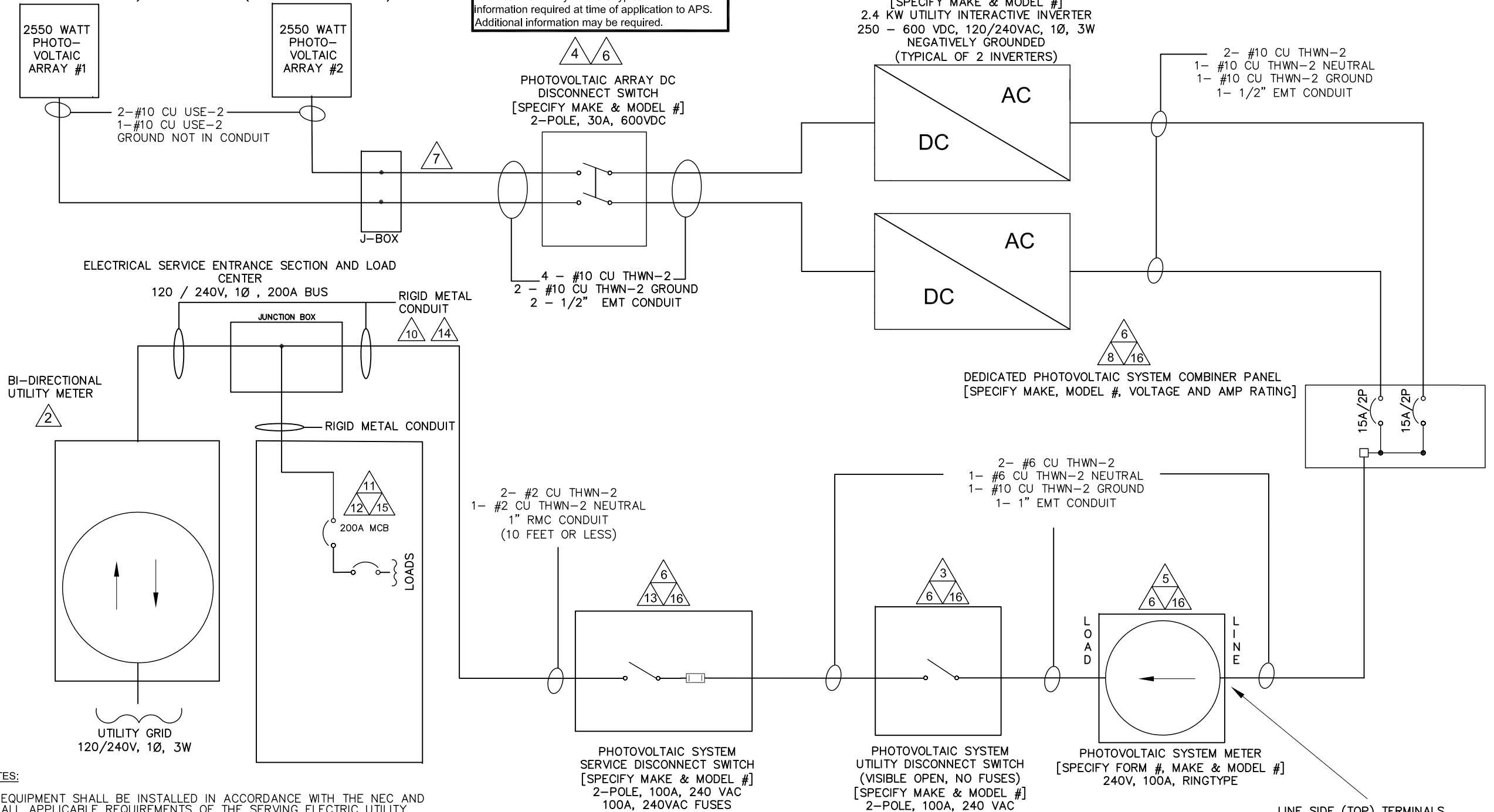


Voc= 457 VDC, Isc= 7.28 AMPS
 Vmp= 376 VDC, Imp= 6.78 AMPS
 (TYPICAL OF 2 ARRAYS)

Voc= 457 VDC, Isc= 7.28 AMPS
 Vmp= 376 VDC, Imp= 6.78 AMPS
 (TYPICAL OF 2 ARRAYS)

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 to only illustrate typical minimum information required at time of application to APS. Additional information may be required.

