A VITAL LINK IN ENERGY TRADING

Group

Energy Viewpoints

Developing Energy Markets

Issue 7 – Summer 2006

Developing Energy Markets

Contents

More to do on Gas Market Development

Dear Reader,

Power leads gas – at least in terms of the development of competitive and transparent tradable markets. So when will European gas trading finally begin to take off and start to rival trading in the power market? The results of the Moffatt Associates' survey in this quarter's special topic of gas market liberalisation reveals a lot of scepticism as to when that will be, but efforts are being made. EU initiatives like the regional gas hub proposal from ERGEG, the EU energy regulators' association, should help to create the conditions for a more integrated market and indeed EFET (The European Federation of Energy Traders) has welcomed this plan and emphasised efforts already made in areas where there is existing regulatory cooperation. A clear sign of the path we must take.

But it's not without hurdles. Margot Loudon of Eurogas argues in her article that a successful gas hub development also depends on other factors. There should be fair access to transportation capacity around the hub; there should be a commercial and regulatory framework, including standard agreements for hub services, ensuring transaction security and transparency of services; and there should be the necessary regulatory oversight on hub operation.

In terms of what could be done to improve liquidity in the gas markets, Moffatt's survey reveals that market participants are divided over what measures should be prioritised and which were the most practical. Favoured approaches were forcing ownership and not just legal unbundling of transmission and distribution, but more so to force incumbents to provide greater transmission and storage access to third parties, and creating transparent data. But how achievable would each of the measures be in practise? Well, there was a degree of pessimism over what could actually be accomplished, with no measure receiving a strong vote of confidence.

Additionally this issue has also taken a look at the oft criticised matter of long term gas contracts, but in his article John Elkins of Gas Matters says that such contracts are not bad per se but will evolve under growing pressure from regulators and competition authorities and with the increase in new sources of supply (e.g. LNG). But even if a supply surplus emerges, an important question is whether customers will expect it to last. A short term gas bubble may not be enough to encourage buyers to leave their long term contracts, but it may be enough to encourage them to venture more deeply into the traded gas markets. This surely is where exchanges like APX can play a further facilitator role by releasing national supply and demand data and providing transparent reference prices.

I fully understand the reasons behind the development of long term gas contracts, but we believe that now is the time to re-examine their impact on the market. I believe that they still have a role to play in underpinning infra-structure developments but provided that the gas that flows under these contracts can be made available to spot markets should one party or another so desire. This would probably mean solving issues associated within specific delivery points and onward re-tradability of the gas. Such a change would be a significant boost to the development of liquidity on spot markets and much needed price transparency. I am convinced that, under such conditions, much of the current antipathy to long-term contracts would evaporate, because in that situation, long-term contracts and short-term optimisation would not be mutually exclusive: instead both could stimulate each other in terms of liquidity.

So there remains more to do on gas market development and if you have any views on this, then as ever we request feedback to be sent to us at **apx@apxgroup.com.** I hope you enjoy reading this issue of *Energy Viewpoints.*

Bert den Ouden
CEO

Slow Progress Expected on European Gas Trading

Ownership unbundling, greater third-party access to transmission and storage and more data transparency are regarded as important steps in creating an effective European gas market. This is the main conclusion of Moffatt Associates' latest European Energy Trends Survey.

Market scepticism

Despite continuing problems with the development of a competitive and transparent power trading market in Europe, electricity, as a tradable commodity, is still far ahead of gas. The results of our survey on this quarter's special topic of gas market liberalisation shows that there is a lot of scepticism in terms of when EU wide gas trading will finally begin to take off and start to rival trading in the power market.

Progress in liberalising the gas sector has been slow. The gas market continues to suffer from a lack of liquidity of both gas and transport capacity, while continued long-term gas contracts can cause market distortion. Despite the best efforts of the European Commission, the gas market is still essentially national, with a number of large and dominant players effectively controlling the market. There is a lack of available gas for new entrants and limited scope for moving gas around the European network because of inadequate interconnections.

The UK, where the total market share of the three wholesale gas suppliers is less than 40%, is the only member state where competition has really begun to take hold, followed by Italy, where the equivalent figure is 60%. In the other European markets, the market share of the three wholesale gas suppliers still exceeds 70%.

A determined Commission

However, the European Commission is increasingly determined to make progress in creating a single power and gas market in Europe. The decision by the Competition Directorate to act against member states over the failure to implement the electricity and gas directives, and to investigate apparent restrictions and distortions of competition, show the EU authorities' strengthened resolve to remove obstacles to a single market. The recent dawn raids by the competition authority investigators targeting a number of European gas companies suspected of an abuse of power was further evidence of the EU's determination to act in this matter.

Initially, the plan was that a single pan-European energy market would gradually emerge as national markets became more competitive and more integrated. However, it has become obvious that this is a long-term ambition and that more decisive action needs to be taken to encourage the development of a genuinely integrated energy trading market.

A regional approach

Earlier this year ERGEG, the EU energy regulators' association that advises DG TREN, put forward a framework for regional developments in both power and gas. In February it proposed the creation of seven macro-regions for power which would serve as the building blocks of a single European energy market, followed in April by a similar project for gas, this time with four macro-regions. **Figure 1** shows the planned projects for gas.

Figure 1. ERGEG's four regional energy market (REM) projects for gas:

Region	Countries	Lead regulator
North-West	Netherlands, Belgium, France, United Kingdom, Ireland	Netherlands
North	Germany, Denmark, Netherlands, Sweden	Germany
South	Spain, Portugal, Southern France	Spain
South-South-East	Italy, Austria, Slovakia, Hungary Slovenia, Greece, Poland, Czech Republic	Italy, Austria (co-chairs)

Source: ERGEG

As the table above shows, the boundaries used to establish regional markets are not always clear-cut. For example, France has been included in two regions, with northern France included in the North-West region and southern France in the South region.

A detailed timetable for introducing these regional initiatives will be published over the Summer, with more information on stakeholder participation also being gathered. ERGEG plans to compile a first overall progress report of the four REMs in late Autumn 2006, followed by a consultation at the Madrid regulatory forum, where gas regulation issues are discussed by national regulatory authorities, the European Commission and other gas market participants. After this, work to establish the regional markets will commence from 2007 onwards.

The European Federation of Energy Traders (EFET) has welcomed the ERGEG regional gas hub proposal, while emphasising that initial efforts on improving liquidity and cross border trade between the existing trading points in Belgium, the Netherlands and northern France, an area where there is existing regulatory cooperation. Results from this pilot study would help to identify what actions should be taken to stimulate trading at and between these hubs, and could be extended to other regional hubs.

Many of our Panel members had clear ideas about where some of the hubs should be located. Favorites were NBP, Emden/TTF, Baumgarten, one hub based in southern Europe, perhaps on the French/Spanish border, and possibly one in Eastern Europe.

