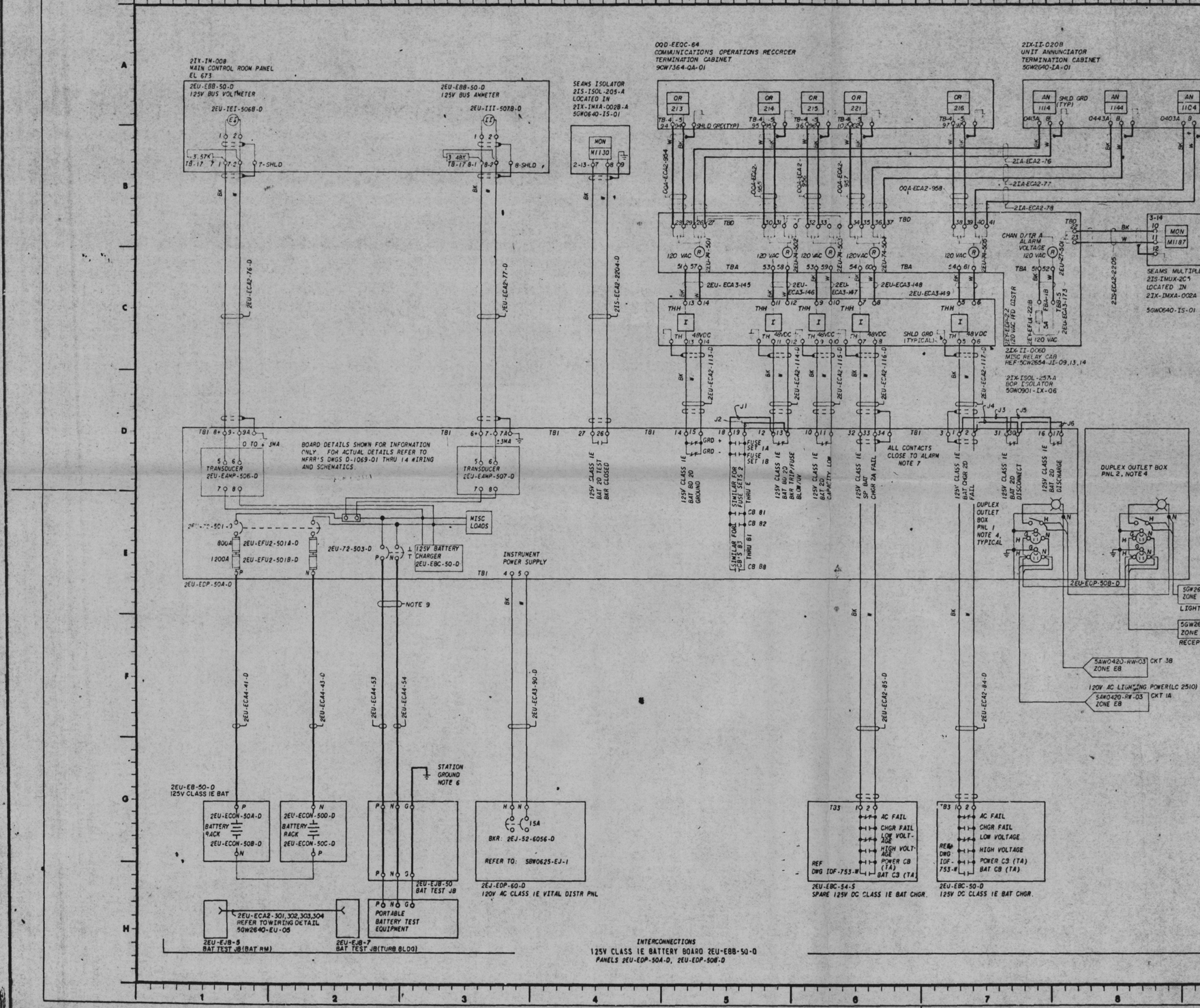

REFERENCE DRAWINGS:

125V DC CLASS 1E PWR DISTR SYS DES CRITERIA N4-EU-D775

120V AC CLASS 1E VITAL PWR DISTR SYS DES CRITERIA N4-EJ-D775

120V AC CLASS 1E AUX PWR DISTR SYS DES CRITERIA N4-EK-D775

125V DC/120V AC CLASS 1E CONTR PWR KEY DIAGRAM 5BW0620-EU-1

125V DC CLASS 1E PWR DISTR SINGLE LINES ..... 5BW0625-EU-1 THRU 4

120V AC CLASS 1E VITAL/AUX PWR DISTR SINGLE LINES ..... 5BW0625-EJ-1 THRU 4

ELECTRICAL COMPONENT TABULATION ..... SYS EJ, EK, EU

CABLE PROGRAM ..... SYS EU

COMMUNICATIONS ORA SYS SCHEMATIC 9GW7364-QA-01

COMMUNICATIONS ORA POINT LIST 9GA7365-QA-08-1

UNIT ANN AND SEQ EVENTS RCOR SYS SCHEMATIC 5GW2640-I4-01

SEAMS SYSTEM SCHEMATIC 5GW0640-IS-01

125V DC CLASS 1E BATTERY BOARD CONTRACT 76K4-86932 (INCLUDES 120V AC CLASS 1E VITAL AND AUXILIARY PANELS,

SINGLE LINES D-1069-03.06

#IRING DIAGRAMS ..... D-1069-08 THRU 14

125V DC CLASS 1E BATTERY CHARGER CONTRACT 76K6-86843

#IRING DIAGRAMS ..... IDF-753, 753#

125V DC CLASS 1E BATTERY CONTRACT 77-823476

120V AC CLASS 1E VITAL UNINTERRUPTIBLE PWR SUP CONTRACT 76K3-86901

#IRING DIAGRAMS ..... 451-010-D001 (SERIES)
462-010-D001 (SERIES)

