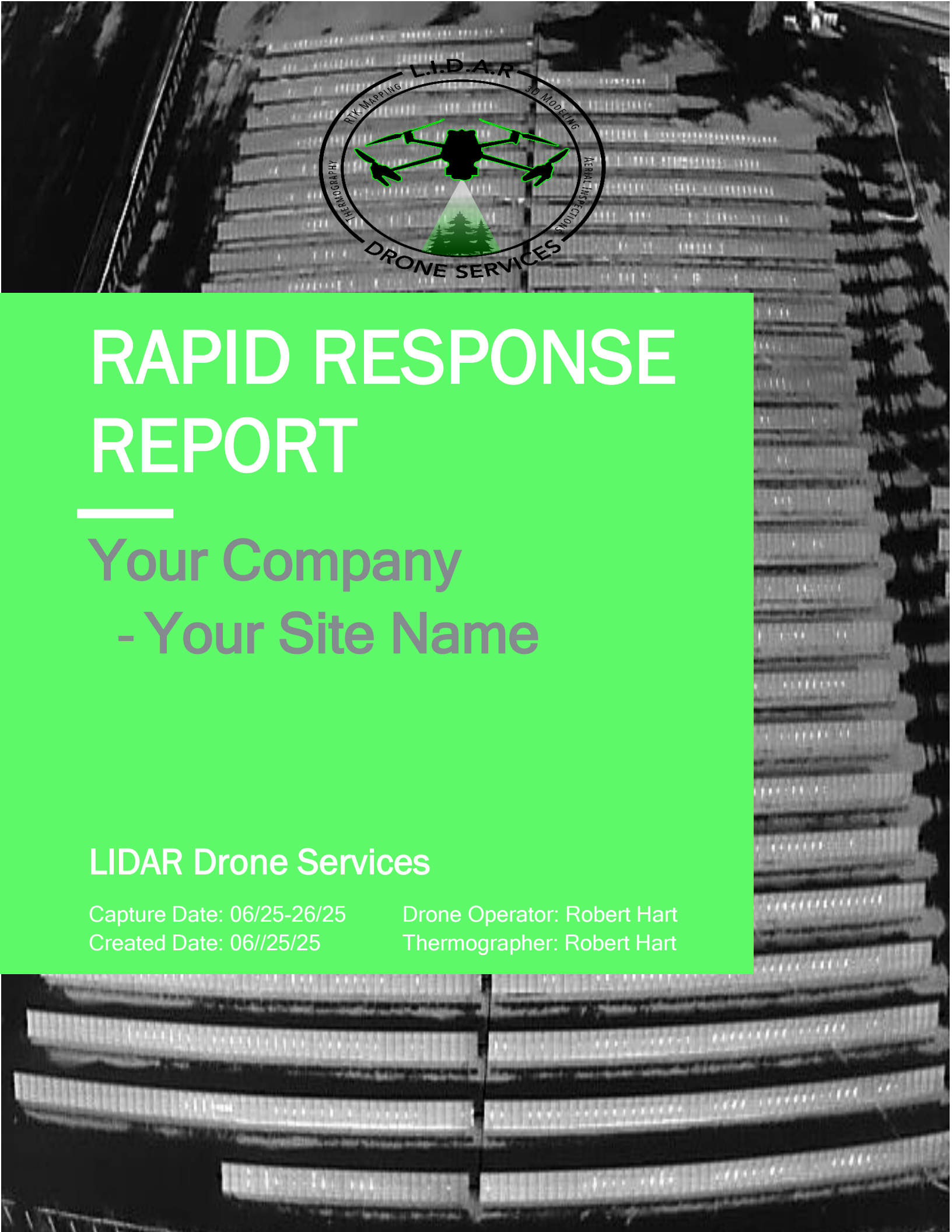


RAPID RESPONSE REPORT

Your Company
- Your Site Name

LIDAR Drone Services

Capture Date: 06/25-26/25
Created Date: 06//25/25

Drone Operator: Robert Hart
Thermographer: Robert Hart

LIDAR Drone Services - Rapid Response Report

Overview

We conducted thermal drone flights above a 10MW Solar Site in Your Site City, State. The client requested a pre-commissioning scan to confirm performance and identify any major issues such as string or array outages, reverse polarity, or other large-scale faults that could delay inspections.

