ALTERNATIVE ENERGY & INDUSTRY

A Review of Fault Monitoring for Utility-scale Solar Arrays

Author: Kriston Kong

University of the West Indies, Mona Campus, Jamaica

The Journal of Caribbean Environmental Sciences and Renewable Energy

Vol. 1, Issue 2, (2019) doi.org/10.33277/cesare/002.001/02

CESaRE
Journal of Caribbean Environmental Sciences and Renewable Energy

ALTERNATIVE ENERGY & INDUSTRY

QUIK Ez

A Review of Fault Monitoring for Utility-scale Solar Arrays

Author: Kriston Kong
University of the West Indies, Mona Campus, Jamaica

The Journal of Caribbean Environmental Sciences and Renewable Energy
Vol. 1, Issue 2, (2019) doi.org/10.33277/cesare/002.001/02

The Caribbean is experiencing widescale changes in its energy landscape. Many countries are waking up to the financial and risk implications associated with conventional fossil fuels and a changing climate in the region. Jamaica's latest project will see a **51 MW solar plant** come online at the end of 2019.

Our latest postgraduate author, Kriston Kong, throws his research into the renewable energy revolution, focusing on solar farms and the innovative ways in which these plants can be integrated into Caribbean grids. Specifically, the author investigates how these large-scale energy plants can be monitored through UASs or unmanned aerial systems, otherwise known as drones.

The use of thermal imagery from automated drones is on the rise for large solar plants and the author reviews advances in the field with recommendations for the Caribbean.

Previous studies have investigated how modern solar panels **develop unique faults** throughout their lifetime, and the need for equally modern ways of monitoring the 'health' of a solar farm. One study has even looked at using UAVs after **a meteorological tsunami hit a solar farm** in Brazil.

What's next?

Kong explores these methods in more detail, making key recommendations for the Caribbean renewable energy sector. His research sheds light on the various processes involved and provides unique insight to usher cutting-edge technologies in the Caribbean, keeping the region abreast with global renewable energy trends.