

**MAINSTREAM**  
RENEWABLE  
POWER

## DECC Call for Evidence

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

Mainstream Renewable Power  
Response

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August 2012

## DECC Call for Evidence: Barriers to Securing Long-term Contracts for Independent Renewable Generation Investment - Mainstream Renewable Power Response

### Executive Summary

We broadly support the *objectives* which are at the heart of the Government's EMR initiative and believe that the CfD FiT framework, with suitable amendments, has the capability to deliver these objectives. We also believe that EMR must include fundamental market reform.

A core objective of the EMR initiative remains de-risking the investment process for independent renewable generators. An integrated EMR package requires *both* a properly functioning CfD FiT support framework *and* a mechanism which removes the fossil price risk currently misallocated to renewable generators through the existing ROC scheme.

This will complete the EMR reform package, remove the existing barriers to investment in the independent renewable generation sector and allow proper consideration of medium term policy solutions to underlying issues identified in the market.

We believe that the establishment of an Offtaker of First Option, which builds and expands on the "offtaker of last resort" outlined in the Consultation, will complete the EMR reform package and ensure that PPA terms for independent generators are viable, financeable and available.

Independent generators and investors are essential partners in the delivery of the Government's aspirations for low-carbon generation and a healthy competitive electricity market. A viable PPA is an essential requirement for the majority of independents seeking to deliver those aspirations.

The current structure and associated Trading Arrangements of the GB market do not *naturally* provide a healthy PPA market for independent renewable generators.

The availability of PPAs in the current market structure relies on a ***disruptive change or requirement*** imposed on the market by policy makers. With the expiry of the RO in 2017, this requirement has effectively been removed. In the absence of any *strong differential incentives to decarbonise*, investment in new capacity by the utilities will be based purely on overall economics.

In its current form, the draft Energy Bill does not yet provide a suitable, *complete* framework for independent renewable generators and their project partners to continue with their investment plans.

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16 August 2012

Dear Mr Coyne,

## Introduction

Mainstream Renewable Power is a leading renewable energy company developing renewable energy projects across several continents. The Company expects to be a major provider of renewable capacity for the UK and has 4500MW in its development pipeline.

We are developing onshore wind projects in North America, South America, and South Africa. In the German North Sea, we are developing the 1500 MW Horizont project.

In the UK, we are developing two large offshore wind projects. In Scottish territorial waters we are developing the 450 MW Neart Na Gaoithe project. Additionally, through the SMart Wind consortium, we are developing the 4000MW Hornsea Round 3 zone. The first phase of 2 GW within the zone is being developed with our partners, Siemens Project Ventures and Dong Energy.

Mainstream Renewable Power remains supportive of the *objectives* which are at the heart of the Government's initiatives regarding Electricity Market Reform (EMR). These include attracting the significant capital inflows required to deliver our low carbon ambitions, de-risking that process and reducing costs for the consumer.

Mainstream Renewable Power strongly supports the decision by DECC to examine and address the barriers which exist for independent renewable generators, seeking long term contracts both under the current and prospective market arrangements for the GB electricity market. Unless these barriers are successfully addressed, the investment needed to deliver our low carbon and climate change objectives will not be realised. Wind power provides the bedrock for meeting these objectives, as the only renewable technology able to deliver at scale, in the required timeframe.

The UK Renewable Energy Roadmap underpins this with onshore wind expected to deliver some 13 GW of capacity. The ambition for offshore wind is even greater. The UK is the global leader for offshore wind energy and is well placed to continue this lead role to 2020 and beyond. The

Roadmap indicates that up to 18 GW could be deployed by 2020. Beyond 2020 there is a very high potential for deployment with over 40 GW possible by 2030. In addition to its contribution to low carbon energy and climate change objectives, offshore wind enhances security of supply and obviates the price risk inherent in fossil fuels.

Our submission addresses the High Level Options set out by DECC in its Call for Evidence and in addition sets out our views on how the Electricity Market Reform Package should be completed in order to provide an integrated solution to the issues faced by independent renewable generators, whilst providing the flexibility to deal with the needs of other low carbon technologies.

## Overview

Independent generators and investors are essential partners in the delivery of the Government's aspirations for low-carbon generation and a healthy competitive electricity market. A viable PPA is an essential requirement for the majority of independents seeking to deliver those aspirations.

Market structure and the underlying Trading Arrangements define and incentivise the commercial behaviour of those operating within it. The current structure and associated Trading Arrangements of the GB market do not *naturally* provide a healthy PPA market for independent renewable generators.

The availability of PPAs in the current market structure relies on a ***disruptive change or requirement*** imposed on the market by policy makers, which forces the utilities to look outside their own plans for asset/energy provision.

With the expiry of the RO in 2017, this requirement has effectively been removed. In the absence of any *strong differential incentives to decarbonise*, investment in new capacity by the utilities will be based purely on overall economics.

Mainstream Renewable Power remains committed to the *objectives* which are at the heart of the Government's initiatives and believes that the CfD FiT framework, with suitable amendments, has the capability to deliver these objectives.

However, in its current form, the draft Energy Bill does not yet provide a suitable, *complete* framework for independent renewable generators and their project partners to continue with their investment plans.

