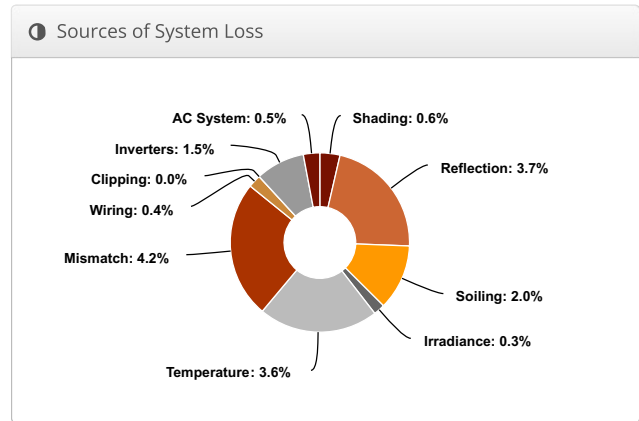
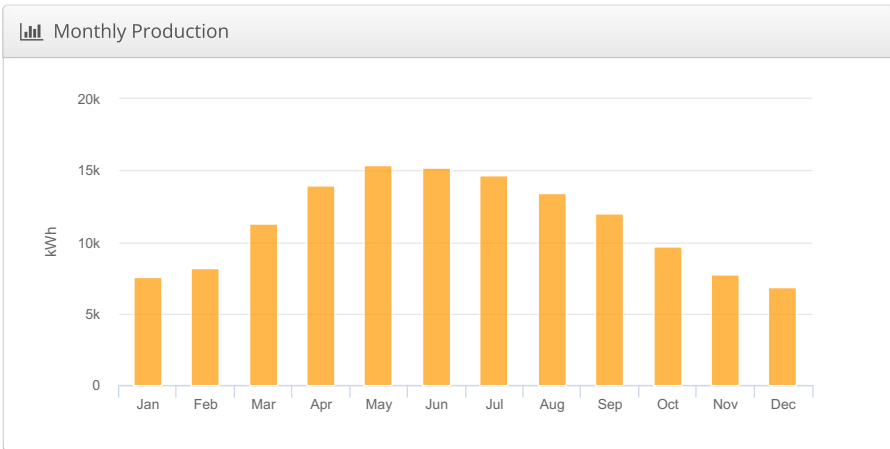
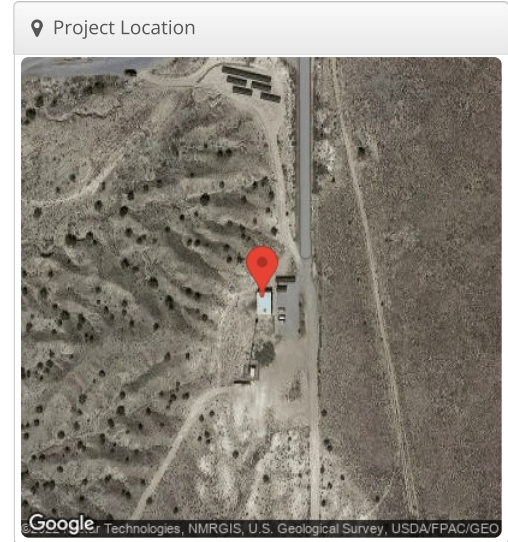


# Design 1 C | Cerro Colorado, 18000 Cerro Colorado Rd SW

Report	
Project Name	C   Cerro Colorado
Project Address	18000 Cerro Colorado Rd SW
Prepared By	OE Solar info@osceolaenergy.com

System Metrics	
Design	Design 1
Module DC Nameplate	78.8 kW
Inverter AC Nameplate	72.0 kW Load Ratio: 1.09
Annual Production	135.8 MWh
Performance Ratio	84.3%
kWh/kWp	1,724.8
Weather Dataset	TMY, 10km Grid (35.05,-106.85), NREL (prospector)
Simulator Version	976710bd6f-d16b7b72d4-0dcfd22a50-1d0eb092a8



Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m <sup>2</sup> )	Annual Global Horizontal Irradiance	2,057.1	
	POA Irradiance	2,046.0	-0.5%
	Shaded Irradiance	2,033.4	-0.6%
	Irradiance after Reflection	1,957.9	-3.7%
	Irradiance after Soiling	1,918.7	-2.0%
	<b>Total Collector Irradiance</b>	<b>1,918.6</b>	<b>0.0%</b>
Energy (kWh)	Nameplate	151,230.4	
	Output at Irradiance Levels	150,703.4	-0.3%
	Output at Cell Temperature Derate	145,204.8	-3.6%
	Output After Mismatch	139,136.4	-4.2%
	Optimal DC Output	138,596.2	-0.4%
	Constrained DC Output	138,592.2	0.0%
	Inverter Output	136,513.3	-1.5%
	<b>Energy to Grid</b>	<b>135,830.8</b>	<b>-0.5%</b>
Temperature Metrics			
	Avg. Operating Ambient Temp		16.9 °C
	Avg. Operating Cell Temp		27.1 °C
Simulation Metrics			
	Operating Hours	4650	
	Solved Hours	4650	

Condition Set												
Description	Condition Set 1											
Weather Dataset	TMY, 10km Grid (35.05,-106.85), NREL (prospector)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type	a	b	Temperature Delta								
	Fixed Tilt	-3.56	-0.075	3°C								
	Flush Mount	-2.81	-0.0455	0°C								
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	2	2	2	2	2	2	2	2	2	2	2	2
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	0.50%											
Module Characterizations	Module	Uploaded By										Characterization
	CS3U-375MS (1000V) (Canadian Solar)	HelioScope										Spec Sheet Characterization, PAN
Component Characterizations	Device	Uploaded By										Characterization
	PVI 36TL (Sollectria)	HelioScope										Spec Sheet Efficiency



Components		
Component	Name	Count
Inverters	PVI 36TL (Solectria)	2 (72.0 kW)
Strings	10 AWG (Copper)	12 (1,917.2 ft)
Module	Canadian Solar, CS3U-375MS (1000V) (375W)	210 (78.8 kW)

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	14-18	Along Racking

Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	East-West	Landscape (Horizontal)	10°	193°	0.0 ft	1x1	42	82	30.8 kW
Field Segment 1 (copy)	East-West	Landscape (Horizontal)	10°	193°	0.0 ft	1x1	16	32	12.0 kW
Field Segment 1 (copy 1)	East-West	Landscape (Horizontal)	10°	193°	0.0 ft	1x1	16	32	12.0 kW
Field Segment 1 (copy 2)	East-West	Landscape (Horizontal)	10°	193°	0.0 ft	1x1	16	32	12.0 kW
Field Segment 1 (copy 3)	East-West	Landscape (Horizontal)	10°	193°	0.0 ft	1x1	16	32	12.0 kW

Detailed Layout

