GREENT	ECH®	Denver		Phone nun	nber 303-62	23-1233	Email: bhuesk	e@ceddenver.com
All Fields must be filled in to support the provident of	b allow the CEI	D Greentech pe	ersonnel to do	a complete	analysis of the	ne project and be specific installati	e able to provid	le a complete ion is only as
accurate as the information	provided. If d	rawings are ava	ailable please	provide then	n along with	the filled out que	stionnaire.	
Date Submitted:				С	EDGT Job	o#	-	
A. Project Inform	ation							
Pr	oject Name							
Proje	ct Bid Date							
Special Requirem	ents for Bid							
Engineer Name a	nd Address							
B Profit Center I	naria							
Profit Cente	r Location:					PC #		
Profit Cente	r Address:							
	City			State	e	Zip Code		
Salesman Name		Ph	one Number			E-Mail		
C. Customer Info	rmation							
Cust	omer Name							
Custom	ner Address							
Cus	stomer City			State	э	Zip Code:		
D. System Locati	on Inform	nation						
Project Ov	ner Name:							
	Address 1:							
	Address 2 <sup>.</sup>							
City:	/1001000 2.		State:			Zip Code:		
Latitude		Degrees		Minutes	North			
Longitude:		Degrees		Minutes	West			
Elevation:		Height	of Building		_			
Obstructions:								
Roof Material					Monolithic Me	mbrane. Tar and Grav	el Shingle etc	
Age of Roof:		Give a rough e	stimate				ci, oningie cie.	
Dime	nsions of Ro	of Surface	ouniato	East to West		North To South		
Structure	of Roof:						Twin Tee Precast	Bar Joist with Metal Deck
Roof Pitch		True (	Drientation				1	
or Dimensions	of Ground I	Mount Area		East to West	-	North To South		
Utility Company								
Grid Voltage		Voltage		Phase				
Existing pa	anel or seriv	ce ratina		Amps				
p					Devidential O	ammercial Caut etc.		
Location Lyne								

1. Country of Origin Re	quirements					
ARRA or Made	irement		Yes		No	
Other Special S	/stem Requireme	ents:				
2 Module Requirement	S					
2. Monufacturor	5					
Wattage				-		
Other requirements		-			Black Frame, Fr	ameless, etc.
3 Inverter Requirement	s					
SMA PV F	owered	Power One		Ennhase		
Wattage Volta	ge	Phase				_
4. Racking Requiremen	ts	-		-		
Manufacturer Preference						
Mounting Requirements				Roof Anchored.	Ballasted, ground	mount. etc.
Standoff Height Inche	es Flashir	ngs required		Yes		No
5. Rack Loading Requir	ements	• •		-		
See Instruction item #2 Wind L 0	adina: Exposure:		Max V	Vind Sneed		mph
See instruction term #2	ading: Zone:		Max V	Snow Load		_lbs/ft2
	ante			enen Leaa		100/112
6. Monitoring Requirem	ents	Maria		N1.		
Web Conn		_Yes				
On Site Mon	toring	_Yes				
Web A	ccess	_Yes				
Weather Station rec	quired	Yes		NO		
7. Grounding Requirem	ents					
Are WEEB clips allowed by the	e AHJ	Yes		No		
Is Lightning protection ree	quired	Yes		No		
Is TVSS no	eded	Yes		No		
8. Off Grid System Info	mation					
Maximum Load at any one	ime		КW	See Instructions	item #3	
Average usage over a 24 h	our period		KWH	See instructions	item #4	
Largest Motor Load			Amps		HP	
Days of reserve for battery	oank	days	See instructions i	item #5		
Location for battery bank		Indoor		Outdoor		
Will ventilation be needed for	or battery cabine	t	Yes		No	
Desired Voltage for Battery	Bank	VDC	Choose from	12, 24, or 48		
9. Additional Informatio	n In the area below	v please enter any in	ormation regardi	ng the system that	would be relevan	t to the requested system
such as appealed mounting requirements, owni	a configuration or any othe	r appoint conditions t	hat wa naad ta bi	a awara of		
such as special mounting requirements, awing	ig conliguration of any othe	a special conditions i	nat we need to be	e aware or.		

## F. Facility Layout Sketch

Please include a Sketch of the roof / array layout and include the following:

1. Outside roof dimensions

2. Requested array layout and configuration

3. Location and size of exisitng obstructions on the roof

4.Expected mounting layout and other mounting requirements.

5.All potentially useful dimensions

6.Make sure to indicate North

7.Include any external obstructions such as trees and other buildings

 $\ensuremath{\mathsf{8.Mark}}$  locations of the inverter, power panels, and utility meter.

The information supplied is for the use of CED Greentech Denver to develop a quotation for the materials necessary to build a photovoltaic system. The quotation is only as accurate as the information supplied and no assumptions will be made. If you have any questions regarding the completion of this form please contact a representative of CED Greentech Denver to assist in getting the correct information entered. The more complete the information supplied the more complete the quotation will be. Balance of System materials will only be included if requested, if not the local Profit Center will be responsible to price the materials necessary to make the system complete. The base materials will include modules, inverters, racking, combiner panels, ground lugs for modules, ground wire if dimensions are given, and DC string wiring if dimensions are given.

## Instructions on completing Photovoltaic Questionnaire

1. Complete as many of the sections as you can, if the information is not available please put DNK if you do not know the information or NA if this does not apply to this system.

2. Regarding the exposure category please use the following codes:

**Exposure B** is urbanand suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of a single family dwellings.

**Exposure C** has open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurrican prone regions.

**Exposure D** has flat, unobstructed areas and water surfaces outside hurricane prone regions. This category includes smooth mud flats, salt flats, and unbroken ice. If uncertain please confirm your selection with the local building authority.

3. Regarding the maximum load at any one time, you will need to do an inventory of the electrical loads of the facility and determine all of the loads that may be on at any one time to determine maximum KW.

4. Regarding the average usage over a 24 hour period, you will need to either have historic data for an exsiting facility or take all of the loads from your inventory and estimate how long each item will run in a 24 hour day and total all of the KWH figures together to arrive at the KWH per day.

5. Regarding the days of reserve for the battery bank, this will be determined by how many days of power a customer would want the battery bank to have in reserve to supply power during an extended cloudy period when the sun would not support the loads and charge the batteries.

6. Wind load and snow load can be aquired from the local building department, if this is left blank we will assume that these figures are typical for the area and we will not guarantee the accuracy of the figures that we use and the rating of the racking may be questioned by the building department when a permit is applied for.

7. The question regarding WEEB clips if left empty or not allowed is checked we will include ground lugs for each module and rail, if WEEB clips are allowed we will include the appropriate clip for each module and ground lugs for each rail.

## Notes on what we will include in our quote unless otherwise requested.

1. We will include a pair of PV wire terminations for each string of PV modules that the system will require, we will not include the crimping tool necessary to install the terminations. We will include Amphenol H4 connectors on Phono modules and others that require this type of termination and Tyco terminations on Schott modules and others that have this type of termination.

2. If the system has multiple strings of modules we will include fused combiner boxes if the inverter that is quoted does not have a fused combiner included. We will include a DC disconnect if the inverter that is quoted does not have a DC disconnect included.

3. If we are given accurate dimensioned drawings with the request we will include the USE-2 or PV wire that would be necessary to go from the PV modules to the inverters and the bare ground wire necessary to go from the modules to the inverter. If we are not given enough information we will exclude this wire from our quote and the local PC or customer will be responsible for this wire.

4. We normally will not include any AC wiring or components unless specifically called for on the Quote request.