

## ENERGY REDUCTION - DEMAND SIDE MANAGEMENT

### FACTSHEET

ABEC can reduce energy usage and spend by reducing energy demand during peak periods, avoiding two types of charges that many of our clients have experienced. These charges are known as 'Triad' and 'Red Zone' charges. This factsheet gives you a brief insight into both.

#### **What are Triads?**

If you purchase your electricity on an 'Energy Only' basis, the annual cost of using the National Grid Transmission System is passed through at cost by your Energy Supplier. Triads are the three peak half hourly periods of national electricity demand each winter (Nov-Feb) and form the basis of Transmission Use of System (TUoS) charges to HH (half-hourly) electricity customers. **The charges are regionally based and during the Triad period, taking London as an example your normal £0.10 kWh will increase to £46.23 kWh for these 3 half hour windows.**

Our solution combines Triad warning signals (forecasting when the Triads are likely to happen) with automated control that minimises your usage during these costly half hour periods. Typically we will issue between 10 and 20 warnings each winter. The peaks normally occur on weekdays between 5 and 6pm.

We will work with you to establish what plant can be shut down (or usage restricted) during the Triad period. When a Triad event is predicted we can automatically begin the load shed or demand reduction process using the BMS. Therefore, there is very little or no action required by the customer.

#### **Red Zone Management**

The 10 UK Electricity Distribution companies have standardised their charging structure for delivering electricity. The charges are now based on Red, Amber and Green time zones (formally called DUoS) with Red zone being the weekday late afternoon period (typically 16:00 -19:30). The charges are intended to restrict peak time usage of half hourly Industrial and Commercial customers. The typical DUoS charging represents around 12% of a typical utility bill. To reduce your DUoS costs, you should consider how to reduce your consumption during the Red Zone period.

Our solution creates an alternative BeMS software strategy (to your normal software strategy) to reduce energy usage during the Red Zone period, thus saving energy usage and cost.

#### **Demand Side Management**

Our cost effective solutions enable you to avoid or minimise these costs by proactively monitoring and managing demand side loads at times when charges are highest.

Our engineering team will work with you to understand how your energy consumption can be reduced and in what time frame. We will install any metering technology that is needed to work with our software and give you access to our Internet based portal to monitor your electricity load reduction. Through our team of building and industrial controls / application engineers we are able to make recommendations as to how significant savings can be realised.