REV.	DESCRIPTION:	DATE
C	JUNCTION BOX	10/19/16



NOTES:

- 1 EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC AND ALL APPLICABLE REQUIREMENTS OF THE SERVING ELECTRIC UTILITY COMPANY AND OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- 2 BI-DIRECTIONAL UTILITY METER TO BE INSTALLED BY UTILITY COMPANY.
- 3 LABEL "PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH". SWITCH COVER TO BE LOCKED AT ALL TIMES. SWITCH TO BE VISUAL OPEN AND ACCESSIBLE PER UTILITY REQUIREMENTS AND CONFORM TO NEC 705.22.
- 4 LABEL "PHOTOVOLTAIC ARRAY DC DISCONNECT SWITCH" PER NEC 690.13(B). LABEL WITH MAXIMUM VOLTAGE, MAXIMUM CIRCUIT CURRENT AND MAXIMUM RATED OUTPUT CURRENT PER NEC 690.53. SWITCH TO BE LOCKED.
- 5 LABEL "PHOTOVOLTAIC POWER SYSTEM DEDICATED KWH METER". METER ENCLOSURE AND SOCKET PROVIDED AND INSTALLED BY CUSTOMER PER APS ESRM. METER PROVIDED BY CUSTOMER.
- 6 PROVIDE WARNING SIGN PER NEC 690.13(B) READING "WARNING-ELECTRIC SHOCK HAZARD-DO NOT TOUCH TERMINALS-TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION".
- 7 METALLIC CONDUIT SHALL BE USED WITHIN BUILDING PER NEC 690.31(E).
- 8 LABEL "DEDICATED PHOTOVOLTAIC SYSTEM COMBINER PANEL" AND "LOADS NOT TO BE ADDED TO THIS PANEL".
- 9 GEC TO BE INSTALLED AS REQUIRED BY MANUFACTURER INSTRUCTIONS AND NEC 690.47.

- 10 GROUNDING BUSHINGS AT EVERY ENTRY AND EXIT POINT TO ENCLOSURES WITH RMC
- 11 A PLACARD OR DIRECTORY IS INSTALLED AT THE SERVICE ENTRANCE WITH EXPLICIT DIRECTIONS TO THE LOCATION OF THE PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH AS REQUIRED BY APS.
- 12 A PERMANENT PLACARD OR DIRECTORY IS INSTALLED PER NEC 705.10.
- 13 SUPPLY SIDE CONNECTION IS INSTALLED PER NEC 230, APS ESRM, AND APS INTERCONNECTION REQUIREMENTS. LABEL "PHOTOVOLTAIC SYSTEM SERVICE DISCONNECT SWITCH". SWITCH COVER TO BE LOCKED AT ALL TIMES.
- 14 SUPPLY SIDE CONNECTION IS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DOCUMENTATION IS INCLUDED WITH THE APS INTERCONNECTION APPLICATION. ENSURE UL LISTED CONNECTORS.
- 15 LABEL "WARNING - A GENERATION SOURCE IS CONNECTED TO THE SUPPLY (UTILITY) SIDE OF THE SERVICE DISCONNECTING MEANS. FOLLOW PROPER LOCKOUT/ TAGOUT PROCEDURES TO ENSURE THE PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH IS OPENED PRIOR TO PERFORMING WORK ON THIS DEVICE."
- 16 EQUIPMENT SHALL BE LISTED, TESTED AND MARKED TO WITHSTAND THE AVAILABLE SHORT CIRCUIT CURRENT.

