



### Company Details

Privatised in 1996, British Energy plc is the UK's largest electricity generator. British Energy Power & Energy Trading (BEPET) manages the purchase and sale of electricity in the UK market. It generates in excess of 70TWh, and has a growing direct supply business.

### Location

- United Kingdom

### Industry

- Energy

### Business Challenges

- Operate competitive electricity trading business - matching supply as closely to demand as possible
- Integrate systems to give traders access to accurate, timely information
- Implement scalable integration platform to support future expansion and new regulatory requirements

### Solution Overview

- Select eGate Integrator as a well-structured integration solution with auditable movement of data
- Interfaces developed to enable data to be transferred to and from the trading and risk management system
- Use this data to balance energy production and predicted demand

*"eGate Integrator is quite simply an excellent product. Anyone who appreciates the complexity of the electricity trading market, can't fail to be impressed by what we have achieved using SeeBeyond's technology,"*

**Jeremy Lock**, Head of Trading Systems, British Energy Power & Energy Trading Ltd.

### Business Challenges

Electricity generators in the UK sell their output to suppliers, who in turn supply the electricity to their customers. Under the arrangements for electricity trading, several different markets with different timeframes exist. The overall picture is complex, especially as the National Grid Company operates a balancing mechanism to match supply with demand for every half-hour period through the day. The challenge for a supplier like British Energy is to match the amount of electricity generated with forecasts of customer demand for each period. Any mismatches between supply and demand are subject to an energy imbalance price, which amounts in practice to a financial penalty.

Accurate estimation of generation and supply commitment depends on information from a variety of sources. To bring this information together, British Energy relied at one time on spreadsheets and databases, with much re-keying of data. However, there was a growing need to integrate the company's systems so that traders using the trading and risk management system would have access to accurate, timely information.

At the time, the trading market was relatively new, but British Energy anticipated strong growth in the number of trades as well as substantial changes in trading regulations. These changes began with the introduction of the New Electricity Trading Arrangements (NETA), which would require a number of new applications. A flexible, scalable integration platform was therefore a priority.

### Solution Overview

After evaluating the market, British Energy chose to implement SeeBeyond's eGate Integrator platform. Not only did eGate Integrator meet the company's need for flexibility and scalability, but it also had several other key strengths.

*"We discovered that eGate Integrator was very well-structured and easy both to use and to support. One feature that particularly appealed to us was the ability to audit the movement of data through the system and pinpoint any errors or problems,"* explained Jeremy Lock, Head of Trading Systems at BEPET.

Working with LogicaCMG, supported by training and consultancy from SeeBeyond, British Energy used eGate Integrator to construct interfaces between its Zai\*net Manager trading system and a variety of other internal applications.

Using information imported to Zai\*net Manager, British Energy's traders ensure that customer demand – resulting from a combination of long-term, medium-term and short-term contracts – is matched to the volume of electricity bought and sold.. Generally speaking, the process of achieving a balance involves trading in the wholesale markets and adjusting the output of the company's power stations.

### Business Benefits

According to Jeremy the use of eGate Integrator, in conjunction with the skills of British Energy's traders, has enabled the company to minimise avoidable costs associated with the energy imbalance price. In principle, these costs could amount to tens of thousand pounds within a single half-hour period and therefore the effect on maintaining income has been considerable.

eGate Integrator has also proved capable of supporting a significant increase in the number of trading transactions, there has been a 3 orders of magnitude increase over a three-year period. Today, although many millions of messages a year are handled using eGate Integrator, the resources devoted to support remain essentially unchanged and investment in additional integration technology has been minimal. eGate Integrator delivers a single view of the entire integration environment, enabling Jeremy and his small team to manage a large number of interfaces centrally and to resolve faults efficiently and effectively. The robustness and reliability of the product represent an additional advantage, with support calls being almost non-existent.

Lock claims that implementation and modification of interfaces is very straightforward, making the business more flexible. To keep up with the evolving requirements of NETA, energy suppliers have to modify their interfaces frequently as definitions of messages used in the central markets change. British Energy has been able to accomplish this smoothly and without difficulty.

### Plans for the Future

Regardless of how much additional growth there might be in trading volumes, British Energy is confident that it can continue to rely on eGate Integrator to meet its integration needs. It also anticipates that SeeBeyond will become the platform for additional integration initiatives in other areas of its business.

*"There are alternative integration products of this type on the market, but I am happy that with eGate Integrator, we made the right choice at the right time for our business. It has been a very positive experience in every sense,"* **Jeremy Lock**, Head of Trading Systems, British Energy Power & Energy Trading Ltd.

### Business Benefits

- Supported increase in volume of trading transactions by 3 orders of magnitude over a three year period
- Minimised avoidable costs from imbalances between supply and demand
- Large increases in transaction volumes can be accommodated without significant additional investment
- Ease of implementation and modification of interfaces makes the business more agile and flexible to change
- Proven reliability of eGate with low support costs

### Technology Profile

- SeeBeyond Components
- eGate™ Integrator

### Integrations

- Zai\*net Manager
- SFE Logistics
- SFE Evaluate
- Henwood Energy OPSYM
- A Retail Demand Processing System

### Sizing

- More than 100,000 trading transactions annually

### Hardware/OS

- Sun Servers
- Sun Solaris