Gaz de France ESS

Options for energy buyers

Andy Wrigglesworth – Special Markets Manager

Gaz de France

Proposed agenda

- Market context
- How I see your options
- Conclusions
- Gas demand side

Brent Price Trends

Short Term Scenarios

- Crude oil has touched record level at 75 $/b and it seems to remain an upside potential (80 $/b ?).
    - ***Refinery maintenance in the US is still unexpectedly heavy***
    - ***Tensions on gasoline due to changing specifications (MTBE)***
    - ***Geopolitical tensions (Iran) and supply cuts (Nigeria)***
    - ***Funds are coming back but still beneath 2005 record level in terms of net long position.***

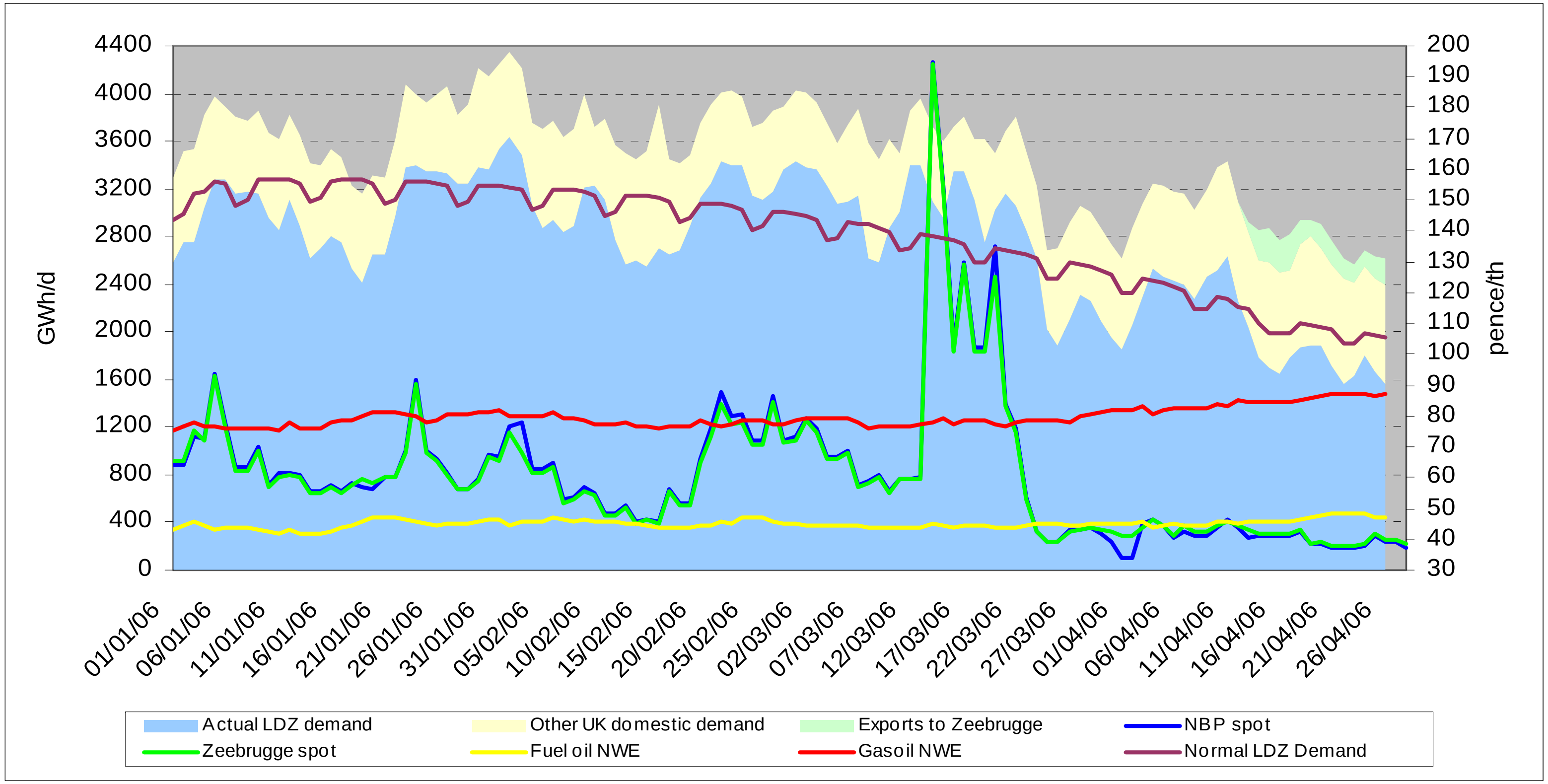
- Possible correction in May in a 62-70 $/b range
    - ***End of refinery maintenance in the US***
    - ***Hurricane-struck refineries coming back***
    - ➢ ***Decreasing refining margin***
    - ➢ ***Funds selling to take profits before Driving Season***
    - ***Clearer view on Iran ?***

