British Utility Market Report

Electricity

Gas

Water and Waste

Ed 3 - 2006

The British Utility Market Report
Ed 3 2006

Introduction

- This report is a comprehensive overview of the British Utility Market
- The utility sector in Britain is dominated in 2006 by some critical questions and some dangerous unknowns

Key Findings

- Britain now has uniform power trading arrangements applying to England, Wales and Scotland
- 17% of baseload generating capacity will be decommissioned by 2010 and 36% by 2020, as coal and nuclear plants are closed down
- With the government prevaricating about energy plans, the country could be facing an energy crisis of great magnitude in the years to come
- The gravity of the potential danger should not be underestimated
- What is going to replace the base load power, provided by coal or nuclear?
- How secure is gas?
- Consolidation in the electricity market continues with many mergers and acquisitions, with increasing exchange of customer between the gas and electricity markets
- Losses in gas customers due to strong competition have been compensated by gains in the electricity market
- Britain is reaching the end of self-sufficiency in energy supplies
- Natural gas production is still strong but reserves are running down, with an R/P of 6 and the rate of new discoveries is declining
- In 2005 a major change took place in the British gas industry, with National Grid selling four of the eight Gas Distribution Networks to three new owners
- Transmission and distribution are regulated activities but for the first time gas distribution is now subject to competitive pressures which will enable the regulator to assess performance when making price determinations
- The water sector now consists of 10 water and waste companies and 12 water only companies
- While British-owned companies are still strong, foreign investors such as Veolia, RWE, Ondeo and YTL have significant shares and Agbar and Macquarie Infrastructure Fund entered the market in the last year
- RWE is divesting Thames Water this year

Reasons to buy

- Gain insight into the future of UK energy, is it a potential crisis?
- Understand how to position your company in this changing market
- Look at opportunities in these uncertain times and prioritise

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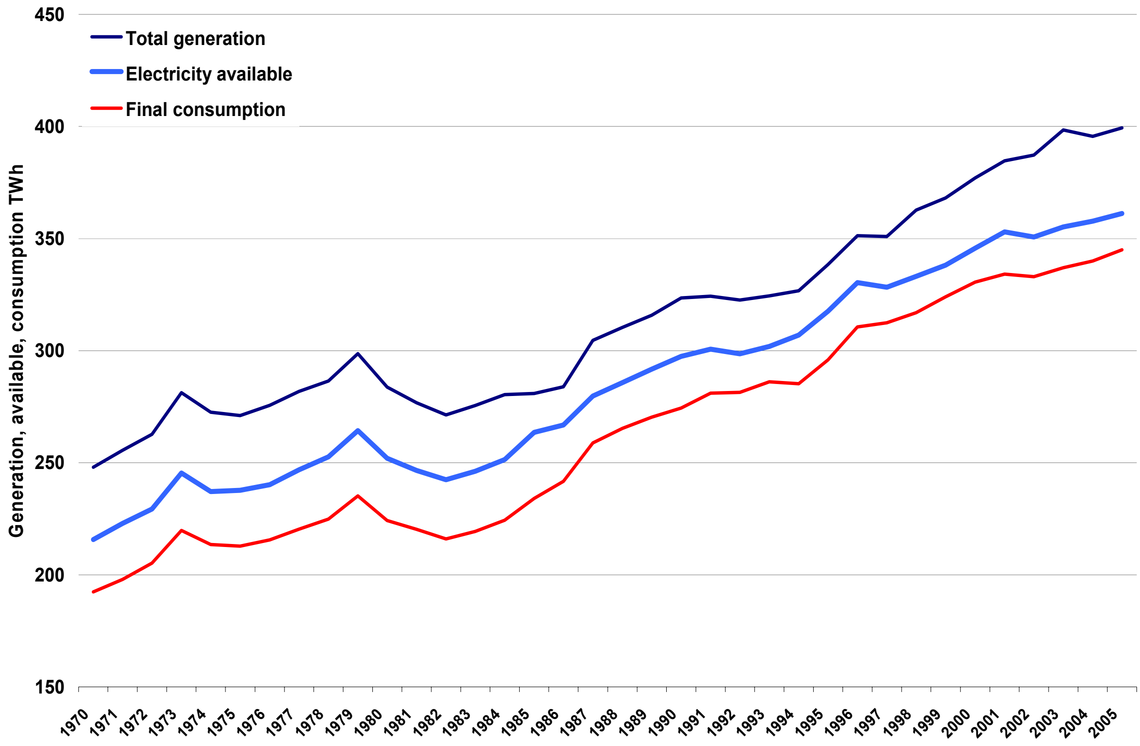
II. Introduction - The Electricity Supply Industry in the United Kingdom

Electricity Demand: 1970 to 2005

The total electricity generated in the UK including self-production was 399 TWh in 2005, with an annual growth rate of 1.7% over the last 10 years. In 2005, 360 TWh of electricity was generated by the major power producers of the electrical supply industry (ESI) and 37 TWh by auto-producers, and 2 TWh being purchased from other sources. Net imports were about 8 TWh and the final supply available was 407 TWh. After own use of 31 TWh in the generating industry and losses of 30 TWh, final consumption was 345 TWh.

