

ELECTRICAL SITE PLAN

SYSTEM SPECIFICATIONS

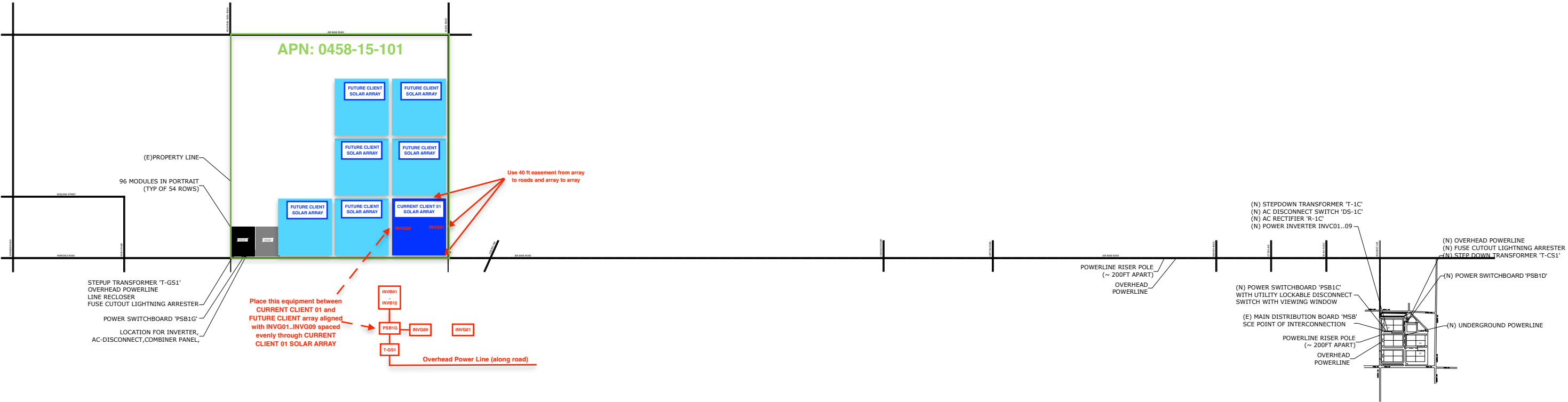
PV MODULES: (5,184) CSI SOLAR CO., LTD, CS6.1-72TB-625H