- Likely rebound in late Q2/early Q3
    - ***Driving season – high fuel demand, refining capacity saturated, new specs***
    - ***Hurricane season***

- Main Upside risk : Jump to 80 $/b (WTI)
    - ***What will happen if sanctions are taken upon Iran ?***
    - ***Terrorists (Nigeria, Middle-East) threaten to cut more production.***

    - ***What is the maximum net length funds can take on the market ?***

Recent Experience in NBP Spot Prices



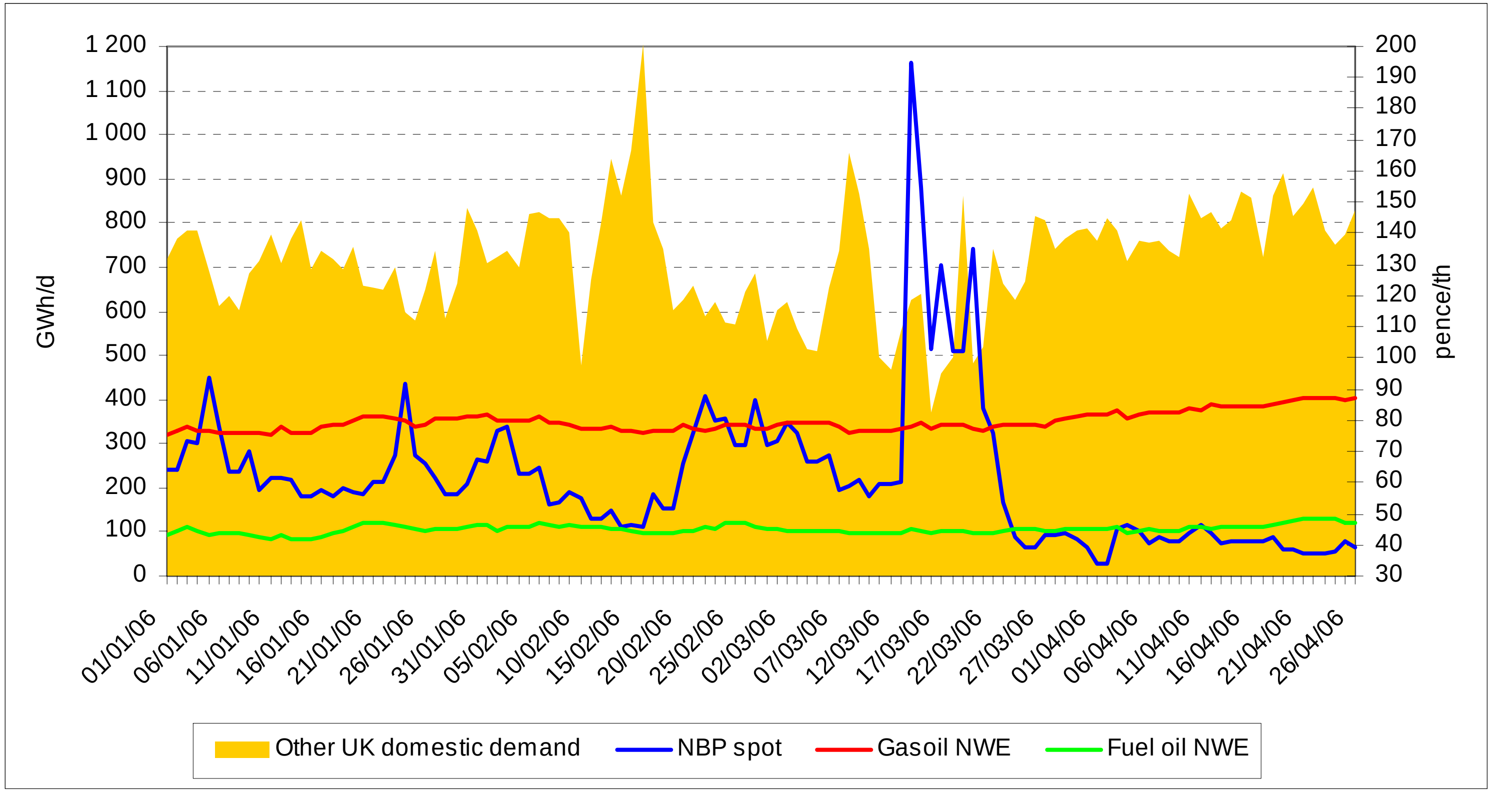
Since Jan 06, the UK has experienced a series of cold snaps leading to regular price jumps.