B & W NSSS CONTRACT 71C62-54114-2

MAIN CONTROL ROOM #IRING DIAGRAM 02-23724NF

BOP ISOLATOR CONTRACT 79KJ2-822388
ISOLATOR CAB CONNECTION DIAGRAMS - 17502020-100 SERIES
17502020-300 SERIES

BATTERY DISCHARGE TEST EQUIP CONTRACT 80KJ4-825496 ..... SK-1057
BCT-100-SERIES

SYMBOLS:

AN XXXX	UNIT ANNUNCIATOR MONITORING SYSTEM (XXXX - POINT NUMBER)
OR XXXX	COMMUNICATIONS OPERATIONS RECORDER AND ANNUNCIATION (XXXX - POINT NUMBER)
MON XXXXX	SEAMS MONITORING SYSTEM (XXXXX - POINT NUMBER)

NOTES:

1. ALL CIRCUITS SHOWN ON THIS DRAWING ARE CLASS 1E WITH THE EXCEPTION OF ANNUNCIATION, LIGHTING AND BATTERY TEST CIRCUITS.
2. THIS DRAWING SHOWS INTERCONNECTION OF INSTRUMENT, CONTROL, ANNUNCIATION, LIGHTING AND BATTERY CIRCUITS ONLY. OTHER POWER CONNECTIONS (V4) ARE SHOWN ON 5GW2640-EU-01 & 02. PORTIONS OF THE SYSTEM SCHEMATIC ARE SHOWN OUT-OF-FUNCTION. THESE OUT-OF-FUNCTION PORTIONS ARE SHOWN FOR INFORMATION WITH REFERENCES PROVIDED TO THE DOCUMENT WHICH CONTROLS THE EQUIPMENT CONFIGURATION.
3. ALL ELECTRICAL EQUIPMENT IS SHOWN IN ITS DE-ENERGIZED STATE.
4. NON-CLASS 1E LIGHTING CIRCUITS ARE ISOLATED BY CONDUIT INSIDE CABINETS. RECEPTACLE SAFETY GROUND IS TIED TO CONDUIT.
5. ALL JUMPER NUMBERS ARE PREFIXED BY THE EQUIPMENT UNID NUMBER AND SYSTEM DESIGNATION "EU" EXAMPLE. 1EU-EDF-30A-D-EUJ5
6. FIELD TO CONNECT GROUND BUS OF BATTERY TEST JUNCTION BOX TO STATION SERVICE GROUND.
7. ALL ALARM CONTACTS ARE CLOSE-TO-ALARM UNLESS OTHERWISE NOTED.
8. SEE SYSTEM EU CABLE PROGRAM FOR COMPLETE CABLE INFORMATION INCLUDING SPARE CONDUCTORS. ONLY THOSE CONDUCTORS USED ARE SHOWN.
9. THE BATTERY TEST CIRCUITS ARE DESIGNATED NON-CLASS 1E AND ARE NOT WITHIN THE SCOPE OF THE SEPARATION CRITERIA BECAUSE:
   A. THE BATTERY BOARD IS TAKEN OUT OF SERVICE DURING THE TEST.
   B. THE TEST CIRCUITS ARE NOT USED DURING NORMAL OPERATION.
   C. THE BATTERY TEST BREAKER IS NORMALLY OPEN.
   D. BATTERY TEST BREAKER CLOSURE IS MONITORED AND ALARMED IN THE MAIN CONTROL ROOM ON SEAMS.

PRC APERTURE CARD

Date #50-438 8304250536
Case # of Document
Date 3-25-83
REGULATORY DOCKET FILE

REV NO	ECN NO	DATE	DESIGN	DRAFTING	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPD	NC	NE	SM	RN
3	SI	4-11-83	TMA	TMA	TMA	GJA	WAT					N/A	N/A	N/A	N/A
INCORPORATED FCR E-2314.															
2	1139,1085	2-24-81	CSH	MBA	MBA		WAT					N/A	N/A	N/A	N/A
INCORPORATED FOR E1743, BAT DISCHARGE TEST EQUIP, MISC CHANGES.															
1	SI	10-7-79	CSH	MBA	MBA		CWH					N/A	N/A	N/A	N/A
ADDED ALARM ISOLATION DETAILS. REVISED JUMPER NO'S.															

DESIGN C. Hinson — INSP —
DRAWN K. Hinson — ENGINEER M. Watson
CHKD K. Hinson
SUPV —

SCALE EXCEPT AS NOTED

GENERAL
UNIT 2

SCHEMATIC DIAGRAM 125V CLASS IE DC POWER DISTRIBUTION SYSTEM

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED M.W. Johnson
RECOMMENDED C.H. Hinson
APPROVED R.M. Michaels

KNOXVILLE 10-18-78

88 | E | SGW2640-EU-04 | R3

RECORD DRAWING AS CONSTRUCTED

COMPANION DWGS:
SGW2640-EU-01, 02, 05-09

REVIEWED
RC(CIVIL) —
RE(ELEC) N/A
RM(MECH) —

INSPECTED AND APPROVED FOR ISSUE —