ecotricity

Gas Generation Call for Evidence
Area 4E
Department of Energy & Climate Change
3 Whitehall Place
London
SW1A 2AW

Ecotricity Group Limited
Unicorn House
Russell Street
Stroud
Gloucestershire
GL5 3AX

27th June 2012
Ecotricity Reference No.: 308

The Renewable Energy Company (Ecotricity)
Consultation Response to: Call for Evidence on the role of gas in the electricity market

Dear Gas Generation Team,

Ecotricity is a renewable energy generator and supplier. We have around 45,000 domestic and non-domestic electricity customers, whom we supply with a combination of our own renewable generation, and electricity purchased in the market. We have been supplying gas for over two years and have around 16,000 gas customers. In the near future we aim to supply green gas into the UK gas grid via anaerobic digestion technology.

Ecotricity welcomes the opportunity to respond to this call for evidence on the role of gas in the electricity market. As an energy supplier and generator, gas supplier and future gas producer this is an issue of great importance to us.

Ecotricity's response is divided into two parts:

A) Answers to the questions outlined in the consultation and
B) Our conclusion/summary views on the proposals outlined in the consultation.

Unicorn House Russell Street Stroud Gloucestershire GL5 3AX
tel 01453 756111 fax 01453 756222 info@ecotricity.co.uk www.ecotricity.co.uk
The Renewable Energy Company Limited - Axiom House Station Road Stroud GL5 3AP - Registered in Cardiff No: 3043412

A) Answers to questions outlined in the consultation paper

Question 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?*

The main strengths of gas include the fact that it is flexible and allows for intermittent renewable generation whilst being cleaner than coal. However, the declining availability of upstream gas supply in the UK and lack of substantial support for renewable gas generation means that we are still dependent on foreign countries who are not always politically stable. Gas is not carbon neutral and CCS is still developing, therefore it should not be seen as an alternative to renewable energy generation.

We believe that focussing on the role of gas in the electricity market is not the most effective way of exploring its potential for decarbonisation of the energy sector. Rather, more emphasis should be placed on bio-methane and its potential for use in domestic usage. Bio-methane from anaerobic digestion can be produced from waste that would otherwise go to landfill. Once scrubbed it fits within gas regulations and can be directly injected into the gas grid. By taking organic waste out of landfill, where it would otherwise degrade in open air, anaerobic digestion actually reduces the amount of carbon dioxide in the atmosphere. It is a highly efficient way of decarbonising the energy sector, far more so than alternatives such as combined heat and power.

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

Although gas can be considered a lower carbon option than coal, the use of natural gas to produce electricity should not be promoted over and above renewable forms of generation. At best, bringing more gas online should be seen only as a temporary solution to alleviating short term supply shortages.

Question 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?*

The key factor determining investment is rate of return; however it is substantially dampened by uncertainty, which is currently high due to regulatory changes and market movements. At present prices are volatile, which furthers this uncertainty and the current poor spark spreads reduce profitability and thus lower return on investment.

Both price volatility and poor spark spreads are likely to reduce in the coming years as security of supply becomes an increasingly salient issue. It is expected that high risk premiums will be an increasingly relevant factor in the determination of the purchase price. This will push up the spark spread, which will raise profits and encourage the development of new gas fired plants.

Unicorn House Russell Street Stroud Gloucestershire GL5 3AX
tel 01453 756111 fax 01453 756222 info@ecotricity.co.uk www.ecotricity.co.uk
The Renewable Energy Company Limited - Axiom House Station Road Stroud GL5 3AP - Registered in Cardiff No: 3043412

Question 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?*

Most regulatory change increases uncertainty and uncertainty reduces investment. The key issue is not so much the specific regulations, but the manner in which they are made and in particular the amount of advanced notice that industry receives before changes take place.

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

It is essential that any policy concerned with gas generation and security of supply should consider the benefits of creating bio-methane through anaerobic digestion. This will not only reduce UK dependence on gas imports, but will also be a key factor in enabling the Government to meet its legally binding carbon reduction targets.

We strongly believe that the primary purpose of renewable gas production should be for injection into the gas grid; this is far more efficient than using biogas in combined heat and power systems for electricity generation.

Question 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?*

The impact of unconventional gas, such as shale gas, is unclear. We are very concerned about current moves in support of shale gas. Despite gas being cleaner than other fossil fuels, it is not a renewable source of energy and still produces greenhouse gases. Not enough is known about the potential risks of shale gas and its extraction and we believe that pursuing it is simply a distraction from investment in genuine renewable sources of gas and power.

B) Our conclusion/summary views on the proposals outlined in the consultation

In summary, Ecotricity believe that gas should not be seen as an alternative to renewable energy generation when it comes to decarbonising the electricity supply. UK based renewable energy will also contribute to our energy security. To this end, investment in renewables should be prioritised over shale gas exploration as the latter carries unknown risks, is finite and will continue to contribute substantially to climate change.

We believe that for the energy industry overall it would be better to focus on increasing the role of anaerobic digestion in gas supply, rather than the role of gas in the electricity market.

Unicorn House Russell Street Stroud Gloucestershire GL5 3AX
tel 01453 756111 fax 01453 756222 info@ecotricity.co.uk www.ecotricity.co.uk
The Renewable Energy Company Limited - Axiom House Station Road Stroud GL5 3AP - Registered in Cardiff No: 3043412

ecotricity

As a general principle we would like to stress the importance of ensuring that all policies work together. It is vital that all policy changes work together and are considered holistically as well as on a micro basis.

Ecotricity welcomes the opportunity to respond and hope you take our comments on board. We also welcome any further contact in response to this letter. Please contact Emma Cook on 01453 769301 or emma.cook@ecotricity.co.uk.

Yours sincerely

Unicorn House Russell Street Stroud Gloucestershire GL5 3AX
01453 756111 01453 756222 @ecotricity.co.uk .ecotricity.co.uk
The Renewable Energy Company Limited - Axiom House Station Road Stroud GL5 3AP - Registered in Cardiff No: 3043412