Thermal anomalies found during these flights can indicate significant problems such as **string or array outages, reverse polarity, or other large-scale electrical faults.** Detecting these issues early provides an opportunity for corrective action before official inspections, ultimately reducing costly re-flights, avoiding extended downtime, and keeping the project on schedule.

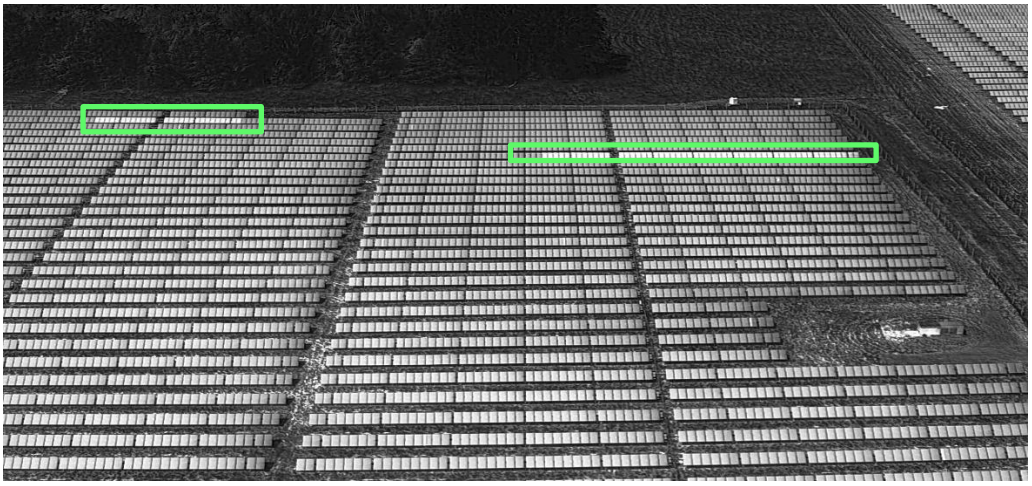
By locating and confirming larger system failures ahead of time, LIDAR Drone Services helps EPCs, and owners protect long-term system efficiency while saving both time and money during the commissioning process.

Note: This inspection did not require any temperature readings. The camera settings were left at the factory values for RAT, humidity, and emissivity. Any temperature readings are apparent temperatures.

Equipment

- **DJI Matrice 350** with **Zenmuse H30T Thermal Camera**
- **FLIR PV78: Solar Irradiance Meter**

Invertor - 1

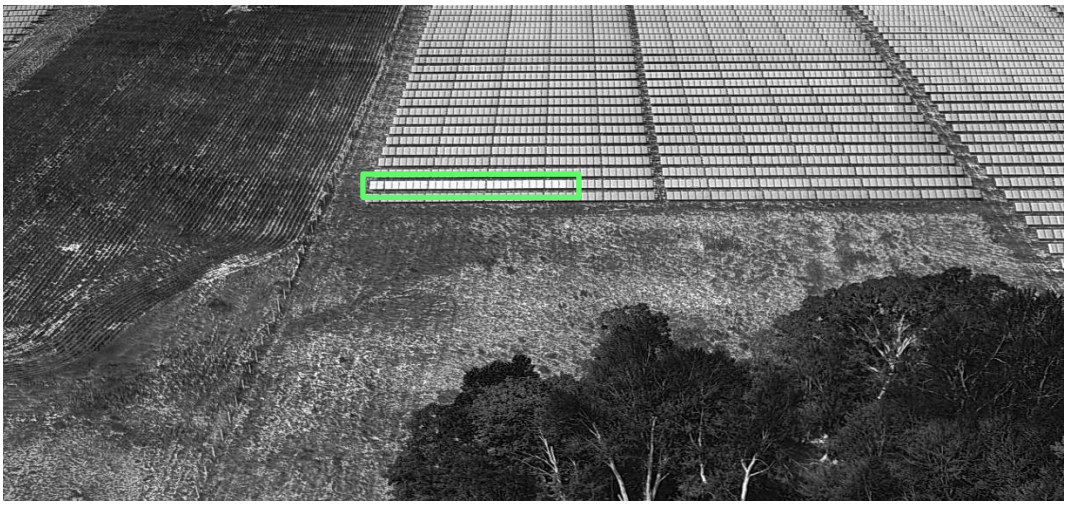


Text Annotation:
Multiple anomalies were detected indicating possible defective string issues in the section block of invertor 1.

