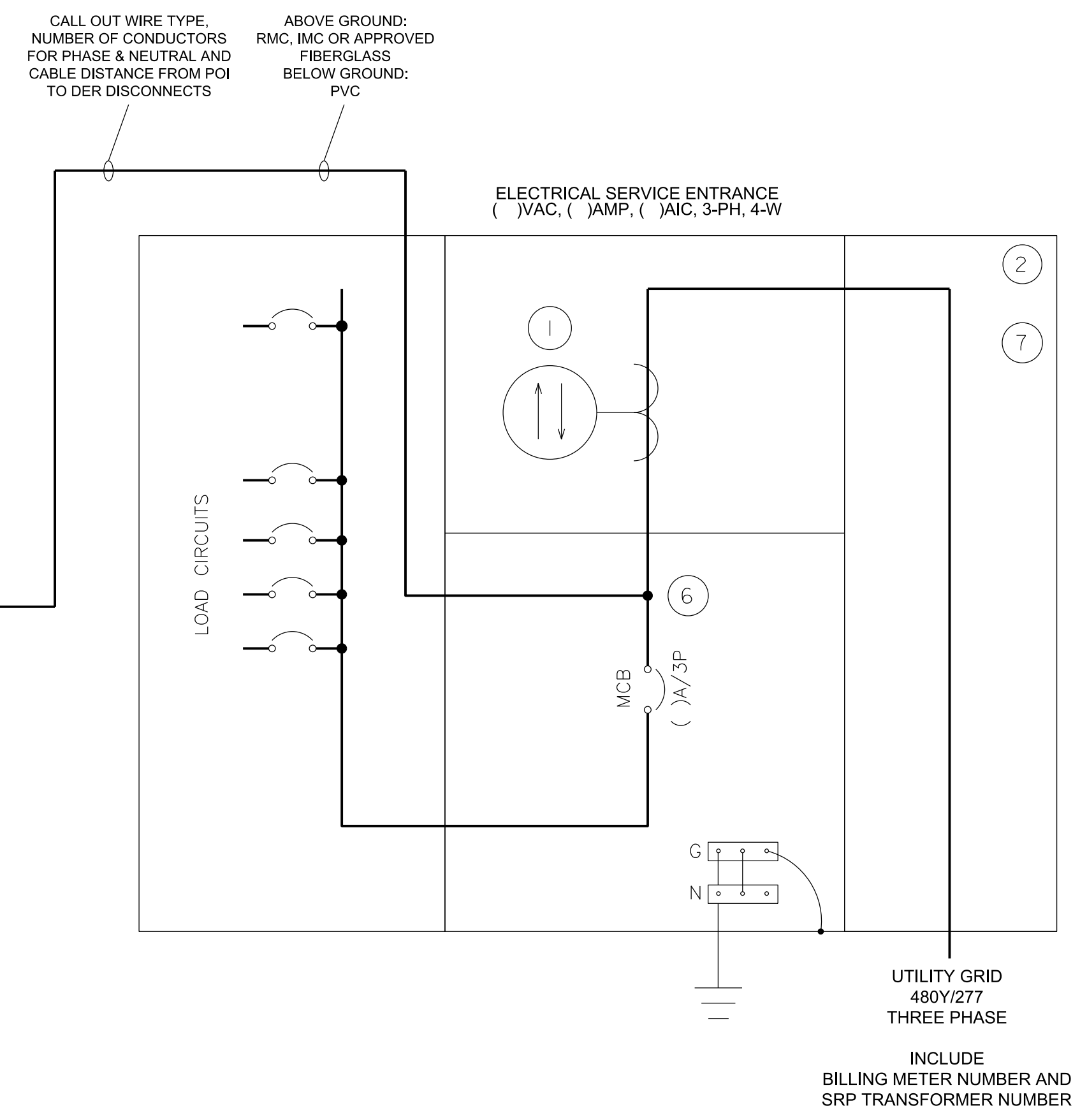
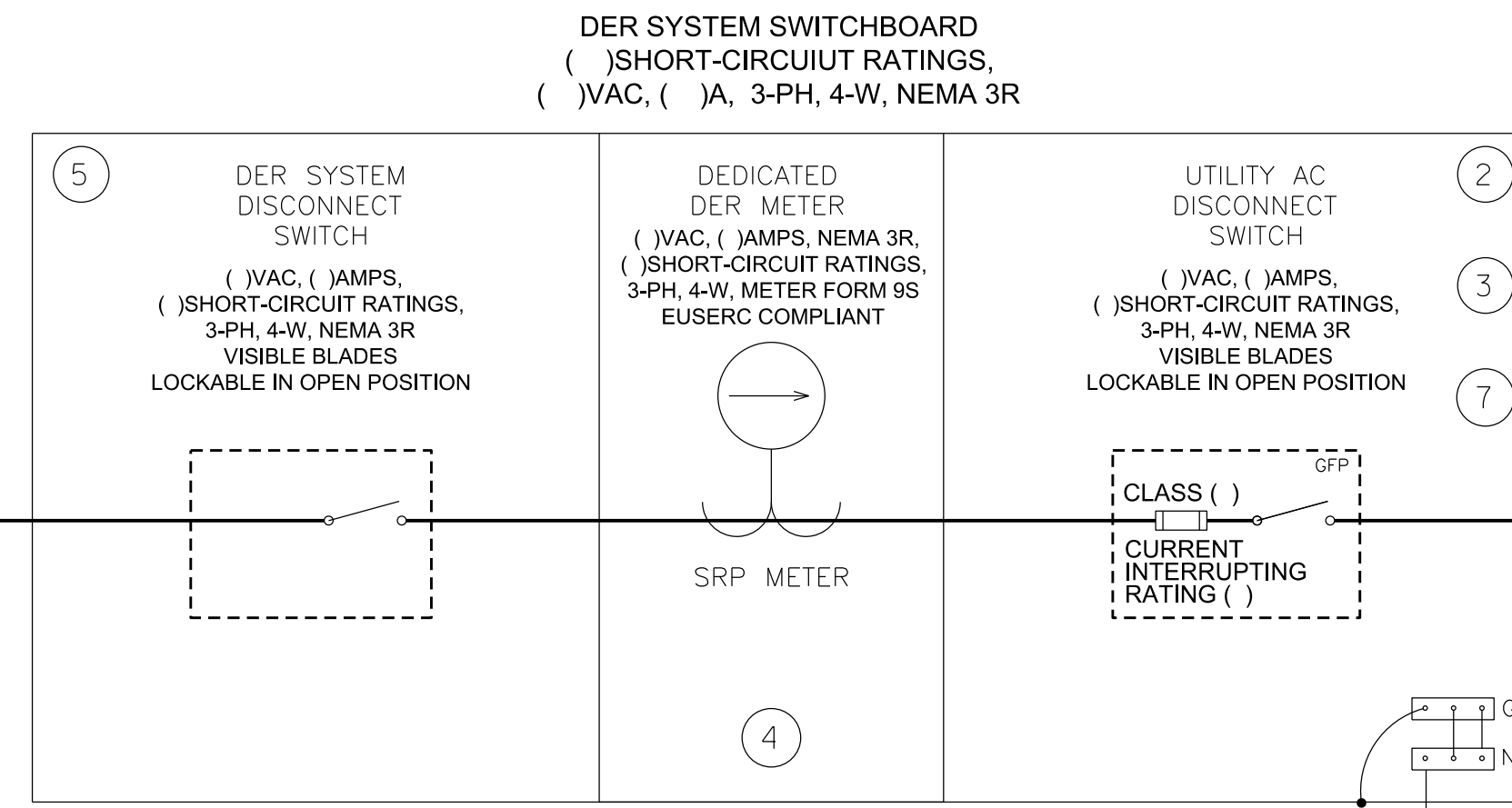