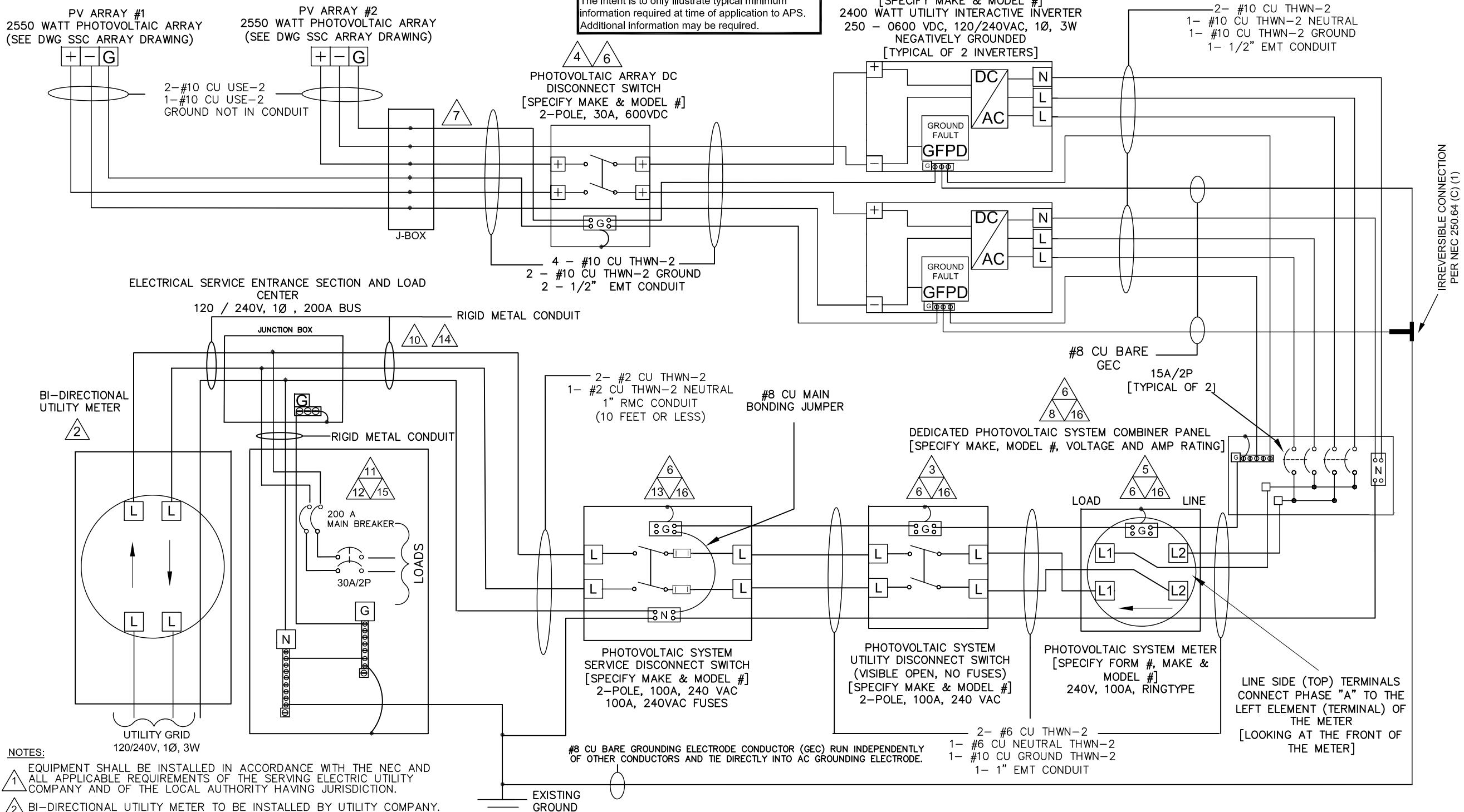
SAMPLE SUPPLY SIDE TAP ONE-LINE DIAGRAM

1234 South Main Street Any City, Arizona 85123 Tel: 602-555-5555		ABC SOLAR COMPANY, INC.	
APPROVALS	DATE	ONE-LINE ELECTRICAL DIAGRAM 4.8 KW AC PHOTOVOLTAIC SYSTEM 999 N. CACTUS BIRD RD. ANY CITY, AZ 85123	
DRAWN ABC	04-05-05		
CHECKED			
ENGINEER			
M.G.R.			
REV. C	10-19-16	SIZE A	CODE INTENT NO.
ABC PROJECT #1111-9999		DRAWING NO. SSC ONE-LINE	
DO NOT SCALE DRAWINGS		SCALE NA	REV. C SHEET 1 of 5

LINE SIDE (TOP) TERMINALS CONNECT PHASE "A" TO THE LEFT ELEMENT (TERMINAL) OF THE METER [LOOKING AT THE FRONT OF THE METER]

REV.	DESCRIPTION:	DATE
C	APS CORRECTIONS	10-19-16

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 to only illustrate typical minimum information required at time of application to APS. Additional information may be required.



