



Bay County Builders Services
 840 W. 11th ST.
 Panama City, FL 32401
 850-248-8350 FAX: 850-248-8384

PERMIT APPLICATION

6th Edition Florida Building Code in effect

Residential Commercial New Construction Existing Building

Owner Name:	Phone:
Project Address:	
Contractor Name:	Phone:
Company Name:	
FAX Number:	
License or Comp Card Number:	

Electrical

Job Cost:	Square Footage:
Service Change AMPS:	Sign
Service Repair AMPS:	Mobile Home Pole
Temporary Construction Pole AMPS:	Pool
Rewire with Service Change	Pre-inspection for power
Additions without Service Change	New Circuits
New Construction	Low Voltage/Burglar Alarm
Miscellaneous Service Pole for (60 amps):	Solar Energy System

Mechanical

HVAC

HOOD VENT

Job Cost:	No. of Systems:
<small>R403.6.1 Equipment sizing. Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on the equipment loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies, based on building loads for the directional orientation of the building. The manufacturer and model number of the outdoor and indoor units (if split system) shall be submitted along with the sensible and total cooling capacities at the design conditions described in Section R302.1. This code does not allow designer safety factors, provisions for future expansion or other factors which affect equipment sizing. System sizing calculations shall not include loads created by local intermittent mechanical ventilation such as a standard kitchen and bathroom exhaust systems.</small>	

Plumbing

Job Cost:	Fixtures:	Water Heater:	Sewer Taps:
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Gas

Job Cost:	Water Heater/Vent:	Outlets:
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Roof

Replacement Roof Over

Squares:	Square Footage:	Job Cost:
Roofing Material:		

Security Alarm	Sq. Ft:	Annual Fire Inspection
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Application is hereby made to obtain a permit to do the work and installation as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work will be performed to meet the standards of all laws regulating construction in this jurisdiction. I understand that a separate permit must be secured for ELECTRICAL WORK, PLUMBING, SIGNS, POOLS, AIR CONDITIONERS etc.

I understand all REQUIRED INSPECTIONS will be requested of the work permitted herein. Compliance will be strictly enforced. This permit is VOID after six (6) months from issuance unless the work it covers has been commenced and has had ongoing inspections. The Building Official may revoke this permit or remove service, in such case as there has been any false statement or misrepresentation as to the material fact in the application or plans, upon which this permit was based.

Signature of Owner/Contractor

Date



NOTICE OF COMMENCEMENT

Permit No. _____
State of Florida
County of Bay

Tax Folio No. _____

To Whom It May Concern:

The undersigned hereby gives Notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

Description of property (legal description of the property, and street address if available): _____

General description of improvement: _____

Owner Name: _____

Address: _____

Owner's interest in site of the improvement: _____

Fee Simple Titleholder Name: _____

Address: _____

Contractor Name: _____

Address: _____

Phone Number: _____

Payment Bond Surety: _____

Address: _____

Phone Number: _____ Amount of Bond: \$ _____

Lender Name: _____

Address: _____

Phone Number: _____

Person within the State of Florida designated by Owner upon whom Notices or other documents may be served as provided by Section 713.13(1) (a) 7., Florida Statutes:

Name _____

Address _____

Phone Number: _____

In addition to himself or herself, Owner designates _____ of _____ to receive a copy of the Lienor's Notice as provided in Section 713.13(1) (b), Florida Statutes. Phone Number: _____

Expiration date of Notice of Commencement is one (1) year from date of recording unless a different date is specified _____.

Signature of Owner

Sworn to (or affirmed) and subscribed before me this _____ day of _____, 20____, by _____ (name of person making statement).

Signature of Notary Public (State of Florida)

NOTARY SEAL

Personally Known _____ or Produced Identification _____

Type of Identification Produced _____

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROVER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK ON RECORDING YOUR NOTICE OF COMMENCEMENT.



Florida Product Approval Affidavit

In complying with Chapter 17 of the Florida Building Code, I _____ as the contractor/builder, attest the structure to be built or renovated at _____ will comply with the established standards for performance of products and materials set forth by the product approval guidelines as required by 553.842 Florida Statute and 61G20-3 Florida Administrative Code.