Expectations for gas trading

There was widespread scepticism amongst the Panel about whether gas trading would take off within the next two years, although greater confidence that this would begin to happen within a period of five years. Our respondents did, though, welcome the fact that the European Commission is showing renewed determination to make progress on establishing the single market, and in particular they supported the greater involvement of the EU competition authorities in monitoring and dealing with the situation.

Some of our Panel, while supporting the ERGEG proposal in theory, were sceptical about how successful this would be in achieving a genuinely liquid gas trading market. Establishing regional hubs may not, in itself, create the conditions necessary to stimulate trading in the market, and more important than regulatory actions is the need for the market to be driven by commercial concerns. Other Panel members believed that regulation is the key to establishing a proper trading market, and were pleased that the competition authorities now appear to be taking the lead in ensuring that the markets are liberalised in line with EU legislation.

Conditions for success

In drawing up its regional markets initiative, ERGEG has identified a number of issues which need to be addressed to provide sufficient opportunities for competing gas supply companies. These include incentives for investment, availability of gas, cross-border compatibility, for example in balancing and flexibility regimes, and information transparency.

In terms of what could be done to improve liquidity in the gas markets, our Panel members were divided over what measures should be prioritised, and which were

the most practical **(See Figure 2 below).** Favoured measures were forcing ownership and not just legal unbundling of transmission and distribution, forcing incumbents to provide greater transmission and storage access to third parties, and creating more transparent data on capacity, transmission and storage. In terms of how achievable each of the measures would be in practice, however, there was a degree of pessimism over what could actually be accomplished, with no measure receiving a strong vote of confidence from our Panel.

Nine countries have not implemented any unbundling, while the remaining five EU member states have been allowed to derogate from the unbundling principle.

Another problem facing the European gas market is the lack of a clear framework for network access conditions, especially for transactions between TSO areas. This should be addressed by the new regulation on access to gas networks (1775/2005), which came into force on 1 July 2006.

Figure 2 - Panel ratings of measures to improve gas market liquidity (on a scale of 1-10 where 1 not important/practical and 10 very important and very practical)

	Priority	Practicality
Force ownership not just legal unbundling of transmission and distribution	7	5
Force incumbents to provide greater transmission and storage access to third-parties	7	5
Create more transparent data on capacity, transmission and storage	7	5
Increase imports of LNG to diversify sources of supply	6	5
Make long term import contracts more flexible so incumbents have to trade more	6	5
Use more gas release programmes to help new (supplier) entrants	5	5
Use gas swaps to facilitate cross-border trading	5	5
De-coupling link to oil price so prices better reflect demand and supply of gas in Europe	5	5
Impose "use it or lose it" conditions to maximise use of UK interconnector	5	4

The lack of unbundling of gas transmission is a clear barrier to the achievement of an integrated gas market and to the emergence of a liquid and transparent gas trading market. Only Denmark, the Netherlands, Sweden and the UK have instituted ownership unbundling, while seven countries: Austria, Belgium, France, Germany (partially), Italy, Spain and Hungary, have instituted legal unbundling.

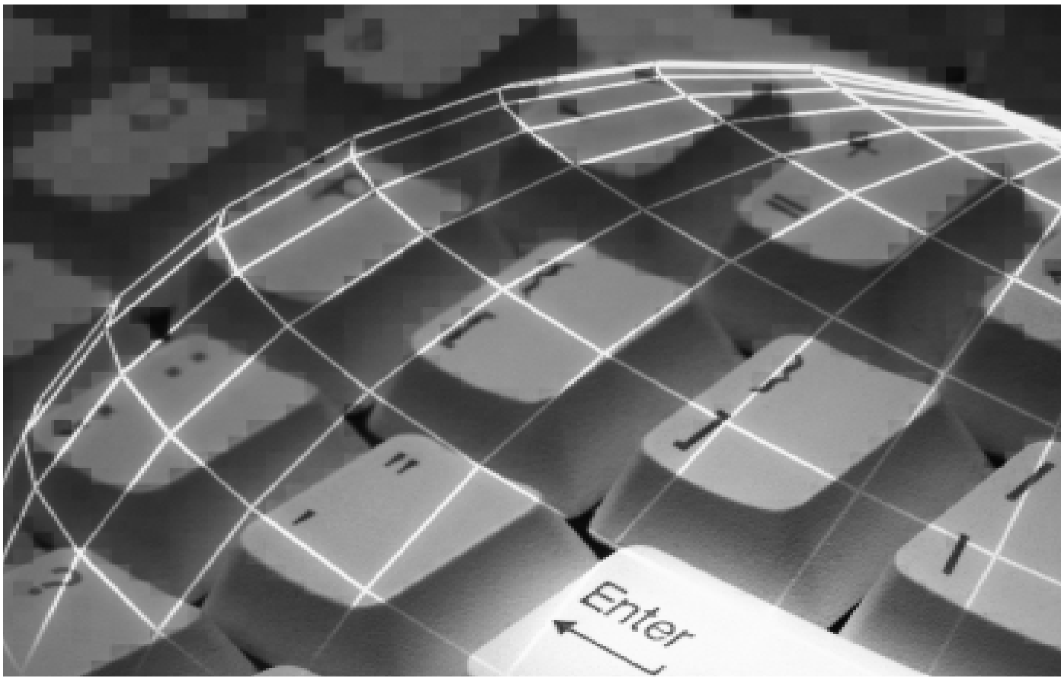
Diversification, access and transparency

As well as strengthening security of supply, gas needs to be imported from new sources into the EU if the market is to be made more competitive. One positive development which could help to encourage the emergence of a gas trading market in the EU is the growing investment in LNG, and plans for LNG terminals are well-advanced in a number of EU member states. The European Commission believes that LNG is a key source of diversification, and in the medium-term this should help to establish a trading market for gas in the EU.

The inadequacy of the data available continues to represent a significant barrier to trading in the gas market. A lack of adequate information on prices will continue to prevent the development of a liquid and transparent market, and this obstacle will need to be addressed if trading is to develop. Most of our Panel members thought that exchanges could play a role in encouraging and facilitating more liquid markets for gas in Europe, particularly by releasing daily supply and demand data in the various countries, and by providing a transparent price reference. Gas is already traded on the APX exchange, while the EEX hopes to introduce a gas trading contract from autumn 2006. Other exchanges are likely to follow suit.

Other initiatives which should help to stimulate trading in the gas market include the voluntary agreement reached last year by the Madrid regulatory forum on conditions for access to gas storage. The agreement sets minimum requirements for fair and non-discriminatory access to gas storage facilities and services in line with the EU Gas Directive. However, the results of the agreement have so far been uneven, with ERGEG reporting at the last meeting of the Madrid forum in May this year that compliance on transparency and on third part access services remains insufficient.

