

# **SolarFocus**

Performance Analysis and event Investigation for Renewable Energy Projects

SolarFocus is an advanced business intelligence and data analysis application developed by BrightSource. Designed to support a wide range of renewable energy plants such as central tower, parabolic trough, PV, and wind plants, it helps to better understand day-to-day operations, performance analysis, problem investigation, and reporting.



## **Data Visualizations to Highlight Trends**

SolarFocus helps to visualize an energy plant's story by making the raw data understandable. It presents trends in graphical form, for ease of understanding. The SolarFocus home page and dashboard can be customized and individualized to dynamically show trends and data most important to each user.



SolarFocus collects data directly from the plant's control systems: control system data, weather predictions, historical data, and more. It then presents this data using logical tags and rich graphics that are easily customizable. For example, you can combine data from various sources using functions such as averages or create other, create complex dashboards based on data aggregation, use time series data visualizations to track the value of sensors over time, and even define your own colors and scales.

#### **Tailored Statistics and Reports**

BrightSource's SolarFocus technology provides the data and statistics that a plant operation team needs for analysis, including control, equipment, weather, and performance. In addition, you can supplement predefined reports and statistics with customized scripts and formulas for your project.

Investigate Past Events & Predict Future Problems

The power of SolarFocus lies in its investigation functionality, which includes tools for visualizing data from various sources, time series manipulations, and spatial data and control logical data.

As SolarFocus collects and evaluates current data in real-time and compares it to historical data over time, it can be used to investigate past events and to predict potential future problems based on historical data. This is extremely useful as it gives early warning about potential issues and enables operational teams to zero in on issues before they happen.



Understand operations



Analyze performance



Investigate problems



Create your own virtual tags

### **Distributed Plant Site Spatial Viewer**

For plants with a high number of distributed equipment such as solar fields, SolarFocus provides a dedicated viewer that displays each piece of equipment and its status at any given time. This spatial and time information can be used to playback a recording of the site's changing behavior during a selected time. Users can also retrieve real-time information from specific components on the renewable energy site.

## **Virtual Tags**

With virtual tags, you can create new logical data based on existing tags and logical functions. These tags can be used to create time series trends and spatial data for a solar field logical overview; to evaluate dependencies between different parameters; to create data points to generate reports; and more.

