

## Barriers to securing long-term contracts for independent renewable energy generation investment

Submission by REG Windpower Limited ("REGW")

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### Introduction

This submission is a response to the recently published call for evidence from the Department for Energy and Climate Change ("DECC") on route to market for independent renewable energy generators.

REG is one of the top 20 owners of onshore wind farms in the UK (by capacity), with 51MW in operation, c.25MW consented and a pipeline of up to 1,000MW in development. Through its experience in developing, financing, building and operating wind farms over the past seven years, it has established an in-depth understanding of the UK offtake market, including long-term 'bankable' power purchase agreements ("PPAs").

The following responses relate to the questions raised in DECC's call for evidence, dated 5<sup>th</sup> July 2012, in relation to the renewable energy PPA market.

**Question 1 – Please could you provide a summary of your experiences with the PPA market over the past three years?**

REGW has been out to tender for PPAs several times in the past three years.

1. In 2010, REGW tendered for a long-term bankable PPA in preparation for the refinancing of its existing operating onshore wind assets, amounting to around 41MW;
2. In 2011, REGW tendered for a long-term PPA for its Sancton Hill (10MW) and South Sharpley (6MW) wind farms (under construction);
3. REGW is currently looking for potential PPA counterparties for its Orchard End project (4MW) which is also under construction;
4. REGW is currently seeking potential PPA counterparties for a 6MW onshore wind project in Northern Ireland.

The results of these tenders are summarised below.

Table 1: REGW PPA summary (per Annex A)

	Tender 1 (2010)	Tender 2 (2011)	Tender 3 (2012)	Tender 4 (2012)
<b>Number of counterparties approached</b>	12 (including all the Big Six suppliers)	6 (1 x Big Six, 5 x other)	4 (all non-Big Six)	14
<b>Responses received</b>	6 x bids received (incl. 1 x Big Six) 6 x no response	3 x declined 3 x bids received	2 x no response 2 x bid received	7 x declined 4 x no response 3 x bids received
<b>Discount range</b>	10% - 16%	7% - 25%	10% - 13%	10% - 15%

received <sup>1</sup>				
PPA term sought	8 years	10 years	15 years	15 years
Best floor price	N/a – fixed price	N/a – fixed price	N/a – FIT project	£32/MWh
Lowest floor offered	N/a – fixed price	N/a – fixed price	N/a – FIT project	£14/MWh
Key terms	<ul style="list-style-type: none"> <li>• One (Big Six) player wanted significant indemnities in the event of an outage and wanted collateral from REG for the imbalance risk.</li> <li>• Introduction of Change in Law provisions to allow the offtaker to reopen commercial terms.</li> <li>• Punitive treatment of LEC price and ability to revisit LEC discount in future.</li> <li>• Restrictive covenants for neighbouring REG wind farms.</li> </ul>			

<sup>1</sup>Being the discount to the market electricity price applied by the PPA provider.

REGW's experience is that lenders have always sought a PPA which covers the entire term of the loan (to date this has meant 15 year PPAs). Recent discussions with lenders would suggest this is unlikely to change in future and although debt tenors have currently reduced due to Basel III requirements, it is REGW's view that in the medium-term, long-term 15-year tenor debt will return to the market.

In any event, long-term PPAs may reduce future refinancing risk on shorter-tenor loans, since the PPA market at the end of year 7 or 10 is uncertain, thus increasing the refinancing risk. Having a 15 year PPA now, adds more certainty as to the potential to refinance a 'hard perm' loan in future.

**Question 2 – Have you seen significant changes to the PPA market over the past three years, and if so, what do you think has driven this? If you have asked PPA providers for explanations of why changes have occurred, what reasons have been provided?**

REGW has been in regular contact with PPA providers over the past three years and through these discussions, the following observations have been noted:

- Demand for PPAs from the Big Six is diminished, largely due to lower levels of electricity demand and spare generation capacity;
- Appetite for longer term PPAs is significantly reduced across the market (utility and non-utility), mainly due to the uncertainty of EMR and due to capital constraints which restrict offtakers' abilities to guarantee long-term offtake;
- Deterioration of pricing due to negative outlook on imbalance costs over the longer term;
- Collapse of the LEC market due to recent policy changes in the UK relating to Climate Change Agreements;
- Onerous provisions in some contract terms, such as a requirement to compensate the offtaker for failing to deliver stated output (inherently difficult for a wind generator);
- Offtakers seeking to place more imbalance risk onto generators, both in terms of discounts applied and through contract terms which allow offtakers to re-price the PPA terms in the event of significant market changes. Such risk transfer is wholly inequitable for developers, since it means those with the least ability to manage such imbalance risks (i.e. independent

generators) are being forced to either accept these risks or pay for them through extortionate discounts in the PPA.

Question 3 – How does the GB market for PPAs compare to other international markets? If you operate in other markets, how do PPA structures and terms differ? If terms differ what are the drivers behind the differences?

REG has experience of contracting 80MW of wind projects in the Ontario, Canada power market. The market was based around 2 forms of PPA contracting, being a standard offer Feed-in-tariff (SOP) for projects below 10MW and and Request-for-proposals (RFP) system for those in excess of 10MW. All power was contracted through the Ontario Power Authority (OPA), an agency of the Ontario Government with an 'AAA' credit rating.

The SOP PPA contracts were issued for a 20 year life cycle, the RFP contracts were for 25 years.

Terms and conditions surrounding the 2 PPA routes were considerably more straightforward than those offered in the UK given the contracts were underwritten by the Ontario Government.

