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Welsh Assembly Government

Energy Market Reform consultation
Department for Energy and Climate Change
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10 March 2011

Welsh Assembly Government response to the Department for Energy and Climate Changes consultation on Electricity Market Reform (EMR)

Dear Sirs

Currently, the generation of electricity within Wales plays a significant role within the UK's electricity market, and with the construction of the transmission interconnector to the Irish Republic, will similarly do so in the UK /Eire electricity market of the future.

Wales already has a diverse mix of energy technologies generating circa 30 Terra watt hours per annum of electricity. Almost all generating technologies are already present in Wales, with perhaps the exception of geo-thermal technology, and with our geography, topography and 1200km of sheltered coastline, there is a massive potential low carbon energy resource which could be sustainably exploited in the future.

The Welsh Assembly Government's "A Low Carbon Revolution" sets out our ambition in combating the effects of climate change and harnessing this potential, in which the reform of the UK's energy market will prove a key component.

<http://wales.gov.uk/topics/environmentcountryside/energy/renewable/policy/lowcarbonrevolution/?lang=en>

Over the past two decades, the energy market has seen the changes brought about following privatisation, the introduction of the electricity pool and subsequent New Electricity Trading Arrangements, British Electricity Trading and Transmission Arrangements market systems, along with the move from the Non Fossil Fuel Obligation to

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the Renewable Obligation support mechanism for renewables, and other reforms overseen by OFGEM. These have been successful in encouraging in Wales the deployment of technologies based on renewable resources including on and off-shore wind and biomass (both as dedicated biomass plant and use within co-firing coal fired power stations) and the construction of new gas-fired power stations.

The UK's energy generation infrastructure now faces significant challenges. The current free market driven system is widely recognised as not fit for purpose to deliver the transition to a low carbon energy economy as quickly as practicable, at minimum cost to the consumer, whilst maintaining high levels of energy security and maximising local content and job creation. The Renewables Obligation has been successful in assisting low carbon technology deployment. However contrary to predictions, experience has shown with important technologies such as offshore wind, that costs have rapidly increased and there are therefore concerns for the long term that this obligation might lead to very considerable and unnecessarily high charges being placed on UK consumers.

The Assembly Government's "A Low Carbon Revolution" sets out the vast renewables potential that exists in Wales in that by 2025, Wales could generate twice our annual electricity consumption per annum from wholly renewable resources. The maximisation of this potential requires a number of enablers including, the appropriate market reforms and sufficient support for innovation (especially technology cost reduction), a stream-lined Planning and consenting process which ensures the full consideration of environmental impacts, and the timely progression of grid investment.

Gas-power in Wales, both through LNG imports and electricity production, along with our limited but secure coal fired and pumped-storage power facilities, continue to play a very important role in maintaining affordable GB electricity supplies as we enter the low carbon transition phase. In the longer term, we expect all our major fossil fuel, and hopefully biomass fuelled power stations, to be fitted with carbon capture and storage systems. In addition, the development of other low carbon technologies including nuclear power in North Wales is important from the wider economic development perspective and it is essential that reforms should recognise that the communities/ locations which host important energy generating infrastructure should benefit from the considerable income generated.

Therefore against this background, we have studied DECC's proposals for electricity market reform with great interest. The importance of the reforms has rightly led to much debate and we are aware of initial responses from stakeholders and commentators to bodies such as the UK Parliament Energy and Climate Change Select Committee, but expect their consultation responses to be more informative. As with all market reforms, it is vital that such reforms, whilst delivering a coherent fit with overarching strategies, retain the flexibility to cope with uncertain futures and do not catalyse perverse or unintended consequences. Therefore before finalising our opinions on the way forward, we would like to have sight of the fully considered responses to the consultation from expert practitioners who are fully familiar with the workings of the current market.

Taking each of the main proposals in turn;

- The associated ideas on establishing a **carbon floor price** and the introduction of **emission performance standards** are sensible to discourage the further development of high carbon options, such as unabated coal fired power stations.