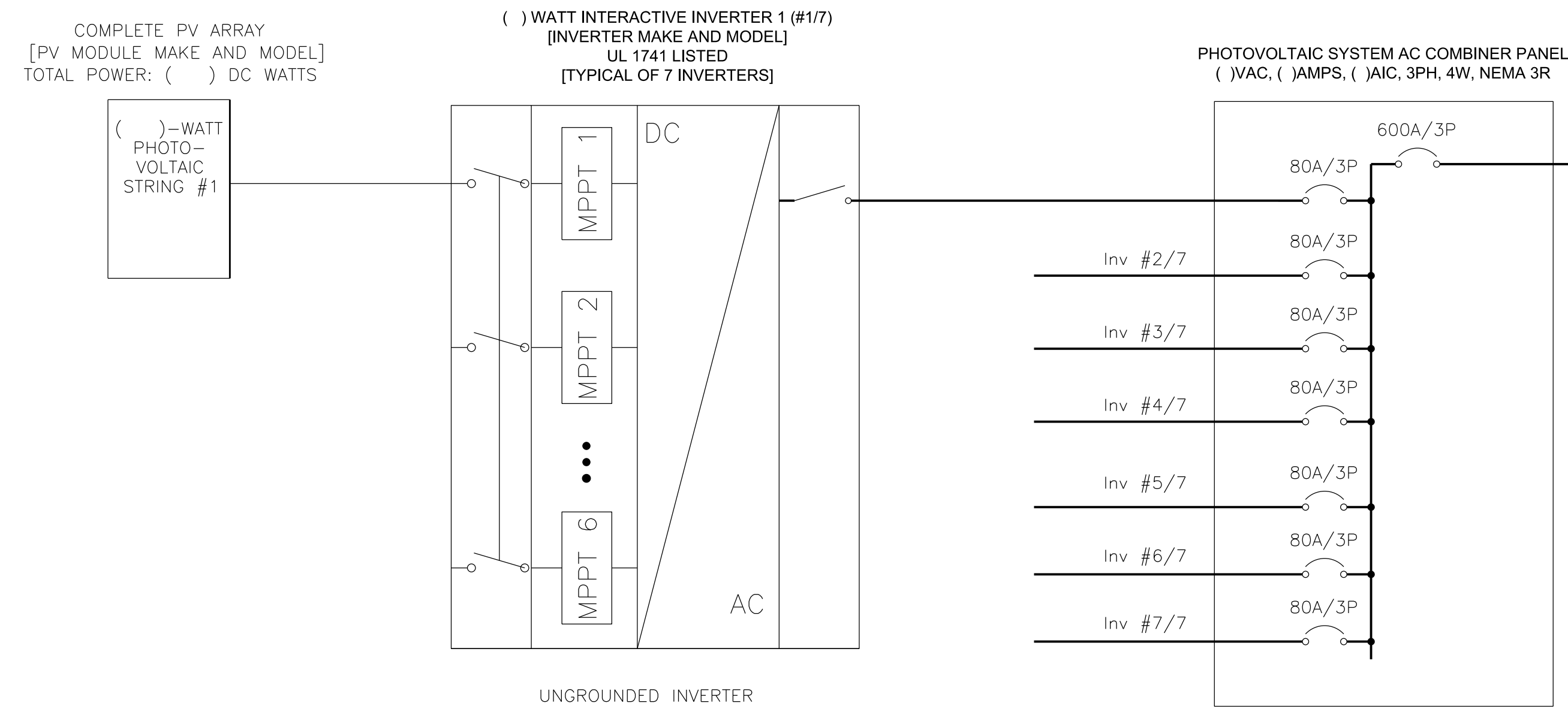


