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## QBC response to EBSCR consultation ref 120/13

22 October 2013

Dear Ofgem,

It is common knowledge now that the future UK grid will be very different from the Grid we know today. Increased renewable power and decreased coal and spinning steam plant will lead to a more volatile and difficult to balance transmission system. It has been shown that the value of lost load to the UK economy is much higher than the cost of installing extra capacity. Achieving this low carbon yet stable network is the focus of the Capacity Mechanism [CM] and Contracts for Difference [CFD] under Electricity Market Reform [EMR].

While many different elements must come together in achieving a low carbon UK, it is clear that any facility that can help reduce cost and improve reliability will be highly valuable to a future transmission system. QBC has been awarded planning for a new 600MWh Pumped Storage facility in North Wales<sup>1</sup>, and has a pipeline of around 1GW which we intend to bring online by 2021. While there are many technologies operating in this space, QBC appears to be the only developer bringing forward electricity storage of this scale and offers the best chance of having grid scale storage in place by 2018.

However, despite the obvious value that new Pumped Storage can bring to the transmission system, articulating an economic model of sufficiently low risk to an investor is extremely complicated. Whilst renewable and nuclear power will benefit from the CFD, and new semi flexible capacity will benefit from the CM, the extremely fast and flexible nature of Pumped Storage will not be able to boast full government support, and investors will remain that much more sceptical as a result.

QBC has developed a merit order of UK pumped storage sites. The vast majority of these are presently uneconomic. Our first site is a marginal investment opportunity, but we believe it will achieve the required investment of over £100m because we can convince enough investors of the future prospects of UK Pumped Storage. However the task is difficult despite National Grid, DECC, Imperial College London and the Carbon Trust all stating that there is a clear future need for energy storage, in particular fast and flexible storage.

<sup>&</sup>lt;sup>1</sup> http://www.ft.com/cms/s/0/e210981a-1641-11e3-a57d-00144feabdc0.html?siteedition=uk#axzz2iRXPEENd



The proposed reforms will greatly improve the situation in the following ways:

- 1. The market will better understand the cost of a power loss, and the incentive in avoiding one;
- 2. The market will better reward those who can help balance the Grid;
- 3. The reforms will better inform investors of the business opportunity in fast and flexible generation and Demand Side Response [DSR],
- 4. The reforms will give a strong signal to investors on the regulatory environment for new Pumped Storage; and
- 5. The reforms will help highlight the business case for new Pumped Storage allowing us to bring more sites to market quicker as they become economic sooner. Hopefully in time to avoid more costly actions.

QBC has so far won investment without any government subsidy promise. This has taken great care and skill and has not been an easy task. QBC welcomes the proposed reforms as a first step in rebalancing the energy markets. Only by fixing broken areas of the marketplace will we unlock a lower carbon and higher efficiency UK at lowest cost. Well done and thank you.

Kind Regards

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