TEREN

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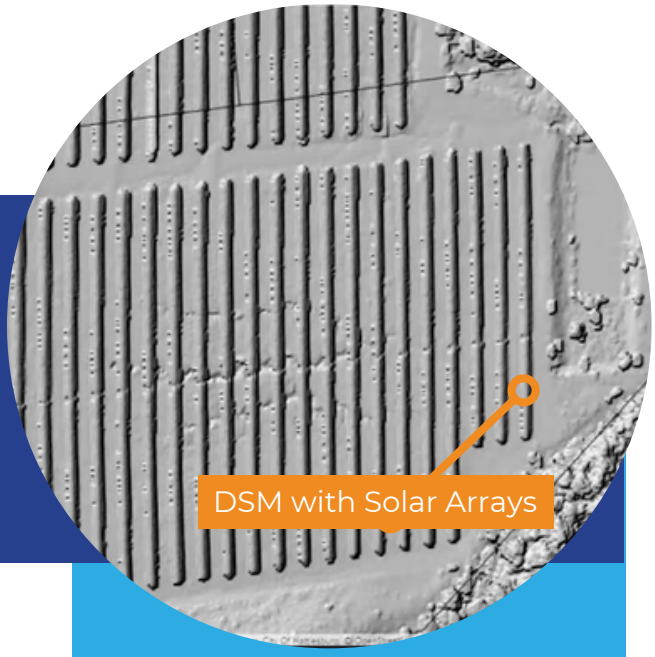
UNCOVER OPERATIONAL ISSUES WITH HIGH-FIDELITY TERRAIN DATA

Teren's high-fidelity data helped a renewable developer uncover the root cause of frequent ponding under solar arrays.



PROBLEM

A renewable developer had completed a large solar farm in southern Louisiana. The developer did not contract Teren in the early stages of development to best understand the terrain and topography of the site.

After the developer completed the project, but while the site was still under warranty, the site began flooding regularly. Flooding under solar arrays can impact energy production and result in lost revenue for the owner. Due to the warranty, they were on the hook for finding a solution.

Without a good understanding of the underlying topography and hydrology flow paths, the developer did not know how best to correct the issue.

SOLUTION

The developer turned to Teren to solve the problem. With solar arrays already in place, Teren captured LiDAR via fixed-wing aircraft at night. This allowed the LiDAR to penetrate the solar arrays and examine the terrain below.

Teren delivered digital surface, digital terrain, and hydrology analytics to reveal why the site was flooding.

OUTCOME

TEREN IDENTIFIED THE ROOT CAUSE OF FLOODING UNDER THE SOLAR PANELS

Teren digitally removed surface features to reveal the problematic trenching, water flow, and accumulation that were causing the issues beneath the panels.

Armed with a better understanding of terrain and flow paths, the developer was able to execute an effective water diversion plan and avoid additional flooding.

AT A GLANCE

Problem

- A solar farm was flooding regularly while still under development warranty
- The ponding was impacting the panels resulting in lost revenue

Solution

- Teren's high-fidelity digital terrain data and flow path analysis uncovered the problem
- The developer was able to implement an effective water diversion plan