- NOTES:**
- 1 EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC AND ALL APPLICABLE REQUIREMENTS OF THE SERVING ELECTRIC UTILITY COMPANY AND OF THE LOCAL AUTHORITY HAVING JURISDICTION.
 - 2 BI-DIRECTIONAL UTILITY METER TO BE INSTALLED BY UTILITY COMPANY.
 - 3 LABEL "PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH". SWITCH COVER TO BE LOCKED AT ALL TIMES. SWITCH TO BE VISUAL OPEN AND ACCESSIBLE PER UTILITY REQUIREMENTS AND CONFORM TO NEC 705.22.
 - 4 LABEL "PHOTOVOLTAIC ARRAY DC DISCONNECT SWITCH" PER NEC 690.13(B). LABEL WITH OPERATING CURRENT, OPERATING VOLTAGE, MAXIMUM SYSTEM VOLTAGE, AND SHORT CIRCUIT CURRENT PER NEC 690.53. SWITCH TO BE LOCKED PER NEC 690.7(D).
 - 5 LABEL "PHOTOVOLTAIC POWER SYSTEM DEDICATED KWH METER". METER ENCLOSURE AND SOCKET PROVIDED AND INSTALLED BY CUSTOMER PER APS ESRM. METER PROVIDED BY CUSTOMER.
 - 6 PROVIDE WARNING SIGN PER NEC 690.17 READING "WARNING-ELECTRIC SHOCK HAZARD-DO NOT TOUCH TERMINALS-TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION".
 - 7 METALLIC CONDUIT SHALL BE USED WITHIN BUILDING PER NEC 690.31 (E).
 - 8 LABEL "DEDICATED PHOTOVOLTAIC SYSTEM COMBINER PANEL" AND "LOADS NOT TO BE ADDED TO THIS PANEL".
 - 9 GEC TO BE INSTALLED AS REQUIRED BY MANUFACTURER INSTRUCTIONS AND NEC 690.47.
 - 10 GROUNDING BUSHINGS AT EVERY ENTRY AND EXIT POINT TO ENCLOSURES WITH RMC

- 11 A PLACARD OR DIRECTORY IS INSTALLED AT THE SERVICE ENTRANCE WITH EXPLICIT DIRECTIONS TO THE LOCATION OF THE PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH AS REQUIRED BY APS.
- 12 A PERMANENT PLACARD OR DIRECTORY IS INSTALLED PER NEC 705.10.
- 13 SUPPLY SIDE CONNECTION IS INSTALLED PER NEC 230, APS ESRM, AND APS INTERCONNECTION REQUIREMENTS. LABEL "PHOTOVOLTAIC SYSTEM SERVICE DISCONNECT SWITCH". SWITCH COVER TO BE LOCKED AT ALL TIMES.
- 14 SUPPLY SIDE CONNECTION IS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DOCUMENTATION IS INCLUDED WITH THE APS INTERCONNECTION APPLICATION. ENSURE UL LISTED CONNECTORS.
- 15 LABEL "WARNING - A GENERATION SOURCE IS CONNECTED TO THE SUPPLY (UTILITY) SIDE OF THE SERVICE DISCONNECTING MEANS. FOLLOW PROPER LOCKOUT/ TAGOUT PROCEDURES TO ENSURE THE PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH IS OPENED PRIOR TO PERFORMING WORK ON THIS DEVICE."
- 16 EQUIPMENT SHALL BE LISTED, TESTED AND MARKED TO WITHSTAND THE AVAILABLE SHORT CIRCUIT CURRENT.