In conclusion, gas lags behind power in terms of the development of a liquid and transparent trading market. EU initiatives should help to create the conditions for a more integrated market, but it is not yet clear how successful plans such as the ERGEG regional market initiative will be. There is a lot of scepticism amongst market participants about how quickly gas trading can develop, and a recognition that much still remains to be done, not least the need to make more gas available, if gas trading is to take off in the next few years.



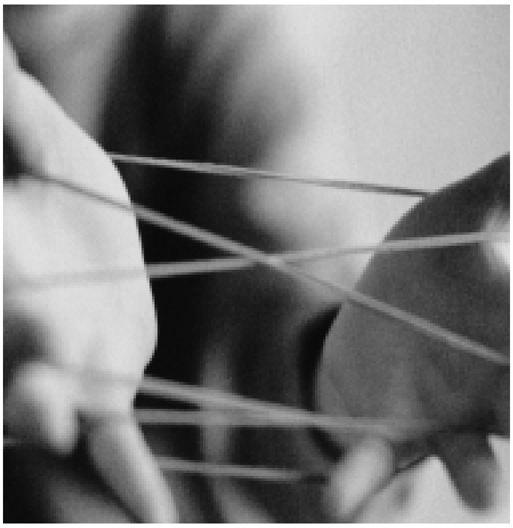
Need for a Regional Approach to Effective Competition

Eurogas, which represents the interests of wholesale and retail gas suppliers, believes that regional gas trading "hubs" will lead to greater wholesale market efficiency. Margot London, deputy secretary general of Eurogas highlights what needs to be done to create more effective competition.

Introduction – Setting the scene

Eurogas supports the achievement of the internal European gas market. A fully functioning internal market will enhance efficiency in the customers' interests and contribute to security of supply. Customer choice and effective competition will lead to the development of innovative, high-standard end-use services, and improve Europe's competitiveness.

Therefore, timely and correct implementation of the Directive 2003/55/EC concerning common rules for the internal market in natural gas and also of the Regulation on conditions for access to the natural gas transmission networks which came into force on 1st July (No 1775/2005) is necessary, as well as full implementation of voluntary commitments, notably the Guidelines on Access to Storage adopted by the Madrid Forum in Spring 2005.



Getting the complementary regulatory framework right presents a challenge. Therefore Eurogas participates actively in the Madrid Forum which seeks consensus-based solutions on the way forward. Eurogas also looks forward to contributing to the planned work of ERGEG on regional markets which can provide a useful next step to a fully integrated European market.

An essential framework approach should include:

- the assurance for suppliers of non-discriminatory access to the gas infrastructure system
- the development of market driven hubs
- the need to address any distortions arising from interactions between adjacent markets or network rules

Transparency and coherence of rules leading to convergence of operators' services will be keys to further progress, and contribute to well functioning wholesale gas markets.

An essential framework for non-discriminatory system access

From the suppliers' and systems users' perspective it is essential that rules are in place to ensure non-discriminatory access to pipelines, storage and LNG terminals, based on appropriate tariff structures.

Effective unbundling of transportation activities from gas trade is necessary to give users confidence their requests for network access and development will be treated in a non-discriminatory manner. Also there must be capacity allocation and congestion management rules to optimize use of existing capacity, as well as giving market signals for the development of new capacity. Suppliers must be able to move their gas through Europe in a fluid way on an economic basis.

Capacity allocation methods are of critical importance in ensuring a system of non-discriminatory access. In circumstances when capacity exceeds demand, there should be no problem with regard to acquiring capacity, but when demand exceeds availability of capacity then congestion management rules will be required that promote and support competition in the supply of gas, are not anti-competitive, and optimise the use of the system. In the first place it is important to incentivise a secondary market in capacity trading by capacity holders. Rules, however, should also involve clear Use-It-Or-Lose-It/Lend-It (UIOLI) rules for accessing capacity on an interruptible but also on a firm basis.

Meanwhile full implementation of the Regulation on conditions for access to the gas transmission networks should ensure the availability of shorter-term data to both market participants and authorities, which is necessary for the efficient and non-discriminatory use of the network.

The development of market driven hubs

Gas trading hubs need to be developed as a major element of the competitive gas market. While for suppliers, long-term take or pay contracts will remain important and for most companies indeed will be the backbone of their supply strategies, it is necessary that a more liquid market is promoted, supported by shorter-term and spot contracts, and hub development, to complement longer-term arrangements, widen supply options by improving flexibility and enhancing portfolio optimisation. At the same time hubs can be a means by which a market value can be ascribed to gas used for balancing, and for contract indexation purposes.

At present a few hubs operate in Europe, but they vary considerably in terms of their trading terms, access to capacity, numbers of players, and whether or not they are regulated. Some are relatively well-developed; others are still in their early stages and have yet to develop the desired features of a well-functioning hub. Therefore Eurogas supports the work of the European Regulators Group for Electricity and Gas (ERGEG) to facilitate the emergence of properly functioning hubs.

The two key principles underlying an effective hub are transparency – that prices are public and available on a continuous basis and liquidity – requiring a sufficient number of willing buyers and sellers, and no single participant can exert undue influence on prices for physical trades, this liquidity also depends on the suppliers being able to move gas readily to and from the hub.

Successful gas hub development also depends on other factors. There should be fair access to transportation capacity around the hub, which should be sufficiently extensive to permit hub users to move gas to and from the hub. There should be a commercial and regulatory framework, including standard agreements for hub services, which ensures transaction security and transparency of services. Although hubs should essentially be market-driven, their operation will require regulatory oversight of, for example, necessary technical and financial resources of players, verification of gas availability, daily operations and balancing rules.

Hubs can contribute to real efficiency gains in the market and to the more effective functioning of market competition.

Convergence of national systems

If an integrated European market is to be achieved it is also important to improve the compatibility and convergence of national operating systems so that transporting gas across Europe is a "seamless" experience for network users.

The principal responsibility of TSOs is to ensure the integrity of the system, and to deliver network's user's gas in accordance with the contract. As the market develops and indeed to facilitate the development of regional gas markets, the services offered by TSOs should correspond with the needs of system users, even if these needs can be expected to vary in different countries, regions, and at different stages of market development. The development of entry-exit network access models should be pursued as they simplify transportation and balancing for users and support liquidity at hubs. Market based balancing should be an objective, as this would ensure that balancing charges are cost-reflective to provide the right incentives for users. TSOs provide at present different balancing regimes. It should be avoided that incompatibilities between different regimes lead to extra costs being imposed on users. Therefore possibilities for convergence between neighbouring balancing regimes should be investigated. This will be a main issue for the gas regional markets initiative.

Inevitably, some detailed rules and arrangements will continue to be different in different operating zones for some time to come. Therefore there has to be a common understanding on principles and objectives, and common definitions and as far as possible methods in a number of areas. For example, a commonly agreed approach on capacity calculation should underpin capacity allocation and congestion management. Rules on capacity allocation and to prevent capacity hoarding have to be consistently applied throughout the internal market.

