

distributed generators a choice of reference prices from day-ahead to year ahead would create flexibility as a competition based solution that would offer some assistance to both generators and suppliers.

I hope you find these responses useful. If you have any queries, regarding this response please do not hesitate to contact me.

Kind regards,

A handwritten signature in black ink, appearing to be 'J. [unclear]', located below the 'Kind regards,' text.

Policy & Regulatory Affairs Director

We do not support a one size fits all approach to PPAs. Clearly a PPA for a despatchable 2GW Nuclear station is completely different to a intermittent 6MW wind farm, or a 1MW hydro site with 50% onsite usage. It is therefore unlikely that agreement on standardised form would be available.

There may be scope for a code of practice for decentralised generators, but it should be voluntary.

#### Competition Measures

Increased liquidity would help all parties as would greater transparency of prices which would aid accurate price discovery. However, for suppliers it must stretch along the forward market curve and the issue of collateral needs to be addressed. We would also support a cash out reform to recognise the increasing intermittent nature of the UK energy mix and thus predictability (or prior notification) of cash out prices would assist all parties.

Independent aggregators are only a second best solution to address the lack of competition in the retail market. If more solutions to open up the retail market were introduced then independent aggregators would not be needed, but could operate if they so wished. Encouraging greater retail competition through improved wholesale market conditions would also be beneficial to the end consumers.

Offering a range of reference prices to generators negotiating a FIT with CFD would also enhance competition as it would allow generators who wish to strike fixed-price PPAs to opt for longer range reference prices.

Any measure that reduces the incentive to vertically integrate would support competition. However, we are disappointed that this Call for Evidence seems to assume that PPAs with the 6 VIU provides sufficient levels of competition.

#### Regulatory Measures

We strongly oppose an obligation on larger suppliers to offer PPA terms as this would distort the market against smaller retail players, thus embedding the dominance of the VIUs. It is also unclear whether this obligation would lead to competitive PPAs, and would certainly stifle innovative PPA offerings that smaller suppliers typically bring to generators.

Similarly we believe the same applies to an off-taker of last resort.

### **9. What are your views of the potential for market distortions and possible impact on the wider market?**

The FIT CFD is correctly designed for large transmission connected generators, but does so at the expense of independent, smaller scale renewables by:

- Making the market more complex
- Encouraging further vertical integration
- Not supporting fixed-price PPAs
- Lead suppliers to seek PPAs with RO generators above FIT CFD generators

As a result of the current proposals we expect larger generators to receive a greater degree of certainty on price at the expense of greater volatility for end user prices, which will be mitigated by increased vertical integration. This will reduce competition both in generation and retail markets at the expense of the consumer. This will mean greater regulation is required due to lack of competitive pressures.

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

For distributed generation we believe that DECC should consider the recommendation of the ECCC and adopt a simple FIT mechanism for that type of generation. If this is not deemed acceptable, then allowing

In the medium to long term, for generators supported through the FIT CFD, that instrument creates a disincentive to seek a fixed-price PPA. Good Energy would then need to seek an alternative means of fixing power costs, albeit based around the variable-price PPA that a generator would require in order to minimise the basis risk of the instrument.

Under this model, the generator would incur a greater discount (between 2.5% to 7.5% dependent on the specific risk profile of the generator) than offered to RO generators on a fixed-price PPA due to the significantly increased risk profile at the day ahead level due to the variability of the day ahead market, and the variability of the output from renewable generators – neither of which can be easily mitigated.

Longer term, as RO generators fall away and FIT CFD generators come to the fore (assuming any independent distributed generators take up the FIT CFD) we feel that the logical response by PPA counterparties will probably be a greater degree of vertical integration.

Market wise we expect transmission connected generators and distributed generators which are part of a vertical portfolio to move to reference-price linked PPAs. As a result we expect there to be a significant increase in the volatility of prices for end consumers with more price changes as suppliers rebalance their risks and margins due to their increased exposure to short term prices. There will be limited new players in the retail market entrenching the dominance of the vertically integrated utilities. Independent suppliers will meet their needs via vertical integration or RO generation, thus generators seeking a market tracking PPA may find the market increasingly illiquid.

**6. What has been the determining factor in selecting a preferred PPA and PPA provider?**

As PPA provider we try to offer terms to suit the generator, which usually means we purchase the entire output from the generator at a fixed price for energy, ROCs, LECs and REGOs at a time length to suit. Typically generators are under no obligation to generate at any particular time, but are obliged to tell us about planned and unplanned outages to help with our output forecasting.

The discount on the market price will reflect length of contract, intermittency, reliability, size, technology, location, and proportion of generation as export. Due to the number of variables the price offered can vary significantly. Longer term contracts can have break clauses in them where the energy price is renegotiated based on an agreed formula on more up to date forward market prices.

As a supplier of purely renewable energy we are experts at managing this portfolio mix, but as all suppliers gradually increase the amount of renewable energy in their portfolio, then they are likely to manage these elements of the discount with greater sophistication.

**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 the driver for this?**

We do not have sufficient information to provide evidence on this point.

**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?**

We support the view expressed in 6.2 that intervention should be "minimised and limited to responses that are proportionate, targeted and deliver benefit that outweigh the cost". To this end we do not propose that there should be any intervention for larger, (>50MW) transmission connected generation or, at least, any intervention should not skew the PPA market away from fixed-price offerings. Our views expressed here relate to distributed generation.

Market Led Initiatives

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?**

Over the past three years we have seen growth in distributed generation driven by the security of income provided by the Renewable Obligation and the sub-5MW FiT scheme.

