



THE OXFORD
INSTITUTE
FOR ENERGY
STUDIES

A RECOGNIZED INDEPENDENT CENTRE OF THE UNIVERSITY OF OXFORD



Results of Workstream 1 Workshop on Pricing (Brussels, October 24, 2013)

GAC Meeting

Moscow, 19 November 2013

Agenda

1. European gas pricing - different price formation mechanisms:

Pricing in long term contracts: past, present and future, R. Dickel - Consultant

Oil linkage and hybrid pricing, S. Komlev - GazpromExport

Development of hubs, G. Steiner – CEGH

Gas pricing in Central and Eastern Europe, L.Varro – IEA

Influence of international gas price development via LNG, M. Hall – Oil and Gas UK

Introduction to discussion: Common ground between Russia and EU on pricing, J. Stern

2. Structural change in European gas markets – future role/business model of midstream buyers, Thierry Bros – SocGen

3. Regulatory impacts of gas delivery at hubs, W. Boltz – E-Control

4. As buyers move to a portfolio of long, medium, short and spot commodity contracts, how will this impact their transportation capacity requirements? N. Sisman – ENTSOG

Overall aim of the Workshop: to explore the common ground between EU and Russian stakeholders on future gas price formation and long term contracts.

Points of Agreement

- European gas demand will continue to decline unless both the EU and Russia act jointly eg making gas more price competitive with coal in power sector, and ensuring a meaningful price for CO2 emissions.
- Despite this, demand for Russian gas might increase, and Russia might get a higher share of a smaller European market (see Scenarios Workshop)
- Gas sold under LTCs with ToP is of higher value than gas sold under hub-based contracts without ToP, as it includes flexibility => the price differential reflects the value of flexibility (which can fluctuate over time)
- Buyers do not want to sign new LTCs oil-linked prices and sellers do not want to sell flexible gas at hub prices; these positions could create an impasse
- If flexibility resulting from LTCs with ToP should be unaffordable, and hence abandoned, daily balancing would become an alternative mechanism for defining a value of flexibility



Points of Agreement (cont'd)

- **Central and South East Europe is trying to reduce its dependence on Russian gas by encouraging shale gas production, constructing LNG terminals and improving interconnections with NW Europe and between each other – but these will not change their gas balances significantly;**
- **Most ‘reverse flow’ gas will remain physically Russian**
- **The gap between hub-based and oil-linked prices in LTCs has narrowed considerably in Russian contracts**
- **Changes in flows might lead to new congestion in some systems while hub-based prices might not provide adequate signals for network expansions**
- **Gas versus coal flexibility in power generation: the assumption that gas is more flexible is certainly not correct in some countries (eg Germany)**
- **The role of (pure) mid-stream utilities will progressively become less important, (some part of) their role might be taken up by producers**



SIGNIFICANT DIFFERENCES OF OPINION REMAIN...



Points of Disagreement

- **The value of flexibility:**
 - will grow due to the need to accommodate the increasing share of RES in the system and due to inelastic gas demand in residential/commercial sectors;
 - will fall due to overall demand reduction and excess of transportation capacity in Europe; more capacity will have to be built for flexibility to become less valuable but hub based priced do not provide the right signals for doing so.
- **Additional export capacity into Europe (e.g. South Stream and Nord Stream 3, 4) are:**
 - necessary for transit-avoidance and security of supply/demand;
 - unnecessary as demand will not recover, and existing corridors (e.g. Ukraine) are sufficient.



Points of Disagreement (cont'd)

- Hub-based prices may not provide sufficiently strong signals for long-term upstream investment, and some producers might be unwilling to invest, thus potentially undermining security of supply; the ability to hedge on the forward curve is limited (small volumes up to 3-years ahead)
- Hub-based prices reflect perceptions of supply and demand and although they are efficient in responding to short term events (e.g. February 2012, March 2013) (producers' view), they might over-react and over-estimate risks
- The fact that oil-linked gas became unmarketable in the EU is largely a result of legal/regulatory action by the EC and EC/MS regulators, rather than an objective change in market fundamentals
- Although there is agreement that the gap between hub-based and oil-linked prices has narrowed and these prices are coming closer together, there is disagreement as to why this has happened



Important Discussion Points (without agreement/conclusion)

LNG market uncertainty in the 2010s:

- **How much North American LNG will be available (depending on the Henry Hub price) and to which markets will it be exported?**
- **Will Asian demand continue to take the majority of global LNG or will there be a surplus for Europe?**

Security of supply: oil-indexed pricing provided a level of security of supply and demand; it is not clear whether hub pricing is able to perform the same functions

Price manipulation: oil indexed prices prevented accusations of price manipulation; hub pricing may create risks of such accusations especially for Gazprom which is such a big player in the market

Role of mid-stream utilities: the latter have lost their merchant function and their remaining aggregator function is being eroded. will producers take over their functions?



Main Conclusions/Results of the Workshop

- There is a desire on both sides to retain commodity LTCs but little clarity and agreement as to how these LTCs will have to change to become acceptable to both sides – what could be the key features of such new LTCs?
- Europe has limited appetite for capacity LTCs, whereas Gazprom is concerned about “contractual mismatch” between capacity and commodity LTCs
- Unless a compromise is reached on resolution of current “pricing impasse”, European demand for gas will continue to decrease during the 2010s, though it is not impossible that Russian gas will have a higher market share
- It will be necessary to create a framework which would allow stakeholders to determine the value, and hence, the price of flexibility



REFLECTIONS FROM THE WORKSHOPS AND NEXT STEPS FOR WORK ON SCENARIOS AND PRICING





Reflections from the two Workshops

- The Scenario workshop was extremely optimistic about future European gas demand while the pricing workshop was extremely pessimistic
- Pessimistic European gas demand scenarios were not necessarily incompatible with increased imports of Russian gas
- Pricing was felt to be a key clarification requirement of the scenarios, which could have a significant impact on overall gas demand and imports of Russian gas
- Significant differences of opinion remain on market uncertainty and pricing



WorkStream 1 Scenario and Pricing Work: suggested next steps

SCENARIOS: further meeting(s) with modellers is necessary – see “Questions and Comments” and “Tasks and Suggestions” slides (in the notes from the workshops) for:

- clarification of points noted;
- formulation (if possible) of “win/win” scenario(s)

PRICING: uncertainty as to whether additional meeting would be useful as the major differences are clear

A “high road” paper needs to be drafted setting out a possible win/win scenario for both sides in relation to Russian gas deliveries to Europe. It is clear from these workshops that differences of opinion between the two sides cannot be fully resolved, and will mean that not all concerns can be addressed



THANK YOU

