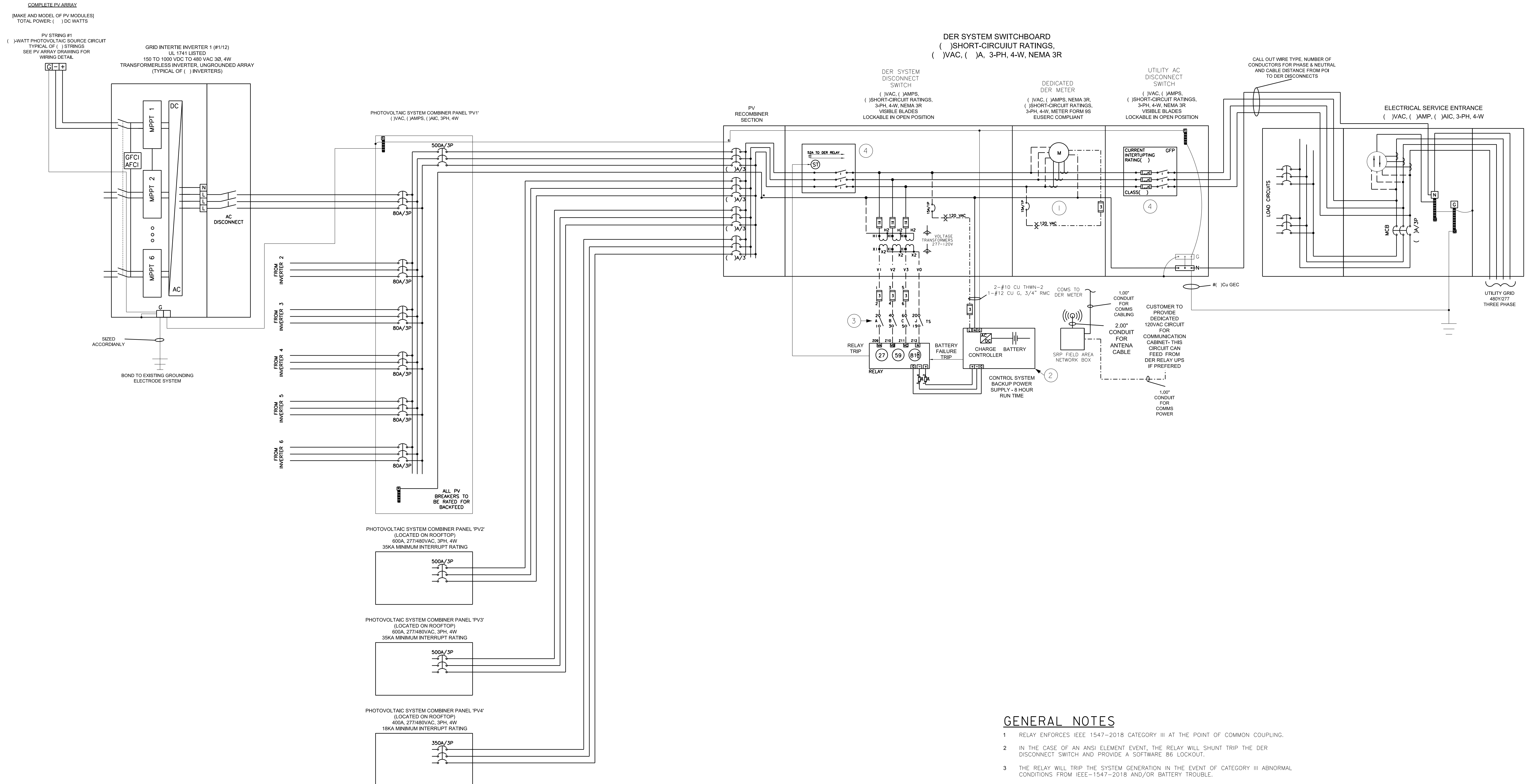


THREE LINE DRAWING TO SHOW SRP REQUIREMENTS FOR A CLASS III PV SYSTEM OVER 1MW



GENERAL NOTES

- RELAY ENFORCES IEEE 1547-2018 CATEGORY III AT THE POINT OF COMMON COUPLING.
- IN THE CASE OF AN ANSI ELEMENT EVENT, THE RELAY WILL SHUNT TRIP THE DER DISCONNECT SWITCH AND PROVIDE A SOFTWARE 86 LOCKOUT.
- THE RELAY WILL TRIP THE SYSTEM GENERATION IN THE EVENT OF CATEGORY III ABNORMAL CONDITIONS FROM IEEE-1547-2018 AND/OR BATTERY TROUBLE.
- LOCKOUT CAN ONLY BE CLEARED MANUALLY AFTER RESTORATION OF GRID TO ANSI THRESHOLDS.
- PROTECTION SYSTEM TO BE TESTED EVERY 5 YEARS BY AN APPROVED TESTING AGENCY.
- VERIFY UPS AND BATTERY VOLTAGE ARE SAME AS RELAY POWER AND CONTROL VOLTAGE AND VERIFY ALARM CONTACT VOLTAGE FROM UPS IS APPROPRIATE FOR RELAY INPUT.
- LABE SENSING POTENTIAL CUTOUPS AS WELL AS 52A STATUS AND TRIP CUTOUPS WITH PLACARDS MOUNTED ABOVE CUTOUPS.
- SENSING POTENTIAL TEST SWITCH SHALL BE SEPERATE FROM INPUT AND OUTPUT CUTOUPS.
- ALL WIRES ASSOCIATED WITH RELAY SYSTEM SHALL BE LABELLED AND LANDED ON TERMINAL BOARDS TO FACILITATE WIRING SYSTEM CORRECTLY. WIRE NUTS SHALL NOT BE USED IN THIS SCHEME.