# SINGLE LINE DRAWING TO SHOW SRP REQUIREMENTS FOR A CLASS II PV SYSTEM UNDER 1MW



NOTE:  
VALUES OF AVAILABLE FAULT CURRENT FOR USE IN DETERMINING APPROPRIATE MINIMUM SHORT-CIRCUIT CURRENT AND INTERRUPTING RATINGS OF SERVICE AND DER EQUIPMENT ARE AVAILABLE ONLINE FROM SRP'S ELECTRIC SERVICE SPECIFICATIONS (ESS) MANUAL

## GENERAL NOTES

- ALL SYSTEM DESIGN DRAWINGS MUST INCLUDE ALL SWITCHGEAR FROM GENERATION FUEL (SOLAR ARRAY, BATTERY, ETC.) TO UTILITY SERVICE TRANSFORMER. ALL SWITCHGEAR MUST BE IDENTIFIED WITH UNIQUE IDENTIFIERS.
- ANY CUSTOMER-SITED EQUIPMENT THAT CONSISTS OF A MAIN-TIE-MAIN MUST INCLUDE INTERLOCK DESCRIPTION AND MAIN-TIE-MAIN SCHEME.
- ADDITIONAL INDICATIONS MAY BE REQUIRED IF ADDITIONAL CUSTOMER SWITCHING CAN OCCUR.

