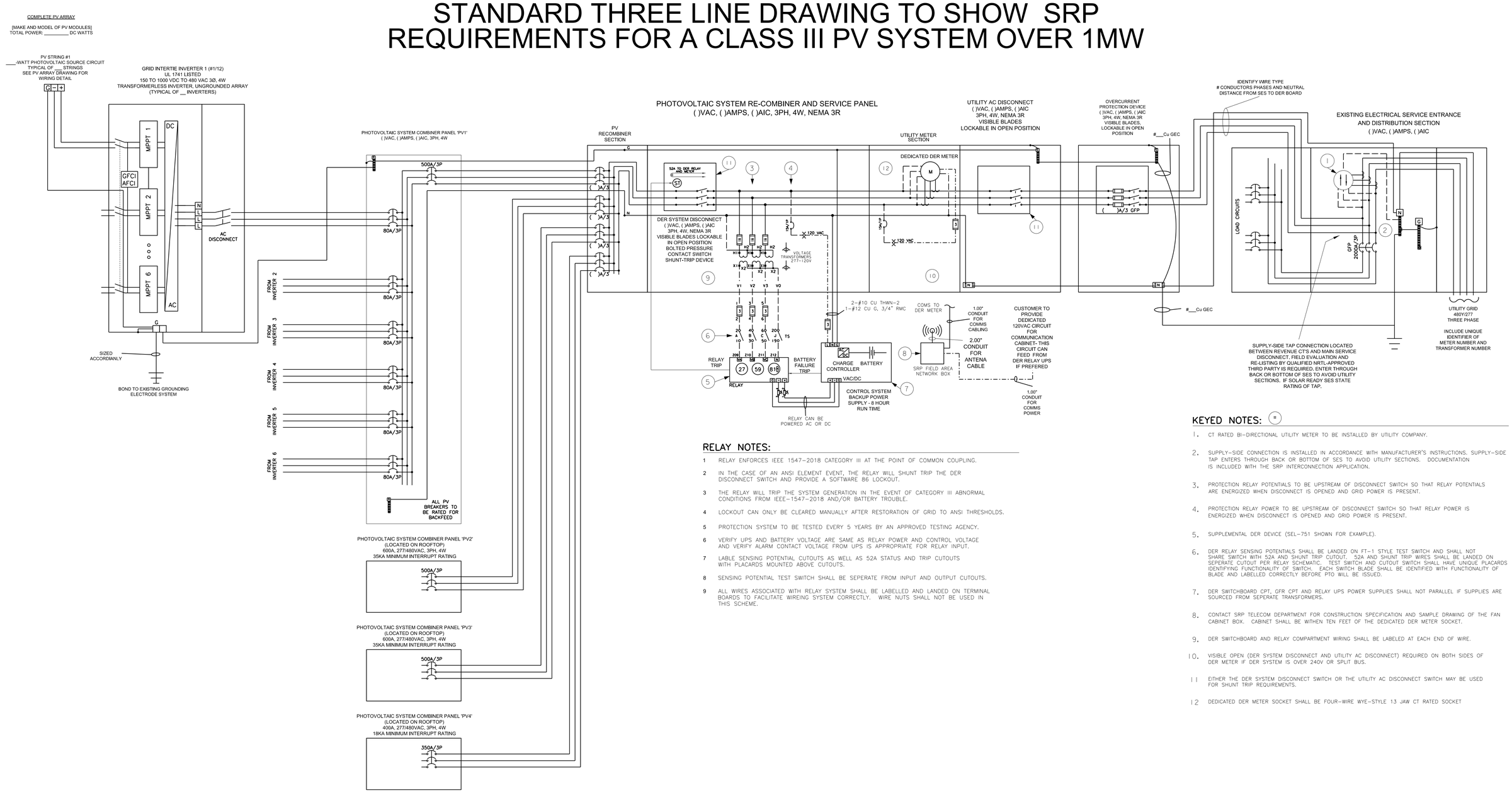
STANDARD THREE LINE DRAWING TO SHOW SRP REQUIREMENTS FOR A CLASS III PV SYSTEM OVER 1MW



RELAY NOTES:

1 RELAY ENFORCES IEEE 1547-2018 CATEGORY III AT THE POINT OF COMMON COUPLING.

2 IN THE CASE OF AN ANSI ELEMENT EVENT, THE RELAY WILL SHUNT TRIP THE DER DISCONNECT SWITCH AND PROVIDE A SOFTWARE 86 LOCKOUT.

