

## CASE STUDY

# LPS (Lightning Protection System) Study

Using data to identify risk levels associated to blade damage occurrence & re-occurrence



### KEY CHALLENGES

- A lack of understanding of the relationship between lightning damages and LPS component failures
- No data-driven method to approach it, nor a system to facilitate such a study

### CUSTOMER

Our customer is an owner and operator of a large renewable power portfolio including solar and wind assets in North America and Western Europe.

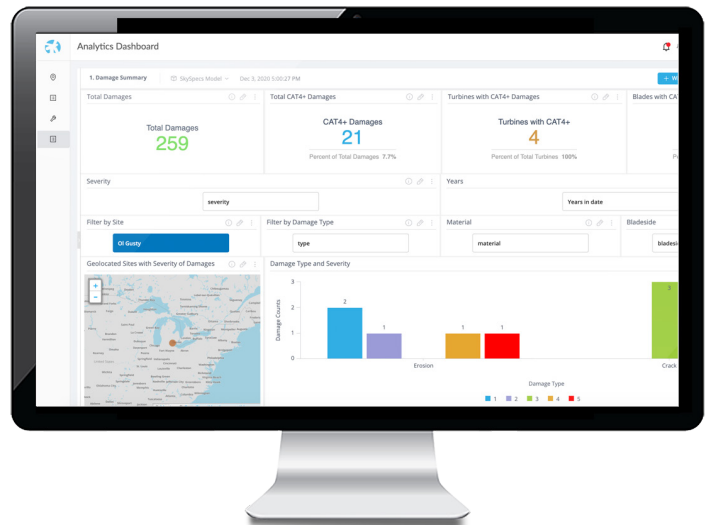
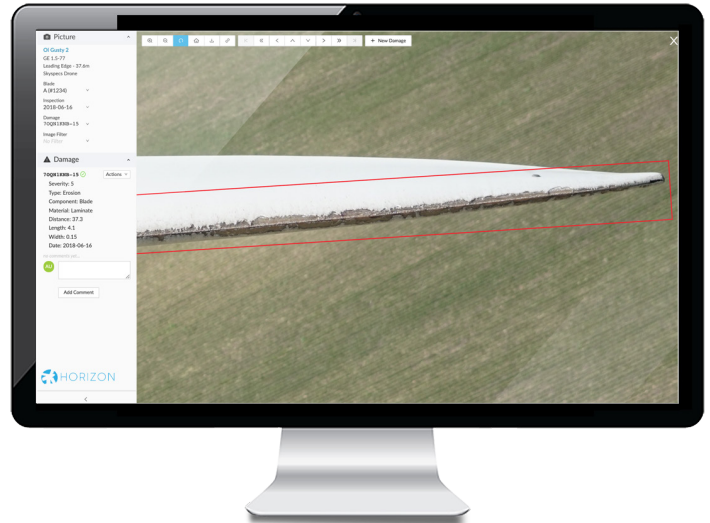
### OVERVIEW

Our customer wanted to better understand how to mitigate the damage caused by lightning, and more strategically plan for repairs based on priority and a better understanding of risk levels.

*“ Lightning strikes are major contributors to blade damages, potentially leading to failure & downtime. UC Berkeley scientists, along with others, found lightning strikes would increase by about 12% for every 1C of warming, resulting in about 50% more strikes by 2100. ”*

## RESULTS

- SkySpecs assessed & correlated blade damages to lightning protection system (LPS) test measurements
- This data was then used to plan maintenance that ultimately avoided costly repairs and replacements
- SkySpecs identified risk levels associated to blade damage occurrence & re-occurrence



Talk to us about your  
Blade Maintenance Strategy

SCHEDULE A CALL