

Initial Design CP V2 (NM Cap) Rehrig Pacific Company - CA, 4010 E 26th St, Vernon, CA 90058

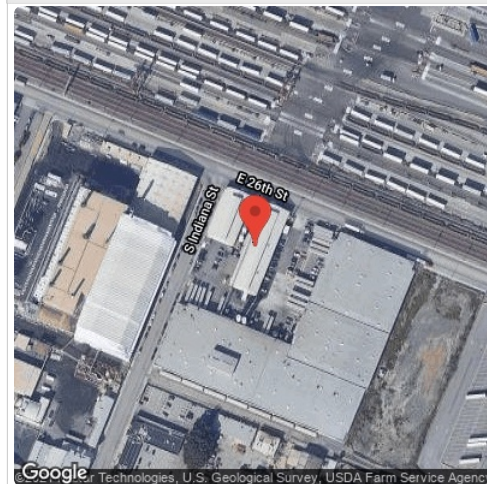
Report

Project Name	Rehrig Pacific Company - CA
Project Address	4010 E 26th St, Vernon, CA 90058
Prepared By	Calvin Preston cpreston@verdesolutions.com

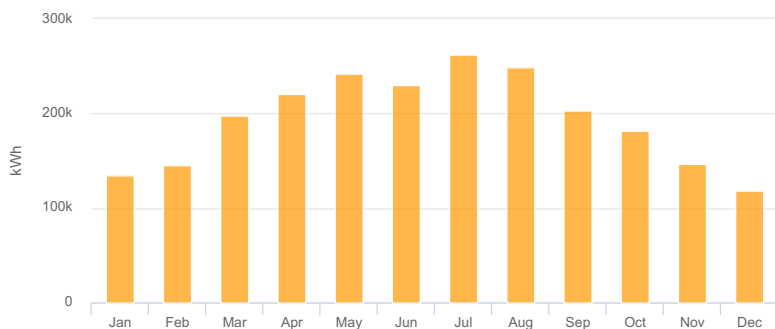
System Metrics

Design	Initial Design CP V2 (NM Cap)
Module DC Nameplate	1.35 MW
Inverter AC Nameplate	1,000.0 kW Load Ratio: 1.35
Annual Production	2.331 GWh
Performance Ratio	83.5%
kWh/kWp	1,733.2
Weather Dataset	TMY, 10km grid (34.05,-118.15), NREL (prospector)
Simulator Version	1e9ccd774f-254d8fa384-08bdb03a88-71b9b7d496

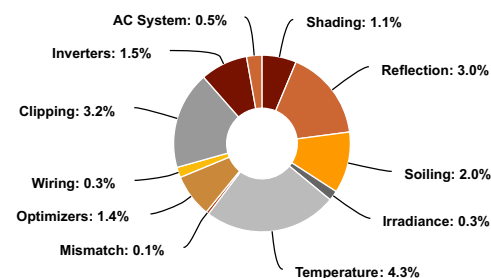
Project Location



Monthly Production



Sources of System Loss



Annual Production

	Description	Output	% Delta
Irradiance (kWh/m²)	Annual Global Horizontal Irradiance	1,935.9	
	POA Irradiance	2,076.7	7.3%
	Shaded Irradiance	2,053.3	-1.1%
	Irradiance after Reflection	1,992.6	-3.0%
	Irradiance after Soiling	1,952.7	-2.0%
	Total Collector Irradiance	1,952.7	0.0%
Energy (kWh)	Nameplate	2,625,972.3	
	Output at Irradiance Levels	2,617,367.2	-0.3%
	Output at Cell Temperature Derate	2,503,706.1	-4.3%
	Output After Mismatch	2,501,417.2	-0.1%
	Optimizer Output	2,466,316.7	-1.4%
	Optimal DC Output	2,458,010.6	-0.3%
	Constrained DC Output	2,379,737.8	-3.2%
	Inverter Output	2,342,955.5	-1.5%
	Energy to Grid	2,331,240.7	-0.5%
Temperature Metrics			
Avg. Operating Ambient Temp		18.0 °C	
Avg. Operating Cell Temp		28.8 °C	
Simulation Metrics			
		Operating Hours	4635
		Solved Hours	4635

Condition Set

Description	Condition Set 1												
Weather Dataset	TMY, 10km grid (34.05,-118.15), 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				
	Q.PEAK DUO L-G8.2 430 (Hanwha)					Folsom Labs			Spec Sheet Characterization, PAN				
Component Characterizations	Device			Uploaded By					Characterization				

Components

Component	Name	Count
Inverters	SE100KUS (SolarEdge)	10 (1,000.0 kW)
Strings	10 AWG (Copper)	90 (14,289.0 ft)
Optimizers	P860 (SolarEdge)	1,598 (1.37 MW)
Module	Hanwha, Q.PEAK DUO L-G8.2 430 (430W)	3,128 (1.35 MW)

Wiring Zones

Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	13-35	Along Racking

Field Segments

Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	10°	202.23306°	1.2 ft	1x1	1,223	1,223	525.9 kW
Field Segment 2	Fixed Tilt	Landscape (Horizontal)	10°	202.1522°	1.2 ft	1x1	881	881	378.8 kW
Field Segment 3	Fixed Tilt	Landscape (Horizontal)	10°	202.06857°	1.2 ft	1x1	1,024	1,024	440.3 kW
Field Segment 4	Fixed Tilt	Landscape (Horizontal)	10°	202.14339°	1.2 ft	1x1			0

Detailed Layout