Information and approval numbers of the building components will be available at the time of inspection of these products to the inspector on the jobsite: 1) copy of the product approval; 2) the performance characteristics which the product was tested and certified to comply with; and 3) copy of the applicable manufacturer's installation requirements. Further, I understand these products may have to be removed if approval cannot be demonstrated during inspection.

Applicant signature

Date

STATE OF FLORIDA
COUNTY OF BAY

Sworn to (or affirmed) and subscribed before me this _____ day of _____
20_____, by _____.

(Signature of Notary Public - State of Florida)
(Notary Stamp or Seal)

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

Photovoltaic Checklist

Photovoltaic Solar Permit Guidelines

For the successful completion of your application, the following process is required:

1. Miscellaneous Application
2. Notice of Commencement (if applicable)
3. Owner Builder Affidavit (if owns and occupies)
4. Identify the on-site location (site plan) showing all related equipment.
 - a. Indicate back-up battery location¹
5. Rough layout showing location of solar panels on roof (2 copies) (see fillable example)
6. Photovoltaic Engineering (2 copies) (see fillable example)
 - a. Panels mount (tie down) structural attachment

Code Compliance Information

1. All information, drawings, specifications and accompanying data shall bear the name and signature of the person responsible for the design. Refer to 106.1 Florida Building Code and 471.003.2(h)2.a Florida Statute: Identification of design professional of the photovoltaic system.
2. Chapter 16 Florida Building Code: structural mounting, attachments and design of all equipment shall be F.B.C. 2007 compliant.
3. 304.4.1. and 502.5.3 of the Florida Building Code. Are storage batteries being used? If so, size and type?
4. Has mechanical (battery ventilation) and fire requirements been addressed, as necessary?
5. Chapter III NEC (National Electrical Code): Identify type and size of conductors, conduit or raceways. Is it suitable for installation in the outdoor (sun, heat and wet) environment?

¹ Applied for by a Solar contractor. Electric is applied for by Subcontractor.

Photovoltaic Checklist

6. 110.3(B) NEC Installation and use all equipment shall be installed per instructions on it's listing or labeling.
7. Transfer switch, manual or automatic. Detail to be shown for all switching equipment and methods from and to public utility electrical system.
8. 240.24. NEC: Each occupant shall have ready access to all over current devices which protect the conductors and equipment of that occupancy.
9. Photovoltaic installations shall comply with all National Electric Code requirements, especially those stipulated in article 690 of the 2005 (NEC):
 - a. 690.4(c) NEC: Identify services string connections, not to interrupt conductors if a module is removed.
 - b. 690.4(d) NEC: Provide specifications of inverter, and assure identification for use in solar photovoltaic systems.
 - c. 690.5. NEC: ground fault protection requirements satisfied?
 - d. 690.6. NEC: inverter modules device and systems.
 - e. 690.8(A) NEC: Technical data. Show calculations which were used to derive the maximum circuit current.
 - f. 250 NEC: Detail grounding electrode system of utility service and photovoltaic system.
 - g. 690 III NEC: Identify location of disconnecting means and other related P.V. systems at this structure.
 - h. 690 IV NEC: use approved wiring methods.

[Click here](#) for the Expedited Permit Process for PV Systems Help Guide or visit www.solarabcs.org.

Photovoltaic Checklist

Permit Process for Small-Scale PV Systems

The information in this guideline is intended to help local jurisdictions and contractors identify when PV system installations are simple, needing only a basic review, and when an installation is more complex. It is likely that 50%-75% of all residential systems will comply with these simple criteria. For projects that fail to meet the simple criteria, a resolution steps may be suggested to provide a path to permit approval.