NOTES:

- WITHIN EACH INDIVIDUAL POWERCLERK APPLICATION, A SITE PLAN, ONE LINE, THREE LINE, AND LABEL SHEET SPECIFIC FOR EACH PROJECT WILL NEED TO BE UPLOADED INTO POWERCLERK FOR ENGINEERING REVIEW. IN ADDITION FOR SYSTEMS OVER 1MW A UNIQUE PROTECTION SCHEMATIC WILL BE REQUIRED FOR EACH PROJECT SUBMITTED IN POWER CLERK.
- SYSTEMS INSTALLED IN AREAS WHERE THE AHJ DOES NOT PROVIDE A CITY CLEARANCE, DESIGN DRAWINGS MUST BE STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARIZONA, AND THE CUSTOMER MUST PROVIDE A SIGNED CERTIFICATE-IN-LIEU OF CLEARANCE FOLLOWING COMPLETION OF ALL WORK.
- EQUIPMENT SHALL HAVE SHORT CIRCUIT CURRENT RATINGS EQUAL TO OR GREATER THAN THE AVAILABLE FAULT CURRENT SUPPLIED BY SRP. SEE SRP ESS AVAILABLE ONLINE FOR SCC SPECIFIC TO CUSTOMERS SES.
- UNFUSED DISCONNECT SWITCHES WILL BE EVALUATED AT 10KA SCCR. IF DESIGN UTILIZES SERIES RATINGS FOR DISCONNECTS BASED ON UPSTREAM OVERCURRENT PROTECTION APPROPRIATE DETAILS SHALL BE INCLUDED IN DESIGN FOR JUSTIFICATION. MARKINGS FOR SERIES RATING WILL BE REQUIRED AT BOTH DISCONNECTS PER THE NEC.

KEYED NOTES:

- THE DEDICATED DER METER SOCKET SHALL BE FOUR-WIRE WYE-STYLE 13 JAW CT RATED SOCKET. A NEUTRAL AND GROUND BOND ARE REQUIRED. THE METER SOCKET SHALL BE EUSERC COMPLIANT.
- RELAY UPS, THE DER SWITCHBOARD CPT, GFR CPT AND RELAY UPS POWER SUPPLIES SHALL NOT PARALLEL IF THEY ARE FROM SEPERATE TRANSFORMERS.
- DER RELAY SENSING POTENTIALS SHALL BE LANDED ON FT-1 STYLE TEST SWITCH AND SHALL NOT SHARE SWITCH WITH 52A AND SHUNT TRIP CUTOUT. 52A AND SHUNT TRIP WIRES SHALL BE LANDED ON SEPERATE CUTOUT PER RELAY SCHEMATIC. TEST SWITCH AND CUTOUT SWITCH SHALL HAVE UNIQUE PLACARDS IDENTIFYING FUNCTIONALITY OF SWITCH. EACH SWITCH BLADE SHALL BE IDENTIFIED WITH FUNCTIONALITY OF BLADE AND LABELLED CORRECTLY.
- THE DER SYSTEM DISCONNECT SWITCH OR THE UTILITY AC DISCONNECT SWITCH MAY BE USED FOR SHUNT TRIPPING REQUIREMENTS. DER EQUIPMENT TO INCLUDE RELAY, COM CABINET AND DER METER SHALL REMAIN IN POWER BY UTILITY WHEN SHUNT TRIP DISCONNECT IS OPEN.

THIS SAMPLE DRAWING IS FOR ILLUSTRATION PURPOSES ONLY AND IS NOT TO BE USED FOR DESIGN OR CONSTRUCTION. THIS DRAWING AND ITS SUITABILITY FOR END USE IS NOT IMPLIED. THE INTENT IS ONLY TO ILLUSTRATE TYPICAL MINIMUM INFORMATION REQUIRED AT THE TIME OF APPLICATION TO SRP. ADDITIONAL INFORMATION MAY BE REQUIRED.

001	04/2023	MCA	MCA	PCM	PCM	
REV NO.	PROJECT NO.	DATE	DSGN ENGR	DFTR	DESIGN CHECK	ISSUE APPRVD
PHOENIX - ARIZONA						
XXX KW DC/ XXXKW AC PV THREE LINE DIAGRAM ADDRESS LINE 1 ADDRESS LINE 2						
SCALE: NONE						
01	E8	30x42	CLASS III 1MW			