



Fantastic Solar 2021

FINAL Report

AUGUST 25

Industrial Aerobotics



Major Defects Analysis

This report is a high-level summary of the major issues found across the Fantastic Solar Site that are not operating as designed. This report is not intended to be used for repair of detected anomalies but only to get a general understanding of the scale and general areas of major issues found. The official DC Health Tracker report will have all defects located, type of defect, and identifier of its location so repair can be planned.

Executive Summary

Analysis shows that just under 4.5% of the site is showing heating and a potential energy loss of 9MW compared to 4% and 8MW in 2020.

Blocks/Inverters:

There were no Blocks/Inverters that were offline during the scan.

Trackers:

There were no large, wide-spread sections that had tracker issues. Overall, there were 184 inoperative trackers compared to 163 Trackers in 2020.

Combiner/Strings:

There is a very limited occurrence of complete Combiner outages and string outages are less than 1% on average per Inverter.

Hotspots:

As typical with CdTI Panels there were very few individual panels that were inoperative or containing "hotspots".

Year/Year Analysis:

There were 716 Strings that were inoperative in the 2020 scan that were not repaired or have subsequently failed again compared to 814 in 2019/2020. There are also 32 Trackers that were not repaired or have subsequently failed again compared to 68 in 2019/2020.

2021



2020



DC Health Tracker Summary:

Summary Section of Clearway DC Health Tracker Spreadsheet

Site Fantastic Solar																					
Test Information							Environmental Conditions					Equipment									
Test Team	Industrial Aerobotics						POA Irradiance (W/m²) > 600					Manufacturer/Model		FS-Series 4		No. of Modules per String		15			
Drone ID							Cloud Cover (okta) < 2					Inverter Type		760		Site Nominal DC power (MW)		202			
Camera ID	Flir XT2-640 Fast						Ambient Temp (°C) < 40					Module Nominal Power (W)		120		String Nominal Power (W)		1800			
							Wind Speed (m/s) < 7.78														
FINDINGS																					
Method	Total	Weight		DEFECTS	Inverters	Combiners	Individual Strings					Modules	Module Substrings	Trackers	Hot Spots	Total	Recovered				
Visual	0	0.0%			0	0						0	0	184	0	4.483%	0.000%				
Drone	5032	100.0%	Power Loss	0	0	8726400					0	0	331200	0							
Analytics	0	0.0%	Repaired	0	0	0					0	0	0	0							
			Recovered	0	0	0					0	0	0	0	0						

Sample Image of Issue Area:

All Images are available and will be provided upon request

TRACKERS-STRINGS-TABLES