The underlying stability and clarity of the Ontario renewables schemes allowed:

- low cost of capital debt providers to be introduced into projects with, in our experience, debt tenures of 18 to 20 years from both banks and pension funds;
- certainty for smaller developers that there is a route to market for small scale wind farms (sub-10MW);
- a competitive process amongst the larger developers in the RFP process that ensured the OPA contracted for the lowest price of power at any given tender round;
- a considered and predictable roll-out of renewables across the state that allowed long-term planning for developers, debt providers and the Government; and
- 2 types of scheme that both drove down the cost of capital due to their tenure and the backing of AAA credit.

Question 4 – What are the factors preventing or encouraging participation in the GB market? How (and why) do you expect these to change over time?

REGW, like many other independent generators, could opt to set up its own supply business. But, like other new entrants, REGW would face significant barriers to doing so, which illustrates the difficulties faced by all potential new entrants in the GB electricity market, notably:

- Trading capability likely to require significant investment in personnel and IT systems, which represents a high fixed cost relative to the customer base (compared with the incumbents);
- Collateral requirements for operating in BSC and for OTC counterparties;
- Significant regulatory complexity and change leads to high costs;
- Lack of liquidity in open market, leads to potential lack of hedge for retail supplies;
- Access to new customers is uncertain, requiring substantial marketing spend and price-competitiveness with incumbents (despite a lack of volume to achieve this);

- Significant working capital requirement following Winter peak demand and time elapsed to receipt of payments;
- Increased volume and price risk, without the portfolio/balance sheet to absorb this;
- Unlikely to be attractive option for debt finance providers since no ability to build in long term price floor.

None of the above is likely to be addressed by EMR. In fact, EMR is likely to strengthen the positions of the incumbent Big Six, particularly given the proposed frameworks for CfDs and the Capacity Mechanism.

Question 5 – Do you expect the EMR package to change the PPA terms that you might offer/receive and if so how do you believe they will change? What do you think is the primary driver for these changes?

Yes, we believe that EMR will significantly worsen the PPA terms offered by offtakers. The reasons for this are as follows:

- No cash-out reform is proposed to spread the cost of wind imbalance across all BSC participants (this is a fundamental barrier to suppliers offering new PPAs to wind generators), which will further discourage suppliers from offering PPAs to wind projects;
- Added complexity and uncertainty of CfDs and the Capacity Mechanism;
- No obligation or incentive for suppliers to contract for renewable PPAs;
- Weak incentives to enter the PPA market and high barriers to entry for those wishing to do so;
- Competition for CfDs (where subject to a volume or levy cap) and the proposed ‘gateway’ requirements (where evidence of a PPA will be required to be eligible for a CfD) will put the Big Six in a strong position to outbid independent wind generators (and actively prevent them from doing so);
- CfD FITs introduce ‘basis risk’ for onshore wind generators between the reference price and the price that can be obtained in the market – this risk is best managed across a utility’s own portfolio, reducing any incentive for these parties to procure additional capacity from third party generators.

Question 6 – What has been the determining factor in selecting a preferred PPA and PPA provider?

For REGW, the following factors are essential in the evaluation of a potential PPA:

- Bankability of PPA counterparty and strength of balance sheet (PPA providers or the guarantor need to be bond-rated or investment grade (AAA- or above);
- Price, floor price and discount on power, ROCs, LECs and embedded benefits;
- Key commercial terms, such as:
  - Onerous obligations such as a requirement to post collateral or indemnify the offtaker for non-delivery;



- Approach to change in law provisions;
- Willingness to offer parent company guarantees;
- Liability cap offered by the offtaker to cover breaches in the agreement sufficient to satisfy the lender (typically 6-12 months income would need to be covered).

Question 7 – Have you seen a change in investment returns as a result of the changing nature of PPA terms and can you provide an example, including how this has been calculated? Do you expect the EMR package to change investment returns, and if so what is the driver for this?

In REGW's experience, every additional 5% discount applied under a PPA reduces project IRR by approximately 1% (unlevered post-tax nominal).

It is REGW's view that such discounts are adding an unnecessary and costly burden to UK consumers due to the higher subsidies required to compensate generators in order to maintain the an acceptable level of investment return.

Question 8 – What are your views (costs, benefits and risks) on the potential options discussed in this call for evidence that may be necessary to achieve the Government's objectives?

REGW believes in the ability for the market to deliver the right outcomes provided that an adequate non-discriminatory regulatory framework is put in place to support this.

Clearly, market liquidity would deliver substantial benefits to both generators and end consumers. In conjunction with this, reforming the BSC requirements could lower barriers to entry and allow more participants into the market.

In addition, the UK market comprises a number of different trading platforms for open market trading of power. This dilutes the volumes traded further, making it more difficult for participants to place large volumes of generation into the market, where there is insufficient demand.

It is REGW's view that of the three options proposed by DECC under the call for evidence, that the supplier of last resort would be most effective in bringing on independent renewable generation. REGW's experience in the Canadian market highlights that by employing a government agency to purchase the power can attract the lowest cost of capital investors given the AAA credit-rating of the offtaker. This clearly benefits the end consumer since it means that renewables can be funded at lowest cost. It also provides the absolute regulatory certainty that the UK needs to attract long-term infrastructure asset investors.

Question 9 – What are your views of the potential for market distortions and possible impact on the wider market?

N/a

Question 10 - Can you identify and explain any other viable options (voluntary, competition based, regulatory or otherwise) that should be considered?

REGW would like to see consideration of the following in order to improve PPA market liquidity:

- Stronger financial incentives (though not necessarily an obligation) for suppliers to contract for new renewable energy PPAs from independent generators;
- Establish standard PPA terms for all intermittent renewables;
- Reduce the cost and complexity of participating in the balancing market, to encourage new entrants and reduce imbalance costs payable by individual suppliers;
- Encourage new entrants with a simplified route to market for generators seeking corporate PPAs (i.e. power offtake contracts with large energy users);

*REG Windpower, 15<sup>th</sup> August 2012*