Anomaly locations:
Block 1, Section 4, Row 2, String 1.3.4.4
Block 1, Section 3, Row 7, String 1.2.3.4; & 1.2.3.5

Camera Info	
Camera Model	H30T
Lens	24mm
Width	1280
Height	1024
Flight Altitude	400’
Wind Speed	9mph

Invertor 2

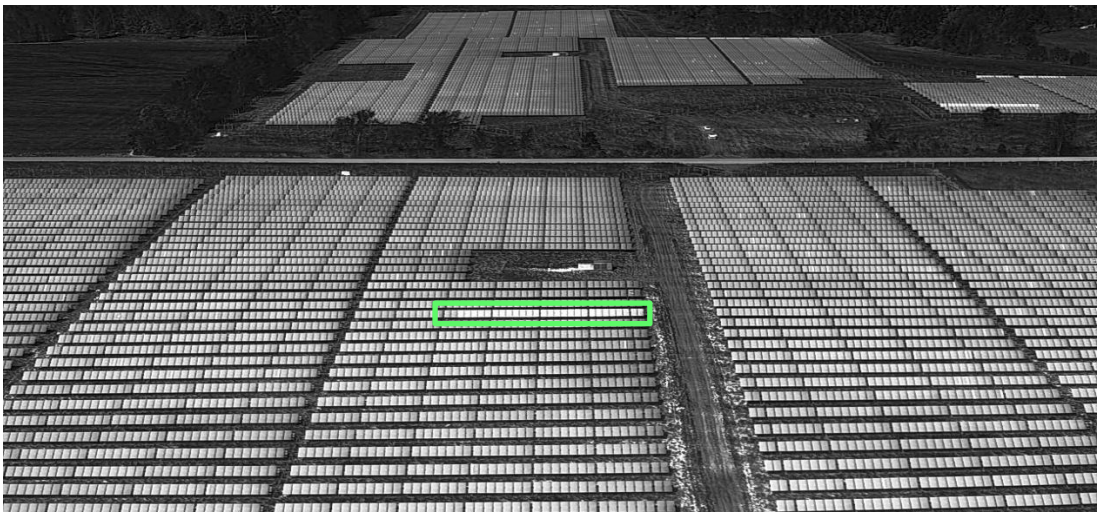


Text Annotation:
Multiple anomalies were detected indicating possible defective string issues in the section block of invertor 2.

Anomaly locations:
Block 2, Section 2, Row 41, String: 2.2.1.7

Camera Info	
Camera Model	H30T
Lens	24mm
Width	1280
Height	1024
Flight Altitude	400’
Wind Speed	9mph

Invertor 3

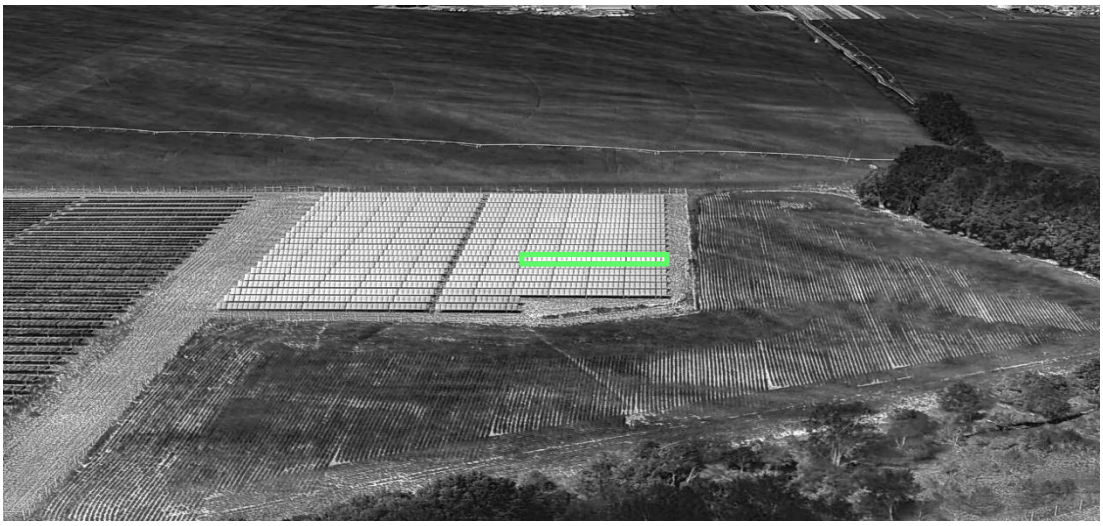


Text Annotation:
Multiple anomalies were detected indicating possible defective string issues in the section block of invertor 3.