3 THE RELAY WILL TRIP THE SYSTEM GENERATION IN THE EVENT OF CATEGORY III ABNORMAL CONDITIONS FROM IEEE-1547-2018 AND/OR BATTERY TROUBLE.

4 LOCKOUT CAN ONLY BE CLEARED MANUALLY AFTER RESTORATION OF GRID TO ANSI THRESHOLDS.

5 PROTECTION SYSTEM TO BE TESTED EVERY 5 YEARS BY AN APPROVED TESTING AGENCY.

6 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.

7 LABLE SENSING POTENTIAL CUTOUTS AS WELL AS 52A STATUS AND TRIP CUTOUTS WITH PLACARDS MOUNTED ABOVE CUTOUTS.

8 SENSING POTENTIAL TEST SWITCH SHALL BE SEPERATE FROM INPUT AND OUTPUT CUTOUTS.

9 ALL WIRES ASSOCIATED WITH RELAY SYSTEM SHALL BE LABELLED AND LANDED ON TERMINAL BOARDS TO FACILITATE WIREING SYSTEM CORRECTLY. WIRE NUTS SHALL NOT BE USED IN THIS SCHEME.

KEYED NOTES: (#)

1. CT RATED BI-DIRECTIONAL UTILITY METER TO BE INSTALLED BY UTILITY COMPANY.

2. SUPPLY-SIDE CONNECTION IS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. SUPPLY-SIDE TAP ENTERS THROUGH BACK OR BOTTOM OF SES TO AVOID UTILITY SECTIONS. DOCUMENTATION IS INCLUDED WITH THE SRP INTERCONNECTION APPLICATION.

3. PROTECTION RELAY POTENTIALS TO BE UPSTREAM OF DISCONNECT SWITCH SO THAT RELAY POTENTIALS ARE ENERGIZED WHEN DISCONNECT IS OPENED AND GRID POWER IS PRESENT.

4. PROTECTION RELAY POWER TO BE UPSTREAM OF DISCONNECT SWITCH SO THAT RELAY POWER IS ENERGIZED WHEN DISCONNECT IS OPENED AND GRID POWER IS PRESENT.

5. SUPPLEMENTAL DER DEVICE (SEL-751 SHOWN FOR EXAMPLE).

6. 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 BEFORE PTO WILL BE ISSUED.

7. DER SWITCHBOARD CPT, GFR CPT AND RELAY UPS POWER SUPPLIES SHALL NOT PARALLEL IF SUPPLIES ARE SOURCED FROM SEPERATE TRANSFORMERS.

8. CONTACT SRP TELECOM DEPARTMENT FOR CONSTRUCTION SPECIFICATION AND SAMPLE DRAWING OF THE FAN CABINET BOX. CABINET SHALL BE WITHEN TEN FEET OF THE DEDICATED DER METER SOCKET.

9. DER SWITCHBOARD AND RELAY COMPARTMENT WIRING SHALL BE LABELED AT EACH END OF WIRE.

10. VISIBLE OPEN (DER SYSTEM DISCONNECT AND UTILITY AC DISCONNECT) REQUIRED ON BOTH SIDES OF DER METER IF DER SYSTEM IS OVER 240V OR SPLIT BUS.

11 EITHER THE DER SYSTEM DISCONNECT SWITCH OR THE UTILITY AC DISCONNECT SWITCH MAY BE USED FOR SHUNT TRIP REQUIREMENTS.

12 DEDICATED DER METER SOCKET SHALL BE FOUR-WIRE WYE-STYLE 13 JAW CT RATED SOCKET

NOTES:

1. 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.

2. 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.

REV NO.	PROJECT NO.	DATE	DSGN ENGR	DFTR	DESIGN CHECK	ISSUE APPRVD
0	001	04/2021	MCA	MCA	PM	PM

PHOENIX - ARIZONA

XXX KW DC/ XXXKW AC PV
THREE LINE DIAGRAM
ADDRESS LINE 1
ADDRESS LINE 2

SCALE: NONE

GURU CODE	DISTR CODE	DWG SIZE	
OL	E8	30x42	CLASS III 1MW