



MOBILE TELECOMMUNICATIONS



FIXED LINE



PBX & NETWORKING



ENERGY



CONVERGED SOLUTIONS

## Our Services

### Procurement, Audit, Analysis and Sourcing

Catalyst is one of the UK's largest independent utilities companies. We offer a complete business consultancy service offering bespoke utilities solutions and strategies for the management of commercial electricity and gas requirements. We evaluate business needs and work with our customers to find solutions that meet their immediate and future requirements. We can also advise on day-to-day requirements and consider how our clients can maximise efficiency whilst lowering overheads and ongoing costs.

### Three Key Services

We have three core services, each designed to increase value in different ways:

- Energy Procurement
- Invoice Validation
- Dedicated Account Management

#### • Energy Procurement

Our energy consultant's work with your purchasing staff to advice on contract type and market conditions. Then we'll build purchasing strategies and action plans that will deliver lower total cost and reduced risk of supply chain failure.

#### • Invoice Validation

We can then provide monthly invoice validation services and liaise directly with your accounts payable department to reduce the costs sometimes associated with validating invoices.

#### • Account Management

Your Dedicated Account Manager will become your single point of contact for any future site registrations, queries or any additional purchase decisions.

## UK Electricity Guide Part 1

All electricity suppliers are just the top of a very complicated supply chain, as they present the end user with one bill that covers the other associated costs in the energy supply chain to your business. These additional costs cover the production and delivery of your electricity and then form part of the total price that you pay. The way in which they are charged will depend on your supplier and the type of contract that you have. This guide aims to demonstrate how the four components of wholesale energy, infrastructure, service charge and pass through charges make up the total cost of your electricity bill. The wholesale energy, infrastructure and service charge parts are included within your unit rates and typically make up approximately 70% of the total value of your electricity bill.

### Wholesale Energy Costs

This is the wholesale market cost of energy to cover your predicted usage, and is the single biggest component of the unit price, which accounts for over 70% of the total bill. In the industry, this element is called energy at Notional Balancing Point or NBP for short. Electricity is purchased in units called kilowatts (kWh's) and suppliers quote for electricity in numerous different formats. These range from simple one-rate structures, the same price per kWh at all times throughout the year, to complex seasonal time of day tariffs (STOD's), which have multiple rates and can have between 4 to 56 different rates in them. These are where electricity is supplied at different unit rates according to the time of day the power is required by the customer. Typically suppliers have different tariffs for day and night, summer day, winter day and winter peak supply times, generally between 4.00 p.m. & 7.00 p.m. In addition to this, they generally all have an evening supply period.

### Infrastructure Costs

This is the cost associated with the delivery of electricity to your business through the high voltage transmission system, which is normally 11,000 volts. National Grid owns and maintains the transmission system in England and Wales, and in Scotland this is owned by Scottish Power Transmission for central and southern Scotland, and by Scottish Hydro Electric Transmission for northern Scotland. But all three companies are responsible for balancing national supply and demand on a second by second basis. This high voltage national transmission system is then delivered to the low voltage distribution network, which is normally at 240 or 415 Volts. Several Distribution Network Operators (DNO's), operate this local distribution network ([Network Map](#)). In the event of a loss of electricity supply it is the distribution network operator who is responsible for restoring supplies and not your actual electricity supplier. The charges for using the transmission and distribution networks in the UK are called Transmission Use of Systems or TUoS charges (National) and Distribution Use of Systems DUoS charges (Regional). The TUoS charges make up 6% of the total cost and the DUoS charges make up 20% of the total cost. There is also an additional charge for the cost of energy lost as heat as it travels from the power station down the transmission and distribution wires, and these are called Tloss (Charges for the loss of transmitting power through the wires) and Dloss (Charges for the loss of distributing power through the wires). Most electricity contracts are all-inclusive which indicates a supply offer, which has all delivery charges (DUoS & TUoS) built into the unit rates for the supply of electricity.

### Service Charge Costs

This is the cost of the supplier supporting your account and managing the imbalance risk involved with your predicted consumption matching your actual consumption. This also includes any additional margin that the supplier wishes to make, which typically accounts for as little as 1-2% of the total bill.



MOBILE TELECOMMUNICATIONS



FIXED LINE



PBX & NETWORKING



ENERGY



CONVERGED SOLUTIONS

## Our Services

### Procurement, Audit, Analysis and Sourcing

Catalyst is one of the UK's largest independent utilities companies. We offer a complete business consultancy service offering bespoke utilities solutions and strategies for the management of commercial electricity and gas requirements. We evaluate business needs and work with our customers to find solutions that meet their immediate and future requirements. We can also advise on day-to-day requirements and consider how our clients can maximise efficiency whilst lowering overheads and ongoing costs.

### Three Key Services

We have three core services, each designed to increase value in different ways:

- Energy Procurement
- Invoice Validation
- Dedicated Account Management

#### • Energy Procurement

Our energy consultant's work with your purchasing staff to advice on contract type and market conditions. Then we'll build purchasing strategies and action plans that will deliver lower total cost and reduced risk of supply chain failure.

#### • Invoice Validation

We can then provide monthly invoice validation services and liaise directly with your accounts payable department to reduce the costs sometimes associated with validating invoices.

#### • Account Management

Your Dedicated Account Manager will become your single point of contact for any future site registrations, queries or any additional purchase decisions.

## UK Electricity Guide Part 2

In addition to the charges included within your unit rate, you may also see additional charges for costs that the electricity industry incurs in delivering your energy. These are called pass through charges and they are normally included on bills to cover the costs of third parties involved in the energy supply chain to deliver your electricity.

