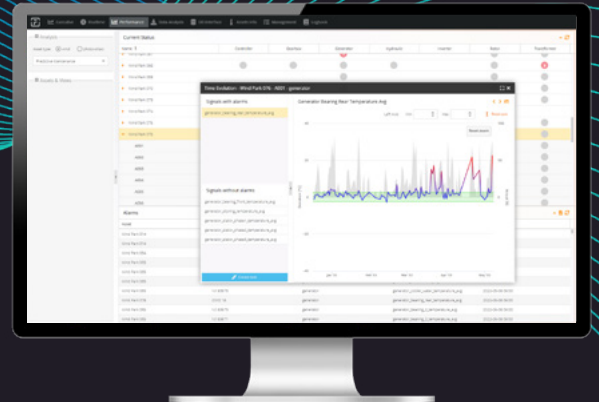


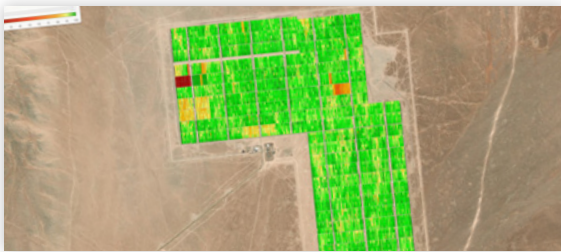
FLUENCE NISPERA

Identify early-stage failure patterns and resolve performance issues with AI-based capabilities



Renewable energy assets generate vast amounts of data and SCADA systems can output large quantities of alerts to sift through. Machine learning algorithms and smarter alerts can turn these vast volumes of SCADA system data and alarms from wind, solar, and battery storage sites into clear,

actionable insights for your team. Nispera offers advanced performance optimization capabilities that help you mitigate the risk of component failure, minimize downtime, lower O&M costs, and increase revenue.



PV DIGITAL TWIN

Identify priority areas of performance improvement with AI-based virtual twins of your PV plant and video animation of historical performance. Models performance down to the string level over any custom timeframe.



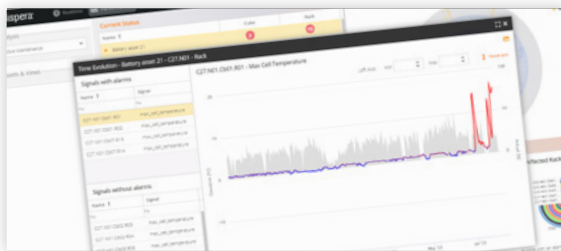
WIND POWER CURVE ALARMS

Get notified when turbine performance deviates from normal. AI models calculate a reference performance for each turbine under different operating conditions and continuously compare the actual performance to this reference behavior.



PV TRACKER ALARMS

Detect tracker faults even with a lack of or low-quality data from the tracking system. Alarms are triggered when faults are detected, including information about the location and related energy losses.



BATTERY STORAGE PREDICTIVE MAINTENANCE ALARMS

Anticipate and act on performance issues before outages occur with AI-based alarms that notify you when temperature anomalies for components trend outside of reference for current operating conditions.