Cross-border tariff systems have to be transparent and fair. There is need for progress in all these areas. Also gas and operational interoperability is a key area for action.

While this will require TSOs to co-operate more than at present, ways also need to be explored of improving the regulatory process. Regulators in all Member States have to enjoy full and equal independence. Especially as regulatory activities relate increasingly to cross-border activity, but additionally there has to be a greater level of regulatory co-operation and co-ordination, that will facilitate convergence and coherence of rules and regulators. The gas regional markets initiative has the potential to be a catalyst to minimise regulatory gaps.

Conclusion

Now that the basic building blocks of the wholesale market are in place, and once the legislation is fully implemented, the focus turns to identifying pragmatic solutions to remaining obstacles to progress. Voluntary agreements and consensus based approaches will be important instruments to improve the market functioning, and the overall framework approach has to focus on hub development. Releasing through specific measures and solutions the dynamism of regional markets, including pragmatic approaches on cross-border issues, will contribute to the successful achievement of the internal market.

This article has focused on wholesale market issues and internal market challenges. Eurogas recalls, however, that changes in the supply structure and considerations arising from world economic growth are bringing new significant challenges to Europe in respect of longer-term gas supplies. Not only must Europe remain an attractive destination for the world's gas supplies in the creation of the internal gas market considered here but external policy of the EU must equally contribute to ensuring security and reliability of supply.

How Long Can Long Term Gas Contracts Survive?

Long term gas contracts are not set in stone but will evolve under growing pressure from regulators and competition authorities and the increase in new sources of supply (e.g. LNG). John Elkins of Gas Matters explores how the market might develop.

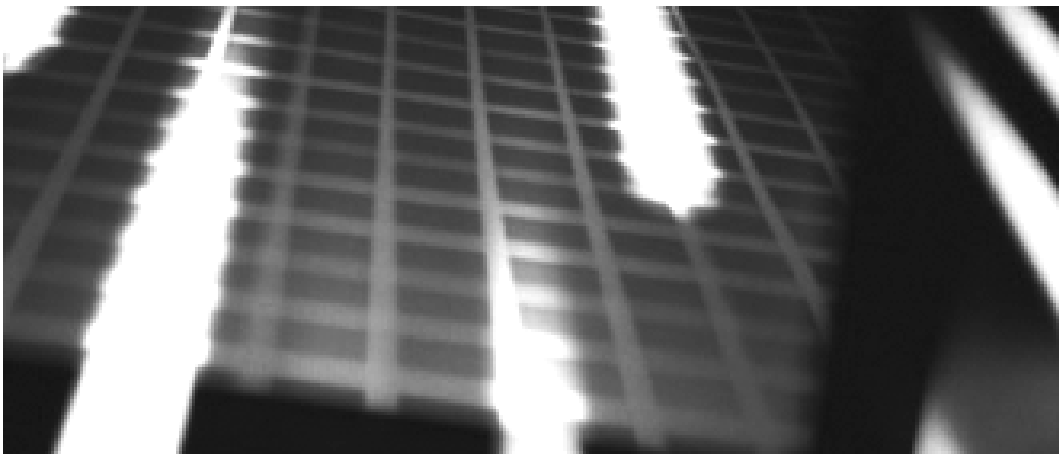
Pressures for change

Why should gas wholesalers and retailers leave the comfort of 15-25 year long term gas contracts with reliable suppliers for the inevitably more uncertain world of short term contracts? And if they choose to do so, how should they do it? The how will depend on the why. For example, it will make a difference whether the change is being made from political conviction, regulatory compulsion, or for commercial reasons, including for instance the emergence of new, possibly cheaper or preferable, sources of supply.

It is usually political dogma which leads regulators to push for change. This is broadly the case in Europe, which is being driven in the direction of liberalisation, although other energy markets have been there before, notably in North America, Australia, Chile, and the Nordic power market.

The initial impetus to change the market structure in the UK came from reports by the then Monopolies and Mergers Commission in 1988 and 1993, and it was pressure from Brussels that led to the dismantling in 2001 of the Gassforhandlingsutvalget ('GFU') system under which contracts for the supply of Norwegian gas were centrally negotiated by a government committee, even though the contracts were nominally between individual upstream companies and the purchaser. The result was the renegotiation of all the existing contracts, and the emergence of contracts such as Centrica's 5 Bcm/year contract with Statoil linked to the NBP gas price, and other "untraditional" long-term contracts for gas entering the UK through the Vesterled and Langeled systems.

Now the liberalising drive from competition authorities in Brussels and Germany ▶



has led to the important challenge of long term contracts between German Stadtwerke and their German suppliers. The importance of this measure can be seen in the vigour with which Ruhrgas has contested the rulings of the Kartelamt. It should be noted that the issue here is not long term contracts per se, but the concentration of contracts with a single supplier upstream and the cosy relationship between supplier and buyer that was encouraged by various "incentives" to use a single supplier.

An important new impetus for change is the entry into the market of major new suppliers – most notably those offering LNG from Qatar, Nigeria and Egypt. Whilst most of the LNG will be sold under long term contracts between producers and wholesalers – for instance Total's plan to buy 5.2 mtpa from Qatar for the South Hook terminal in South Wales – the new sources are likely to create additional liquidity, and increasing levels of short term sales, around European trading hubs. The new LNG terminal capacity could also attract spot cargoes – particularly in the summer months – which by definition would be sold on a short term basis.

What all this shows is that long term contracts are not set in stone, but will evolve as the regulators and competition authorities slowly unpick the anti-competitive elements they may contain. These include GFU-type central negotiations and destination clauses, which restrict the markets into which gas can be sold by the purchaser, and enable the suppliers to lock up markets and prevent catastrophic falls in prices.

The Commission has made some progress through central negotiations with the suppliers, notably in securing the removal of restrictive destination clauses from future contracts, but progress in the area of opening up, for instance, the Russian gas export market to players other than Gazprom is non-existent.

The buyer's rationale

But what about the commercial aspects? Why have European wholesalers and final customers been happy to stick with long term contracts? About 40% of European gas supplies are delivered under "traditional" long term contracts with the national gas companies of Russia and Algeria – Gazprom and Sonatrach – whose consent is necessary if any significant progress is to be made in loosening the ties of the existing contracts.

The answer, presumably, is that the mix of price and security which wholesalers have in the past received from the contracts was acceptable. It could also be that they were happy to prolong the existing, comfortable status quo and were seeking to prolong as much as possible existing barriers to entry into their national markets. It is also easier to deal with just one, large supplier.

A crucial point is that with relatively few suppliers into western Europe, the

dominant suppliers and buying monopolies have been able to manage the market and keep supply and demand more or less in balance. It has been very difficult to promote competition within such a balanced market.