However, the potential effect on power prices of such a floor price, particularly in conjunction with the impact of the EU emission trading scheme and investors concerns about long term certainties, dictate that the introduction of those schemes need to be designed to achieve maximum effect with minimum cost to consumers. In

that context, we are surprised at the conclusions drawn on the impact on electricity prices: that is cost effects become positive towards 2030. This conclusion appears to be predicated on a significant future increase in fossil fuel and carbon prices over that period, but, as UK Ministers have indicated, for the moment the forward gas price predictions look fairly benign. In the immediate future, oil and gas prices appear to be mainly decoupled and while oil price increases would have considerable effect in the transport sector, any such increases should not impact greatly on the electricity sector, although this might change with the rapid introduction of plug-in electric vehicles. Equally coupling/price changes will be affected should gas-derived fuels such as CNG become much more common place within the transport sector. Given that electricity prices are often set through gas plants acting as the marginal price setter, we would welcome further analysis and debate on these assumptions.

- The proposals for **capacity payments** appear sensible to avoid future supply demand imbalances.

However we would wish to see have sight of comments from expert practitioners particularly in relation to assumptions on the future electricity demand within the UK. More active energy efficiency promotion measures, including the Green Deal, designed to reduce overall demand will help minimise peak demand (and therefore key in managing a large amount of intermittent generation) which may increase with the longer term uptake of electric vehicles and the use of electricity for efficient, relatively low carbon, heating systems based on heat pumps. The impact of gas prices may also be significant in limiting the economic case for heat pumps for some considerable time. We are very interested in the special position of pumped storage power stations which may play an increasing role in grid stabilisation and should be considered carefully within any capacity payments framework.

- Finally, there is the proposal to abolish the **Renewables Obligation** and replace this with a Feed In Tariff, probably based on contracts for differences (CfD).

We note proposals to provide interim investment certainty through provision of Renewables Obligation accreditation to 2017. However this might well jeopardise investor confidence for projects currently in the design stage and likely to come forward around this period, such as those renewable projects in Wales that are affected by uncertainties of the timing of proposed grid connections. We would therefore wish to see transitional arrangements to run in parallel until 2020, but once again we would like to study the practitioners evidence in relation to a suitable timeframe. Logically, the new support system should be designed to minimise market uncertainty and the cost to the consumer, particularly through technology capital cost reductions that will be seen in moving from first of a kind to Nth of a kind technology. CfD looks attractive in minimising the cost on consumers of the transition to a low carbon energy system but, we understand, some of the large vertically integrated power generators operating in the UK, would welcome clarity as to how such tariffs might encourage all low carbon electricity generation, including nuclear and renewables.

In conclusion, the Assembly Government believes the UK, should move as fast as practicable to a low carbon electricity system but at a minimum cost to consumers. We are concerned both from the perspective of growing domestic fuel poverty and, also to ensure UK industry has access to reasonably priced energy supplies to ensure it is internationally competitive and thus able to play a full part in economic recovery and economic rebalancing.

Against the background of global developments, this would imply an electricity system in which the power was used as efficiently as possible, with considerable demand side management, and which was produced from a combination of diverse low carbon sources including cost effective (over the long term) renewables, nuclear and highly efficient gas-fired power stations, with the latter as soon as practicable fitted with carbon capture and storage systems.

In theory, the State direction envisaged in the electricity market reform proposals might be able to ensure this outcome but this will only be the case if the system contains considerable flexibilities and, at the detailed implementation level, considers most carefully the potential for unintended or perverse consequences.

The Welsh Assembly Government, as a member of the DECC/Treasury chaired steering board, very much welcomes the commitment from Whitehall to work with us and the other Devolved Administrations to ensure a satisfactory outcome. As well as asking that you take into account our views expressed in this paper and sight of the major consultation responses from key stakeholders, we would ask for strong dialogue on an ongoing basis as the proposals are finalised for the proposed UK Government White Paper.

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