A core objective of the EMR initiative remains de-risking the investment process for independent renewable generators.

An integrated EMR package requires *both* a properly functioning CfD FiT support framework *and* a mechanism which removes the fossil price risk currently misallocated to renewable generators through the existing ROC scheme.

This will complete the EMR reform package, remove the existing barriers to investment in the independent renewable generation sector and allow proper consideration of medium term policy solutions to underlying issues identified in the market. We set out in the body of the document how this would operate.

We have examined the policy options presented by DECC in the Call for Evidence: -

- voluntary market led initiatives;
- competition measures; and
- direct regulatory interventions

We provide detailed responses to each of these in the attached **Table 1**.

The first two options may provide some marginal improvements in conditions, but these will not provide solutions to the problems being faced by independent generators. Where the underlying market structure is a fundamental part of the issue, regulatory intervention is the only effective route to resolution.

We continue to believe that there is a case for fundamental market reform but acknowledge that in the short term this is unlikely to be deliverable. Our views on the deficiencies inherent in BETTA are attached as Annex 2.

Given the above, we believe that the establishment of an **Offtaker of First Option**, which builds and expands on the “offtaker of last resort” outlined in the Consultation, will complete the EMR reform package and ensure that PPA terms for independent generators are viable, financeable and available.

The explicit and implicit guarantees offered by an Offtaker of First Option, together with the appropriate allocation of risk provided by this initiative, would also be reflected in a lower risk weighted cost being incorporated in developer project models, *in line with one of the government’s core objectives for the EMR reform process*.

The Offtaker of First Option should preferably act as the counterparty for both the CfD FiT and the PPA. This needs to be coupled with a cashout reform process which is expanded in scope to



properly acknowledge the changing future generation/demand mix and addresses the need to incentivise and provide flexibility and balancing services on a competitive basis against known, stable and predictable costs

The establishment of an Offtaker of First Option could easily be accomplished *by expanding the role of the NFPA*, which carries out the majority of the functions required of such a body at present, on behalf of both NFFO and ROC supported generation.

The need for this intervention would be transitional. When accompanied by work to address the fundamental issues regarding market structure, operation of the Trading Arrangements and the provision of appropriate flexibility services for a radically changing generation/demand mix, it would be expected that over the medium term, this service would no longer be required. Crucially, it would allow investment to continue while these various reforms proceed in an integrated manner, in an appropriate timescale.

With regard to DECC's request for evidence of difficulties in securing PPAs in the current market environment: Prospective new entrants rightly conduct their own independent due diligence into all commercial risks, including the prospects of securing PPAs on acceptable terms and the risks associated with operation in the GB market.

**We have direct experience of engagement with leading global businesses looking to invest in the UK, which has been compromised by the uncertainty and risk associated with this central, fundamental issue.**

We would welcome the opportunity to share this experience with Govt on a bi-lateral basis.

*In the following sections we set out the need for independent renewable generators, the operation of the PPA market which supports them, the way in which it currently misallocates fossil price risk to renewables and how this would be rectified by the introduction of an Offtaker of First Option.*

*We also provide specific answers to the Consultation questions.*

## The Need for Independent Renewable Generators

Independent generators and investors are essential partners in the delivery of the Government's aspirations for low-carbon generation and a healthy competitive electricity market.

As recognised by Government, the UK needs to invest £75bn in renewable generation by 2020, as part of the overall £200bn investment in wider energy infrastructure. As widely reported elsewhere, incumbent vertically integrated utilities (VIUs) will not be able to provide this level of investment by themselves, due to balance sheet constraints, the scale and rate of the required investment and the legitimate requirement to assess investments against a range of opportunities across both the domestic and international arenas.

It should be noted that the majority of the VIUs are international entities with "home" markets elsewhere (which are likely to be prioritised) and will assess low-carbon generation investment opportunities in the UK as one of a range of competing overseas projects.

Against these constraints and considerations, the contribution from independents and financial institutions is essential, providing a contribution of between one third to one half of the total investment required. Both independents and financial institutions have similar investment requirements – a project by project approach, with each needing to deliver a robust financial case, underpinned by a defined set of cashflows and the suite of risks identified, quantified and appropriately managed.

Importantly, in addition to the essential investment and low carbon energy delivery, independents provide a strong competitive presence in the market, further accelerating gains for customers through innovation and efficiency. In order to achieve these benefits, they require a market which is efficient, effective and which does not confer differential advantage through either market position or scope of activities.

One of the Government's key objectives as set out in the July 2011 White Paper on Electricity Market reform was: *"Provide a more efficient and stable framework for investors ensuring that the cost of capital required to for new low-carbon generation capacity is lower. This varies by technology but the overall effect of the cost of capital reductions from electricity market reform will be a potential saving of £2.5 billion over the period to 2030"*. This is supported by the Offshore Wind Industry's commitment that, working with government it aims to reduce the cost of offshore wind to £100/MWhr by 2020. A healthy and competitive independent generation sector is essential if these cost reductions are to be achieved.