## KEYED NOTES: \*

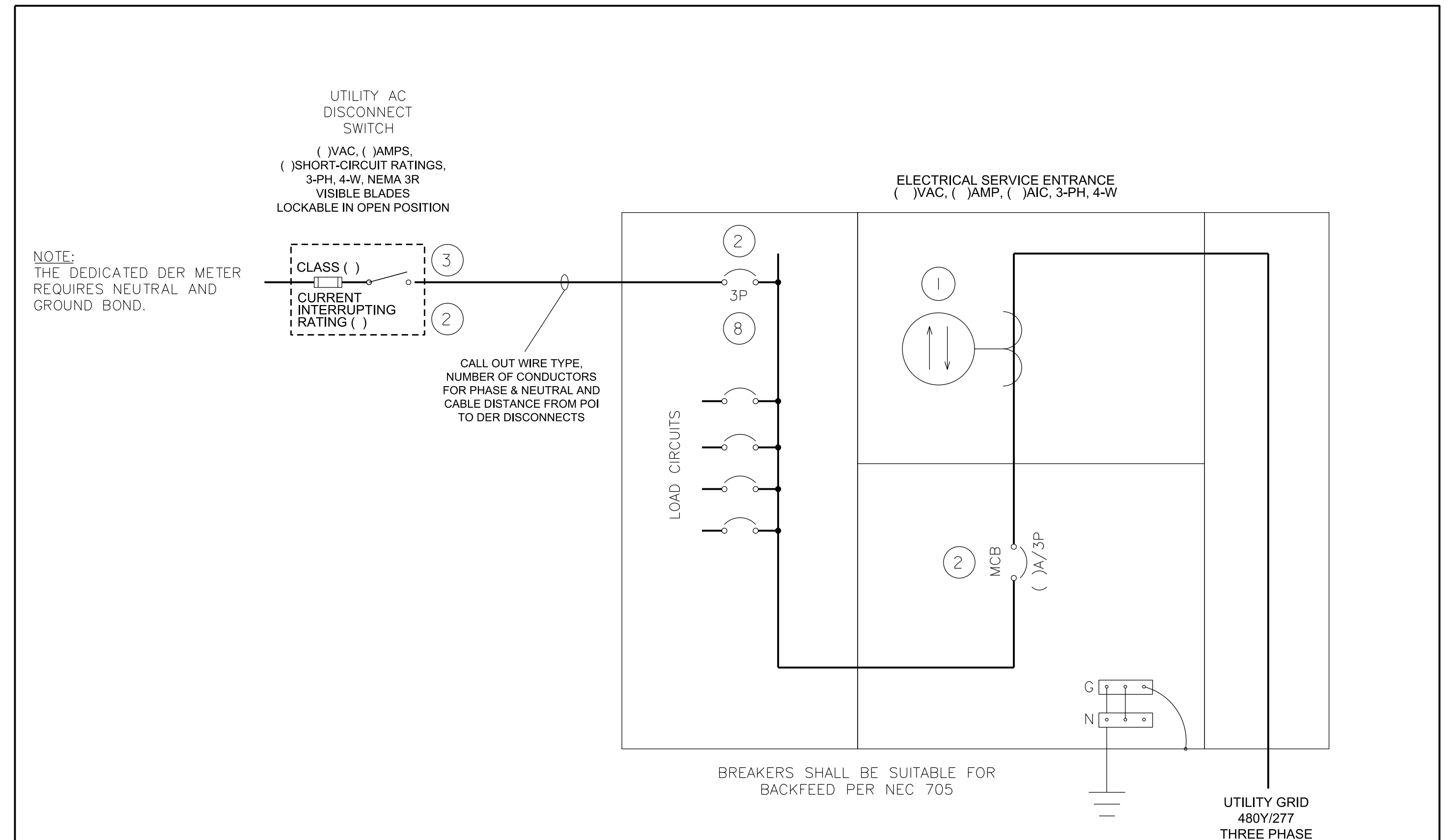
- BI-DIRECTIONAL UTILITY METER TO BE INSTALLED BY SALT RIVER PROJECT.
- LABEL SIGNAGE AND LOCATION OF SIGNAGE SHOULD FOLLOW SRP STANDARDS OUTLINED IN SRP'S DISTRIBUTED GENERATION INTERCONNECTION HANDBOOK (DGIH) SECTION 2. FOR LABELING REQUIREMENTS, REFER TO THE DER SIGNAGE SECTION WITHIN THE SRP DGIH, SECTION 2. FOR ALL OTHER CONTRACTOR SUPPLIED MATERIAL AND ADDITIONAL LABELING, THE CUSTOMER SHALL CONFORM TO THE NEC AND SRP'S ELECTRIC SERVICE SPECIFICATIONS (ESS) MANUAL SECTION 11: CONTRACTOR SUPPLIED MATERIAL.
- UTILITY AC DISCONNECT SWITCH. THE CUSTOMER SHALL INSTALL AND MAINTAIN, A MANUALLY-OPERATED LOAD-BREAK DISCONNECT SWITCH CAPABLE OF BEING LOCKED IN A VISIBLY OPEN POSITION. SEE SRP DGIH FOR UTILITY AC DISCONNECT SPECIFICATIONS.
- DEDICATED DER METER. THE DEDICATED DER METER SOCKET SHALL BE FOUR-WIRE WYE-STYLE LOCATED AS SHOWN. THE METER ENCLOSURE AND SOCKET SHALL BE PROVIDED AND INSTALLED BY CUSTOMER. METER, CTs AND TEST SWITCHES WILL BE PROVIDED BY SRP. CT-RATED PRODUCTION METERING ENCLOSURES SHALL HAVE THE BUS IDENTIFIED WITH REFERENCE TO THE GENERATION SOURCE SIDE PRIOR TO METERING INSTALLATION WITH A TEMPORARY TAG LABELED "GENERATION SOURCE".
- DER SYSTEM DISCONNECT SWITCH. THE CUSTOMER SHALL INSTALL AND MAINTAIN, A MANUALLY-OPERATED LOAD-BREAK DISCONNECT SWITCH CAPABLE OF BEING LOCKED IN A VISIBLY OPEN POSITION. SEE SRP DGIH FOR DER SYSTEM DISCONNECT SPECIFICATIONS.
- SUPPLY-SIDE SOURCE CONNECTION SHALL BE LOCATED AT THE SERVICE ENTRANCE SECTION, AFTER THE SRP BILLING METER AND BEFORE THE SOURCE SIDE OF THE SERVICE DISCONNECT, OUTSIDE OF ANY SEALED AREAS OF THE UTILITY SECTION. SUPPLY-SIDE SOURCE CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH ARTICLE 705 OF THE NEC AND DOCUMENTATION OF RECERTIFICATION BY A NATIONALLY RECOGNIZED TESTING LABORATORY TO MAINTAIN EQUIPMENT LISTINGS HAS TO BE INCLUDED WITH THE SRP POWERCLERK INTERCONNECTION APPLICATION.
- EQUIPMENT SHALL BE LISTED AND RATED TO WITHSTAND THE AVAILABLE SHORT-CIRCUIT CURRENT. THE CIRCUIT BREAKERS/FUSES SHOWN ON THE SINGLE LINE DIAGRAM SHALL INCLUDE THE CURRENT INTERRUPTING RATINGS THAT THE DEVICES CAN SAFELY INTERRUPT AT THE SPECIFIED VOLTAGE. THE EQUIPMENT SHOWN ON THE SINGLE LINE DIAGRAM SHALL INCLUDE THE SHORT CIRCUIT CURRENT RATINGS THAT DEVICES CAN SAFELY HANDLE DURING FAULT CONDITIONS.

## EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	MANUFACTURER	PART NO.	NOTES
A	PV MODULE			
B	INVERTER			
C	AC BKR			
D	METER SOCKET			
E	AC DISC.			

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.

## LOAD-SIDE CONNECTION ALTERNATIVE



## KEYED NOTES: \*

- BI-DIRECTIONAL UTILITY METER TO BE INSTALLED BY SALT RIVER PROJECT.
- LABEL SIGNAGE AND LOCATION OF SIGNAGE SHOULD FOLLOW SRP STANDARDS OUTLINED IN SRP'S DISTRIBUTED GENERATION INTERCONNECTION HANDBOOK (DGIH) SECTION 2. FOR LABELING REQUIREMENTS, REFER TO THE DER SIGNAGE SECTION WITHIN THE SRP DGIH, SECTION 2. FOR ALL OTHER CONTRACTOR SUPPLIED MATERIAL AND ADDITIONAL LABELING, THE CUSTOMER SHALL CONFORM TO THE NEC AND SRP'S ELECTRIC SERVICE SPECIFICATIONS (ESS) MANUAL SECTION 11: CONTRACTOR SUPPLIED MATERIAL.
- UTILITY AC DISCONNECT SWITCH. THE CUSTOMER SHALL INSTALL AND MAINTAIN, A MANUALLY-OPERATED LOAD-BREAK DISCONNECT SWITCH CAPABLE OF BEING LOCKED IN A VISIBLY OPEN POSITION. SEE SRP DGIH FOR UTILITY AC DISCONNECT SPECIFICATIONS.
- DEFINE IN DESIGN AMPERE RATING(S) OF FIXED/ADJUSTABLE-TRIP BREAKERS AND RELEVANT TRIP SETTINGS.

## 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 IOKA 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.

REV. NO.	001	DATE	04/2023	DCSN ENGR	MCA	DFTR	PCM	ISSUE CHECK	PCM
<b>SRP</b> PHOENIX - ARIZONA									
XXX KW DC/ XXXKW AC PV SINGLE LINE DIAGRAM ADDRESS LINE 1 ADDRESS LINE 2									
SCALE: NONE									
SUBJ: CODE: DIST: CODE: DWG: SIZE:									
CLASS II									