From: Peter Taff

Sent: 23 November 2009 10:31

To: Ian Marlee

Subject: Response from Peter Taff for Project Discovery

Apologies for being one working day late with my submission, but I was only made aware of the deadline of the 20th during the Ofgem EU Gas Quality Workshop held on Wednesday 18th November. I hope my submission will be accepted, despite this.

I am writing to you on my own behalf as an Independent Consultant. For my credentials/potted CV - see my attached CV.

There are just 3 issues/factors that I'd like to throw into the Discovery melting pot, based on my commercial and operational experience. They primarily relate to base assumptions about the way our connected markets work, which in turn have an impact on security of supply.

## 1) National Security of Supply obligations take precedence over the neighbouring markets.

Any company that has local national obligations to provide a defined level of security of supply through a winter will (operationally) carefully monitor its gas stock levels in storage against the changing risk of winter severity, as the winter progresses.

e.g. At the start of winter to provide 1-in-50 security my storage should be (say) 100% full. If a neighbouring national market is short of gas in (say) November, and prices rise sharply, I am unlikely to release gas from my storage to supply that market and jeopardise my own SoS obligations to my local market, at whatever economic indicator/price.

However, if the start of winter is relatively mild, by (say) late January, I know that statistically there is now no chance of a 1-in-50 winter, and that the worst possible from now on is (say) a 1-in-10 winter. Therefore I now know (in late January) that I have surplus gas in storage and can happily produce gas and export it to neighbouring markets in response to price signals.

## 2) Differing National Security of Supply criteria/obligations distort market behaviour.

If one national market (A) has a SoS target/obligation to meet (say) a 1-in-100 year winter, and a connected market (B) only has obligations to meet a 1-in-50 year winter, then respective market behaviours will be different. At the start of winter suppliers in both markets will be carefully "husbanding" their gas in store, as the coming winter is unknown. If the weather at the start of the winter is relatively mild then by (say) mid-December, Market A will know that the risks of a 1-in-100 winter are now zero. The worst weather that could now be experienced is (say) a 1-in-60 winter, and gas can be released from storage (in response to price signals) whilst retaining sufficient to meet the current (reduced) winter severity risk.

However in mid-December, Market B still faces the statistical possibility of a 1-in-50 winter and still needs to retain all its gas in store. Thus from mid-December onwards Market A can respond to Market B's price signals, but Market A is not in a position to respond to those from Market B.

Later in the winter (see 1 above) Market B may get to a position where the winter severity risk reduces below gas-in-store levels, and then Market B will be able to respond normally to price signals.

Of course, the use of "Strategic Storage" in some national markets could further distort market behaviour - What are the rules for access to Strategic stored gas? What will its price be? How does its use interact with neighbouring national markets? etc, etc.

## 3) Differing National Gas Quality specifications distort market behaviour.

This was discussed to some extent at the Ofgem Workshop held on Nov 18th 2009.

Where EU gas markets are inter-connected, if the Entry Spec of the receiving market is "tighter" than the Exit Spec of the delivering market then gas can only be traded/sold if either the buyer or the seller takes the "Gas Quality Risk". If this "risk" is unquantifiable by either party, then the transaction is unlikely to take place (and this could apply to both short term trades or long term contracts).

Shippers in a national market know little (or nothing) about the physical gas quality at various locations within that market and cannot forecast future gas qualities (with any associated probability) within that market. A Shipper may know the quality of the gas that it is bringing to that market (e.g. an LNG import), but there is no "molecule tracking" once the gas has been accepted into the market.

This is particularly true where the connected markets use virtual Trading Hubs. The gas is traded between the markets as a pure commodity with no knowledge of the physical quality of the gas that flows between the markets.

However matters are further complicated when Shippers buy/book long-term Entry and/or Exit capacity in neighbouring markets either in ignorance of the underlying gas quality risks, or in the "hope" that *something* will be done in the future to remove those risks (perhaps because they alone cannot quantify the risk or remove/reduce it). By doing so they have accepted an unquantified contractual risk, and reduced the TSOs incentives/need (if any) to resolve the underlying issues.

I enclose a presentation that I made on this topic at the Flame Conference in Amsterdam in 2007.