Anomaly locations:
Block 3, Section 3, Row 14, String: 3.2.4.5

Camera Info	
Camera Model	H30T
Lens	24mm
Width	1280
Height	1024
Flight Altitude	400’
Wind Speed	9mph

Invertor 4

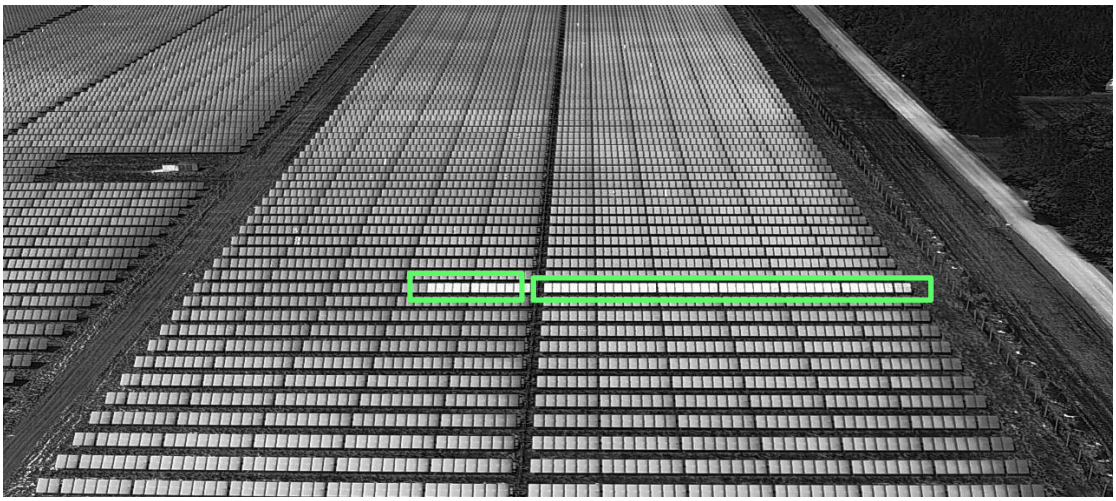


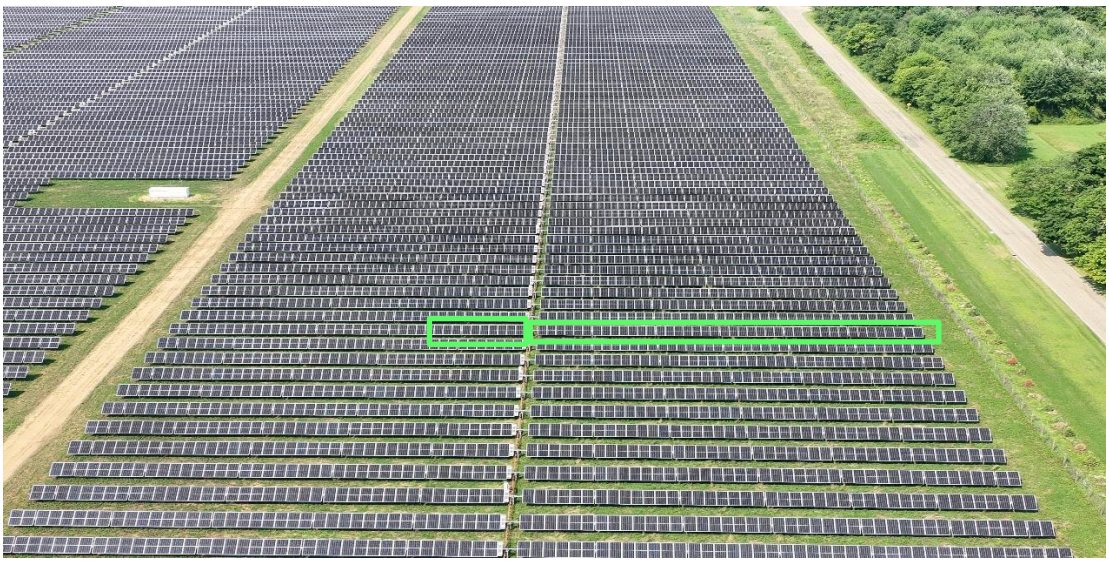
Text Annotation:
Multiple anomalies were detected indicating possible defective string issues in the section block of invertor 4.

