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EZ Solar Field: optimal operations management and maintenance of solar fields

SENER ENERGÍA / GENERACIÓN RENOVABLE / INTERNATIONAL

EZ SOLAR FIELD: OPTIMAL OPERATIONS MANAGEMENT AND MAINTENANCE OF SOLAR FIELDS

Cliente: 100 MW Solar Power Plant

País: International

EZ Solar Field is an integral digital solution for the optimal operations management and maintenance of solar fields, focusing on solar thermal power plants that use parabolic trough collectors.

Unlike other tools, it covers the entire cycle from the capture of data to the confirmation of the technician's work order in the field and the analysis of its completion.

This software, developed by Sener, captures the data via an automated process that collates the data exported from the monitoring system. Its data model integrates 1000 SCAs, its instrumentation, the main flow rates to its field, the meteorology and the field alarms. An algorithm analyzes them and automatically

generates corrective actions in the form of work orders, with prioritization and approval workflows included.

With EZ Solar Field, you can check the results online through interactive dashboards for supervisors and a mobile app for field operators. Thanks to its analysis capabilities, you can radically reduce the time invested in preventive tasks that relate to the calibration and balancing of loops, with an overview of which part of the field is deteriorating the most.

It optimizes the capacity of the maintenance teams for fields of any size, with a reduction of up to 20% of the OpEx and a yield increase of up to 8%.

Reduction of up to 20% of the OpEx	Yield increases of up to 8%	Automation of corrective tasks

WHAT DOES EZ SOLAR FIELD DO

- It automatically analyzes and monitors plant data.

- It monitors the status of the installation and generates maintenance actions to correct any incidents.

- It evaluates the economic return on actions.

- It offers a full model of the solar field that can enable the creation of new applications.

- It includes a powerful analysis tool for technicians.

- It receives client information and can support other O&M activities in the field.

- It prescribes maintenance actions for balancing in the field.

- It analyzes and detects instrument faults.

- It evaluates losses in performance/economic return depending on the anomalies detected.

- It offers a work environment for the internal analysis of other potential non-automated incidents.

- It provides data direct from the field via a mobile app.

- It is published on a website and can be accessed depending on your role.

- It includes an application manager to manage plant jobs, assign tasks and oversee compliance monitoring. It also offers another operator's application for monitoring assigned actions, obtaining feedback of its completion and other field observations.

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