SAMPLE SUPPLY SIDE TAP THREE-LINE DIAGRAM

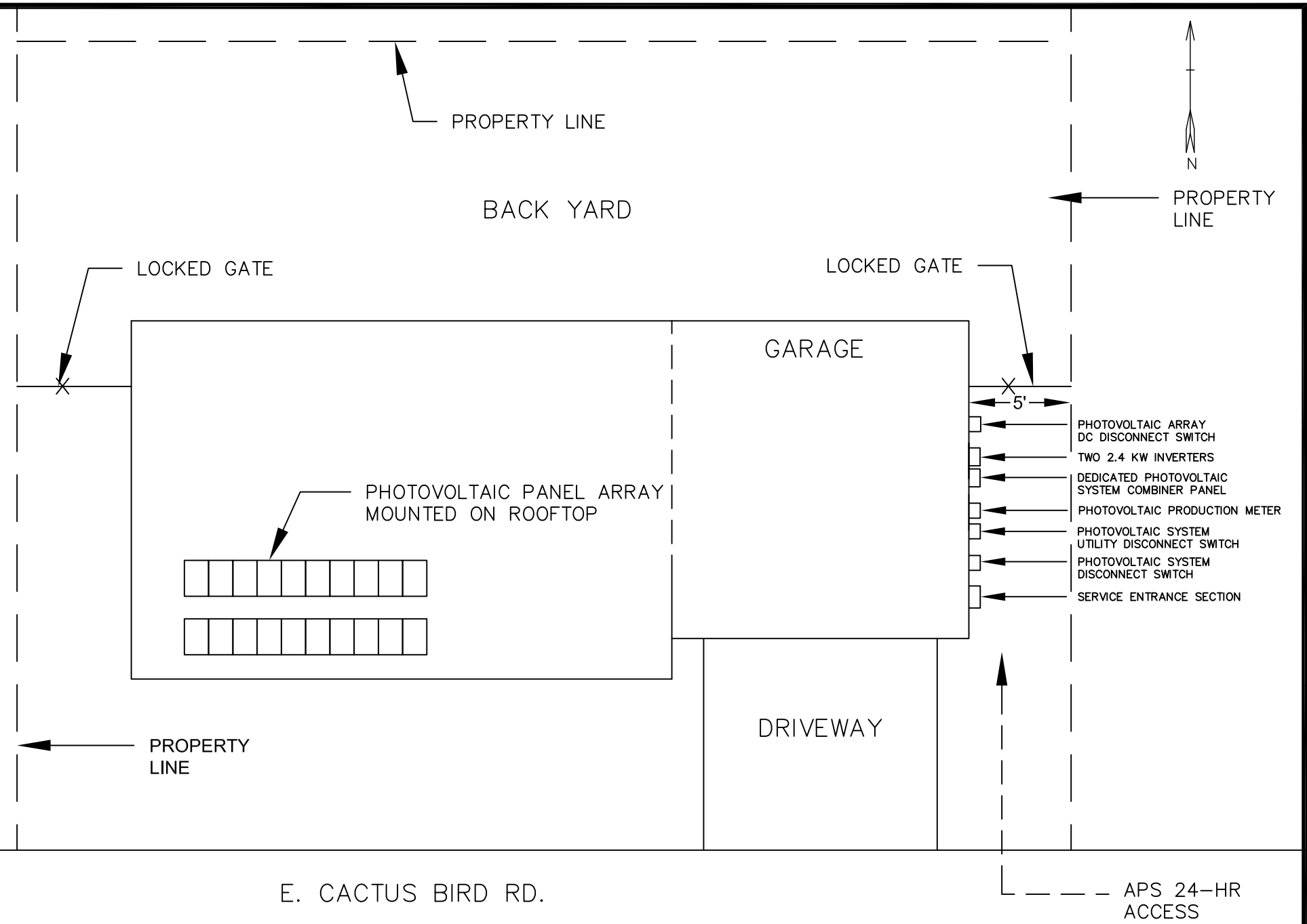
1234 South Main Street Any City, Arizona 85123 Tel: 602-555-5555		ABC SOLAR COMPANY, INC.	
APPROVALS	DATE	THREE-LINE ELECTRICAL DIAGRAM 4.8 KW AC PHOTOVOLTAIC SYSTEM 999 N. CACTUS BIRD RD. ANY CITY, AZ 85123	
DRAWN ABC	04-05-05		
CHECKED			
ENGINEER			
M.G.R.			
REV. C	10-19-16	SIZE A	CODE INTENT NO.
ABC PROJECT #1111-9999		DRAWING NO. SSC THREE-LINE	
DO NOT SCALE DRAWINGS		SCALE NA	REV. C SHEET 2 OF 5

NOTE: UTILITY HAS 24-HR UNRESTRICTED ACCESS TO ALL PHOTOVOLTAIC SYSTEM COMPONENTS LOCATED AND SERVICE ENTRANCE.

