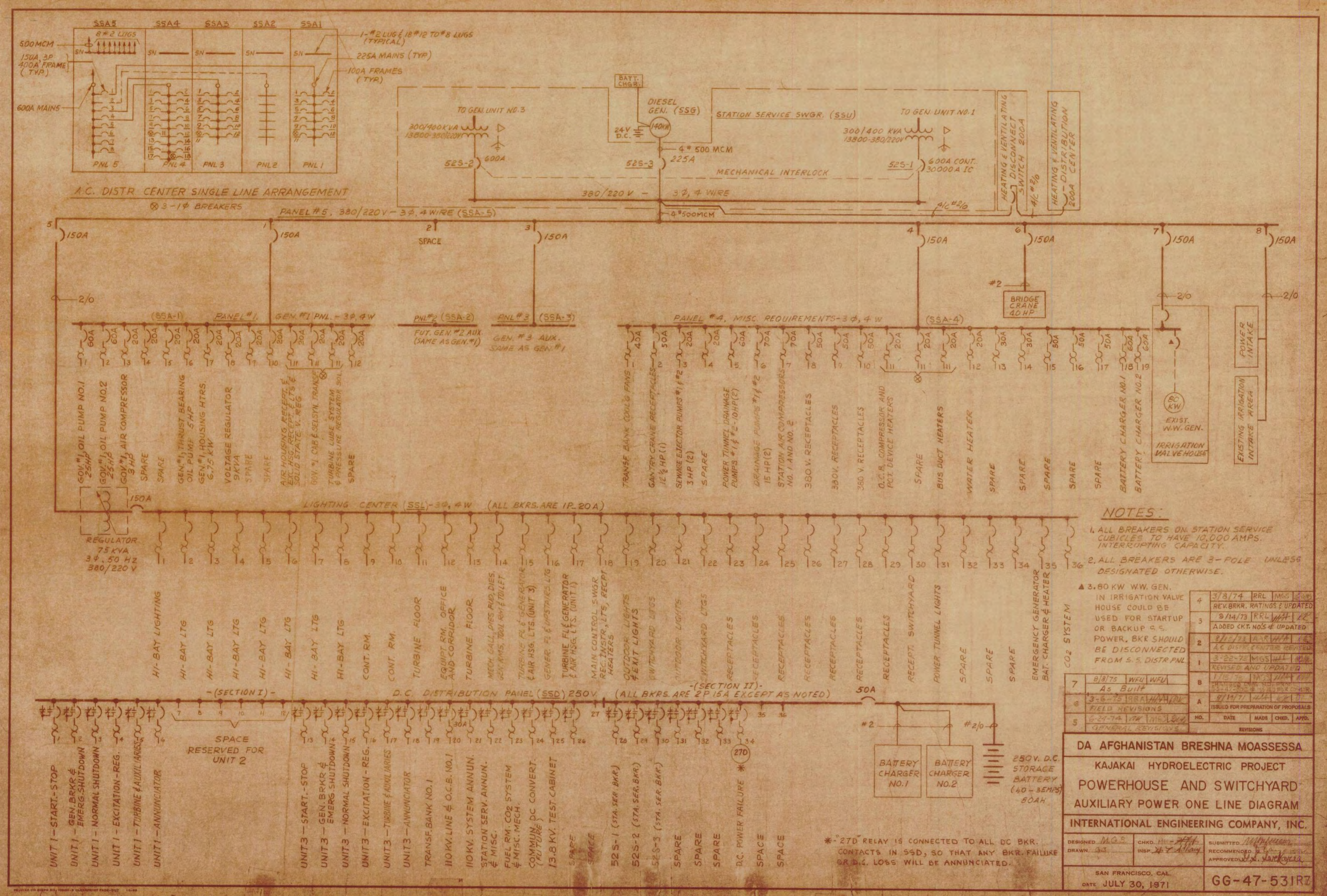
SSA5 SSA4 SSA3 SSA2 SSA1
500MCM
150A, 3P 400A FRAME (TYP)
600A MAINS
8 #2 LUGS
1-#2 LUG & 18 #12 TO #8 LUGS (TYPICAL)
225A MAINS (TYP)
100A FRAMES (TYP)
PNL 5 PNL 4 PNL 3 PNL 2 PNL 1
A.C. DISTR. CENTER SINGLE LINE ARRANGEMENT
⊗ 3-1Φ BREAKERS
BATT. CHGR.