The latest one (mid-March) has had dramatic consequences on prices : 195 p/th day-ahead and 255 p/th within-day.

Gasoil prices didn't manage to play their role of price cap because the drop in non-LDZ demand was low compared to the increase in LDZ demand and the missing volumes from Rough (closed since 17 February).

Prices are now on a downward trend as the winter comes to an end and the Rough storage facility is still close (which reduces injection demand).

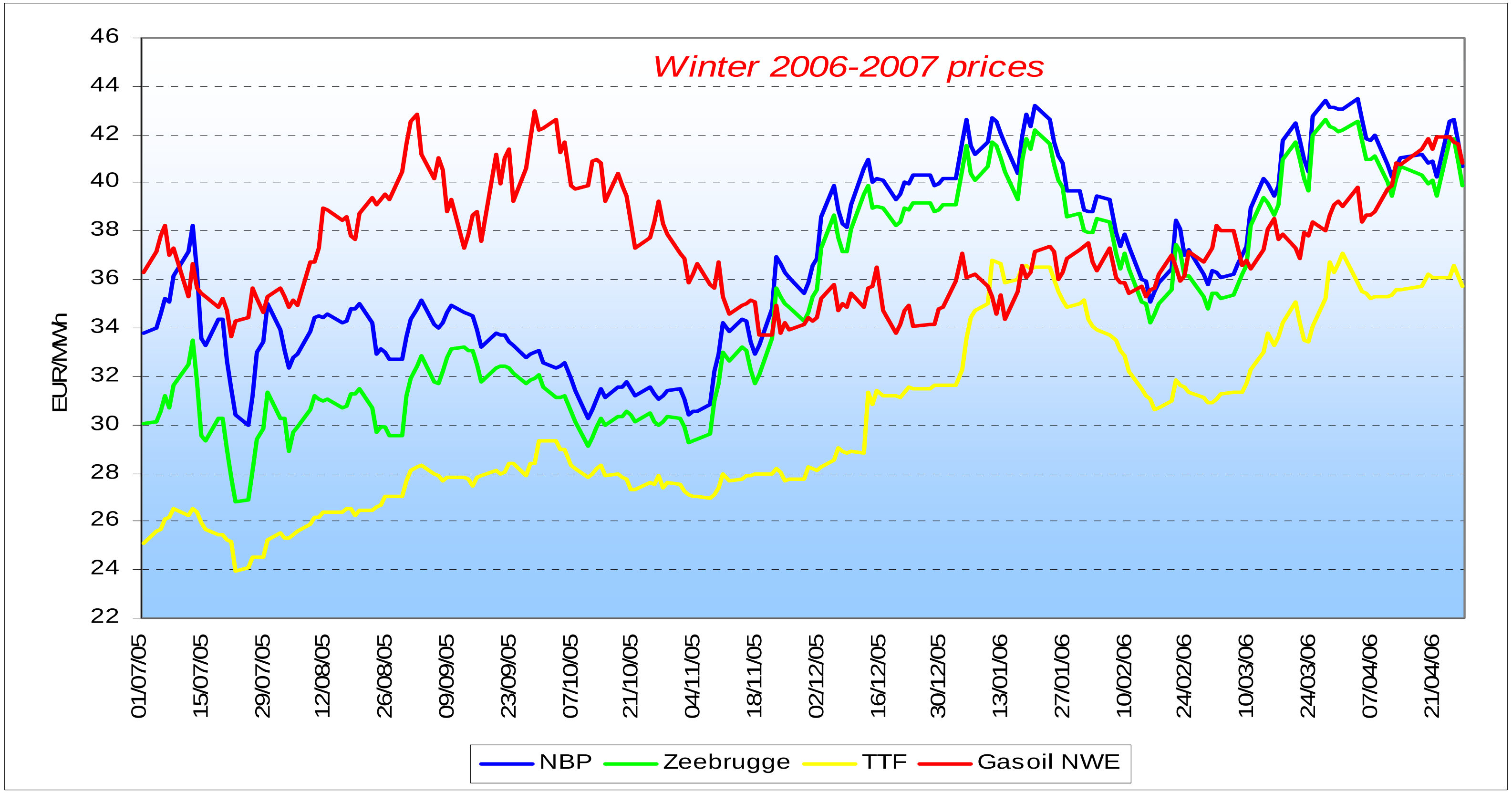
Evidence of Large Consumers Price Sensitivity in the UK