NOTE: REFERENCE SECTION 301.15 OF THE APS ESRM FOR ELECTRIC METER SEPARATION BETWEEN WATER AND GAS.

NOTE: WORKSPACE IN FRONT OF AC ELECTRICAL SYSTEM COMPONENTS SHALL BE IN ACCORDANCE WITH APS AND NEC REQUIREMENTS. FOR APS REQUIREMENTS, REFERENCE SECTION 300 OF THE APS ESRM AND SECTION 8.2 OF THE APS INTERCONNECTION REQUIREMENTS.

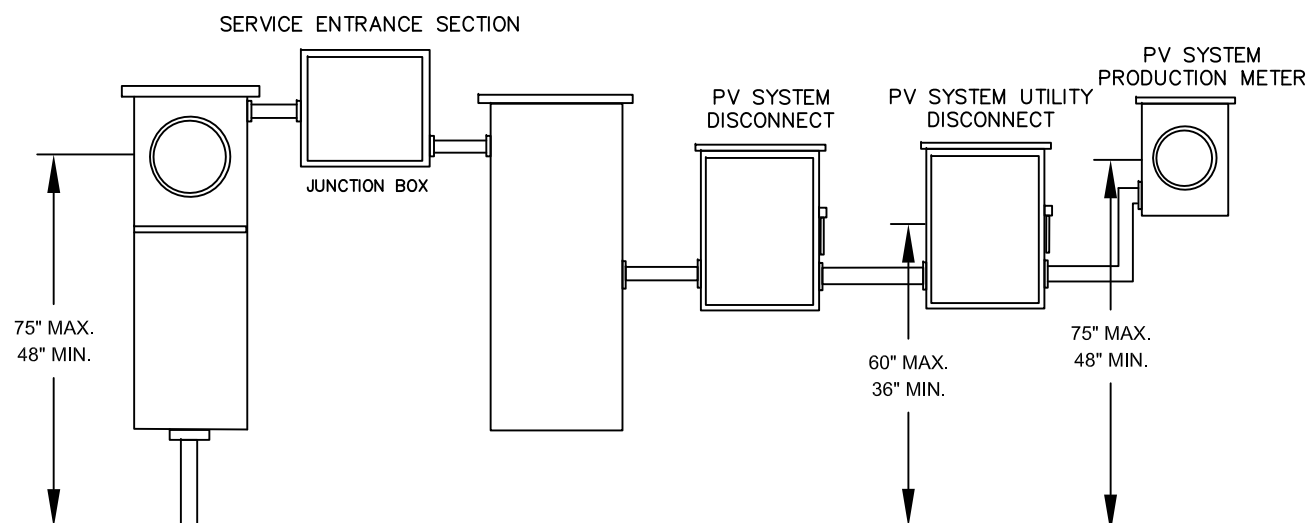
This Sample Drawing is for illustration purposes only and is not to be used for design or construction. This drawing and its suitability for end use is not implied. The intent is only to illustrate typical minimum information required at time of application to APS. Additional information may be required.



E. CACTUS BIRD RD.

APS 24-HR ACCESS

ELEVATION VIEW



SAMPLE SITE PLAN

1234 South Main Street Any City, Arizona 85123 Tel: 602-555-5555		ABC SOLAR COMPANY, INC.	
		SITE PLAN 4.8 KW AC PHOTOVOLTAIC SYSTEM 999 E. CACTUS BIRD RD. ANY CITY, AZ 85123	
APPROVALS	DATE	SIZE	DRAWING NO.
DRAWN ABC	1-26-17	B	0000-0005
CHECKED			
ENGINEER			
REV.			
ABC PROJECT #1111-9999		SCALE NA	REV. SHEET 5 OF 5