In fact the only real success has been in the UK, which has been characterised as being relatively closed, and relatively over-supplied by a large number of North Sea producers. Once the British Gas monopoly was broken the conditions were right for an outbreak of competition and for the development of trading at the NBP. Legacy long term contracts lived on, but new long term contracts have become shorter in length and generally indexed against traded gas markets. Much of the new import infrastructure has been funded without assured gas supply contracts, so much so that concerns have been expressed by National Grid, in relation to the winter of 2006/7, that the capacity will not be fully used, either because of price competition or constraints elsewhere in the system.

The role of trading "hubs"

Many European traders are now trading at the NBP, as well as at Zeebrugge and the TTF, partly to gain experience of trading, and partly to gain or consolidate footholds in the north-western European market. One question that would be interesting to ask them all is whether the trading hubs are giving them what they want. Short term trades are clearly already available to the wider European audience but, and this is relevant to the debate about long term contracts, the NBP suffers from a relative thinness of forward trading. Most of this trading is done by intermediaries, with the result that there is high volatility and higher forward prices currently than might otherwise be the case. It has been suggested that one of the reasons for this thinness is the reluctance of UK producers to conclude long term contracts or participate in the forward markets.

The reasons for this have been widely debated and various excuses have been offered. The major one is assumed to be that producers could be exposed if they fail to deliver, and would then have to fulfil contracts by buying on the NBP at very high prices. This is important because a lot of UK gas sales contracts to all but the largest Industrial and Commercial users are set with reference to forward prices.

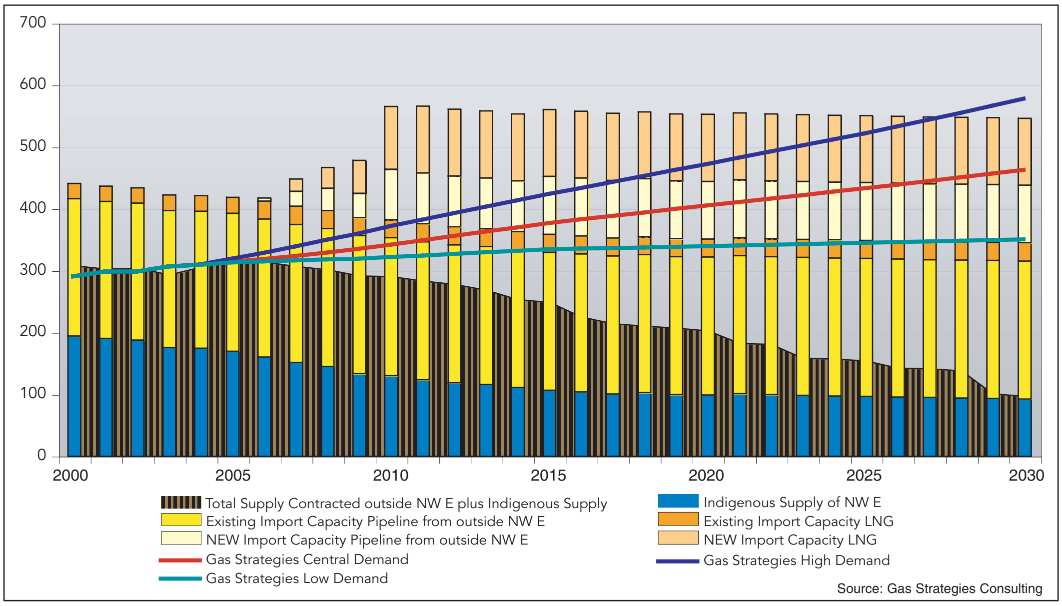
One response to such uncertainty is that it takes time for a hub to develop and that European hubs are still a long way from being comparable with the sophisticated trading that takes place in North America. It is estimated that less than 10% of final demand is bought under contracts of more than 5 years in the United States, about 30% on one to five year contracts and around 60% on contracts of less than one year. And almost all contracts are indexed against traded gas markets. Another factor is that whilst the European systems are physically interconnected, it is still difficult for independent traders at hubs to move gas between these systems.

Impact of alternative suppliers

What could be the catalyst for a North American pattern to emerge in Europe? If we assume that there are many purchasers looking for gas at lower than current prices, but with supply security, the missing link is pressure on suppliers from alternative supplies at lower prices.

Such a scenario seems now to be possible. **Figure 1 below** illustrates the potential for European over-supply led by LNG import projects all round the coasts of Europe, and new pipeline proposals, including those from Algeria to Spain and Italy, NEGP, Nabucco, and others involving gas flowing through Turkey westwards.

Figure 1 - Outlook for Supply Capacity, Contracted Supply and Demand in NW Europe



We must of course be careful to distinguish a surplus of capacity from a surplus of gas. The projects listed above are for capacity, and do not represent gas available for sale. Nevertheless if a large proportion of the infrastructure proposed by these projects is built, then a lot of gas could potentially be hunting for a market. This could include gas from existing long term suppliers, whose customers might be expected to switch their supplies down to minimum levels allowed in their contracts, to escape high prices and make room for trading at lower prices.

If the possibility of oversupply does hit Western Europe there will inevitably be pressure from energy users not to renew or extend existing long term contracts, and maybe to renegotiate existing long term contract price clauses – price re-openers are a standard feature of Continental European contracts.

Where could this lead? Perhaps towards gas- rather than oil-indexation, greater use of a flexible market, and a redefinition of "long term" to mean only 5 to 10 years, and "medium term" to mean 1 to 5 years.

Conclusion

But even if a supply surplus emerges, an important question is whether customers will expect it to last. A short term gas bubble may not be enough to encourage buyers to leave their long term contracts, but it may be enough to encourage them to venture more deeply into the traded gas markets. No-one wants or expects long term contracts to disappear – they still play a role in North America – but they may be transformed beyond recognition. And once suppliers have learned to dabble with a portfolio approach to their purchases, maybe as much as 20-30% of the portfolio could become medium term under the new definition.

This article is derived from an article to appear in the August edition of Gas Matters.

Trends in European Energy Quarterly Survey (Summer 2006)

This edition of ***Energy Viewpoints*** includes the results of our latest quarterly survey which monitors trends in the European energy markets.

This survey is run in association with **EFET** (the European Federation of Energy Traders) and is conducted by **Moffatt Associates,** an independent market research and business strategy consultancy based in London.

The objectives of this research programme are to canvass views on trends in market prices and energy market developments such as liberalisation, and to monitor changes in market perceptions over time.

Results are based on the views of representative Panel of leading market participants and policy influencers. The survey itself takes the form of an in-depth telephone interview and is conducted on a strictly confidential and non-attributable basis. Respondents were interviewed in June/July 2006.

This quarter we received contributions from 25 senior market participants from 10 European countries (Belgium, Denmark, France, Germany, Italy, the Netherlands, Norway, Poland, Spain and the UK).

