



- NOTES FOR INVERTER INPUT AND OUT CIRCUITS:**
- 1) IF UTILITY REQUIRES VISIBLE-BREAK SWITCH, DOES THE AC DISCONNECT SATISFY THE UTILITY REQUIREMENTS OR IS AN ADDITIONAL SWITCH NECESSARY?
 - 2) IF INCENTIVE PROGRAM REQUIRES PV OUTPUT METER, ADD METER BASE THAT MEETS REQUIREMENTS.
 - 3) SIZE PHOTOVOLTAIC POWER SOURCE (DC) CONDUCTORS BASED ON MAX CURRENT ON 690.53 SIGN OR OCPD RATING AT DISCONNECT (IF SUPPLIED).
 - 4) SIZE INVERTER OUTPUT CIRCUIT (AC) CONDUCTORS ACCORDING TO INVERTER OCPD AMPERE RATING.

OCPD = OVERCURRENT PROTECTION DEVICE (IF NO OCPD-LEAVE ITEM BLANK)

PV MODULE RATINGS @ STC

MODULE MANUFACTURER _____

MODULE MODEL # _____

OPEN-CIRCUIT VOLTAGE = ____ V

OPERATING VOLTAGE = ____ V

MAX SYSTEM VOLTAGE = ____ V

OPERATING CURRENT = ____ A

SHORT-CIRCUIT CURRENT = ____ A

MAX SERIES FUSE (OCPD) = ____ A

MAXIMUM POWER = ____ W

Voc TEMP COEFF = ____ mV or %/°C (IF SUPPLIED, CIRCLE TYPE OF COEFF)

PV ARRAY INFORMATION

OF MODULES IN SERIES ____

OF PARALLEL CIRCUITS ____

LOWEST EXPECTED TEMP ____ °C

HIGHEST EXPECTED TEMP ____ °C

690.53 PHOTOVOLTAIC POWER SOURCE SIGN ON DC DISCO

RATED CURRENT = ____ A

RATED VOLTAGE = ____ V

MAX SYS VOLTAGE = ____ V

MAX CURRENT = ____ A

SOURCE CIRCUIT CONDUCTOR TYPE
 (OUTSIDE CONDUIT-CIRCLE ONE) USE-2; PV WIRE

SOURCE CIRCUIT CONDUCTOR TYPE
 (INSIDE CONDUIT-CIRCLE ONE) THWN-2; XHHW-2; RHW-2; USE-2

SOURCE CIRCUIT CONDUCTOR SIZE
 (SEE NOTES FOR ARRAY WIRING BELOW) ____ AWG

- NOTES FOR ARRAY WIRING:**
- 1.) 2005 ASHRAE FUNDAMENTALS 2% DESIGN TEMPERATURES DO NOT EXCEED 47°C IN THE UNITED STATES (PALM SPRINGS, CA IS 43°C).
 - 2) FOR LESS THAN 9 CURRENT-CARRYING CONDUCTORS IN ROOF-MOUNTED SUNLIT CONDUIT AND USING THE OUTDOOR DESIGN TEMPERATURE OF 47°C,
 - a) 12 AWG CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH I_{sc} OF 6.4 AMPS OR LESS WHEN PROTECTED BY A 10-AMP FUSE.
 - b) 10 AWG CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH I_{sc} OF 9.6 AMPS OR LESS WHEN PROTECTED BY A 15-AMP FUSE.

Generic Photovoltaic System Electrical Diagram for PV Systems of 10 kW or less				
				SIZE A
Drawn By:	SCALE	NTS	Date:	SHEET