

Liquidity in GB wholesale energy markets

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As part of the probe into the energy retail market last year, Ofgem noted concerns about the level of wholesale market liquidity, particularly in the electricity market. We have examined those concerns and proposed a number of ways to address them.

Our analysis shows that liquidity - a key measure of a market's performance - is low in the GB electricity market compared to other commodity markets and energy markets in a number of European countries. Liquidity in the gas market compares well to that in other countries and also to other commodity markets. We examine factors that have contributed to the low levels of liquidity in the electricity

market and set out a range of possible policy options that could improve liquidity. We are seeking views on the analysis, evidence and the high-level policy options presented. We intend to publish a consultation document in early autumn setting out in more detail a range of proposals to address the issues identified in our summer report.

► What is liquidity and why is it important?

Liquidity is the ability to buy or sell a product quickly without causing a significant change in its price and without incurring significant transaction costs. A key feature of a liquid market is that it has a large number of buyers and sellers willing to transact at all times.

Illiquid markets may act as a barrier to entry into the generation and supply market and may act as a source of

competitive disadvantage to small suppliers. Conversely, liquid markets provide investment signals to market participants and reduce the capacity that parties might manipulate prices. Lack of liquidity may, therefore, reduce the efficiency of wholesale electricity markets and reduce competition between industry parties.

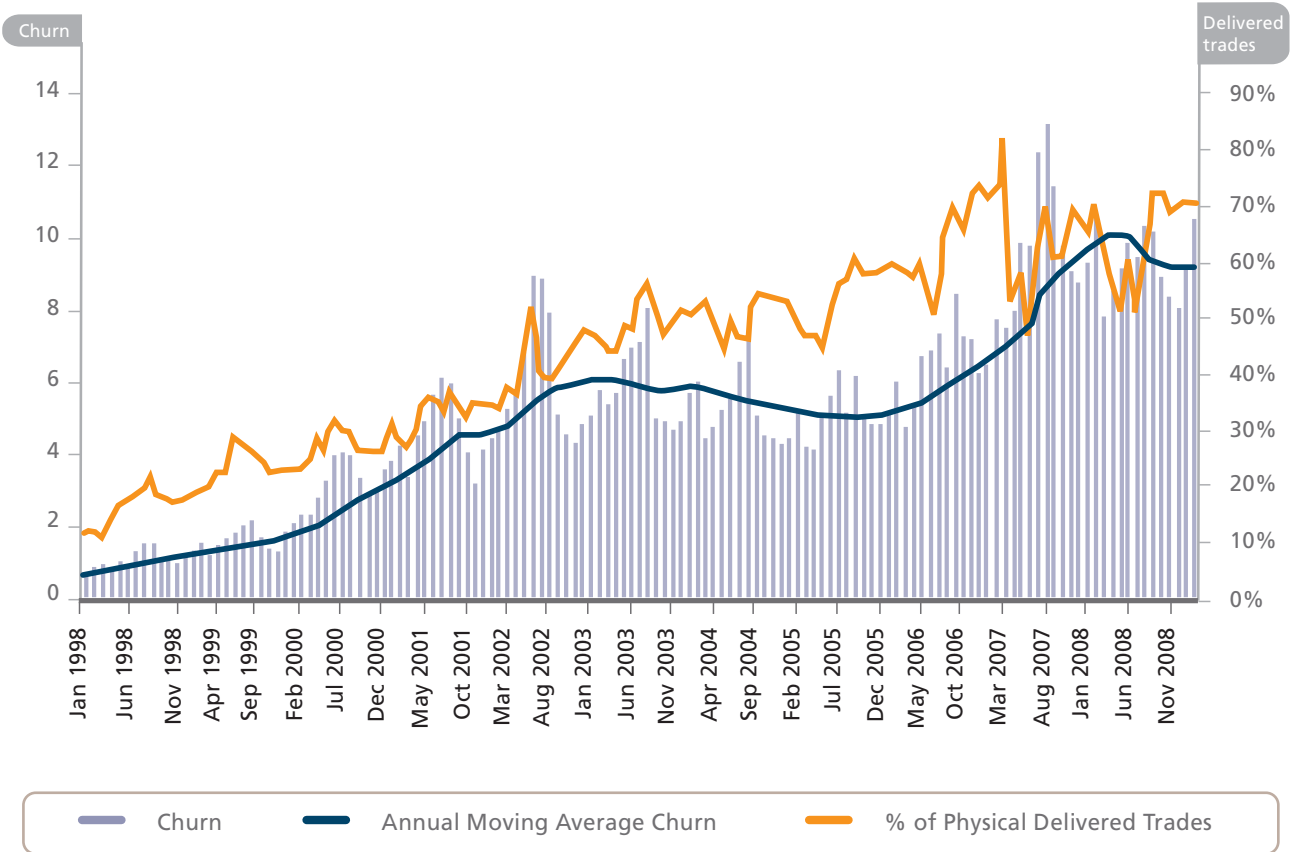
► How is energy traded in Britain?