PV INVERTERS: (9) CHINT POWER SYSTEMS AMERICA, CPS-275KTL-DO/US-800

BATTERY INVERTERS: (12) CHINT POWER SYSTEMS AMERICA, CPS-ECB200KTL/US-800

BATTERY MODULES: (2) CHINT POWER SYTSEMS AMERICA, CPS ES-5016KWH-US

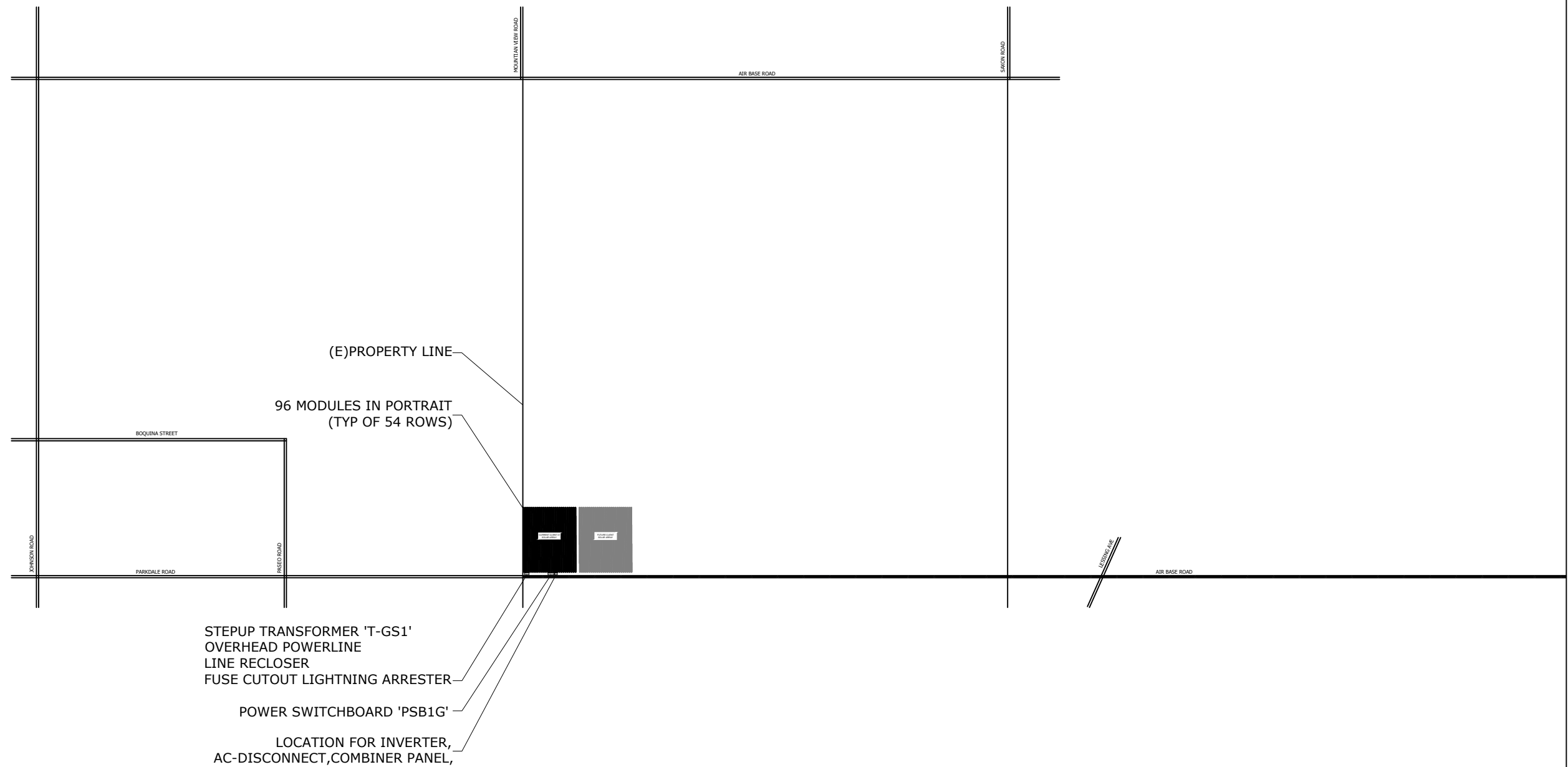
POWER INVERTERS: (9) YASKAWA SOLECTRIA SOLAR, XGI-1500-200/200-480



