



Energy Purchasing Strategy Mid-year Review 2015



BEN DHESI
MANAGING DIRECTOR

Foreword from Ben Dhesi

I am pleased to introduce this midterm Energy Trading report for Pulse Business Energy. At a time when many in the energy market are calling for transparency, the publication of this report is a dynamic step that can provide a powerful tool for energy buyers and traders alike.

The results in this report are not necessarily designed to claim the best performance in the market as the need to balance risk and reward for each customer and product will vary.

Instead the report will offer energy buyers and traders alike an insight into our buying decisions when faced with the market conditions during the first 6 months of 2015.

This insight can then be reconciled with the rationale behind your own respective buying decisions.

I am also pleased to introduce the author Dr Tony West, who is Pulse's Strategic Energy Trading Consultant. Tony is well known in the wholesale trading community and is a pioneer of energy trading in the UK. He played a key part in developing early asset backed

trading models at Npower in the 1990s and is credited with coining the term "Spark Spread" (used to describe the gross margin of a gas fired power station). Transferring Tony's knowledge from the wholesale sector to the retail sector is a great coup. This is the first of four commissioned reports to be released every 6 months in the energyst.



DR TONY WEST
ENERGY TRADING
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About the Author - Dr Tony West

Dr Tony West has over 30 years' experience in the energy and power industry

Tony has formally been Head of Trading for Scottish Power based in Glasgow and Npower's trading business. Prior to joining Scottish Power, he worked at Sapient as Director of Business Consulting within the Trading and Risk Management practice.

As well as establishing Npower's (National Power's/Innogy's) trading business, Tony was instrumental in the development of the utility's internal market/asset backed trading model. Tony conceived and led the introduction of many new innovative B2B risk management product offerings; one such campaign was specifically recognised

in the Utility Week Industry Achievement Awards, Marketing Initiative of the Year.

More recently Tony worked at Gazprom Marketing & Trading, developing their power activity as well as the power strategy across Europe for Gazprom in Moscow.

Tony has also worked in a variety of senior positions at BP, JP Morgan, RWE Trading, Standard Chartered Bank and smaller trading companies and hedge funds. Tony currently provides trading and risk management oversight for Pulse business energy's clientele.

Introductory comment and market context

In comparison to 2014, the market development during the first half ('1h') of 2015 has been different in many particular aspects.

During 2014, the UK gas and power prices generally trended down and market sentiment was predominantly bearish. However, whereas prices maintained their bearish trend during most of January

2015, the next two months showed much increased volatility, during which time we saw the highs of the year to date followed by a drop towards the lows of the year before another bounce up. Thereafter, during 2q2015, prices have generally moved sideways, close to the lows of the year, albeit with some up and down movements around a mean due to short-term supply instability.