Required information for Permit:

1. Site plan showing location of major components on the property. This drawing need not be exactly to scale, but it should represent relative location of components at site (see supplied example site plan). PV arrays on dwellings with a 3' perimeter space at ridge and sides may not need separate fire service review.
2. Electrical diagram showing PV array configuration, wiring system, overcurrent protection, inverter, disconnects, required signs, and ac connection to building (see supplied standard electrical diagram).
3. Specification sheets and installation manuals (if available) for all manufactured components including, but not limited to, PV modules, inverter(s), combiner box, disconnects, and mounting system.

Step 1: Structural Review of PV Array Mounting System

Roofing Information:

Is the array to be mounted on a defined, permitted roof structure? Yes No

If No due to non-compliant roof or a ground mount, submit completed worksheet for the structure WKS1.

1. Is the roofing type lightweight (Yes = composition, lightweight masonry, metal, etc...) _____

If No, submit completed worksheet for roof structure WKS1 (No = heavy masonry, slate, etc...).

2. Does the roof have a single roof covering Yes No

If No, submit completed worksheet for roof structure WKS1.

Mounting System Information:

1. Provide details of structural attachment certified by a design professional
2. For manufactured mounting systems, fill out information on the mounting system below:

Photovoltaic Checklist

- a. Mounting System Manufacturer _____ Product Name and Model # _____
- b. Total Weight of PV Modules and Rails _____ lbs
- c. Total Number of Attachment Points _____
- d. Weight per Attachment Point ($b \div c$) _____ lbs (if greater than 40 lbs, see WKS1)
- e. Maximum Spacing Between Attachment Points on a Rail _____ inches (see product manual for maximum spacing allowed based on maximum design wide speed)
- f. Total Surface Area of PV Modules (square feet) _____ ft^2
- g. Distributed Weight of PV Module on Roof ($b \div f$) _____ lbs/ft^2
If distributed weight of the PV system is greater than 5 lbs/ft^2 , see WKS1.

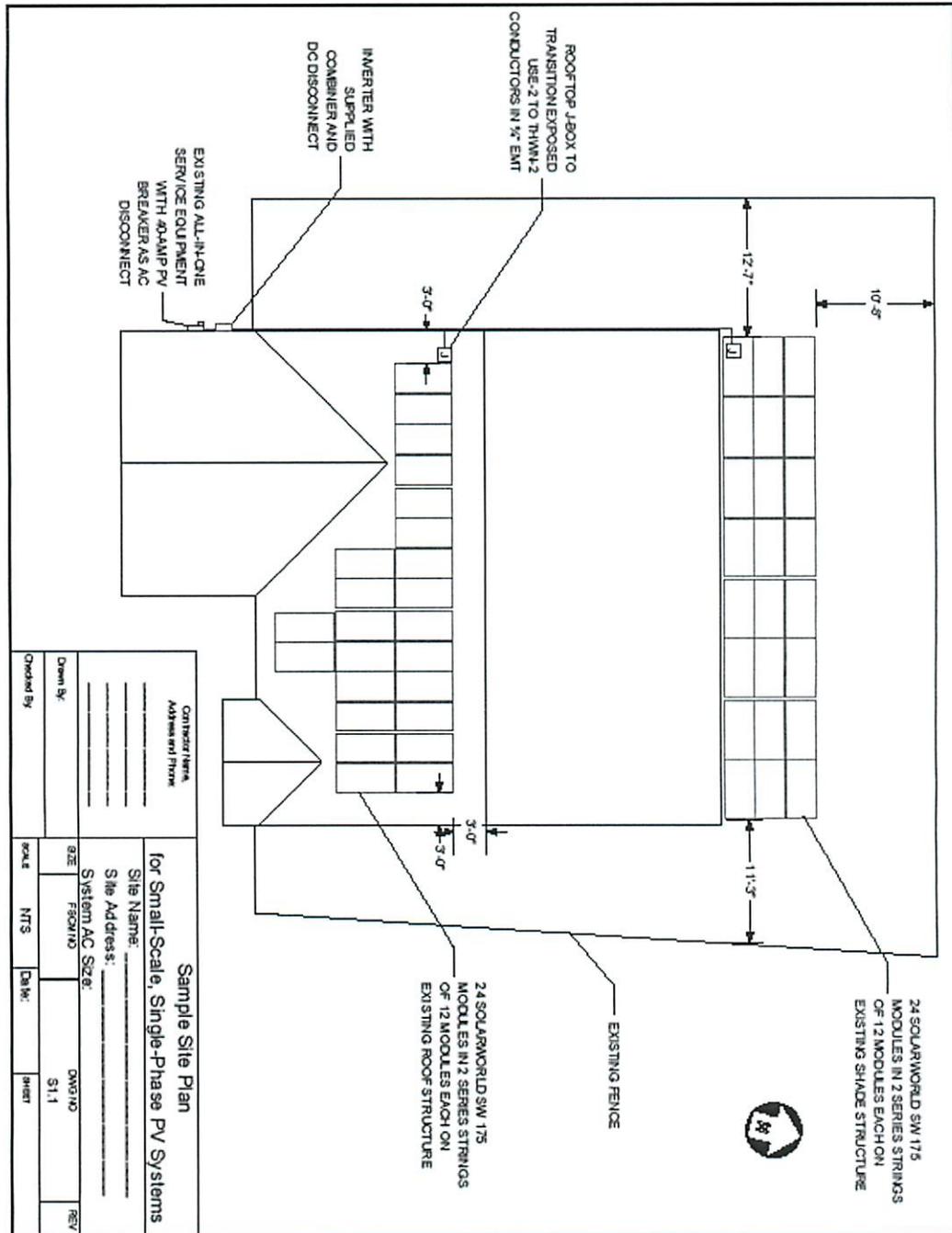
Step 2: Electrical Review of PV System (Calculations for Electrical Diagram)