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ELECTRICAL SITE PLAN PV



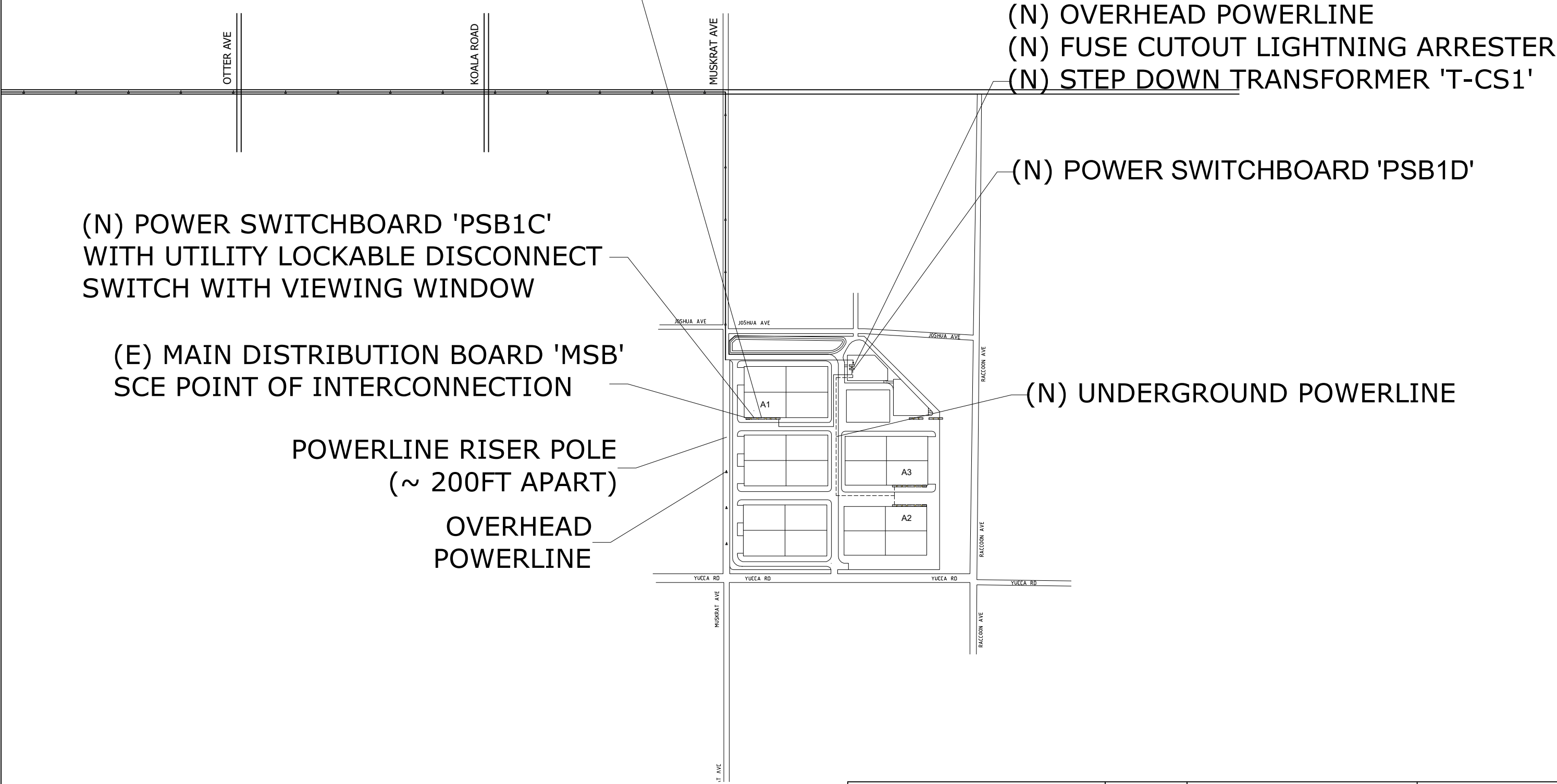
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- (N) STEPDOWN TRANSFORMER 'T-1C'
- (N) AC DISCONNECT SWITCH 'DS-1C'
- (N) AC RECTIFIER 'R-1C'
- (N) POWER INVERTER INVC01..09

