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The influence of wind temperature on power plant unit consumption

To investigate the intricate interplay between weather patterns, climate variations, and power systems, we developed a database of time series of wind and solar power generation, ...

In this article, the effects of wind and temperature on long-term degradation are analysed using inverter-level data with multiple weather stations located within the plant.

To better understand the power generation dynamics, the effect of air density due to temperature on power and energy generation figures was modelled. The model uses historical ERA5 ...

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An inverter-level analysis of a large photovoltaic (PV) plant is evaluated over four years to investigate the long-term performance and degradation caused by wind and temperature effects.

An inverter-level analysis of a large photovoltaic (PV) plant is evaluated over four years with regard to the long-term degradation caused by wind and temperatu

The effects of wind conditions on the temperature distribution and performance of each PV module are studied.

This paper analyses the safety, reliability, and resilience of PV systems to extreme weather conditions such as wind storms, hail, lightning, high temperatures, fire, and floods.

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