Energy Prices for Year +1

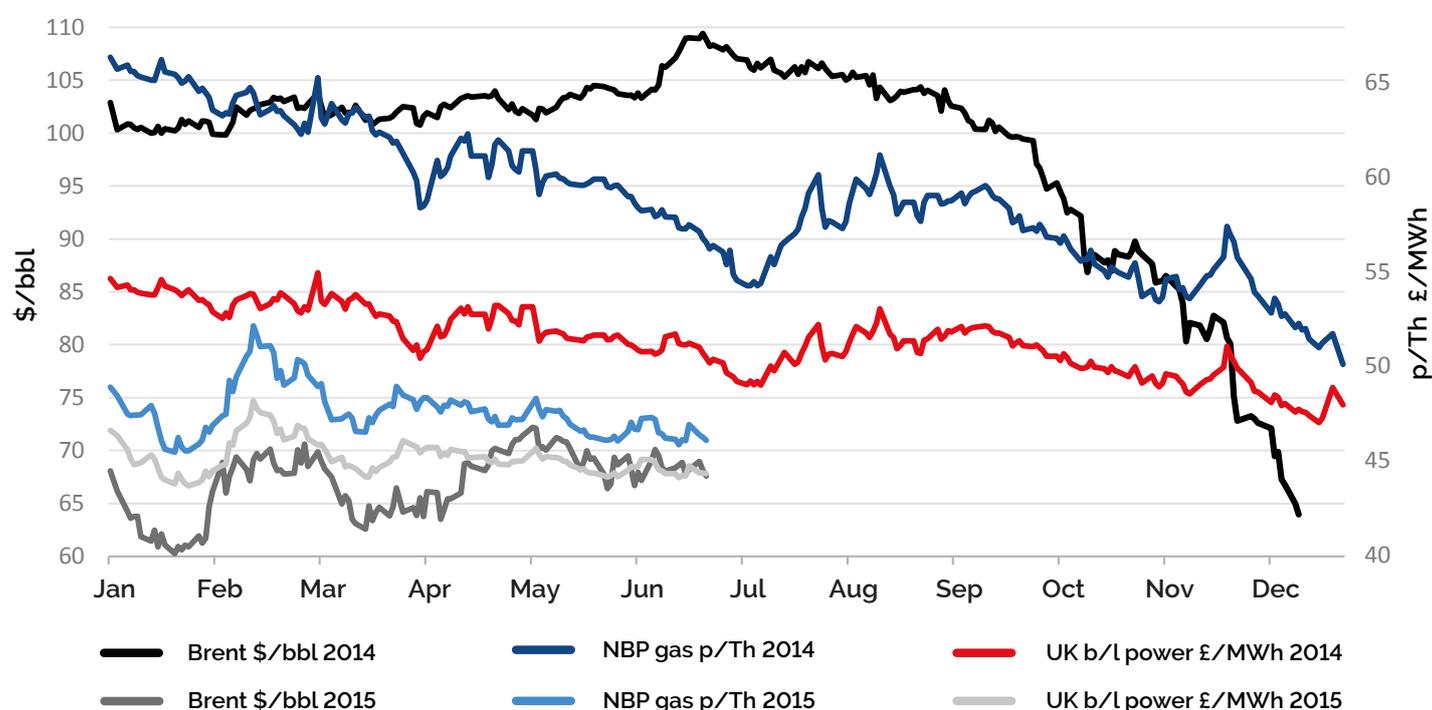


Figure 1. Market prices for Brent, NBP gas and UK power:

The chart shows the wholesale market prices for year+1. i.e. in 2014 prices reflect annual 2015 prices and for 1h2015 prices reflect annual 2016 prices.

In 2014 UK energy prices were driven primarily by regional fundamental supply/demand issues with global and political issues providing only a secondary influence. However, UK energy prices during 1q2015 were heavily influenced by movements in oil prices, with very high correlation – in fact the end-January low corresponded exactly with the low in oil prices and the subsequent year high mirrored the bounce in global oil prices. Since then, oil prices have drifted

following seasonal norms for global oil.

Political issues have also played a larger part in the gas market in 2015, as a consequence of a Dutch government decision in February, coincident with the oil price bounce, to temporarily reduce the production cap for the large Groningen gas field, production is expected to be limited further.

During 2014 the forward term structure of the market for rolling-annual prices was generally contango indicating an underlying bearish sentiment, however, except for the start of the year, January was very bearish in sentiment, during most of 1h2015 the term structure was either slightly backwardated or more often flat, indicating little conviction in market sentiment for the market direction.

Perhaps the main similarity between 2014 and 1h2015 is that power prices are still following gas, especially as coal fired generation levels decrease. However, the increasing proportion of renewables is starting to

increase its relevance in short term pricing, which in time will likely encourage a more bearish term structure to the forward curve in comparison to the historically typical 'tick' shape of a few years ago.

As mentioned in the 2014 performance report the Pulse Business Energy purchase strategy is predicated on the basis that the UK energy supply system is designed to comfortably meet peak demand. Therefore, except when there are extreme non-seasonal weather patterns or other unexpected events, for base-load demand, delaying purchasing decisions will tend to lead to lower prices as the spot delivery month is approached.