The volume of consumption rose rapidly at 7.1% in 1973, but following the increase in oil price in 1974, growth fell to a negative contraction of -3.1% in 1974. With the increase in oil price increase in oil price in 1979, growth dropped from 4.35% to –5.0% in 1980 and continued to decline for another two years till 1982. In the last 20 years, growth has oscillated between a peak of 2.2% in 1996 to a fall of -0.7% in 2004.

Figure II.1 The Consumption, Availability and Generation of Electricity in the UK (1970-2005, in TWh)



Source: DTI

Domestic consumption made up 58% of total gas usage and 34% of the overall electricity used.

After the near absence of growth in 2002, electricity demand by final consumers grew by 1¼ per cent in 2003, and only ¾% in 2004 (although this rises to just above the 1½% per year trend rate of growth when allowance is made for the change to reporting on a calendar year basis in 2004). In 2005, the break up of the electricity demand was — domestic sector (29%), industry (28%), and commerce, public administration, transport and agriculture (28%). Fuel industries accounted for 7.50% and the transmission and distribution losses accounted for the remaining 7.50%.

VIII. Regulation and Legislation

Ofgem is the regulator for the gas and electricity industries in the UK. Its main role is to protect and advance the interests of the consumers by promoting competition wherever possible, and through regulation only where necessary. Application of this principle has resulted in numerous benefits for all the gas and electricity customers. Ofgem functions on the basis of two priorities:

- Promoting effective competition, wherever appropriate
- Regulating the monopoly companies that operate the gas pipes and electricity wires

In addition, Ofgem has the following responsibilities:

- To help secure the energy supplies in the UK by promoting competition in the gas and electricity markets, and regulating them to ensure adequate investment in the networks
- To help gas and electricity markets as well as the industry in achieving environmental improvements as efficiently as possible
- To keep into consideration the needs of the vulnerable customers, particularly the older people who suffer from any disability and low income earners

Ofgem's Governance

Ofgem operates under the direction and governance of the Gas and Electricity Markets Authority. This authority makes all the major decisions and lays down policy priorities for Ofgem. Its role in the management of Ofgem is set out in its rules of procedure.

Ofgem's powers are provided for under the Gas Act 1986, the Electricity Act 1989 and amended by the Utilities Act 2000. It also has enforcement powers under the Competition Act 1998. It is funded by the energy companies who have the license to run the gas and electricity infrastructure in the UK.

British Electricity Trading and Transmission Arrangements (BETTA)

Revisions of the trading arrangements resulted in the introduction of the New Electricity Trading Arrangements (NETA) in March 2001, which is operated by ELEXON, the Balancing and Settlement Code Company. These are now become superseded and are replaced by the British Electricity Trading and Transmission Arrangements (BETTA), which apply to England, Scotland and Wales.

Until April 2005, the electricity wholesale market in Scotland operated under different arrangements from those in England and Wales. But, BETTA introduced a single wholesale electricity market for the Great Britain with a single transmission system operation (National Grid), which works independent of electricity generation and supply. England, Scotland and Wales now operate on the same electricity trading arrangements. Prior to BETTA, the transmission system in Scotland was operated by the Scottish Power and Scottish and Southern Energy, who were the major electricity generating and supplying companies. BETTA is essentially an extension of the previous arrangements, NETA, which existed in England, Wales and Scotland. BETTA is designed to promote competition and provides number of benefits, particularly for Scottish consumers and generators. The legislation which underpinned BETTA was delivered in the Energy Act 2004

Under the new arrangements, the electricity generators sell majority of their output (over 90%) to the electricity suppliers in bilateral contracts. The generators self despatch their plant rather than being centrally despatched by the System Operator, which was done by National Grid.

The new wholesale market operates in three stages, plus a new settlement process. Generators and suppliers are allowed to use power exchanges (trading arenas in which electricity is bought and sold) to trade electricity; currently this accounts for approximately 7 % of the traded electricity. The suppliers then sell the electricity in the retail market to the customers. Traders also buy and sell electricity among generators and suppliers. Parties trading electricity negotiate a price for the electricity in half-hourly blocks.

