

Deadline – 28 June 2012
gasgeneration@decc.gsi.gov.uk



28 June 2012

Gas Generation Call for Evidence
Area 4E
DECC
3 Whitehall Place
London
SW1A 2AW

Dear Sir

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

Eggborough Power Limited (EPL) is an independent generator which owns and operates Eggborough Power Station (EPS), a 2,000 MW coal fired power station situated in the Aire Valley in North Yorkshire. EPS was previously owned and operated by British Energy (and latterly EDF) to provide flexible and reliable mid merit support to the "baseload" nuclear portfolio. EPL is now owned by two substantial private shareholders, SVP and Bluebay and is operating as an essentially merchant power plant in the wholesale market.

While not a gas consumer, Eggborough is a merchant plant and its greatest competition has historically been from gas fired plant. We recognise the challenges facing the Government in securing reliable, efficient generation for the future, but we hope that the Government does not unintentionally undermine the operation of the wholesale electricity market by trying to pick winners.

Consultation Questions

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?

Gas generation has a role to play in the development of a GB electricity market that can deliver efficient, secure supplies but in a market with more renewable generation, notably intermittent wind. New gas generation does have advantages over some technologies, being capable of more flexible operation and, as with all newer plant, the gas generation of the future will have greater efficiency. However, as the GB market goes through a period of unprecedented change it is difficult to know if the gas infrastructure will be capable of supporting the type of flexible operations that new peaking plant may be required to undertake.

At the current time gas fired generation has relatively low capital costs compared to other technologies. It is also a proven technology and can be built to be flexible, so it can load follow and meet the "gaps" in supply that wind may create in the future. Looking at the time taken to build plant in recent years, the Independent Generators Group (IGG) found timescales of 6-7 years from a Section 36 application were not uncommon, with plant extensions often taking just as long as new plant. With the new planning regime we do not know if the timescales will reduce.

Once the EMR design is completed, the Government may signal required new build via the capacity mechanism. Government will need to be realistic about investment timescales when reaching that decision. Compared to some other plant types, the lead

times on gas fired plant does offer Government comfort that there is technically the ability to deploy quite significant volumes of additional plant margin in a timely manner. What appears to be the greatest downside of gas generation is its fuel supply chain in an import dependent country.

Eggborough believes that the Government must consider whether the market for gas, while competitive, has enough physical infrastructure to ensure that there are secure gas supplies at economically efficient prices in the years to come. Eggborough, and other coal plant, can be required to stock fuel, though the coal market is relatively competitive and the infrastructure exists for importing and storing coal. The gas fired plants have no such obligations, with not even a requirement to have firm gas supply contracts. While the UK's gas market does have storage, the volume looks relatively limited compared to other countries such as France, with only Rough capable of supporting the demand for an extended period. We are aware that the Government has asked Ofgem to review gas security and hope that consideration will be given to developing additional strategic storage.

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

The Government should not try to set specific levels of any form of generation. It should set the policy background and leave the market to function in the most competitive way possible. Setting targets creates risks for investors that are likely to further hinder investment in the sector as a whole.

The renewables obligation, and in future the proposed CfD FITs mechanism, provides support to renewables (and possibly nuclear) to allow them to compete in the market despite their higher production costs. Coal and gas plant are the "marginal" price setting plant and as such do not receive any support, but face additional costs in the form of carbon taxes (EU ETS and carbon floor price). As the marginal plants start to operate for less hours, with increasing renewable capacity, these conventional plants may require additional support to maintain plant margin. EMR's proposed capacity mechanism is looking to address the problem of declining plant margins. It is reasonable to assume that as older plant does close, for environmental or economic reasons, at the present time new build generation is most likely to be gas fired.

New conventional generation is likely to require more flexible operations in future years, which will result in higher capital and operational costs. Some of this plant may benefit from payments under the capacity mechanism, but generally the market prices should dictate which types of plant are built. If the Government tries to encourage significant new build generation of a specific type it risks forcing the closure of plant that is still capable of providing efficient, secure electricity supplies.