Forward rolling - Annual gas price

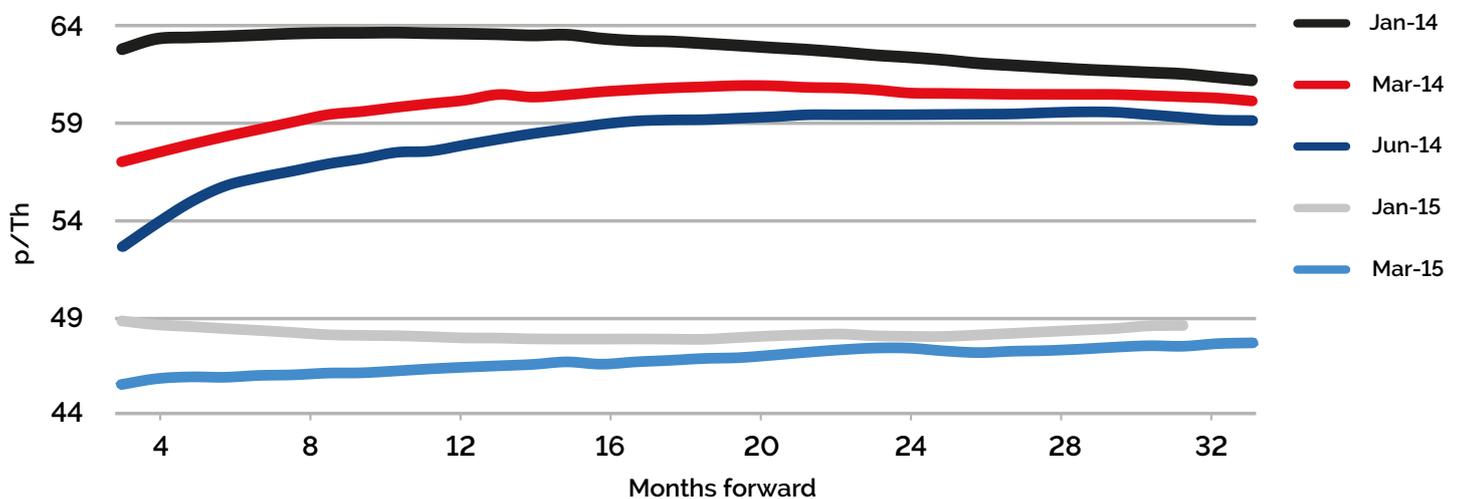


Figure 2. Rolling-annual NBP gas price forward curves:

The chart shows the development in the forward curve term structure from 2014 to 2015, showing the move from a bearish contango in 2014 to flat in 2q2015. Such curves are a good indicator of market sentiment.

Electricity

During 2014, Pulse's strategy significantly out-performed (by about 10-15%) other strategies that relied upon fixing annual prices at the outset of a contractual period whether that was a January, April or October start. In fact Pulse's strategy even proved to be beneficial from the outset. During 1h2015, the same situation is evolving for Jan 2015 start contracts, with Pulse's achieved average annual price to date already 10-12% lower than the Jan

2015 start annual prices available at the start of the year (assuming Pulse's uncovered balances are purchased at the prevailing forward price). The main reason for this strong performance against a fixed priced Jan 2015 start is not only that front month prices have dropped but forward prices have dropped as well, indeed relatively more. As for April 2015 start arrangements, Pulse's achieved average annual price mirrored the

fixed prices for April 2015 start annual prices available in March and have generally remained close to the lows, as discussed above

The market term-structure, as evidenced by rolling-annual price forward curve (see Pulse's regular monthly reports), is flat i.e. without any significant contango or backwardation; with such little conviction in the market, this situation will remain until we see a shift in sentiment or the fundamental supply/demand position alters – NB: on balance, particularly looking at the oil market, global energy supply currently looks more than sufficient and increasing availability of renewable power may justify Pulse's existing strategy in the long term. However, it is particularly important at this time to watch for shifts in the forward curve that might indicate a need to alter strategy.

