

Photovoltaic System Single Line Diagram

**SINGLE-LINE DIAGRAM #1 – NO STRINGS COMBINED PRIOR TO INVERTER**

CHECK A BOX FOR WHETHER SYSTEM IS GROUNDED OR UNGROUNDED:  
 GROUNDED (INCLUDE GEC)  
 UNGROUNDED

REFER TO STEP 16 FOR RAPID SHUTDOWN DETAILS FOR UNGROUNDED SYSTEMS:  
 - DC OCPD MUST DISCONNECT BOTH CONDUCTORS OF EACH SOURCE CIRCUIT  
 - UNGROUNDED CONDUCTORS MUST BE IDENTIFIED PER 210.5(C). WHITE-FINISHED CONDUCTORS ARE NOT PERMITTED.

\* Consult with your local AHJ and /or Utility

IF DC/DC CONVERTERS ARE USED, CHECK THE BOX BELOW THE CORRESPONDING CONFIGURATION

PARALLEL DC/DC CONVERTERS ON ONE SOURCE CIRCUIT (FIXED UNIT VOLTAGE DC/DC CONVERTERS)

DC/DC CONVERTERS ARE ALL RUN IN SERIES (FIXED SOURCE CIRCUIT VOLTAGE DC/DC CONVERTERS)

DESCRIPTION	YES / NO	(IF YES, STEPS 6 & 8 REQUIRED)
1 SOLAR PV MODULE / STRING		
2 DC/DC CONVERTERS INSTALLED?		
3 SEPARATE DC DISCONNECT INSTALLED?		
4 SEPARATE DC DISCONNECT INSTALLED?		
5 INTERNAL INVERTER DC DISCONNECT		
6 CENTRAL INVERTER		
7 LOAD CENTER INSTALLED?		
8 PV PRODUCTION METER INSTALLED?		
9 SEPARATE AC DISCONNECT INSTALLED?		
10 CONNECT TO INVERTER #2 (USE LINE DIAGRAM 2)		

CONDUCTOR/CONDUIT SCHEDULE			
TAG	DESCRIPTION AND CONDUCTOR TYPE	NUMBER OF CONDUCTORS	CONDUIT/CABLE TYPE
A	USE-2 <input type="checkbox"/> OR PV-WIRE <input type="checkbox"/>		
B	EGC/GEC:		
C	EGC/GEC:		
D	EGC/GEC:		
	EGC/GEC:		

ENTER "N/A" WHERE SUITABLE FOR WHEN NOT USING CONDUIT OR CABLE AS PERMITTED BY CODE