### The Standing Charge

The Standing Charge covers the support and maintenance of the electricity distribution network and any associated distributor's administration costs. It is calculated at a fixed monthly or daily rate over the period of the bill, and the rate reflects the costs of the local distribution company.

### The Capacity/Availability Charge (kVA)

The availability charge contributes towards your distribution company's maintenance costs to provide the electricity supply connection to your business for both active power or real power which converts current flow into useful energy for lighting and heating, measured in kilowatts (KW) and reactive power measured in kilovolt amps (KVA). The supplier will inform the electricity distribution network operator (DNO) the company that maintains the electricity network of the agreed amount of electrical load to make the capacity available to your business. This charge is known as the capacity or availability charge and is measured in £ per kVA (Kilo Volt Amps).

### Excess Capacity/ Availability Charges

This is a penalty charge applied by certain suppliers to clients who are drawing kVA above their Available Supply Capacity (ASC). In some cases this can be three times the contracted £ per kVA rate.

### Reactive Power Charge (REAP)

A reactive power charge is a charge for the difference between the electricity supplied and the electricity converted into useful power. The power factor or fake power is a measure of how effectively electricity is being used on a site measured in kilovolt amps (KVA). Certain types of equipment like motors and drives cause poor power factors, which reduces the capacity of the network to supply power. If this happens then certain suppliers and distribution companies will enforce a penalty charge for this, through reactive power charges because it puts an additional strain on the distribution network and this charge is a contribution towards those additional costs.

### Combined HH/NHH Data Charges

This reflects the costs associated with collecting and handling your metering data. Data collection methods include remote dial up, which requires a dedicated communications line, or more costly manual meter reads.

### Settlement Agency Charges

Behind the scenes the distribution companies, suppliers, metering companies and others need to settle up and recover their costs from each other. The UK's balancing and Settlement Code Company, called Elexon, maintains the system within which this activity is governed and this charge relates to their costs. The documentation that governs these arrangements is known as the Balancing and Settlement Code (BSC). For additional information, Elexon's website can be found at [www.elexon.co.uk](http://www.elexon.co.uk)



MOBILE TELECOMMUNICATIONS



FIXED LINE



PBX & NETWORKING



ENERGY



CONVERGED SOLUTIONS

## Our Services

### Procurement, Audit, Analysis and Sourcing

Catalyst is one of the UK's largest independent utilities companies. We offer a complete business consultancy service offering bespoke utilities solutions and strategies for the management of commercial electricity and gas requirements. We evaluate business needs and work with our customers to find solutions that meet their immediate and future requirements. We can also advise on day-to-day requirements and consider how our clients can maximise efficiency whilst lowering overheads and ongoing costs.

### Three Key Services

We have three core services, each designed to increase value in different ways:

- Energy Procurement
- Invoice Validation
- Dedicated Account Management
  
- Energy Procurement

Our energy consultant's work with your purchasing staff to advice on contract type and market conditions. Then we'll build purchasing strategies and action plans that will deliver lower total cost and reduced risk of supply chain failure.

- Invoice Validation

We can then provide monthly invoice validation services and liaise directly with your accounts payable department to reduce the costs sometimes associated with validating invoices.

- Account Management

Your Dedicated Account Manager will become your single point of contact for any future site registrations, queries or any additional purchase decisions.

## Value Added Electricity Services

Some of the services that are provided directly by your chosen supplier can now be contracted directly to independent third parties, dependant on the type of supply and the choice of contract. These include meter operations (MOP), data collection (DC) and data aggregator (DA). These companies would be responsible for collecting, processing and validating the meter reading data, and then pass the information to a Data Aggregator (DA). UK consumers have had the right to nominate their own data collector/aggregator (DC/DA) since 1998. But many customers have not taken advantage of this opportunity, leaving their chosen electricity supplier to appoint their preferred provider. There are significant advantages to be gained by nominating your own data collector/aggregator including enhanced data provision often at little or no extra cost.

### Meter Operator Charges (MOP or MO)

Any site that has an electronic half hour data meter fitted must appoint a meter operator to install and maintain the metering equipment. This is normally the host distribution network operator; however a number of independent meter operators are now available. It is the function of the meter operator to maintain the half-hour data meter and collect the data by means of Paknet (radio system), Global System for Mobile Communications (GSM) or Power line Carrier (PLC). A meter operator agreement costs from £150.00 to £500.00 per annum depending on factors such as the meter operator and the type of meter. There will usually be a separate charge for the communications link, which varies from area to area. Any NHH site is provided by the chosen suppliers preferred supplier, however it is also possible to install a new AMR meter and replicate the services of a half hour data meter.

### Data Collector (DC) & Data Aggregator (DA)

Data Collection can also be contracted separately to a third party who would be responsible for collecting, processing and validating the meter reading data and then passing the information to a Data Aggregator (DA). The Data Aggregator (DA) is an organisation appointed to aggregate the meter reading data received from the appointed Data Collectors (DC) and forward it directly to the supplier.

### Smart Meters or AMR Solutions

Smart Meters or Automatic Meter Reading (AMR solutions) is the term given to a system that provides meter readings automatically. There are two methods of providing data via a one or two-way communications route where the Data Collector's system polls the meter for its data routinely, and the meter sends its readings automatically to the Data Collector or a central location for processing.

### Energy Management Services

By contracting independently of any supplier ensures that your energy data is managed by a third party and as suppliers can often change it offers continuity in service and additional online statistical analysis of your energy consumption. Some service providers will charge an annual fee for a selection of energy reports, but most offer online access to your raw data free of charge. The management of energy costs can be a very complex task and it is possible to subcontract additional services to an energy management company. They will aim to reduce your energy costs whilst at the same time ensuring you are more educated to the use of your energy.