While Pulse did not manage to always buy at the lowest price possible throughout 2q2015, they did buy in the lower half of the range that each contract traded in, more often than not close to the lows. If Pulse had carried out

its base strategy strictly by buying each delivery month as late as practically possible, the achieved price would have been lower in some cases but higher in others - this is because volatility significantly increases as the default day approaches, and with prices trending sideways during 2q2015, the day to day volatility results in prices oscillating around the average price.

However, Pulse's strategy can still be viewed as prudent, preferring to fix a 'reasonable' price when available rather than increasing the risk by waiting in hope of always achieving something better – an appropriate trade-off. Market actions over the summer months may encourage further prudence by fixing in some of the forward level when the market sentiment is undecided, thereby managing the risk down. NB: I have not analysed for partial fixed purchases (say 2 X 6month period contracts or quarterly periods) as the possibilities are endless, however, even for these it is likely the above comments will be relevant.

Pulse comparative performance, 1h2015 electricity:

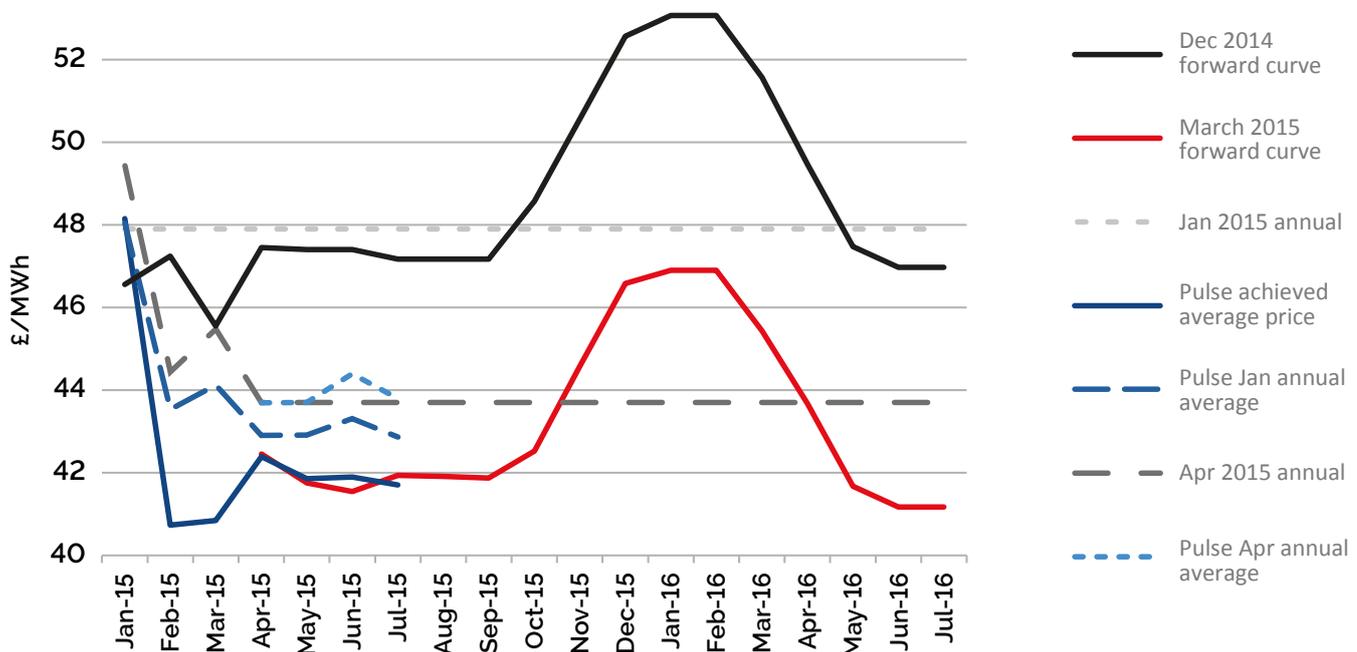


Figure 3. Pulse Business Energy 1h2015 electricity purchase performance:

The chart shows the wholesale market forward curves for power in December 2014 and March 2015 together with the associate annual fixed market price for January 2015 and April 2015 starts. For comparison, the chart includes Pulse's average purchase prices throughout the year and the resulting average cost Pulse achieved for its electricity customers (base-load basis) to date.