Anomaly locations:
Block 4, Section 1, Row 13, String: 4.1.3.4

Camera Info	
Camera Model	H30T
Lens	24mm
Width	1280
Height	1024
Flight Altitude	400’
Wind Speed	9mph

Invertor 5

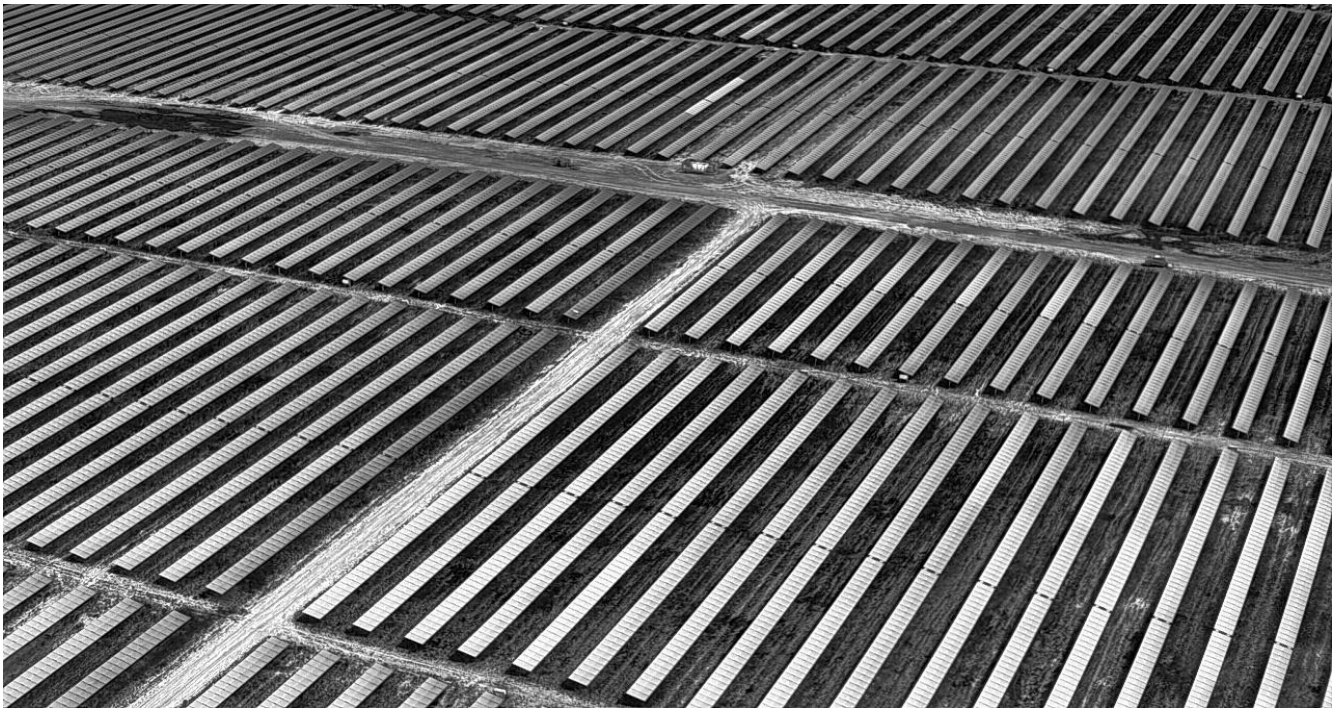




Text Annotation:
Multiple anomalies were detected indicating possible defective string issues in the section block of invertor 5.

Anomaly locations:
Block 4, Section 1, Row 65, String: 4.1.3.4
Block 4, Section 2, Row 65, String: 4.2.7.8

Camera Info	
Camera Model	H30T
Lens	24mm
Width	1280
Height	1024
Flight Altitude	400’
Wind Speed	9mph



Conclusion

In conclusion, this rapid response thermal drone inspection successfully identified anomalies that may indicate major issues such as string or array outages, reverse polarity, or other electrical faults.

With each panel producing about 2 kWh daily—roughly $0.36 per day or $130 annually—system-wide outages quickly translate into substantial energy and financial losses. Detecting and confirming these issues before official inspections provide EPCs and owners the opportunity to take corrective action early, ultimately reducing costly re-flights, avoiding extended downtime, and keeping the project on schedule.

As certified thermography experts, we recommend engaging a qualified electrician to implement the necessary repairs. We also advise reviewing applicable warranties, as these issues may be covered, helping protect both site longevity and profitability.

Thermography Certifications: