INEOS ChlorVinyls

DECC - A call for evidence on the role of gas in the electricity market

Response from INEOS ChlorVinyls

Introduction

INEOS ChlorVinyls welcomes the opportunity to respond to this key consultation. We believe natural gas has a key role in the electricity market. However, the importance of gas goes beyond just the electricity market as it is and we believe will be a key primary fuel at least into the medium term. Our response to this consultation considers these broader perspectives.

INEOS ChlorVinyls is a producer of chlorine, caustic soda, polyvinyl chloride and other chlorinated derivative products. We operate in the UK, Germany, Belgium, France, Sweden, Norway and Holland. Energy, in the form of electricity, is a key raw material in our manufacturing process. Our products compete in European and global markets and it is critical to the economics of any site that energy prices are competitive on a European and global basis.

Electricity prices in the UK are already uncompetitive. For example, the UK wholesale electricity price for 2013 is 25% higher than that in Germany and nearly 70% higher than Scandinavia. This is before the impact of national taxation is considered. We also note that in Germany, for example, there has been a very clear and long term policy to protect energy intensive industry from the impact of costs associated with the heavy investment in renewables generation. The result is that the largest consumers currently pay close to wholesale price and this situation is expected to prevail.

While the recognition of the burden of energy policy on the energy intensive sector has been recognised in the Package of Measures announced in November 2011's Autumn Statement, we stress that this may not go far enough. The UK Government must develop a medium term framework which recognises the specific risks to the energy intensive sector and provides longer term policies to ensure it can prosper and grow.

Without this, the current energy competitiveness gap can only increase.

The Impact of Gas – High Level Scenarios

Looking to the medium term we see that gas will continue to be a critically important primary fuel in the UK which will determine if the UK has competitive energy prices or not.

We can envisage two scenarios:-

Scenario 1 - There is no development of shale gas and the UK market becomes increasingly dependent on imported gas as indigenous production declines and coal fired generation closes/is retired.

In this scenario we expect:-

(i) gas will remain a premium fuel (more expensive than coal) and will largely be used as a back-up source of electricity generation - in this scenario, the back-up generation will require subsidy to support already expensive and subsidised renewables;
(ii) With the expectation that FITs will (need to) be introduced there will be no investment in new generation without these – already we see that despite much consented new CCGT very little is actually being built;
(iii) Additional infrastructure, such as more gas storage, will be required adding to the overall costs of energy supply;
(iv) Energy Intensive Industry, which already is unable to afford energy based on the costs of renewables on their own, will need further protection from the additional costs of FITs, CfDs , storage levies etc. however they arise and
(v) without such protection (the default situation in Germany) Energy Intensive Industry will not be viable and will close.

Scenario 2 – The UK embraces shale gas and exploration and production develops to provide a significant new source of indigenous production.

In this scenario we expect that:-

(i) The UK could enjoy gas prices which are competitive on a European and global level;
(ii) Gas will become competitive with coal as a primary fuel, reversing the current incentive to burn coal and consequently lowering CO2 emissions;
(iii) Improve security of supply for the UK and reduce the need to increase the levels of gas storage;
(iv) Improve the UK's balance of payments as less gas is imported into the UK and
(v) Provide an environment in which Energy Intensive Industry can thrive.

Indigenous Gas – A competitive energy source for the future

Natural gas and North Sea Hydrocarbons have been an important fuel and petrochemicals feedstock in the UK for many years. A large infrastructure is already in place to support this putting the UK in an excellent position to take advantage of shale gas. With the decline in North Sea reserves, shale could provide an excellent competitive replacement fuel source in the medium term and act as a bridging fuel for the longer term while other low carbon technologies are developed.

We see that support for shale gas as critical to the success of UK Energy Intensive industry. Crucially, such support does not need to be financial, through support mechanisms such as those proposed for renewables and nuclear (FITs, CfDs etc). Instead, the support would be through policies such as pro-active granting of exploration licences to encourage companies to further explore and develop the UK resources.