Gas

Much like for electricity, during 2014, Pulse's strategy significantly out-performed other strategies (by about 10-15%) that relied upon fixing annual prices at the outset of a contractual period whether that was a January, April or October start. This good performance has continued for Pulse's gas purchase strategy in to 2015 with Pulse's achieved average annual gas prices already approximately 10-12% lower in comparison to Jan2015 start contracts. Furthermore, out-performing Pulse's power strategy, Pulse's achieved average gas prices for April 2015 starts are also already lower by approximately 5%. Whereas the gas and power markets tend to move roughly in tandem there have been significant differences; primarily being that the forward curve for gas shows a more exaggerated summer season, prices have been generally more volatile and winter prices continued to reduce more than summer; all issues enabling Pulse to achieve a lower annual

price by waiting. Furthermore, the increased volatility of gas has encouraged Pulse to spread buying decisions for gas, thereby helping to reduce the risk of an outlier single price.

Throughout the year, gas appeared to be more volatile than power, trading in comparatively wider ranges and making year lows mid-January 2015. Again, if Pulse had waited until as late as possible to buy the contract they would not have achieved lower prices, however, as gas was more volatile than power, a more diversified buying strategy reduced the risk for customers. It is noticeable that Pulse again did not just fix forward contracts as soon as the forward price was low enough to beat the up-front fixed price and also did not add unreasonable risk by leaving pricing fixing to the last minute; maintaining a consistent risk adjusted policy throughout the period.

Pulse comparative performance, 1h2015 gas:

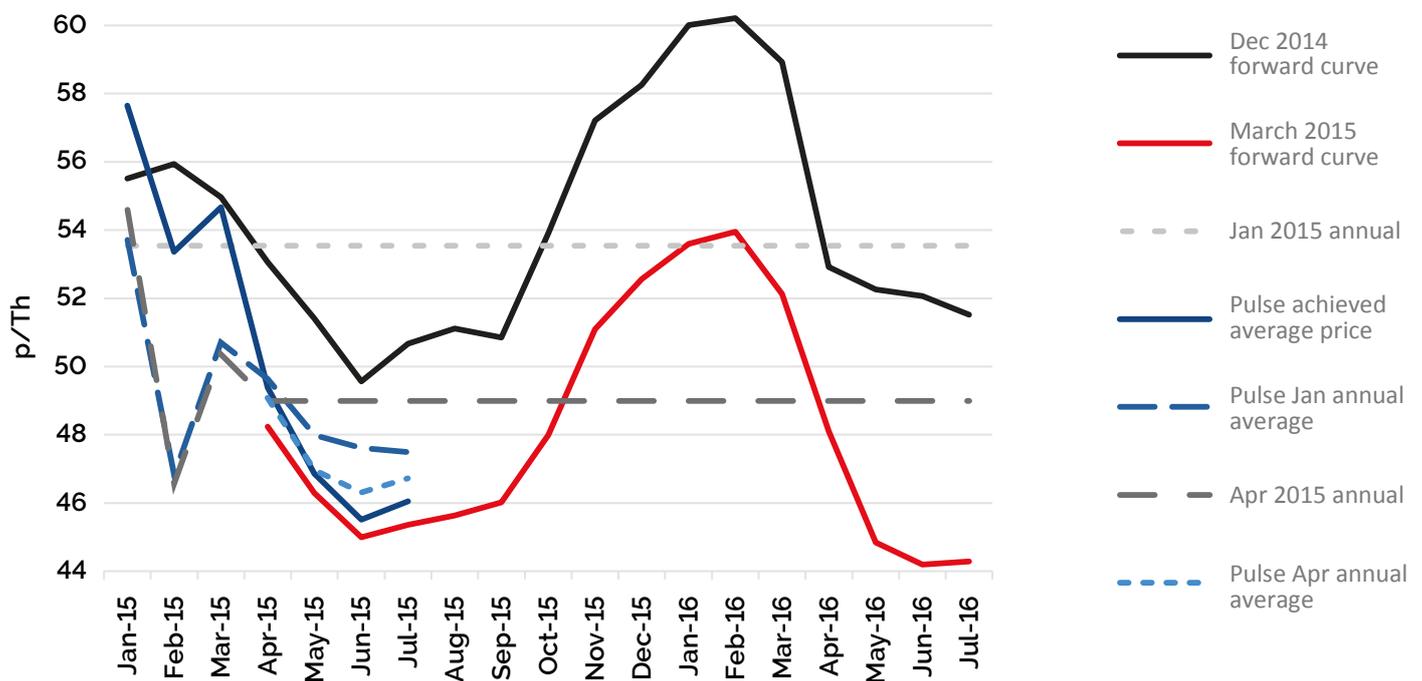


Figure 4. Pulse Business Energy 1h2015 gas purchase performance:

The chart shows the wholesale market forward curves for gas in December 2014 and March 2015 together with the associate annual fixed price for January 2015 and April 2015 starts. For comparison, the chart includes Pulse's average purchase prices throughout the year and the resulting average cost Pulse achieved for its gas customers (base-load basis) to-date.

Aims for remainder of 2015

Assuming the UK energy market sentiment and supply/demand balance doesn't significantly change to be fundamentally short, we would propose Pulse maintains the essential principles of its existing strategy, i.e. flexibly buying as the delivery period approaches rather than buying fixed at the outset (subject to an appropriate review of the risk appetite and requirements of the customer). However, we would also propose some enhanced ongoing analysis to monitor changes to the rolling-annual forward curves. If, for power, this forward curve remains flat, showing no overall market conviction, Pulse should consider buying

a partial volume (phased approach) forward, limiting risk until market direction becomes clearer. This will help Pulse to assess the trade-off of a potential lower price versus increased risk of higher prices. More generally, over recent years the rolling-annual forward market structure (generally contango) has helped Pulse's buying strategy, when prices tended to fall away as delivery approaches. Regular monitoring of this would be advised and the strategy suitably modified if the forward curve reflects a 'hockey-stick' or backwardated curve.

DR TONY WEST

ENERGY TRADING CONSULTANT

Additional comments to note: On any day to day basis, demand will vary in relation to normal anticipated patterns and this can create volatility in prices at the time of purchase decisions; meaning on any specific day if forecast demand is increased, higher prices will result. The counter factor to the strategy of delaying purchases is that volatility increases as delivery approaches, therefore providing a trade-off between potential lower prices but increased risk of prices moving against the strategy with time.

Furthermore, I have not assessed whether the strategy is appropriate or otherwise for the specific customer, but whether the strategy can be deemed successful on the assumption the customer knowingly chose to price their energy via a flexible contracting approach in order to achieve

better pricing. It is recognised that such a flexible approach is an alternative to fixing the contract price up-front (for a full 12 month 'period') on a single day; such day of fixing the annual price being more a matter of luck rather than judgement and so comes inherent with its own risk. This inherent risk may not be appropriate for a customer looking for price (budget) certainty, even if fixing the price up front may be appropriate; the contracting day for the up-front fixed prices may not be the best day to contract or provide the customer with the most suitable benchmark against their competitive position or budgetary considerations.

This summary also does not consider the initial shape and balancing trade and so only looks at the base-load fixing price.

We would be delighted to provide you with some more details.

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Pulse Business Energy was founded by a Solicitor in 2007. Our consultancy work has been the most innovative and commercially focused in the energy market since inception. In 2013 we were nominated for the Most Innovative, Most Trusted and Rising Star at the Energy Live News Awards.



Find out more about us at:
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