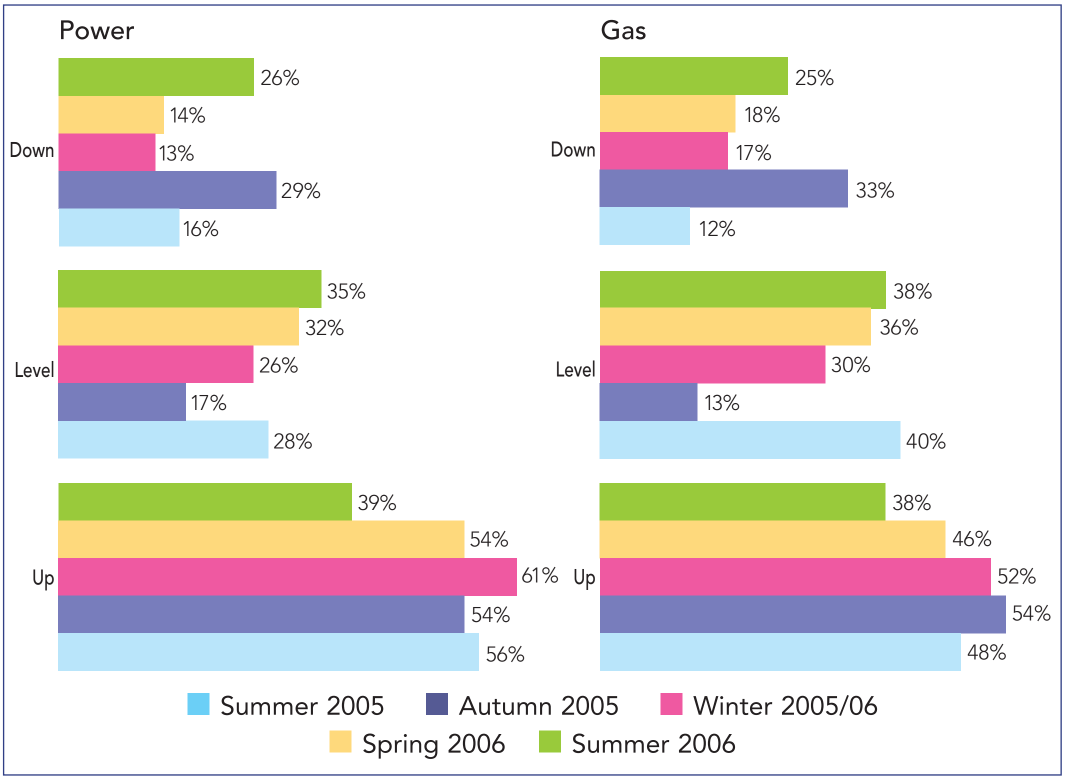
The key findings are as follows:

Market Trends

- There has been a significant shift in **power** price expectations in the current quarter. There has been a sharp reduction in the number of respondents expecting a rise in spot prices in the next twelve months (39%, compared with 54% last quarter) with most of the change accounted for by a rising share of respondents expecting a decrease (26%, compared with 14% last quarter). There was a slight rise in the number of respondents expecting stable prices over the next twelve months (35%, compared with 32% last quarter). The previously dominant view that power prices will continue to rise has weakened.

- For **gas,** we also see a reduction in the number of respondents expecting a price rise (38%, compared with 46% last quarter) and an increase in the number predicting stable prices (38%, compared with 36% last quarter). There is also an increased expectation of price falls (25%, compared with 18% last quarter).

What will be the underlying trend for spot energy prices across Europe in the coming 12 months?



- In four regional markets, Germany, Scandinavia, UK and Netherlands, there has been a softening in the views of respondents toward forward **power** prices over the next 12 months. There has been a marked shift over the last quarter towards lower and stable price expectations. Of note was the shift in the UK view, where those predicting a decrease of prices of less than 3% jumped from 7% last quarter to 29% this quarter.

- For gas, respondents have indicated that overall they expect less volatile, more stable prices over the next 12 months with a shift towards smaller price increases and decreases. The UK once again stands out as an anomaly with a strong increase in those expecting prices to fall by less than 3% (35%, compared to 11% last quarter) possibly driven by confidence that new storage facilities and pipelines will correct last Winter's price spike.

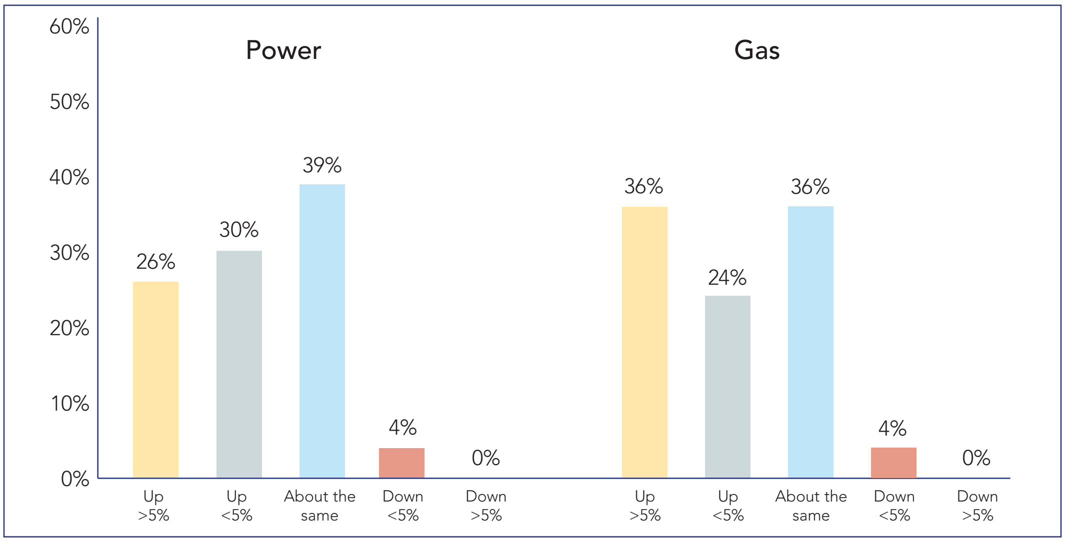
- When asked to identify key issues impacting on the energy market over the next 12 months, the National Allocation Plans for the second phase of the EU's **Emissions Trading Scheme (ETS)** were once again high on the agenda. Clarification of the rules around **CO2 trading** were also a hot topic, as was M&A activity and **sector consolidation.**

- Of the five factors exerting pressure on energy prices submitted to our Panel, **movements in fossil fuel prices** and **environmental pressures** are still seen as most important. Environmental pressures were judged by 80% of our Panel as likely to exert upward pressure on prices. **Infrastructure developments** are judged to be the next most important issue and are expected to exert a downward pressure on prices according to most of our Panel. **Market liberalisation** and **industry consolidation** are predicted to have a lesser influence on prices over the next 5 years.

