

Hannah Nixon, Partner, Transmission and RPI-X@20, OFGEM, 2nd floor, 9 Millbank, London, SW1P 3GE RenewableUK Greencoat House, Francis Street London SW1P 1DH, United Kingdom

> Tel: +44 (0)20 7901 3000 Fax: +44 (0)20 7901 3001

Web: www.renewable-uk.com Email: info@renewable-uk.com

Date: 06/09/2010

Dear Hannah,

# Renewable UK consultation response

RenewableUK (formerly the British Wind Energy Association (BWEA)) is the trade and professional body for the UK wind and marine renewables industries. Formed in 1978, and with over 630 corporate members, RenewableUK is the leading renewable energy trade association in the UK, representing the large majority of the UK's wind, wave, and tidal energy companies.

## Summary:

We support the principles and approach of RPI-X@20 and the move to Sustainable Network Regulation, unfortunately the crucial, important, final step – i.e. an output category for the low carbon economy and the decarbonisation of energy and electricity - is missing.

We recommend final outputs of RIIO should support the delivery of the low carbon economy through incentivising monopoly network companies to innovate and act to that end, and to fully facilitate and support actions by others within the energy sector.

## **Overview:**

Our comments are focussed on Electricity Networks: System Operation, Transmission and Distribution however the principles we espouse may also be applicable in gas regulation.

We support the review of RPI-X, we agree that it has now served its purpose and that a new regulatory regime is required in order to accelerate the transition to the low carbon economy, i.e. achieve an 80% cut in total UK emissions by 2050.

We welcome the recognition by Ofgem that the regulated monopoly networks/ systems and their operators/owners play a vitally important role in the delivery of the low carbon economy. We note that there are effective markets operating in both Electricity Generation and Electricity Supply. Drivers and incentives are in place in both these markets to discourage carbon emissions and wastage. Competition in these markets is driven to lower carbon

emissions through emissions caps, trades, incentives and other market mechanisms. However, these markets cannot function efficiently if there are any impediments in the networks which link producers to customers. Networks therefore have a vital role in facilitating competition (see Appendix 1).

It is evident that Network businesses themselves do not invest in low carbon generation or end user energy efficiency measures; however they can either facilitate or impede, and in some cases even stop, some of these investments.

To ensure that Network businesses are fully engaged and supportive they need to be rewarded for the delivery of the low carbon economy, even if they are not the primary actors in each case.

#### Headline message and response:

## Recommendations - Objective and Outputs

We support the Objective (1) which is the "overriding objective" to "encourage network companies to" "play a full role in the delivery of the sustainable energy sector" and do this over the long term and in a cost effective manner.

We support the Outputs-led approach where the end results are measured.

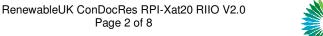
Unfortunately the outputs list (5 in the Recommendations Section) fails to mention <u>the</u> most important factor in sustainable energy - the decarbonisation of energy.

## Output Categories

We note that Output measures are the key mechanism to measure delivery of the Sustainable Network Regulation. In our view the proposed measures will not deliver the changes that Ofgem has identified. The six output categories proposed are:

- Customer Satisfaction;
- Reliability and availability;
- Safe network services;
- Connection Terms;
- Environmental impact;
- Social Obligations.

As described, these measures are the same as most current regulations and represent "business as usual", not the paradigm shift to "Sustainable Network Regulation" that is trailed in the consultation document.





# RenewableUK wants to see an additional seventh output category namely "facilitating the low carbon economy"

The category would be underpinned in the electricity sector by output measures. We proposed these should include:

- Achievement of the UK's 2020 renewable energy targets;
- Decarbonisation of electricity.

The key change highlighted by the Committee on Climate Change, DECC and many others is the decarbonisation of the electricity sector – coupled with a growth in demand caused by transferring activities such as heating and transport from fossil fuel to (low carbon) electricity.

In our view there are many means by which network businesses can influence the carbon intensity of electricity and we have listed some of these in Appendix 1. There are undoubtedly other ideas that network businesses will identify and develop through innovation incentives to decarbonise the sector. However, we do not in any way advocate measuring and rewarding each of these individual actions or behaviours. This would amount to micro-management, especially as the most cost effective activities will vary according to geographical characteristics, resources, opportunities, voltages, etc in different networks and areas.

In our view network businesses will undoubtedly respond in many different ways in order to deliver when an effective incentive in place.

# **Additional Response Points:**

# Innovation

We welcome the incentives and focus on innovation and change to deliver the low carbon economy and sustainable networks. However, innovation cannot exist on its own. It needs a purpose – i.e. a result and a measure - to know when the innovations have achieved the result. In our view that result and the measure is undoubtedly decarbonisation of the electricity sector.

# Length of Price Control

We support a longer price control period, however we recognise that many network investments will have a gestation period that spans the price control review period and in some cases extends over three periods. It is important the long timescales associated with decarbonisation of the energy and electricity sectors is properly considered to avoid short term actions at the detriment of longer term objectives.



# Enhanced Engagement

We welcome the chance for enhanced engagement with the regulated businesses recognising that individuals businesses and organisations have limited resources and that above all else they want a framework that works and delivers.

## Incentives and regulation deterring the low carbon economy

In our view there are and have been many aspects of regulation that act to delay the low carbon economy. For example:

- Incentives to reduce losses can discourage network operators from connecting renewable generation source in weak and remote areas of the grid which would push up network losses whilst reducing UK carbon emissions;
- Incentives to reduce constraint costs can mean that connections are delayed until reinforcements are complete – reducing constraint costs but delaying low carbon generation deployment. Even under Connect and Manage there is a danger that such an incentive may blunt the new policy;
- CML and CI targets mean that DNOs are more likely to drive costlier lower risk connections for renewable generation rather than riskier low cost SmartGrid or Active Networks solutions, meaning that some renewable generation is rendered uneconomic and is not developed.

It is very important that the incentives for the low carbon economy are dominant and that these drive the behaviour of regulation network businesses and not the secondary incentives such as those listed above.

# Conclusion

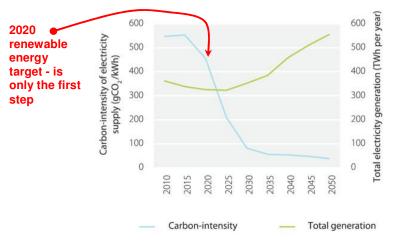
We are keen to stay involved in developing Sustainable Network Regulation and developing appropriate output measures for the output category "facilitating the low carbon economy".

Yours sincerely,

Guy Nicholson, CEng, MIET, MEI, Head of Grid for RenewableUK



# Appendix 1.



Overview of decarbonisation of electricity and necessary regulation

Figure A1 Committee on Climate change view on electricity and carbon intensity.

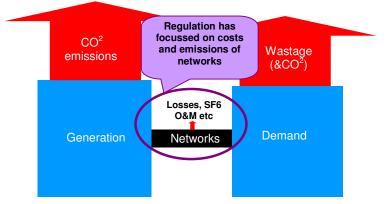


Figure A2 diagrammatic view of regulation of networks and carbon impacts.

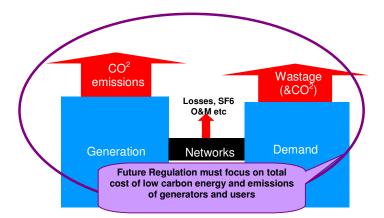


Figure A3 diagrammatic view of future regulation of networks for low carbon economy



# Appendix 2.

## What might network businesses do to facilitate the low carbon economy?

We have identified some items where network operators can act to deliver the low carbon economy. However, there is massive innovation in this area and therefore we cannot predict all possible actions that may taken, We are also concerned that measuring each and every kind of action is micro management and can lead to perverse outcomes. Therefore we would advocate measurements of the big picture such as the carbon flows through their network and the investment costs associated with reducing those flows.

- Connect generation more quickly;
- Share reinforcements between new generators;
- Introduce tariffs to encourage use of constrained renewable sources;
- Introduce tariffs to minimise network investment requirements for renewables delivery;
- Make anticipatory investments in networks so that generation connections can be delivered when generation is ready;
- Smart grid and active network management scheme to facilitate connection;
- Provide faster connection offers and more certain timescales and costs;
- Provide more information on connection costs and opportunities for DG;
- Encourage DSM to reduce network reinforcements and to use available DG locally and reduce constrained DG;
- Change voltage control schemes to allow more generation onto 11kV networks without voltage rise issues;
- Encourage new demand connections to reduce their supply capacity by passing on lower costs / faster connections when DSM and DG measures are incorporated in new customer developments;
- Identify "worst customers" in terms of carbon footprints and provide guidance / support and encouragement – including with third party providers – to reduce energy usage;
- Find ways of providing more electric vehicle charging points without network reinforcements;
- Identify means of connecting heat pumps whilst minimising network reinforcements.



# Appendix 3.

# Assessment of proposed Primary Outputs

The Principles for Primary Outputs are as follows:

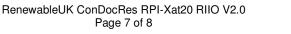
- Material;
- Controllable;
- Measureable;
- Comparable;
- Applicable;
- Compatible with promotion of competition;
- Legally Compliant.

Assessing the measure of carbon intensity of electricity against the principles:

- Material YES the most significant measure for electricity in the low carbon economy;
- Controllable YES network businesses can slow or delay low carbon electricity or they can be supportive and innovative in its connection and delivery;
- Measureable YES carbon intensity is already measured and could be disaggregated on a network basis;
- Comparable YES although there are different challenges and opportunities in different licence areas benchmarking is possible as is measuring the rates of decarbonisation and the expenditures involved;
- Applicable YES rewards and penalties can be based on the measure;
- Compatible with promotion of competition YES network businesses would encourage new connections, third party providers, ESCOs and other innovations to lower demand and decarbonise generation;
- Legally Compliant: YES the measure complies with UK government targets both domestically and internationally.

Assessing a measure of renewable electricity production against the principles:

- Material YES renewables are currently the fastest growing area of low carbon generation;
- Controllable YES network businesses can slow or delay renewable electricity connections or generation – or they can be supportive and innovative in its connection and delivery;
- Measureable YES renewable energy is already measured/ metered and could be disaggregated on a network basis;





- Comparable YES although there are different challenges and opportunities in different licence areas, benchmarking is possible as is measuring the rates of change/ growth and the expenditures involved;
- Applicable YES rewards and penalties can be based on the measures;
- Compatible with promotion of competition YES network businesses would encourage new connections and this encourages competition;
- Legally Compliant: YES the measure complies with UK government targets and European legislation.

