PVOutput Custom Rules

PVOutput has the facility under the 'Automatic Uploads' section, to add a simple line of logic [the rule] to modify current power values based on the available input data. A rule can be applied to each input source be it consumption or generated power.

The rule is applied to each raw power value and the resulting power value is uploaded.

At the time of writing these rules worked. PVOutput has the ability to change these rules. Noted is the rule tester in the settings section.

Input Data

The rule has access to the following variables which can be used as part of the rule logic,

- power - the raw power value in watts
- hour - hour of the day (0-23)
- minute - minute of the hour (0-59)
- out - true if the direction is solar
- in - true if the direction is consumption

Rule Tester

The rule tester will validate the specified rule and apply it to a set of predefined values. The data table shows a set of sample values and the corresponding output value after the rule is applied.

Note that the system configuration cannot be saved if the rule is invalid. The rule tester will report validation errors that needs to be corrected.

Examples

When consumption power is less than 100W, then make power 0W

if(power < 100) power = 0;

When consumption power is less than 200W and the current time is before 4 AM, then make power 0W

if(in && power < 100 && hour < 4) power = 0;

Increase consumption power by 2%. Useful for matching the monitor's readings to the electricity meter.

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power *= 1.02;

Decrease consumption power by 5%. Useful for matching the monitor's readings to the electricity meter.

power -= 1.05;

Increase generated power by 2%. Useful for matching the monitor's readings to the solar inverter.

if(out) power *= 1.02;

When consumption power is greater than 1000W, increase by 10W, when consumption power is greater than 1500W, decrease 10W, otherwise decrease it by 5%

if(power > 1000) power += 10; else if(power > 1500) power -= 10; else power *= 0.95;

When generated power is less than 40W, then change to 0W. This is useful for those of you with noisy inverter switching transformers. Noise not being suppressed by the inverter and incorrectly picked up by current clamps at night time.

if(out && power < 40) power = 0

With a few tweaks the output of the consumption and the generation can be matched to the electricity meter and that of the solar inverter. The increases the accuracy of the monitoring system.

Please email your favourite 'rules' to our office for inclusion in this listing, noting a full description of the rule and why it is applied.