

Solar Maintenance - Overview

1	Name	Cybala 2
2	Address	
3	System size (kW)	
4	Is battery storage installed on-site	No
5	Is a Voltage optimiser installed on-site	Yes
6	Authorised Person	
7	Start date & time	28/06/2025 at 21:51
8	Roof access available	No
9	Cleaning performed	No
10	RAMs completed	No
11	Fireman's Switch	Yes
12	Weather	
13	Ambient temp	

System Components:

	Component	P / F / N/A	Failed on
1	Inverters / AC Distribution	Fail	Cable condition, connection tightness
2	Mains Connection	Pass	
3	PV Generator (DC Side)	N/A	
4	Electrical Testing	Pass	
5	Performance Checks	Pass	
6	Visual inspection	Pass	
7	System Safety Risks	Pass	
8	Battery Systems	Pass	
9	Voltage Optimiser	Pass	

System summary notes:

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Inspection Limitations:

No.	Limitations	Tick to confirm
1	Could not assess roof	
2	Could only assess roof visually (e.g. from cherrypicker or drone)	
3	Structural integrity not assessed	
4	No thermography performed	
5	No electrical testing carried out	
6	Could not isolate system	
7	No comms / logging check done	
8	I confirm that the above areas were not inspected or fall outside my competency	

Follow-up required	
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Follow-up details:

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Solar Maintenance - System Components

1. Inverters / AC Distribution

Inverter info:

Number of Inverters	1
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Inverter info	Complete
Inverter make	
Inverter Model	
Inverter serial number	
Size of inverter (kW)	
No. of strings on inverter	1

Inverter status (e.g. "Enter inverter display status or error code")	
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Tasks:

No.	Task	Pass / Fail / N/A
1	Inverters operating in "normal" mode	
2	No signs of overheat, noise, vibration	
3	Warning / hazard signs functional	
4	Door locks, humidity, internal condition checked	
5	Dust filters checked, replaced if needed	
6	Heat exchangers cleaned	
7	Labels readable and correctly placed	
8	Grounding system visually inspected	
9	Fuses / breakers / disconnections condition	
10	Fan functionality and noise assessed	
11	Cable condition, connection tightness	
12	Supply voltage within spec	
13	Surge protection working (if applicable)	
14	Ground insulation protection (if applicable)	
15	Comms cabling, HUBs, loggers working	
16	Maintenance aligns with inverted and O&M manual	

Fail: Cable condition, connection tightness

Category: 1

Is the system safe to generate?
No, I have disconnected the inverter. Smell of burn upon removing the inverter boot. Burnt connection found, most likely due to connection used (bad lug).

What remedial work was done?
DC isolators open, inverter removed from the system.

What needs to happen next?
Recommend that AC isolator and H07 flex is installed.

Media upload of Fail:

Inverter notes:

2. Mains Connection

Tasks:

No.	Task	Pass / Fail / N/A
1	Warning / hazard signs present	
2	Labels correct and visible	
3	Entrance barriers assessed (if applicable)	
4	Mains connection tightness / no burns	
5	Breaker operates mechanically	
6	Protection device rating correct	

Mains Connection notes:

3. PV Generator (DC Side)

Modules soiling / shading:

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Media upload:

Tasks:

No.	Task	Pass / Fail / N/A
1	PV frame screw options (5% sample)	
2	Frame construction stability (5% sample)	
3	Module fixing to frame (5% sample)	
4	DC connectors test (5% sample)	
5	Solar cable condition / fixing (5% sample)	
6	Grounding connections cleaned & checked	
7	Modules mechanically intact, no discolouration	
8	Thermography of modules / connections (5%)	
9	Further 5% test if fault detected	

String Tests:

Polarity Check: Yes

String		1	2	3	4	5	6	7	8
String Test	Voc(V)								
	Isc(A)								
	Irradiance								
Array Test insulation	Test Voltage (V)								
	Pos – Earth (MΩ)								
	NEG – Earth (MΩ)								

PV Generator (DC Side) notes:

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4. Electrical Testing

Tasks:

No.	Task	Pass / Fail / N/A
1	Voc within acceptable range	
2	Isc measuring safely	
3	Isulation resistance within limit	
4	Earth continuity tested	
5	Inverter functional test	
6	RCD trip tested (if installed)	

Electrical Testing notes:

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5. Performance Checks

Tasks:

No.	Task	Yes / No
1	Generation meter reading logged	

No.	Task	kWh
2	Export Value (kWh)	

No.	Task	Yes / No
3	Output vs expected (adjusted)	
4	Inverter logs reviewed	

No.	Task	Pass / Fail / N/A
5	Monitor and comms working	

Performance checking notes:

6. Visual Inspection

Tasks:

No.	Task	Pass / Fail / N/A
1	PV modules visually sound (no damage, soiling)	
2	Mounting system secure, corrosion-free	
3	Cables intact, fixes, UV-resistant	
4	Signage & labels present, legible	

No.	Task	Yes / No
5	Signs of birds nesting, droppings or wildlife interference (may impact performance or safety)?	

Photos:

No.	Task	Yes / No
6	Debris, leaves or obstruction under panels (may impact performance or safety)?	

Photos:

Visual Inspection notes:

7. System Safety Risks

Tasks:

No.	Task	Pass / Fail / N/A
1	Are MC4 connectors secure, matched and undamaged? (5% sample)	
2	Are DC cables elevated and free from mechanical abrasion?	
3	Any signs of electrical arcing, scorching or melted insulation?	

No.	Task	Yes / No
4	Were thermal images taken for this system?	

Photos:

No.	Task	Yes / No / N/A
5	Any hotspots identified (e.g. connectors, junction boxes)?	
6	Cleaning method checked - no signs of damage from high pressure washing or aggressive brushing?	

System Safety notes:

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8. Battery Storage

Battery info:

Number of Batteries	1
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Inverter info	Complete
Battery make	
Battery Model	
Battery serial number	
Size of Battery (kW)	

Battery status (e.g. "Enter battery display status or error code")	
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Tasks:

No.	Task	Pass / Fail / N/A
1	Battery location safe and compliant (e.g. ventilated, non-combustible surface)	
2	Signs of overheating, restricted airflow, or obstruction	

Battery Storage notes:

9. Voltage Optimiser (VO)

Voltage Optimiser info:

Number of VO's	3
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VO Info	Complete
VO make	Chicano
VO Model	Belea
VO serial number	Mirc
Size of VO (kW)	124
VO status (e.g. "Enter VO display status or error code")	Haha

VO Info	Complete
VO make	
VO Model	Teddy
VO serial number	
Size of VO (kW)	

VO status (e.g. "Enter VO display status or error code")	
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VO Info	Complete
VO make	
VO Model	
VO serial number	
Size of VO (kW)	
VO status (e.g. "Enter VO display status or error code")	

Tasks:

No.	Task	Pass / Fail / N/A
1	VO location safe and compliant (e.g. ventilated, non-combustible surface)	
2	Signs of overheating, restricted airflow, or obstruction	

Voltage Optimiser notes:

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