M.G.LIGHTNING
ELECTRICAL ENGINEERING

Saving due to SolAmitec

As owners engineer for a 7.5MW utility grade PV plant in Romania, I have used the SolAmitec Monitoring system since commissioning in parallel to the contractor supplied industrial SCADA system used by the dispatcher to interface with the plant.

Using the SolAmitec system with its rich configurable alarming capabilities, coupled with its powerful data base analysis, I have managed to save tens of thousands of Euro in the first 5 months of operation. I look forward to continuing to keep the plant running at a high Performance Ratio over the next many years.

The edge offered by the SolAmitec system are due to the following operational realities manifest in using the contractor supplied SCADA.

1) The contractor system must be accessed through special software installed on a computer to enable connectivity to the site, it is not possible to access from any computer equipped with a web browser due to the realities of a utility grade power station. This means that owner monitoring of the system is restricted to office hours, and those days when I am with the computer
2) The contractor system has limited alarms that are configured at start up. Trouble shooting and tracking system efficiency requires the configuration of alarms on the fly to catch specific behavior. The SCADA contractor is not swift or inexpensive when it comes to adding alarms to the system.
3) It is envisioned that in future, we will have plants from other suppliers, making a flexible platform necessary. The SolAmitec system is designed to compare systems, with a database application that allows the comparison of just about any number of any monitored parameters from different systems.
4) Daily emails to stakeholders is important, the SolAmitec capabilities in this realm are second to none.

I have found the SolAmitec system to be of great value in becoming aware of both failures and inefficiencies in the system. Sometimes a failure is alarmed only by the SolAmitec system, going undetected by the SCADA system. When alarms are delivered by the SCADA system, I depend on the SolAmitec system to ascertain if the alarm is real and to research the reason for the alarm before and as the O&M team is on the way.

I am able to design alarms that show inefficiency, as opposed to just pure failure, enabling the direction of the O&M team to check systems before they fail, correcting inefficiencies before they add up to large sums of lost revenue.

The flexibility of database manipulation application has allowed me to analyze system down time due to configuration settings by pulling together in one table parameters from different inverters, meteorological data and power parameters from different time lines to find the cause for inefficiency in one sub-array, allowing us to make concrete decisions as to the viability of making the configuration change across the board, saving many days of low production while "playing it safe", waiting to see the behavior of the other sub-arrays.

Since the SolAmitec system receives it's data from the SCADA system, SolAmitec becomes the only agent capable of warning on a defect in the SCADA monitoring system. Stuck PLC units, irregular data, etc. are not picked up by the SCADA system. SolAmitec is my watchdog on the SCADA system.

In summation, whereas the utility grade PV systems are run by real time SCADA systems, SolAmitec is the owner's tool for understanding what is happening with his investment. Starting from the daily email report through to enabling the effective management of the contracted O&M services working on a minimal PR guarantee and on to the ability to compare different sites, SolAmitec is the best tool for effectively integrating PV system data.