- On average, respondents said that 34% of their company's traded volumes were **cleared** in the previous quarter, up from 33% at the time of our last survey.

- The share of respondents expecting an increase in **market trading activity** over the next quarter has declined for both power (56% overall compared with 76% last quarter) and gas (60% overall compared with 64% last quarter).

How much do you see market trading activity across Europe changing over the coming 6 months?

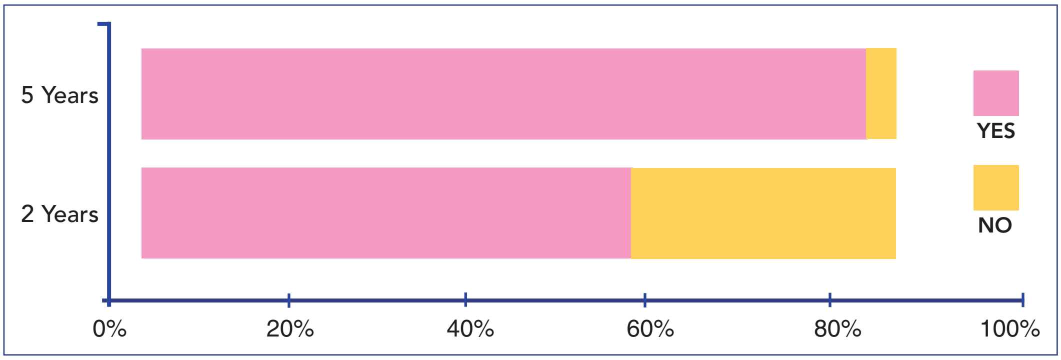


Special Topic: Developing Gas Markets in Europe

Each quarter a different special topic is examined, with additional questions put to the Panel. Last quarter we explored issues relating to energy market transparency and this time our focus was on developing gas markets in Europe.

- 65% of respondents were confident that gas trading opportunities will increase in the next 2 years and were near unanimous in their view that opportunities will increase in the next 5 years (96%)

Are you confident that gas trading opportunities will increase in the next (a) 2 years or (b) 5 years



- Liberalisation was seen as a key driver for increasing gas trading opportunities, as were improvements in infrastructure and pressure from regulators.

- When asked to rate (on a scale of 1-10 where 1 was not important/not practical and 10 was very important/very practical) the importance and practicality of measures to increase liquidity in the wholesale gas market, forcing ownership of transmission and distribution, forcing incumbents to provide greater transmission and storage access to third-parties and creating more transparent data on capacity, transmission and storage were all rated as high priority measures.

- As regards practicality, respondents were generally more pessimistic about what it takes to improve market liquidity. Not one measure scored higher than 5 in terms of practicality and the UK Energy Intensive Users Group (EIUG) proposal to impose "use it or lose it" conditions was seen as being the least practical of all the suggestions.

- It would appear that a majority of respondents were in favour of the creation of four regional gas hubs as recommended by the European Regulators Group. Zeebrugge, Baumgarten, Spain the Polish/Russian border were all suggested as preferable sites. In terms of the trading focus of these hubs, the majority of the Panel were in favour of short-term trades.

- We concluded by asking our Panel what role they saw exchanges playing in encouraging and facilitating more liquid markets for gas in Europe. A generally positive response was received, with exchanges providing market signals, stability and enabling financial players to enter the market. Of those who were more negative, the view was that the regulators will have more of an impact and that exchanges are a by product of more liquid markets, rather than a necessary condition for their success.

	Priority	Practicality
Force ownership not just legal unbundling of transmission and distribution	7	5
Force incumbents to provide greater transmission and storage access to third-parties	7	5
Create more transparent data on capacity, transmission and storage	7	5
Increase imports of LNG to diversify sources of supply	6	5
Make long term import contracts more flexible so incumbents have to trade more	6	5
Use more gas release programmes to help new (supplier) entrants	5	5
Use gas swaps to facilitate cross-border trading	5	5
De-coupling link to oil price so prices better reflect demand and supply of gas in Europe	5	5
Impose "use it or lose it" conditions to maximise use of UK interconnector	5	4

APX News

APX to extend product range in September

APX will extend its services for the Dutch power market with the launch of an intra-day market listing power products in 15 minute intervals. At the same time, a range of strip products (varying from 2 hour block products to 48 hour block products) will be introduced, allowing power to be traded up to two days out. The launch is expected mid-September.

At the moment, the project managers are visiting existing members and prospects. The intra-day market and Strip products will provide members with additional products to optimise their positions, to manage risk, and to further exploit trading opportunities. The new products will provide valuable price signals to the wholesale market and will be listed on the trading platform EuroLight™. Clearing and settlement of the new products will be carried out under the existing arrangements.

APX Group experiences strong year-on-year growth

From April to June 2006, Dutch power reached an all time record volume of 5,347 GWh, an increase of 47.26% from the same quarter in 2005. APX Power UK also demonstrated an increase of its quarterly volumes achieving 2,293 GWh – a 5.29% growth in volume from 2005. APX Group's second exchange to achieve record quarterly volumes was APX Gas UK's OCM with volumes reaching 37,162 GWh (1,268 million therms), representing an increase of 19.7% on the same quarter in 2005.

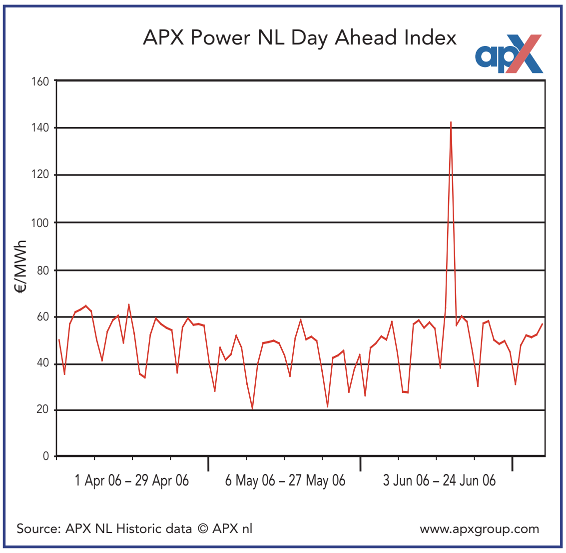
APX Group net profit more than doubles to 2.4 million EUR in 2005

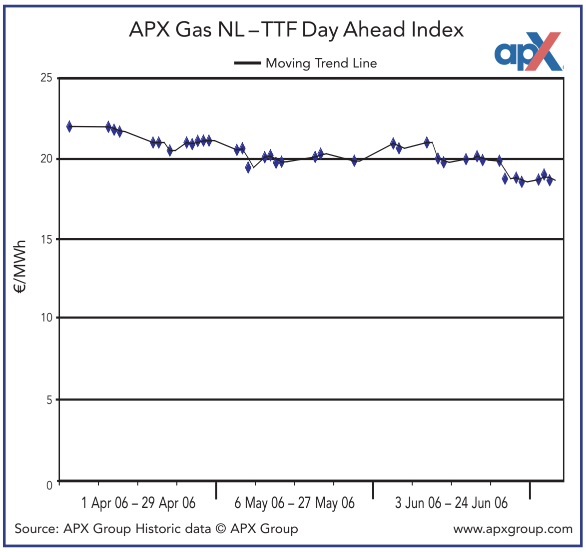
APX had a very successful 2005 due to the Group's restructuring efforts, strong volume and membership growth across all of its exchanges.