In order for a PV system to be considered for an expedited permit process, the following must apply:

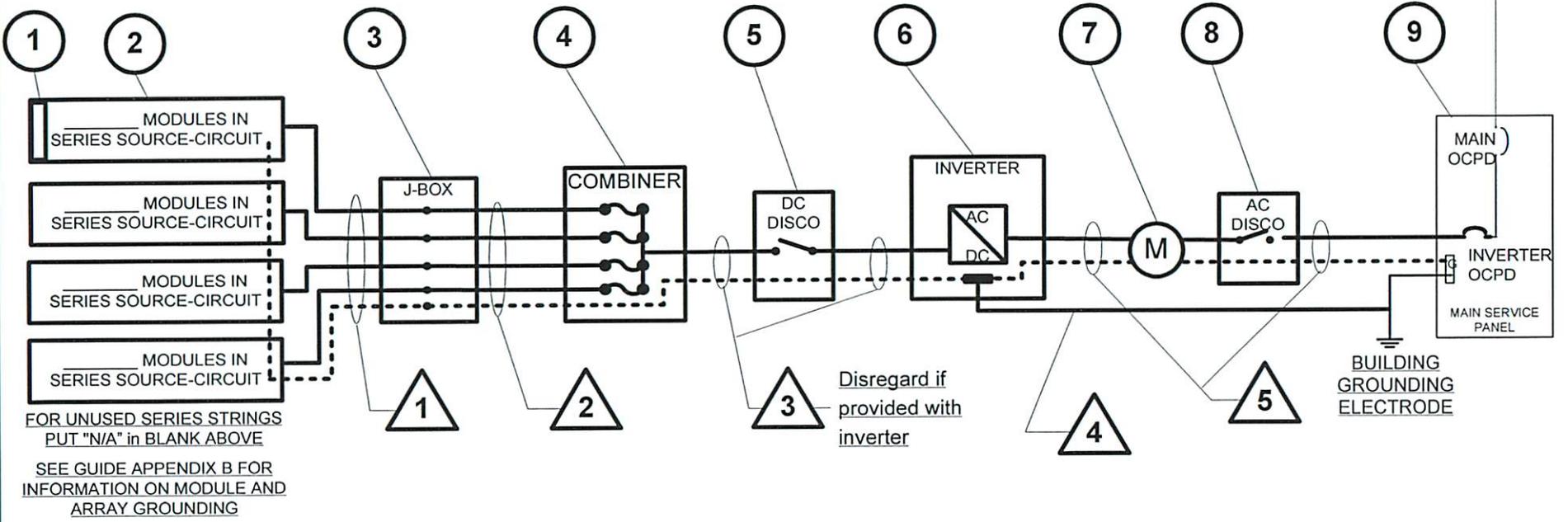
1. PV modules, utility-interactive inverters, and combiner boxes are identified for use in PV systems.
2. The PV array is composed of 4 series strings or less per inverter, and 15 kW_{STC} or less.
3. The total inverter capacity has a continuous power output 13,440 Watts or less.
4. The ac interconnection point is on the load side of service disconnecting means (690.64(B)).
5. The electrical diagram (E1.1 on page 4) can be used to accurately represent the PV system.