This in turn informed the choices made in the subsequent EMR framework. We support the objective of providing a stable and efficient framework for investors, but without a clear sightline

for independent generators of a route to market which meets investment requirements for sufficient, defined, long term cashflows, EMR will not deliver its desired outcomes for government, consumers or investors.

### The PPA Market and the Need for an Offtaker of First Option

We examine the drivers (or absence thereof) behind the need to offer PPAs in Annex 1.

Market structure and the underlying Trading Arrangements define and incentivise the commercial behaviour of those operating within it. The GB electricity sector is dominated by large Vertically Integrated Utilities (VIUs). It does not exhibit a wide range of supplier and generator business models at any degree of scale. The underlying properties of the Trading Arrangements incentivise vertical integration as, under them, it is the most efficient risk management and profit maximising outcome for a rational actor.

It can be argued that long term PPAs are not a “natural” feature of a steady state market, characterised by large vertically integrated utilities that can self fund the necessary asset portfolio to meet their objectives. A mixture of own generation and a strategic short/medium term marginal trading capability is the natural profit maximising strategy for a utility.

The availability of PPAs relies on a **disruptive change or requirement** imposed on the market, which forces the utilities to look outside their own plans for asset/energy provision. With the expiry of the RO in 2017, this requirement has effectively been removed.

The terms of the PPAs on offer from the VIUs depend on an underlying electricity price index determined by fossil fuels. They also depend on the costs of providing balancing services to renewables, again largely determined by fossil fuelled generation with tightly concentrated ownership. In this way fossil fuel price risk is transferred from the offtaker to the renewable generator, who is not equipped to manage it. Under the mechanism of the RO, all of this risk remains with the generator.

The government has rightly sought to remove this risk through the introduction of CfDs as part of the EMR package, allowing the generator to hold those risks it is best placed to manage.

However, within the proposed framework there are two risks which need to be addressed:

- basis risk – where the generator does not achieve the market reference price for its power (still determined by fossil fuelled generation) due to illiquidity or other barriers which it cannot surmount.



- Balancing costs, which will continue to be determined by largely fossil fuelled generation acting in a profit maximising, speculative manner

Both of these risks will be removed from the renewable generator and allocated to the correct holder, by the introduction of the Offtaker of First Option (OFO) as the counterparty to the PPA. The price paid would be identical to the reference index used for the calculations under the CfD. Balancing cost assumptions would be incorporated in the setting of the strike price, with actual costs being managed by the OFO.

### Solutions to Achieve Government Policy Objectives

*Offtaker of Last Resort* – we would expand the role to that of **Offtaker of First Option**, rather than last resort. First Option provides an acceptable benchmark and route to market to allow qualifying projects to proceed, whilst still allowing the ability for the developer to assess any other (presumed available) viable offers from the wider market.

There would be certain administrative and regulatory costs associated with establishing an offtaker (or enhancing an existing body to take on the role) that is credit worthy, sufficiently capitalised and able to manage the volumes that it may be required to contract for. These would be minimal when compared against the benefits that the body would deliver.

The establishment of an Offtaker of First Option could easily be accomplished by expanding the role of the NFPA, which carries out the majority of the functions required of such a body at present, on behalf of both NFFO and ROC supported generation.

**Crucially, the benefits of the initiative would include an effective guarantee for counterparties that PPA terms were both financially viable and financeable.**

The price the generator was paid would be identical to the reference index used for the calculations under the CfD. Balancing cost assumptions would be incorporated in the setting of the strike price, with actual costs being managed by the OFO. Further synergies and benefits could be captured by combining this function with that of the CfD counterparty body. For independent developers, this would allow the removal of credit and collateral requirements associated with CfD operation and translate the commercial arrangement into the equivalent of a conventional PPA, with uni-directional payments flowing from the counterparty to the generator.

The government purchasing agency (**Offtaker of First Option**) would place this energy in the market (either through trading/auctions or through a purchase obligation on suppliers) and




provide the necessary confidence for investors. Any shortfalls in revenue for the OFO would be made good by an appropriate levy recovery mechanism. Under this scenario it allows the flexibility for the CfD FIT to be retained for those technologies for whom it is appropriate (e.g. nuclear and CCS).

The Offtaker would be enabled to use a variety of tools to ensure best value for money for the power purchased, including auctions such as those conducted by the NFPA – to ensure effective price discovery when placing the power in the market.

We do not necessarily agree with the assertion that the terms offered by an administrative process would be priced above the expected terms from a competitive bidding process. In a competitive market, competition to offer PPAs would be expected to drive prices *above* a sustainable minimum. Secondly, the explicit and implicit guarantees offered by an **Offtaker of First Option** would be reflected in a lower risk weighted cost being incorporated in the project model, *in line with one of the government's core objectives for the EMR reform process*. This in turn would lead to a lower cost of capital and the ability to accept a commensurately lower contract price from the OFO.

This would be a transitional intervention. As the market for PPAs improved, it would be expected that this service would no longer be required by new entrants and that existing beneficiaries would seek more attractive terms, terminate their agreements with the OFO and move to a "market based" arrangement at the earliest opportunity, commensurate with their commercial evaluation of risk/reward.

Yours sincerely,

  
Head of Regulatory Affairs

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