ELECTRICAL SITE PLAN POI

Size to Fit Page



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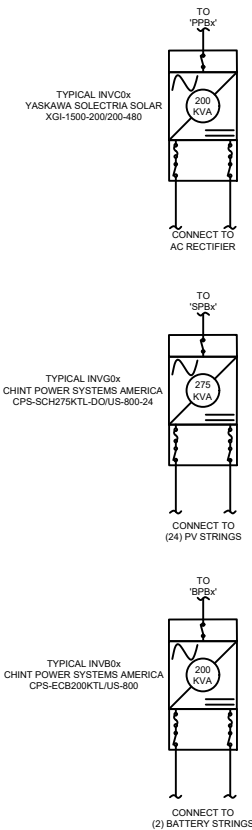
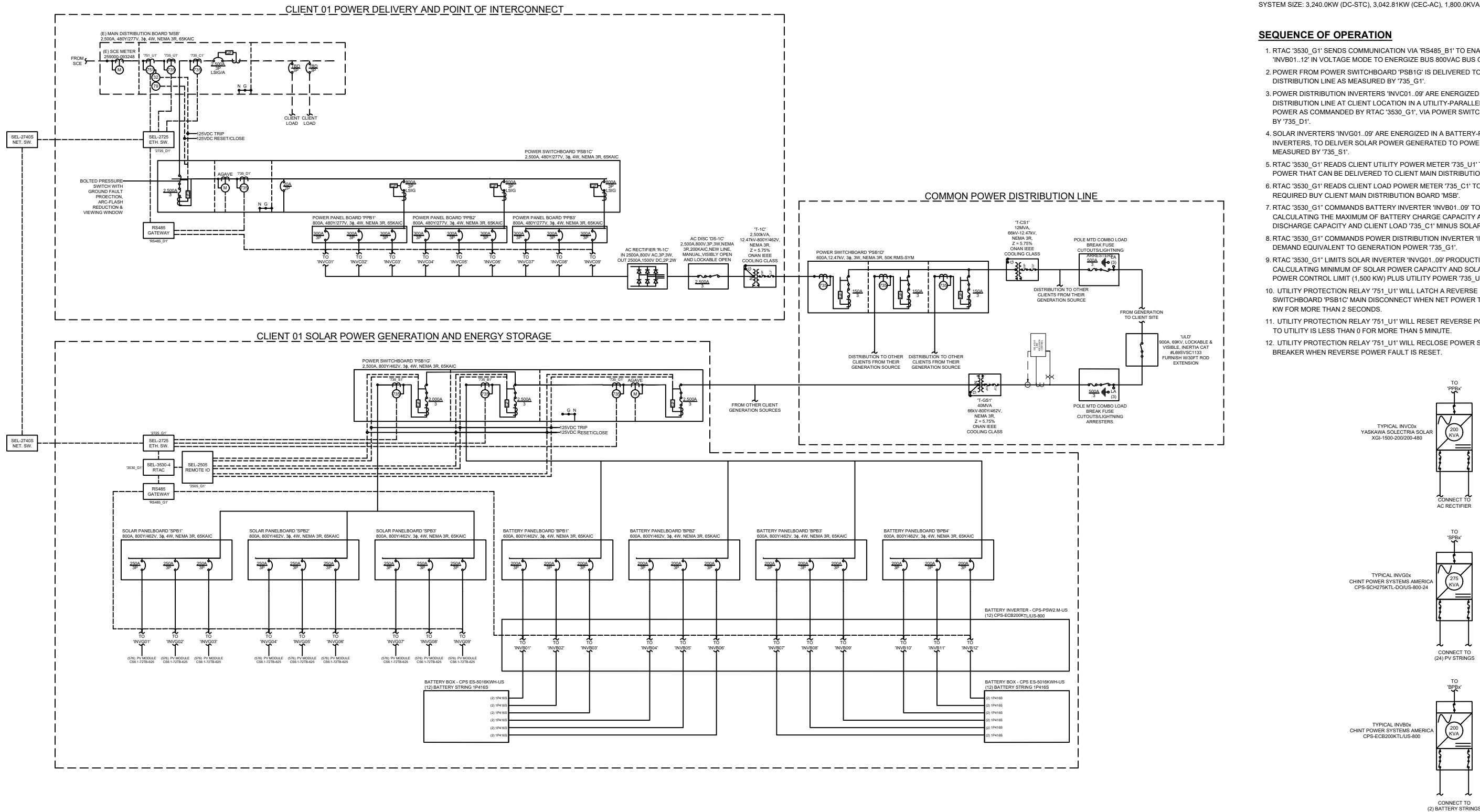
ELECTRICAL SINGLE LINE DIAGRAM