X. Switching in the Electricity and Gas Market

Ofgem, the UK regulator, ensures that the competition remains effective and vigorous across all the segments of the domestic energy market. Although, energy suppliers have raised their prices significantly to recover higher wholesale energy costs, there remain wide variations between the prices they charge. The most expensive suppliers are charging over £100 more on an average than the cheapest for dual fuel supply. Customers on all payment methods, including pre-payment meters, can make significant savings from switching.

Ofgem published the Domestic Retail Market Report in March 2006, which stated that in March 2006, nearly 900,000 customers changed electricity or gas supplier, while more than 200,000 switched supplier in March 2005.This figure is the highest in the last four years.

The announcement of price increase over the 2005-06 winter was followed by a jump in the number of consumers switching supplier in March 2006. This increase in switching rates is consistent with survey findings that price is the most popular reason to change energy supplier.

Over 500,000 residential electricity consumers and 350,000 residential gas consumers changed their supplier in March 2006. This means that in a month, about two percent of the residential customer base for each fuel switched supplier. The number of residential energy customers switching supplier in March 2006 was the highest in comparison to the last four years. The number of completed switches was around 200,000 higher than the total recorded in March 2005.

Over the period to March 2006, and in response to rising energy prices, suppliers have begun to offer a wider range of fixed and capped price tariffs. These are aimed at domestic customers who want protection from further increase in price.

Wholesale energy costs are the largest component of the final bill for both gas and electricity. Wholesale prices continued to rise during winter 2005-06. Forward annual wholesale gas and electricity prices in Q1 2006 were 10-15% higher than those reported in Q3 2005.

The increase in wholesale price reflects the rise in oil, carbon, coal and in particular gas prices. There were testing conditions in the market during the winter pf 2005/06. In addition to North Sea gas supplies declining faster than expected, the closure of the Rough gas storage facility in February led to a loss of 10% in gas supplies. Ofgem asked the European Commission to investigate instances in which the interconnector flows did not relate to price differences between the UK and European markets. Ofgem estimates that this could have added around £1 billion to British wholesale gas prices. There have also been short-term problems in the offshore production and unused capacity at Isle of Grain LNG terminal.

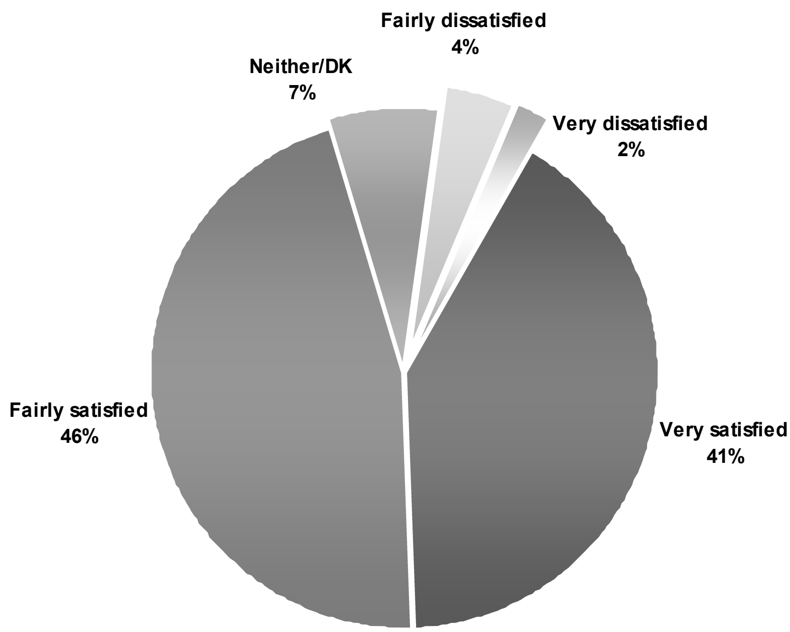
XLII. Customer opinions about the UK water service

MORI, a UK market research company, conducts regular surveys for the regulator to monitor customer satisfaction with the water services in the UK. The following are digests of the important results for the most recent round of the survey, based on a sample of 2,076, indicating an overall high level of satisfaction.

Overall satisfaction with tap water supply

Satisfaction with the tap water supply service is widespread throughout England and Wales. Nearly nine in ten respondents (87%) are satisfied, almost equally divided between those who are 'very' (41%) and 'fairly' (46%) satisfied.

Figure XLII.1 Overall satisfaction with tap water supply



Source: MORI

Overall satisfaction with sewerage service

Satisfaction with sewerage services is not quite as widespread, nor quite as high, as satisfaction with the water supply service. This is partly because twice as many respondents (13%) do not have an opinion about their sewerage service. Overall, eight in ten are satisfied, with more saying they are 'fairly' (47%) than 'very' (33%) satisfied.

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