01)
- CONDENSER CIRC WATER PUMP 2C 2CM-EMOT-003
- CONDENSER CIRC WATER PUMP 2D 2CM-EMOT-004
- CONDENSATE BOOSTER PUMP 2B 2CM-EMOT-005
- NOTWELL PUMP 2B 2CM-EMOT-002
- NO. 1 HEATER DRAIN PUMP 2B 2CD-EMOT-008
- 6900-480V XPM 2TB-ET-18 (2TW27-87-ED-1)
- NO. 8 HEATER DRAIN PUMP 2B 2CE-EMOT-003