DIESEL GEN. (SSG)
STATION SERVICE SWGR. (SSU)
TO GEN. UNIT NO. 3
300/400 KVA 13800-380/220V
24V D.C.
140KW
4 # 500 MCM
525-2 600A
525-3 225A
525-1 600A CONT. 30000 A IC
MECHANICAL INTERLOCK
TO GEN. UNIT NO. 1
300/400 KVA 13800-380/220V
380/220 V - 3Φ, 4 WIRE
4/C #2/0
HEATING & VENTILATING DISCONNECT SWITCH 200A
HEATING & VENTILATING DISTRIBUTION 200A CENTER
PANEL #5, 380/220V - 3Φ, 4 WIRE (SSA-5)
150A
SPACE
2/0
(SSA-1) PANEL #1, GEN. #1 PNL. - 3Φ, 4W
PNL #2 (SSA-2) FUT. GEN. #2 AUX. (SAME AS GEN. #1)
PNL #3 (SSA-3) GEN. #3 AUX. SAME AS GEN. #1
PANEL #4, MISC. REQUIREMENTS - 3Φ, 4 W (SSA-4)
#2
BRIDGE CRANE 40 HP
POWER INTAKE
EXIST. W.W. GEN.
IRRIGATION VALVE HOUSE
EXISTING IRRIGATION INTAKE AREA
GOV. #1 OIL PUMP NO. 1 25HP
GOV. #1 OIL PUMP NO. 2 25HP
GOV. #1 AIR COMPRESSOR 3 HP
SPARE
GEN. #1 THRUST BEARING OIL PUMP 5 HP
GEN. #1 HOUSING HTRS. 6.75 KW
VOLTAGE REGULATOR 9KVA
AIR HOUSING RECEPT. & EXC. HSG. RECEPT. & LTS & SOLID STATE V. REG.
GOV. #1 CNB & SELSYN. TRANSM.
TURBINE LUBE SYSTEM & PRESSURE REGULATOR SOL.
TRANSF. BANK COOLG FANS
GANTRY CRANE RECEPTACLES 12½ HP (1)
SEWAGE EJECTOR PUMPS #1 & #2 3 HP (2)
POWER TUNNEL DRAINAGE PUMPS #1 & #2 - 10 HP (2)
DRAINAGE PUMPS #1 & #2 15 HP (2)
STATION AIR COMPRESSORS NO. 1 AND NO. 2
380 V. RECEPTACLES
O.C.B. COMPRESSOR AND POT. DEVICE HEATERS
BUS DUCT HEATERS
WATER HEATER
BATTERY CHARGER NO. 1
BATTERY CHARGER NO. 2
150A
LIGHTING CENTER (SSL) - 3Φ, 4W (ALL BKRS. ARE 1P-20A)
REGULATOR 75 KVA 3Φ, 50 Hz 380/220 V
HI-BAY LIGHTING
HI-BAY LTG
CONT. RM.
