

# Load Balancing

## Energy Monitoring Use Case

### USER

Commercial business, Electrician

### THE PROBLEM

A commercial premises with a three phase power supply is billed based on the phase with the highest usage. The owner believes they could reduce billing costs with more effective load balancing but do not have granular insight into how usage is spread across the three phases.



### SAFECILITY PRODUCT

The Utility HotDrop energy monitor powered by Safecility's software platform.



Wireless easy to install energy monitors suitable for single and three phase power supply.



Usage data remotely collected and streamed to the cloud



Software platform gives real time usage analytics in an easy to view graphical format



Energy monitors are easily uninstalled for use in a different location



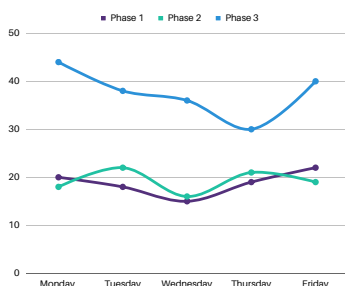
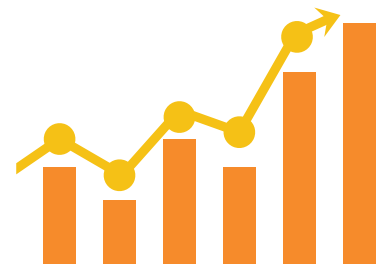
Analytics help identify load balancing issues, reduce waste, save costs and improve operational efficiency.

### THE SOLUTION

Safecility's wireless energy monitoring sensors are installed on each of the three phase power supply lines to the building and usage data monitored over 7 days to determine how the load is spread.

Each energy monitor is a small, batteryless device that takes just a few seconds to clip over the wires feeding each of the three phases. Within 20 minutes the self powered energy monitors collect usage data and begin streaming it to the cloud.

Energy usage data collected by the energy monitors over 7 days showed the three phase system was unbalanced. Using usage analytics from the Safecility power software platform changes were made to equally divide the load across the three phases and as a result billing costs were reduced.



#### WEEKLY USAGE ACROSS EACH PHASE

Usage analytics across the three phases found the phases were unbalanced leading to higher than necessary electricity bills.



Identifying balancing issues and optimising loads is easy using real time analytics from the Safecility platform.