Following our more general comments please find CIA responses to the questions asked;

1. **What are the main strengths and weaknesses of gas generation in helping deliver a secure, affordable route to decarbonisation through to 2020 and then by 2050?**

   Strengths:

   - Technology is well understood and lead times are low
   - capital costs are low
   - much plant already consented;
   - CO2 emissions are lowest of thermal plant – 50% of the emissions of coal
   - With competitive gas prices can generate electricity at competitive prices – operating at baseload.

   Weaknesses:

   - If gas prices are expensive (relatively) then electricity prices will also be expensive;
   - If only required to back-up renewables then support (additional costs) will be required to have expensive plant available for short periods;
   - More storage required if gas import dependency grows leading to more cost.

2. **What role can gas fired generation play in the future and what level of gas generation capacity is desirable?**

   Gas generation could be one of the cheapest forms of electricity generation available if the UK properly encourages the exploration and extraction of indigenous shale resources. While it may be unwise to make the country overly dependent on one energy source experience in the US has shown the potential economic and energy security benefits that shale gas can bring.

   It is apparent that gas will, at the very least, have to be available to back-up intermittent renewables. However, if gas plant is only used intermittently then it is clear this will add more costs to the overall energy supply – costs which could not be bourne by energy intensive consumers

   However, use of competitive gas in gas CCGT oerating at baseload levels could provide very competitve electrictity prices in the UK.

3. **What are the key factors driving the economics of investing in new gas-fired power generation and how are these factors likely to change?**

   It is apparent that the combination of uneconomic gas prices (relative to coal) and the expected introduction of FITs has now stopped all market based investment in new gas generation. There is already a considerable amount of plant planned/consented that is not being built (as is the case with gas storage) and indeed generators are moth-balling plant and even looking to convert CCGT to less efficient open cycle.

   Further, the use of FITs is in essence a subsidy to support a technology that otherwise is not economic – and the cost of this will come back to consumers.

   Unless natural gas becomes a competitve fuel, then support will be needed to ensure investment in plant . If it does become competitve then market based investment may become possible again.

4. **What barriers do investors face in building new gas generation plants in the UK? What are the key regulatory uncertainties that may prevent debt and equity investors making a final investment decision in gas generation and supply infrastructure?**

   Currently because gas is expensive spark spreads do not provide any investment signals. Further, the expectation that FITs will be introduced has now stopped any investment as the "market" waits for this mechanism to be introduced as the route to secure investment certainty.

5. **Are there any other policy issues that need to be addressed beyond the Government's proposals for the capacity mechanism and the EPS?**

   Yes. The policy proposals to secure investment in generation increase costs. These costs are at a level which energy intensive consumers cannot afford (e.g. Carbon Price Support). It is essential that policy measures are adopted that ensure that energy intensive sectors are exempted from the cost of such policy mechanisms. The model adopted in Germany is the very clear bench-mark. There, renewals growth has out-paced that in the UK many times over, but German industry has been protected from the implementation costs to ensure that the health of the manufacturing sector has been maintained.

6. **Given a continuing role for gas and the potential for increased volatility in gas demand, to what extent is gas supply and related infrastructure a barrier to investment in gas fired generation? What impact will unconventional gas have on the case for investing in gas generation and the supporting infrastructure?**

   Gas supply infrastructure in the UK is not a barrier – indeed it offers a massive opportunity. The UK has an excellent supply infrastructure – probably actually already running at well below its potential capacity – we already see National Grid increasing its charges due to lower demand. If gas demand continues to decline then this will become a very expensive and under-used asset – but of course customers will still have to pay for it.

   It would be much better if this asset is exploited through the exploitation of shale gas to compensate for declining North Sea production and to displace expensive and inherently less reliable imported LNG.

   The availability of competitive gas supplies (which would not require government financial support to develop) would then create an environment where gas generators would also be willing to invest with minimal or no implied government support.

   Such an outcome would be to the benefit of UK consumers and UK plc.