Fill out the standard electrical diagram completely. A guide to the electrical diagram is provided to help the applicant understand each blank to fill in. If the electrical system is more complex than the standard electrical diagram can effectively communicate, provide an alternative diagram with appropriate detail.

Layout Example



EQUIPMENT SCHEDULE			
TAG	DESCRIPTION	PART NUMBER	NOTES
1	SOLAR PV MODULE		
2	PV ARRAY		
3	J-BOX (IF USED)		
4	COMBINER (IF USED)		
5	DC DISCONNECT		
6	DC/AC INVERTER		
7	GEN METER (IF USED)		
8	AC DISCONNECT (IF USED)		
9	SERVICE PANEL		____ VAC, ____ A MAIN, ____ A BUS, ____ A INVERTER OCPD (SEE NOTE 5 FOR INVERTER OCPDs, ALSO SEE GUIDE SECTION 9)



CONDUIT AND CONDUCTOR SCHEDULE					
TAG	DESCRIPTION OR CONDUCTOR TYPE	COND. GAUGE	NUMBER OF CONDUCTORS	CONDUIT TYPE	CONDUIT SIZE
1	USE-2 <input type="checkbox"/> or PV WIRE <input type="checkbox"/> BARE COPPER EQ. GRD. COND. (EGC)			N/A	N/A
2	THWN-2 <input type="checkbox"/> or XHHW-2 <input type="checkbox"/> or RHW-2 <input type="checkbox"/>				
3	THWN-2 <input type="checkbox"/> or XHHW-2 <input type="checkbox"/> or RHW-2 <input type="checkbox"/> INSULATED EGC				
4	DC GROUNDING ELECTRODE COND.				
5	THWN-2 <input type="checkbox"/> or XHHW-2 <input type="checkbox"/> or RHW-2 <input type="checkbox"/> INSULATED EGC				

Contractor Name,
Address and Phone:

Drawn By: _____

Checked By: _____

One-Line Standard Electrical Diagram for Small-Scale, Single-Phase PV Systems

Site Name: _____

Site Address: _____

System AC Size: _____

SIZE	FSCM NO	DWG NO	REV
		E1.1	

SCALE	NTS	Date:	SHEET
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PV MODULE RATINGS @ STC (Guide Section 5)

MODULE MAKE	
MODULE MODEL	
MAX POWER-POINT CURRENT (I_{mp})	A
MAX POWER-POINT VOLTAGE (V_{mp})	V
OPEN-CIRCUIT VOLTAGE (V_{oc})	V
SHORT-CIRCUIT CURRENT (I_{sc})	A
MAX SERIES FUSE (OCPD)	A
MAXIMUM POWER (P_{max})	W
MAX VOLTAGE (TYP 600V _{DC})	V
VOC TEMP COEFF (mV/°C <input type="checkbox"/> or %/°C <input type="checkbox"/>)	
IF COEFF SUPPLIED, CIRCLE UNITS	

NOTES FOR ALL DRAWINGS:

OCPD = OVERCURRENT PROTECTION DEVICE
 NATIONAL ELECTRICAL CODE® REFERENCES
 SHOWN AS (NEC XXX.XX)

INVERTER RATINGS (Guide Section 4)