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

Investing in any plant is extremely difficult given the current levels of uncertainty. For renewable plants, including co-firing plants, they are still awaiting the outcome of DECC's review of the renewable obligation certificate (ROCs) levels (the "banding review"). For clean coal plant the CCS programme has been ongoing for some years. Coal and gas plant do not know how the EMR policy will look, cash-out prices are under review and TransmiT is still to be fully worked into a pricing change. At and EU level there are various codes being developed that may cause additional technical requirements and costs on the sector, as well as environmental laws and potential changes to EU ETS.

Investors need greater certainty that if they invest in a given type of plant, in a specific location, that the market in which it is expecting to operate will remain stable for some years. Once the policy background is set out in a more detailed manner investors will be able to make some reasoned decisions about their options. For those looking at gas fired plant, they will need to understand what the various policies are likely to mean in terms of the future market make-up. Will the RO encourage significant renewables, or hardly any? Will EMR give capacity payments to all plant or just a few? Will the capacity mechanism plant create a price cap?

The current work on the capacity mechanism in particular is creating the greatest uncertainty for all energy sector investors today. The market needs to know that once designed, the mechanism will stand and Government will not "unwind" any prices or structures that may have been used to underpin investment decisions. Further changes in policy risks potentially prompting some plant investment in the medium term, but a significant problem in the longer term. Investors need to know that the UK energy markets offer a stable policy background against which to invest.

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?

All investors, looking at new build or upgrades of existing stations, face significant hurdles in creating a robust economic case for the significant sums of money involved to be spent in the GB power market rather than elsewhere in the economy. The problems are substantially greater for merchant plant, such as Eggborough.

Investors will look at the costs against forecast profits, coming either from sales to suppliers¹ or sales onto the wholesale market. Unfortunately the market structure, with few independent suppliers, makes underwriting investments based on firm forward sales difficult. Alternatively the investors can look at forward prices to judge their likely revenue streams, but the lack of liquidity in the GB market means there is no robust forward reference price. Investors are therefore faced with making a decision based on their own market assessment. Considering the demand and supply balance for future years is difficult for two main reasons: there is very limited information on development of embedded power stations, though it is widely acknowledged volumes are increasing; and the market structure, with 6 dominant players, gives at least the perception that investors will not be able to compete on a level playing field.

Were Ofgem's proposals to improve the liquidity in the market to be effective, creating robust forward trading, investors should be able to make economic decisions based on market indicators. Eggborough has raised with Ofgem previously, that the breakup of the big 6 back into generation and supply businesses (or licence requirements that achieve the same end) may provide some additional impetus to improve traded volumes.

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

Eggborough believes that the Government needs to consider, with Ofgem, the way that the gas capacity is structured. If the gas plant in future is to operate in a more flexible way then it will need gas infrastructure that can deliver large amounts of gas to the plants to give them sufficient "ramp rates" to alter their electricity production quickly. This may be a combination of additional linepack and compression.

The time may fast be approaching when requiring gas plant to have more flexible Network Exit Agreements (NExAs) may be economic. As noted above, Eggborough also believes that the Government, with Ofgem, need to consider the role of storage and

¹ Long term sales agreements are commonly referred to as Power Purchase Agreements, or PPAs, and are often used to underwrite the financing of investments.

whether some additional strategic storage should be built in the UK and its capacity used to provide back-up supplies to the gas fired plant, as well as domestic customers.

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?

Eggborough does not believe that the gas market presents a barrier to investment as it is, as DECC point out, a highly liquid and transparent market. As noted above, we do think that consideration needs to be given to the gas infrastructure and whether additional requirements should be placed on gas fired generation in relation to both securing the ability to operate more flexibly and show they have take reasonable steps to ensure that they have secure gas supplies.

There may also be wider barriers to the deployment of all new generation, or investment in existing plant, such as the role of planning. We note that Ofgem is reviewing gas security, which we suspect will give consideration to issues such as the need for gas storage, but the market itself seems to function well.

Eggborough Power hopes that these comments are helpful, but if you or your colleagues would like to discuss any of the issues raised in more detail please do not hesitate to contact me.

Yours sincerely