



Gas Emergency Looms

Posted by [Chris Vernon](#) on March 14, 2006 - 1:07am in [The Oil Drum: Europe](#)

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It has [been apparent](#) since the summer of 2005 that gas supplies this winter were going to be tight. Despite this the UK energy minister Malcolm Wicks had the audacity to state that the country was "*awash with gas*" when the evidence showed the situation to be tighter than ever.

Events are transpiring against us now and John Hemming MP, chairman of the Independent Energy Scrutiny Panel has issued this warning:

Sunday's gas consumption was 357 mcm and involved taking 320GWh from Short Term Storage leaving 724GWh. Today's demand according to the National Grid Website is predicted to be 380 mcm. All else being equal this would involve taking the maximum 526 GWh from Short Term Storage leaving just under 200 GWh. Tomorrow's Gas Demand is predicted at 372 mcm which (all else being equal) would require about 400 GWh from a store of Short Term Gas which only has 198 GWh in it. This would cause a Phase 1 Gas Emergency with disconnections of large users.

Continued below.

Obviously one would expect some demand reduction as a result of the Gas Balancing Alert. It is also possible that imports via the interconnector will pick up. The cold weather, however, is predicted to last a while longer. Medium Term Storage is likely to be running below 30% by the end of Tuesday's Gas Day. It is, however, now likely that there will be a gas emergency this week (likely estimated as a probability of over 50%)

Prices started rocketing on Sunday and have spiked intraday today at £2.55 per therm. This is symptomatic of the nature of the gas market where most demand is not sensitive to the spot price. That is why the demand reduction from the Gas Balancing Alert is likely to be lower than expected by government and Ofgem.

[John Hemming's Gas Issues](#)

The problems really started Thursday 16th February with [an accident](#) at the Bravo gas rig some 18 miles off the East coast of Yorkshire. This platform is a key component in the Rough gas storage facility, the UK's long term gas storage facility holding the vast majority of our stored gas. The facility is not expected back online until at least 1st May now.

With Rough out of the picture daily gas supply over what can be directly extracted from the North Sea gas fields and imported through the continental interconnector has been met from the medium and short term storage. Whilst this storage is capable of meeting all but the most extreme demand daily flow rates (luckily we haven't had any really cold weather) the flow rates can't be maintained for long since the volume just isn't there.

After almost four weeks, the short term storage has been reduced to just 724GWh and medium

term to 2,311GWh. At the maximum rate of extraction (likely due to cold weather and long term storage being offline) these reserves will last for 1.1 and 7.6 days respectively. At immediate threat is the short term storage with a maximum flow rate of 526GWh (~48 million cubic meters). That 48mcm represents 13% of current daily demand.

On it's own the accident at Rough and the late cold spell would appear enough to disrupt supplies but there are some other details compounding the problem:

Statoil ASA, Norway's largest oil company, said today its Troll A platform in the North Sea was producing 10 percent below its capacity because of unspecified difficulties.

Gaz de France workers this morning seized control of two liquefied natural gas import terminals and eight gas storage terminals.

Malfunctions at the platform, which pumps a maximum of 110 million cubic meters of gas a day, had reduced output in February at Troll, the largest gas field in the North Sea. The field, which accounts for about 60 percent of the gas found off Norway's coast, was slated to resume full output on March 8.

Norsk Hydro said last week that production from the Oseberg field would remain at reduced levels during the weekend after faulty equipment curtailed production.

ConocoPhillips, the third-largest U.S. oil company, said it will shut its Ekofisk field in the North Sea for four days this week, halting some 600,000 barrels a day of oil and gas production.

About 375,000 barrels of crude oil a day from the Ekofisk area will be shut down in the early hours of March 17, Ingvar Solberg, a spokesman for ConocoPhillips in Norway, said in a telephone interview today. Gas production from Ekofisk and oil and gas from several neighbouring fields also will be halted, bringing the daily production loss to about 14 percent of Norway's daily output

[Bloomberg](#)

I was also told this morning that the Bruce gas field was experiencing reduced flow rates due to compressor failure and the there was a stoppage at the Britannia field though I haven't been able to confirm this.

On prices:

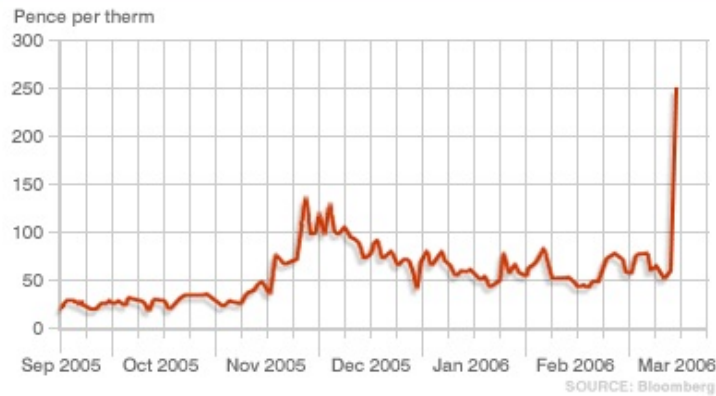
The price at the National Balancing Point, the main U.K. trading hub rose as much as fourfold to 255 pence a therm, according to broker Spectron Group Plc. The price is the highest since Bloomberg began tracking the market in 1999 and equals \$33 per million British thermal units.

[Bloomberg](#)

As John Hemming mentioned such dramatic price fluctuations on the spot market are to be expected since most demand is not sensitive to the spot price. Domestic demand is billed monthly or quarterly and even many industrial users will have contracts to fill forcing uneconomic consumption for short periods. It takes a fourfold increase in price to achieve the required demand destruction.

Here's an illustrative graph from the BBC:

UK WHOLESALE GAS PRICE



Source: [BBC Online](#)

Looking at the weather reports for the coming week, Wednesday 15th March might be a little warmer but the end of the week is again looking cold.

It seems clear that business as usual demand will not be met - this will result in demand being cut from industrial customers (the first Gas Balancing Alert of the winter was issued today). These are the heavy gas users such as chemical, fertilizer and glass manufactures but also the largest industrial gas customer, the combined cycle gas turbines (CCGTs). The real sting in the tail of a gas shortage is the impact extremely high gas prices have on the economics of gas power stations. Severe gas shortages could endanger the national electricity supply.

Perhaps the most surprising thing however is that as close as we are to a gas shortage that will at the very least seriously effect industry, costing millions today but also having a longer lasting effect on industrial investment in the UK is that the public aren't being told about it.

If Tony Blair or Malcolm Wicks would record a 3 minute video to be played a few times a night on the major TV channels (Like Silvio Berlusconi did in Italy last month) explaining the problems and asking everyone to turn their heating down just a little bit, have a shower not a bath, ask offices to do what they can to reduce gas and electricity consumption a little the problem might be avoided.

Detailed information on the UK gas status is available on the National Grid's [Daily Summary Report](#).

One last point that must be highlighted is the complete silence on this subject from the DTI's Joint Energy Security of Supply Working Group ([JESS](#)).

They are meant to publish a report twice a year, it's description:

A key part of JESS's work is compiling information and making it available to the energy markets via published reports. These reports provide an insight into the work of the Group, information on background to the issues relating to security of supply and an update to the indicators on security of supply that the group is developing.

This was due in November 2005 but didn't appear - I was subsequently promised it by the end of February and it still hasn't been published. The latest promise from them is the end of March. I won't hold my breath.

I suspect it wasn't published last year since they couldn't get the numbers to add up in such a way to instil confidence and admission of 'the challenging situation' was not acceptable. If serious



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