INVERTER MAKE	
INVERTER MODEL	
MAX DC VOLT RATING	V
MAX POWER @ 40°C	W
NOMINAL AC VOLTAGE	V
MAX AC CURRENT	A
MAX OCPD RATING	A

SIGNS-SEE GUIDE SECTION 7

SIGN FOR DC DISCONNECT

PHOTOVOLTAIC POWER SOURCE	
RATED MPP CURRENT	A
RATED MPP VOLTAGE	V
MAX SYSTEM VOLTAGE	V
MAX CIRCUIT CURRENT	A

WARNING: ELECTRICAL SHOCK
 HAZARD-LINE AND LOAD MAY BE
 ENERGIZED IN OPEN POSITION

SIGN FOR INVERTER OCPD AND
 AC DISCONNECT (IF USED)

SOLAR PV SYSTEM	
AC POINT OF CONNECTION	A
AC OUTPUT CURRENT	A
NOMINAL AC VOLTAGE	V

THIS PANEL FED BY MULTIPLE
 SOURCES (UTILITY AND SOLAR)

NOTES FOR ARRAY CIRCUIT WIRING (Guide Section 6 and 8 and Appendix D):

- 1.) LOWEST EXPECT AMBIENT TEMPERATURE BASED ON ASHRAE MINIMUM MEAN EXTREME DRY BULB TEMPERATURE FOR ASHRAE LOCATION MOST SIMILAR TO INSTALLATION LOCATION. LOWEST EXPECTED AMBIENT TEMP _____ °C
- 2.) HIGHEST CONTINUOUS AMBIENT TEMPERATURE BASED ON ASHRAE HIGHEST MONTH 2% DRY BULB TEMPERATURE FOR ASHRAE LOCATION MOST SIMILAR TO INSTALLATION LOCATION. HIGHEST CONTINUOUS TEMPERATURE _____ °C
- 2.) 2005 ASHRAE FUNDAMENTALS 2% DESIGN TEMPERATURES DO NOT EXCEED 47°C IN THE UNITED STATES (PALM SPRINGS, CA IS 44.1°C). FOR LESS THAN 9 CURRENT-CARRYING CONDUCTORS IN ROOF-MOUNTED SUNLIT CONDUIT AT LEAST 0.5" ABOVE ROOF AND USING THE OUTDOOR DESIGN TEMPERATURE OF 47°C OR LESS (ALL OF UNITED STATES),
 - a) 12 AWG, 90°C CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH I_{sc} OF 7.68 AMPS OR LESS WHEN PROTECTED BY A 12-AMP OR SMALLER FUSE.
 - b) 10 AWG, 90°C CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH I_{sc} OF 9.6 AMPS OR LESS WHEN PROTECTED BY A 15-AMP OR SMALLER FUSE.

NOTES FOR INVERTER CIRCUITS (Guide Section 8 and 9):

- 1) IF UTILITY REQUIRES A VISIBLE-BREAK SWITCH, DOES THIS SWITCH MEET THE REQUIREMENT? YES NO N/A
- 2) IF GENERATION METER REQUIRED, DOES THIS METER SOCKET MEET THE REQUIREMENT? YES NO N/A
- 3) SIZE PHOTOVOLTAIC POWER SOURCE (DC) CONDUCTORS BASED ON MAX CURRENT ON NEC 690.53 SIGN OR OCPD RATING AT DISCONNECT
- 4) SIZE INVERTER OUTPUT CIRCUIT (AC) CONDUCTORS ACCORDING TO INVERTER OCPD AMPERE RATING. (See Guide Section 9)
- 5) TOTAL OF _____ INVERTER OCPD(S). ONE FOR EACH INVERTER. DOES TOTAL SUPPLY BREAKERS COMPLY WITH 120% BUSBAR EXCEPTION IN 690.64(B)(2)(a)? YES NO

Contractor Name,
 Address and Phone:

Notes for One-Line Standard Electrical
 Diagram for Single-Phase PV Systems

Site Name: _____
 Site Address: _____
 System AC Size: _____

Drawn By:	SIZE	FSCM NO	DWG NO	REV
Checked By:	SCALE	NTS	Date:	SHEET