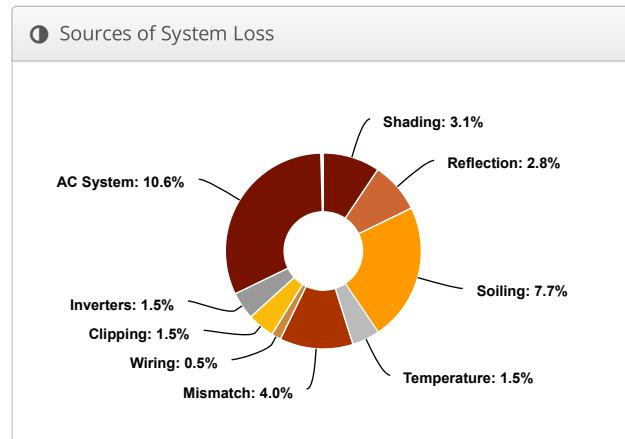
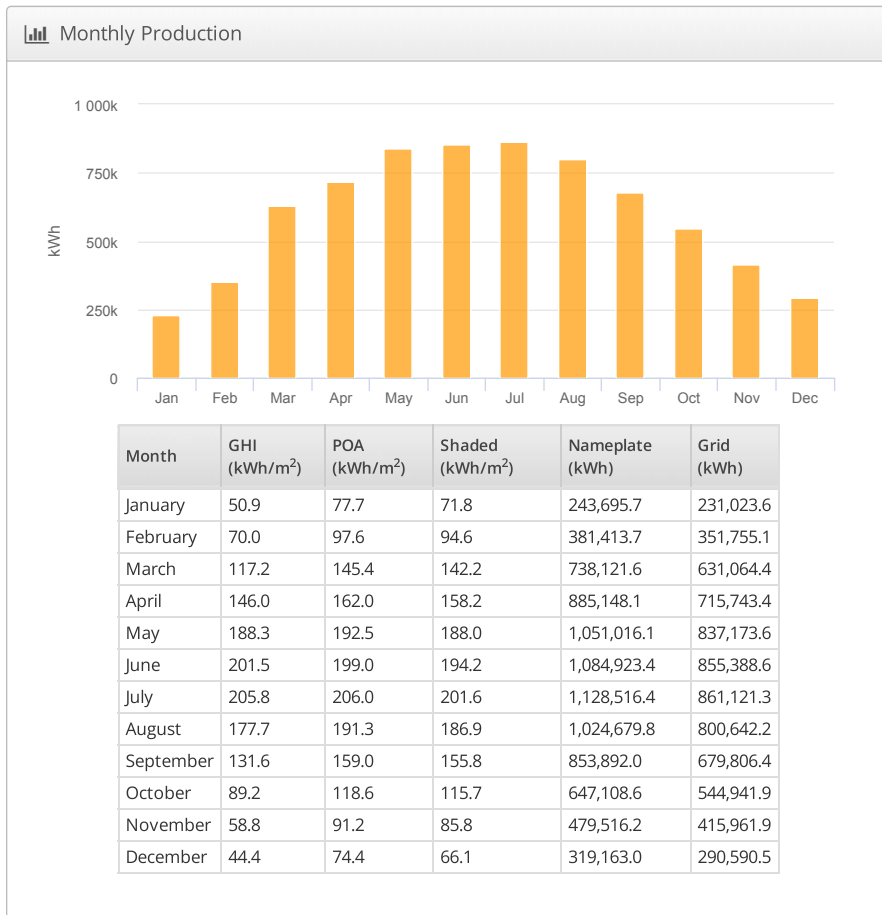
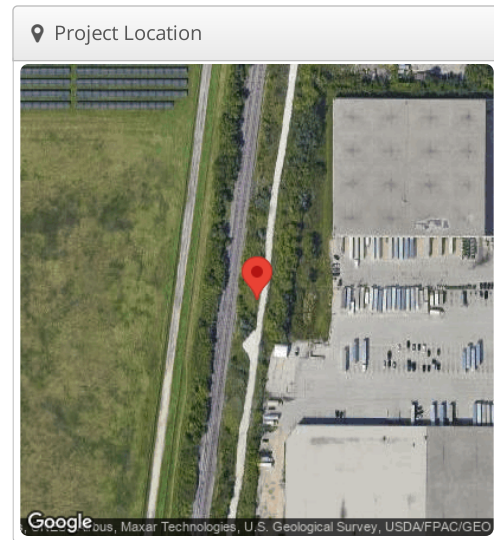