- In 2005, the EBITA* increased by 156% to 5.9 million EUR (2004: 2.3 million EUR)
- Revenue increased in 2005 to 25.2 million EUR, up by 38% (2004: 18.3 million EUR)
- Net profit increased in 2005 to 2.4 million EUR (2004: 0.3 million EUR)

Bert den Ouden CEO of APX Group said "We have made a healthy profit after the investments we made in previous years. Revenues have increased on all the markets. All loans of the acquisitions have been repaid. The role of APX in the development of an integrated North West European energy market has increased considerably."

APX Indices





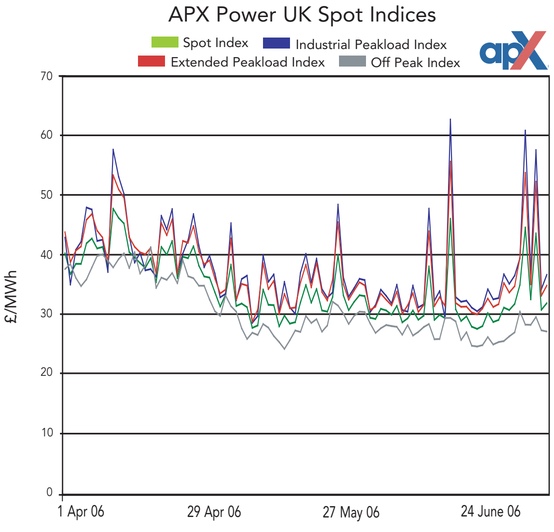
APX Power NL Day Ahead Average Prices

The APX published average prices are comprised of base load, off peak and peak load (07.00 - 23.00) prices based on the average price (in Euro/MWh) of Dutch power traded every day on APX for delivery the next day. Weekend prices are only comprised of base load prices and volumes.

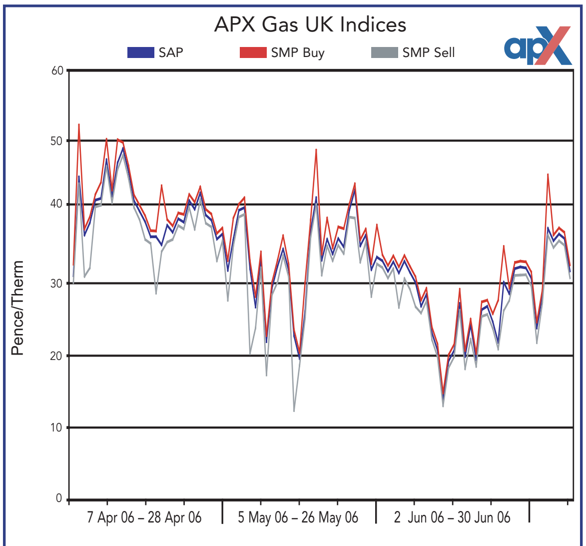
APX GAS NL TTF Day Ahead Index

The Index is a volume weighted average price (VWAP) of all day-ahead trades executed and matched on APX at the TTF gas hub between 06.00 and 18.00 CET (05.00 and 17.00 UK time) for delivery the next day.

APX Indices



Source: APX Power UK RPD Indices © APX Power UK www.apxgroup.com



Source: APX Gas Historic data © APX Gas www.apxgroup.com

APX Power UK Spot Indices

The APX Power UK Spot Indices are based on the APX Power UK Reference Price Data (RPD) which is a half hourly price derived from the volume weighted average price of all Half Hour, Two Hour and Four Hour Block contracts traded within seven calendar days of market closure on APX Power UK.

Spot Price Index (base load) – The average of the RPD prices for all 48 half hour settlement periods.

Peak Load Index – The average of the RPD prices for half hour settlement periods between 07.00 - 19.00.

Extended Peak Load Index – The average of the RPD prices for half hour settlement periods between 07.00 - 23.00.

Off Peak Index – The average of the RPD prices for the Off Peak half hour settlement periods, between 23.00 - 07.00 and 19.00 - 23.00 in the same EFA day.

APX Gas UK Indices

SMPbuy is the highest price that gas was traded (buy or sell) by Transco in its Network Code balancing role for delivery that gas day. In the event of no Transco action, the SMPbuy is calculated by a default setting of 0.0287p/kWh (0.8411p/therm) from the prevailing SAP.

SAP is the volume weighted average price of all trades on the OCM platform.

SMPsell is the lowest price that gas was traded (buy or sell) by Transco in its Network Code balancing role for delivery that gas day. In the event of no Transco action, the SMPsell is calculated by a default setting of –0.0324p/kWh (–0.9496p/therm) from the prevailing SAP.

Disclaimer

Energy Viewpoints is published by APX Group free of charge and is provided on an 'as is' basis for general information purposes only. The information provided by *Energy Viewpoints* is of a general nature, not intended to address specific circumstances of any individual or entity and does not contain professional or legal advice.

While APX Group undertakes every effort to provide accurate and complete information, *Energy Viewpoints* may not necessarily contain comprehensive, complete, accurate or up-to-date information. It is not intended to constitute and should not be relied upon as advice to the merits of investment in any commodity, market, contract or other product and may not be used for advertisement or product endorsement purposes.

APX Group makes no representations and disclaims all express, implied and statutory warranties of any kind to the recipient, and/or any third party including warranties as to its accuracy, completeness, usefulness or fitness for any particular purpose. The exclusion of liability includes any consequential damage, loss or additional costs of any kind suffered as a result of any material published in *Energy Viewpoints* unless caused by intentional default or gross negligence on the part of APX Group's employees.

The layout of *Energy Viewpoints*, graphics and pictures used and the collection of third party contributions are protected by copyright. APX Group reserves all rights in respect thereof. The reproduction of pictures, graphics, information, text and extracts of *Energy Viewpoints* shall be allowed upon prior consent of APX Group only.

APX Group has no influence on the contents or reliability of information or opinions contributed by third parties. Such third party contributions do not necessarily express opinions of, or information generated by, APX Group. APX Group disclaims all express, implied or statutory liability for third party contributions and provides such information or opinions for general information purposes only.

Any claims or disputes arising by virtue of the use of *Energy Viewpoints* shall be exclusively construed in accordance with and be governed by the substantive laws of the Netherlands.