Low gas prices (close to fuel oil prices) ⇒ Increase in Other UK domestic demand (mainly power generators and big industrials).

High gas prices (close to gasoil prices) ⇒ Drop in Other UK domestic demand (mainly power generators and big industrials).

Winter 2006-2007 Prices Tend Now to be "Floored" by Gasoil Prices



Gasoil prices are normally a cap to NBP winter prices.

But, since the first cold snap in the UK (in Nov 2005), which sent NBP spot prices to 165 p/th, NBP winter 06-07 prices have traded above (when the supply/demand balance becomes tight) or close (when it improves) to gasoil prices. They rarely trade below : this is an evidence of a risk premium on NBP winter prices.

This risk premium will tend to decrease if the market becomes more confident about Rough for instance.

What are your options? (i.e now Win 06)

1) **Buy at these levels**
   - Considerations
     - ↳ Budget / MTM
     - ↳ On-cost, i.e. end product
     - ↳ Or damage to bottom line

2) **Leave open medium term**
   - Considerations
     - ↳ Take advantage of short term corrections
     - ↳ Risk of upward movement
     - ↳ Manage around Budget (stop losses / trigger prices)

3) **Leave open to Prompt**
   - Considerations
     - ↳ Forward Risk premium removed
     - ↳ Price Spikes are possible
     - ↳ Difficult to budget

4) **A combination of all of the above!**

Options longer term
(i.e Sum 07, Win 07, Sum 08 and going out)

1) **Budget Management**
    1) Considerations
        1) Risk Committee
        2) Established ToR
        3) Policy VaR

2) **Price Signals**
    1) Considerations
        1) Market Intelligence and ‘Technicals’
        2) Trigger Levels

3) **Financial Derivatives**
    1) Considerations
        1) Treasury and Supplier
        2) Swaps and Options

4) **Oil Infrastructure**
    1) Considerations
        1) Refurbishment
        2) Supplies
        3) Procedures

5) **Plus all as detailed for Win 06**

Conclusions

1) or COME OFF! (Win 05)
2) Contract and Product Flexibility
3) Adaptive
4) Contract Variation (accommodation)
5) Access to real time ‘OTC’ markets
6) Sell Back
7) Market Intelligence
8) Technical Analysis
9) Risk Management Tools
10) Pro Active Account Management

Gaz de France modification proposal (0085)

Introduction of gas reserve arrangements

15 mai 2006

Market benefits of increased certainty of demand response

- Achieves greater certainty about actual demand reduction deliverable on the day
- May allow upward adjustment of GBA trigger level
- Customer response avoids passing through problems to electricity market
- Diversifies risk away from storage only options – hedges reliability (eg. Rough)
- Restore confidence in supply/demand balance which may reduce wholesale market volatility and smooth market prices
- Gives better knowledge of firm customers that may be available to respond

Benefits for Customers

- Get compensated for demand response v's no compensation in an emergency
- Guaranteed income from option payments for being available in certain circumstances – incentive to investigate opportunity
- Can still benefit from flexible contracts
- Smaller customers (<10m therms) can participate via shipper aggregation services
- Encourage investment in alternative fuels
- Structured and visible contract conditions for demand response
- Increased awareness within organisations
- Allows for faster decision making and response times