TURBINE FLOOR
EQUIPT. RM., OFFICE AND CORRIDOR
MECH. CALL, DIES. FUD. DIES. GEN. RMS., TOOL RM. & TOILET
TURBINE FL. & GENERATOR & AIR HSG. LTS. (UNIT 3)
GENER. FL. & UPSTAIRS LTG
TURBINE FL. & GENERATOR & AIR HSG. LTS. (UNIT 1)
MAIN CONTROL SWGR. REC. INSTR., LTS., RECPT. HEATERS
OUTDOOR LIGHTS & EXIT LIGHTS
SWITCHYARD LTGS
RECEPTACLES
RECEPT. SWITCHYARD
POWER TUNNEL LIGHTS
SPARE
EMERGENCY GENERATOR BAT. CHARGER & HEATER
CO2 SYSTEM
-(SECTION I)- -(SECTION II)-
D.C. DISTRIBUTION PANEL (SSD) 250V. (ALL BKRS. ARE 2P 15A EXCEPT AS NOTED)
50A
SPACE RESERVED FOR UNIT 2
UNIT 1 - START.-STOP
UNIT 1 - GEN. BRKR. & EMERG. SHUTDOWN
UNIT 1 - NORMAL SHUTDOWN
UNIT 1 - EXCITATION - REG.
UNIT 1 - TURBINE & AUXILIARIES
UNIT 1 - ANNUNCIATOR
UNIT 3 - START.-STOP
UNIT 3 - GEN. BRKR. & EMERG. SHUTDOWN
UNIT 3 - NORMAL SHUTDOWN
UNIT 3 - EXCITATION - REG.
UNIT 3 - TURBINE & AUXILIARIES
UNIT 3 - ANNUNCIATOR
TRANSF. BANK NO. 1
110 KV. LINE & O.C.B. NO. 1
110 KV. SYSTEM ANNUN.
STATION SERV. ANNUN. & MISC.
FUEL RM. CO2 SYSTEM & MISC. MECH.
COMMUN. DC CONVERT. (FUTURE)
13.8 KV. TEST CABINET
SPARE
52S-1 (STA. SER. BKR.)
52S-2 (STA. SER. BKR.)
52S-3 (STA. SER. BKR.)
D.C. POWER FAILURE
27D
#2
#2/0
BATTERY CHARGER NO. 1
BATTERY CHARGER NO. 2
250 V. D.C. STORAGE BATTERY (40 ± 3 EMPS) 80AH
*-"27D" RELAY IS CONNECTED TO ALL DC BKR. CONTACTS IN SSD, SO THAT ANY BKR. FAILURE OR D.C. LOSS WILL BE ANNUNCIATED.
NOTES:
1. ALL BREAKERS ON STATION SERVICE CUBICLES TO HAVE 10,000 AMPS. INTERRUPTING CAPACITY.
2. ALL BREAKERS ARE 3-POLE UNLESS DESIGNATED OTHERWISE.
▲ 3.80 KW W.W. GEN. IN IRRIGATION VALVE HOUSE COULD BE USED FOR STARTUP OR BACKUP C.S. POWER. BKR SHOULD BE DISCONNECTED FROM S.S. DISTR. PNL.
4 3/8/74 RRL MGS REV. BRKR. RATINGS & UPDATED
3 9/14/73 RRL ADDED CKT. NO'S & UPDATED
2 8/15/73 AAR A.C. DISTR. CENTER REVISED
1 3-22-72 MGS REVISED AND UPDATED
B 1/15/72 MGS
A 8/19/71 ISSUED FOR PREPARATION OF PROPOSALS
NO. DATE MADE CHKD. APVD. REVISIONS
7 8/8/75 WFU WFU As Built
6 3-6-75 RRA FIELD REVISIONS
5 6-24-74 GENERAL REVISIONS
DA AFGHANISTAN BRESHNA MOASSESSA
KAJAKAI HYDROELECTRIC PROJECT
POWERHOUSE AND SWITCHYARD
AUXILIARY POWER ONE LINE DIAGRAM
INTERNATIONAL ENGINEERING COMPANY, INC.
DESIGNED M.G.S.
DRAWN
CHKD.
INSP.
SUBMITTED
RECOMMENDED
APPROVED
SAN FRANCISCO, CAL.
DATE JULY 30, 1971
GG-47-531RZ