Fixed Racking City of Milwaukee- Landfill, 1600 E College Ave, Milwaukee WI

🔧 Report	
Project Name	City of Milwaukee- Landfill
Project Address	1600 E College Ave, Milwaukee WI
Prepared By	Adam Gusse adamg@sunvest.com

📊 System Metrics	
Design	Fixed Racking
Module DC Nameplate	5.93 MW
Inverter AC Nameplate	4.63 MW Load Ratio: 1.28
Annual Production	7.215 GWh
Performance Ratio	71.0%
kWh/kWp	1,217.1
Weather Dataset	TMY, 0.04° Grid (42.93,-87.9), NREL (psm3)
Simulator Version	8450893c5f-c3de092946-8dd4352693-bda843191e



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,481.5	
	POA Irradiance	1,714.6	15.7%
	Shaded Irradiance	1,660.9	-3.1%
	Irradiance after Reflection	1,614.3	-2.8%
	Irradiance after Soiling	1,490.0	-7.7%
	Total Collector Irradiance	1,489.9	0.0%
Energy (kWh)	Nameplate	8,837,194.8	
	Output at Irradiance Levels	8,849,226.5	0.1%
	Output at Cell Temperature Derate	8,713,582.2	-1.5%
	Output After Mismatch	8,361,850.5	-4.0%
	Optimal DC Output	8,317,264.9	-0.5%
	Constrained DC Output	8,194,076.4	-1.5%
	Inverter Output	8,069,849.0	-1.5%
		Energy to Grid	7,215,213.0
Temperature Metrics			
	Avg. Operating Ambient Temp		11.1 °C
	Avg. Operating Cell Temp		19.6 °C
Simulation Metrics			
	Operating Hours	4341	
	Solved Hours	4341	

☁ Condition Set												
Description	Condition Set 2											
Weather Dataset	TMY, 0.04° Grid (42.93,-87.9), NREL (psm3)											
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								
	East-West	-3.56	-0.075	3°C								
	Carport	-3.56	-0.075	3°C								
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	41	30	10	3	3	3	3	5	5	3	3	16
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	4.00%											
Module Characterizations	Module	Uploaded By	Characterization									
	CS7N-650MB-AG (CSI Solar Co., Ltd.)	HelioScope	CS7N-650MB-AG_CSI_EXT_V7_20_20220430.PAN, PAN									
Component Characterizations	Device	Uploaded By	Characterization									
	CPS SCH125KTL-DO/US-600 (Chint Power Systems)	HelioScope	Spec Sheet									

📦 Components		
Component	Name	Count
Inverters	CPS SCH125KTL-DO/US-600 (Chint Power Systems)	37 (4.63 MW)
AC Panels	9 input AC Panel	3
AC Panels	10 input AC Panel	1
AC Home Runs	10 AWG (Copper)	37 (15,074.9 ft)
AC Home Runs	500 MCM (Copper)	4 (13,716.2 ft)
Strings	10 AWG (Copper)	380 (111,906.1 ft)
Module	CSI Solar Co., Ltd., CS7N-650MB-AG (650W)	9,120 (5.93 MW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	24-24	Along Racking

🏠 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Portrait (Vertical)	25°	180°	18.3 ft	2x24	190	9,120	5.93 MW

Detailed Layout