SYSTEM SUMMARY

PV MODULES: (5,184) CSI SOLAR CO., LTD CS6.1-72TB-625H
PV INVERTERS: (9) CHINT POWER SYSTEMS AMERICA CPS-275KTL-DO/US-800
SYSTEM SIZE: 3,240.0KW (DC-STC), 3,042.81KW (CEC-AC), 1,800.0KVA (AC)

SEQUENCE OF OPERATION

- RTAC '3530_G1' SENDS COMMUNICATION VIA 'RS485_B1' TO ENABLE BATTERY INVERTER SYSTEM 'INV01..12' IN VOLTAGE MODE TO ENERGIZE BUS 800VAC BUS OF POWER SWITCHBOARD 'PSB1G'.
- POWER FROM POWER SWITCHBOARD 'PSB1G' IS DELIVERED TO THE COMMON POWER DISTRIBUTION LINE AS MEASURED BY '735_G1'.
- POWER DISTRIBUTION INVERTERS 'INV01..09' ARE ENERGIZED FROM THE COMMON POWER DISTRIBUTION LINE AT CLIENT LOCATION IN A UTILITY-PARALLEL MODE TO DELIVER AVAILABLE POWER AS COMMANDED BY RTAC '3530_G1', VIA POWER SWITCHBOARD 'PSB1C', AS MEASURED BY '735_D1'.
- SOLAR INVERTERS 'INV01..09' ARE ENERGIZED IN A BATTERY-PARALLEL MODE WITH BATTERY INVERTERS, TO DELIVER SOLAR POWER GENERATED TO POWER SWITCHBOARD 'PSB1G' AS MEASURED BY '735_S1'.
- RTAC '3530_G1' READS CLIENT UTILITY POWER METER '735_U1' TO DETERMINE AMOUNT OF POWER THAT CAN BE DELIVERED TO CLIENT MAIN DISTRIBUTION BOARD 'MSB'.
- RTAC '3530_G1' READS CLIENT LOAD POWER METER '735_C1' TO DETERMINE AMOUNT OF POWER REQUIRED BUY CLIENT MAIN DISTRIBUTION BOARD 'MSB'.
- RTAC '3530_G1' COMMANDS BATTERY INVERTER 'INV01..09' TO BATTERY POWER DEMAND BY CALCULATING THE MAXIMUM OF BATTERY CHARGE CAPACITY AND MINIMUM OF BATTERY DISCHARGE CAPACITY AND CLIENT LOAD '735_C1' MINUS SOLAR POWER '735_S1'.
- RTAC '3530_G1' COMMANDS POWER DISTRIBUTION INVERTER 'INV01..09' TO CLIENT POWER DEMAND EQUIVALENT TO GENERATION POWER '735_G1'.
- RTAC '3530_G1' LIMITS SOLAR INVERTER 'INV01..09' PRODUCTION TO SOLAR POWER LIMIT BY CALCULATING MINIMUM OF SOLAR POWER CAPACITY AND SOLAR POWER '735_S1' PLUS REVERSE POWER CONTROL LIMIT (1,500 KW) PLUS UTILITY POWER '735_U1'.
- UTILITY PROTECTION RELAY '751_U1' WILL LATCH A REVERSE POWER FAULT AND TRIP POWER SWITCHBOARD 'PSB1C' MAIN DISCONNECT WHEN NET POWER TO UTILITY IS GREATER THAN 1,600 KW FOR MORE THAN 2 SECONDS.
- UTILITY PROTECTION RELAY '751_U1' WILL RESET REVERSE POWER FAULT WHEN NET POWER TO UTILITY IS LESS THAN 0 FOR MORE THAN 5 MINUTE.
- UTILITY PROTECTION RELAY '751_U1' WILL RECLOSE POWER SWITCHBOARD 'PSB1C' MAIN BREAKER WHEN REVERSE POWER FAULT IS RESET.



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