Energy suppliers and generators can trade gas and electricity on the wholesale markets using exchanges (such as APX) or brokered, Over The Counter (OTC) platforms, such as Spectron or Prebon. The OTC market dominates trading in gas and electricity in GB, accounting for around 80 per cent of traded volumes in gas and almost all electricity traded. The alternative to trading on the open market is for market participants to enter into long-term contracts with each other, or adopt a strategy of vertical integration whereby they can source the volumes they need to meet their customers' requirements internally.

GB gas market liquidity, as measured by the volume of trade on exchanges and OTC, has grown to nearly ten times the size of physical consumption as shown in the figure below. Churn¹ in the gas market compares well with churn in other commodity and European gas markets considered to be liquid. In discussion with market participants the majority have indicated that they consider gas liquidity to be sufficient for their needs.

¹Churn is a commonly used measure of liquidity and is the ratio of traded volumes to final consumption.

Figure 1: GB gas market churn 1998 - 2009



Source: National Grid

Figure 2: Annual Churn rate (2008)

Market	Churn
GB Gas	9
GB Electricity	3
Nordic electricity	7
German electricity	8
French electricity	1.5
Dutch electricity	4.5

Churn in the GB electricity market has fallen from around 7 in 2003 to around 3 today. Liquidity is currently significantly lower than levels in the GB gas market and also lower than a number of other European countries.

The table opposite compares churn in the GB electricity markets to other electricity markets and also the GB gas market.

► Causes of low liquidity in the GB electricity market

Liquidity is likely to be a function of a host of different factors and the (often complex) interrelationships between these, so the low level of GB electricity liquidity over the past 3-4 years is unlikely to have a single cause. There are also strong feedback loops which can make it difficult to distinguish between cause and effect. For example, the impact of declining liquidity may force market participants to seek alternatives to trading in wholesale markets, which may lead to further reductions in liquidity.

The main potential contributors to low liquidity in electricity identified by Ofgem and industry participants are: industry structure, trading arrangements and credit issues.

Industry structure

Small companies and consumer bodies have expressed concerns that large vertically-integrated companies (the Big Six suppliers) are able to source much of their energy requirement internally, reducing the need for trading.

Trading arrangements

A range of factors have been suggested including the current balancing arrangements, lack of product availability, absence of reference price, price volatility, and the fact that gas is sometimes traded in place of electricity.

Credit issues

There has been a move towards increased requirements to post collateral, at least for small and less creditworthy participants, following the collapse of Enron, and more recently in light of the credit crunch. This is likely to have increased the costs of hedging for small participants which may have reduced liquidity.

It has also been suggested that government intervention and uncertainty over energy policy has contributed to lower levels of GB wholesale market liquidity.

► Policy options for improving electricity market liquidity

The report outlines a number of possible measures that could be adopted to improve the level of liquidity in the GB wholesale electricity market. At this stage Ofgem is seeking views from industry participants on the options outlined below and inviting comments on other options that could improve liquidity.

A number of industry-led initiatives to improve liquidity in the GB electricity market are already underway. The APX Group, which provides the main electricity exchange, launched a day-ahead power auction in November 2008. In addition, a joint venture between exchanges, Nasdaq OMX and Nord Pool Spot (N2EX) is launching a day-ahead auction this year and a derivatives market at a later date. The aim is to improve liquidity by creating robust reference prices.

Other options put forward by industry participants include:

- increased interconnection and integration (via market coupling) of the GB and European markets;
- introduction of a regulated/subsidised market maker;
- introducing an obligation on large/vertically integrated participants to auction a certain proportion of their generation output;
- reintroduction of self supply restrictions;
- reform of cash-out arrangements, such as a move to a single cash-out price;
- changes to the current governance arrangements;
- greater information provision (on demand/supply fundamentals);
- exempting parties below a certain threshold from exposure to imbalance price; and
- helping smaller market participants to meet the higher cost of credit and collateral requirements.

During next few months Ofgem will meet with interested industry parties, assess responses to this report, develop a range of detailed proposals to improve liquidity in the GB wholesale market and consult on these in early autumn.

We would expect to publish any final proposals at the end of the year.

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