

SAMPLE DOCUMENT ONLY

This sample is for illustrative purposes only and meant to provide general guidelines. Actual project information may be different or more detailed.

APPENDIX XIII PROJECT SPECIFICATIONS AND CONTRACT CAPACITY CALCULATION

I. PROJECT SPECIFICATIONS

“MVA” means megavolt ampere, the unit of apparent power.

“Nameplate Rated Output” means, with respect to an inverter or electric generator, the MVA that the manufacturer of the inverter or generator has designed such equipment to produce under normal operating conditions as specified by such manufacturer.

“Designated Power Factor” means, with respect to an inverter or electric generator, the power factor required to satisfy the portion of the Project’s reactive power requirements that are specified in *[please identify the applicable source, such as the PTO’s Interconnection Handbook, the CAISO’s Phase II Study, or the Generator Interconnection Agreement for the Project]* and are not being satisfied by other sources of reactive power within the Project.

“Nameplate Rated Power” means, with respect to an inverter or electric generator, the multiplication product of the Nameplate Rated Output and the Designated Power Factor for such inverter or generator, in MWs.

The project specifications shall consist of the following eleven (11) items (each item of which shall be a “Project Specification”). As provided in Section 3.1(g), Seller shall not make any change or modification to any Project Specification without Buyer’s prior written consent.

1. Project name: **Candlestick Solar Project**
 2. Project Site name: **Candlestick Solar**
 3. Project physical address: **490 Jamestown Avenue, San Francisco, CA 94124**
 4. Total number of Units at the Project: **1**
 5. Technology Type: **Solar PV**
 6. Interconnection Point of Project: **PG&E’s 115 kV Candlestick Substation**
 7. Service Territory of Project: **PG&E**
 8. Substation: **Candlestick**
 9. Description of Units: ***[delete inapplicable project types]16.0 MW PV project with 1344 Solar Frontier Thin Film CdTe panels and 21 SMA 800CP-US inverters.***
- **For a Solar PV Project**

- a. For each type of inverter in the Project, specify in the table below the type, the number of inverters, the Nameplate Rated Output, the total Nameplate Rated Output, the Designated Power Factor, the Nameplate Rated Power and the total Nameplate Rated Power: *[add rows as needed]*

Inverter Type	Number of Inverters	Nameplate Rated Output (MVA)		Designated Power Factor	Nameplate Rated Power (MW)	
		Per Inverter	Total		Per Inverter	Total
SMA 800CP-US	21	.88	18.48	0.909	.8	16.8
Total		N/A			N/A	

- b. For each type of panel technology (e.g., multi-crystalline silicon, mono-crystalline silicon, thin-film CdTe, multi-junction, bifacial, concentrating, etc.) and each type of panel orientation (e.g., fixed-mount, tilt-angle, azimuth, single-axis tracker, double axis tracker, etc.) specify in the table below the technology, the type of orientation and the total DC rating at Standard Test Conditions: *[add rows as needed]*

Panel Technology	Orientation	DC Rating at STC (MW _{DC})
Thin Film CdTe	Single-Axis Tracker	20.16
Total	N/A	20.16

“Standard Test Conditions” means, with respect to determining the nameplate DC rating of a solar PV panel in a factory flash test, an irradiance of 1,000 W/m², a panel temperature of 25°C, and an air mass of 1.5.

- **For a Solar Thermal Project**

- Specify the total area (square meters) of solar mirrors (or of apertures for parabolic mirrors):
- Specify the technology (e.g., parabolic trough, power tower, parabolic disk) and the storage medium and capacity, etc.:
- For each steam turbine, specify the rated conditions (MW rating, steam inlet temperature, steam inlet pressure, condensing temperature, mass flow rate):
- For each electric generator, specify the Nameplate Rated Output, Designated Power Factor and Nameplate Rated Power:

- **For a Wind Project**

For each type of turbine, specify the Nameplate Rated Output, Designated Power Factor and Nameplate Rated Power and the rated output wind speed (m/s):

- **For a Biomass or Geothermal Steam Project**

- a. For each steam turbine, specify the rated conditions (MW rating, steam inlet temperature, steam inlet pressure, condensing temperature, mass flow rate):
- b. For each electric generator, specify the Nameplate Rated Output, Designated Power Factor and Nameplate Rated Power:

10. Description of Land:

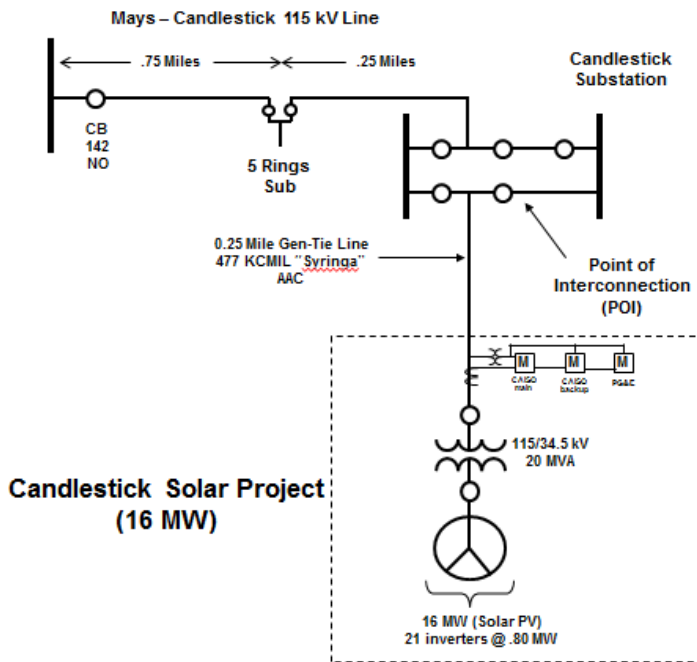
The Site contains the following Assessor Parcel Numbers upon which the Project is located and as identified on the topographical map included in this Appendix XIII:

[Insert Map] **APN: 5000/001**

11. Description of Interconnection Facilities and metering:

The Project will use the following Interconnection Facilities and metering configuration as identified in this one-line diagram included in this Appendix XIII:

[Insert One-Line Diagram for Interconnection Facilities and Metering]



12. Maps: The Site is identified in the following topographical map:

[INSERT MAP]



II. CONTRACT CAPACITY CALCULATION

The Contract Capacity specified in Section B of the Cover Sheet shall be the factor (A) minus each of the factors (B) through (E) provided below:

A	Sum of the Nameplate Rated Power of all inverters/generators	__16.8__ MW
B	Calculated electrical losses from inverter/generator output terminals to Delivery Point (with all inverters/generators operating at Nameplate Rated Outputs)	__.6__ MW
C	Electrical Losses	__0__ MW
D	Auxiliary and station loads coincident with inverters/generators operating at Nameplate Rated Outputs	__.2__ MW
E	Other factors (explain below)	__0__ MW
F	Contract Capacity at the Delivery Point (F = A – B – C – D – E), which shall be	__16.0__ MW

the same as the MW amount specified for the Contract Capacity in Section B of
the Cover Sheet

Inputs for the Nameplate Rated Power calculation:

Designated Power Factor:

	Leading	Lagging
Project power factor requirements	<u>_.95__</u>	<u>_.95__</u>
Seller's Designated Power Factor for inverters/generators	<u>_.909__</u>	<u>_.909__</u>

Power factor requirement is measured at (check one):

inverter/generator terminals; Point of Interconnection; Other: _____