There has recently been a reduction in such schemes as the RO banding review has taken place. However, the trend towards more distributed generation above 5MW appears to be growing as technology costs fall.

We have noticed some significant peak and troughs of interest from potential generators. Many generators, financiers, installers and other suppliers have repeatedly mentioned their frustration by the changes made to the sub-5MW FiT tariff levels as delivering uncertainty and complexity into project planning. A lack of consistency from the government is cited as the main cause of indecision and for projects being cancelled.

The uncertainty surrounding the EMR has led to many suppliers taking a change in tactics with an increased interest in vertically integrating their portfolio to minimise their risks and recycle more funds within their business.

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?**

As we do not operate outside the UK we do not have any evidence to present on this 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?**

Probably the most prevalent factor preventing entry into the GB market is the uncertainty and complexities of the UK support regime, coupled with concerns around the planning system.

There is however, a genuine interest in local renewable generation and the current framework of fixed-price PPAs, with reasonably fixed-price RO support that works for smaller independent developers (i.e. >5MW but < 50MW). It is worth noting that for the independent generator, the RO provides a key asset in the form of the ROC. The value of that asset should be judged not just in terms of its financial value, but also the bargaining power it provides to that kind of generator, in a market where the major energy suppliers have little incentive to purchase power from them.

The advent of EMR is causing concerns for developers who are not energy professionals and are looking at on-site generation, which exports on a spill basis, or dedicated generation sites by businesses seeking to diversify their income such as farmers and landholders.

Once EMR is in place, then we would expect larger Independents to adapt their energy trading strategy and PPA requirements to match the final arrangements. However, the complexity of the arrangements for smaller developers will either deter entry to the market, or at the very least lead to an increasing discount to market price from a reducing pool of PPA counterparties as Independent suppliers seek to source energy either by increased vertical integration or a preference to fixed-price PPAs with existing RO generators, as both routes give more certainty of costs and risks when setting prices for end users.

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.

In the short to medium term, we would continue to offer fixed-price PPAs to distributed generators supported through the RO in order to fix our costs for our customers.

a variable output reliant on prevailing weather conditions in return for a discount on the firm market price. As we see an increasing proportion of our power generated from intermittent sources, this balancing risk is set to increase as the supplier, as the commercial agent for balancing supply and demand, will be required to take a system wide view in order to take advantage of the physical availability of power.

For the supplier, such fixed-price PPAs allows price stability which can be passed through to end consumers, thus reducing their electricity price volatility. For renewables, where the key cost is primarily capital rather than operational and fuel costs, long term PPAs are sensible and offer the opportunity for long term stability of retail prices.

As the June 2012 draft Operational Framework states, the advent of FIT with CFD with a day-ahead reference price means that fixed-price PPAs will be difficult for a generator to agree. This because their CFD is hedged against that reference price rather than a PPA price, as a result it creates the 'basis' risk that the FIT CFD is supposed to eliminate. However, a market tracking reference price also increases the financial risk to the supplier, especially as they are unable to change consumer prices more than quarterly, leading to increase customer churn rates and, in the long run, new political concerns about the operation of the energy retail market.

As a result, well established suppliers like Good Energy are likely to prefer to source their generation either by vertical integration, or purchasing from grandfathered RO and premium FiT generators which are far less risky a proposition compared with the FiT CFD, and this would in turn lead to a reduction of competitive pricing within the renewable PPA market for new FiT CFD generators.

This creates the possibility of generators incurring bigger discounts on the market rate for their exported power. If Good Energy was to offer market tracking PPAs to FIT CFD generators it would do so at a greater discount (between 2.5% to 7.5% dependent on the specific risk profile of the generator) than offered to RO generators on a fixed-price PPA due to the significantly increased risk profile at the day ahead level due to the variability of the day ahead market, and the variability of the output from renewable generators – neither of which can be easily mitigated.

For your convenience we have answered your questions below, expanding where necessary.

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

Good Energy has been in contact with over 1,500 current and potential decentralised renewable generators regarding PPA arrangements over the past 3 years.

As a key provider of PPAs to distributed renewable generation we have noticed a general increase in PPA requests from generators. However, we have at the same time noticed that some financiers are requiring generators to seek PPAs with parties with a good credit rating, thus excluding them from signing PPA with smaller suppliers like ourselves, despite smaller suppliers typically offering better terms and a better quality service. The Department should consider the impact of the FIT CFD in a similar light, particularly given the concerns already voiced in industry about the credit requirements that the instrument is likely to lead to. We have noticed that the terms offered to smaller generators by large vertically integrated utilities have generally improved, with larger suppliers willing to offer reasonable terms to smaller renewable generators.

The introduction of the sub-5MW FiT scheme has had a marked impact on improving liquidity in the market through its creation of a new pool of renewable generators, which are far more likely to be independently owned. We believe that the policy instrument's relative simplicity and accessibility has had a key role in doing so.

Matt Coyne,  
Department of Energy and Climate Change  
3 Whitehall Place  
London  
SW1A 2AW

17<sup>th</sup> August 2012

Dear Matt,

### **Call for Evidence on independent renewable generation**

As you know, Good Energy is the UK's leading 100% renewable electricity supplier, supplying 30,000 customers across the UK. We are committed to the development of the UK's ability to generate electricity from renewable resources, using a range of different technologies to do so. All the power we source for our customers comes from distribution network connected renewable generators, a majority via fixed price PPAs with independent generators.

Good Energy is the leading supplier in engaging and supporting decentralised renewable generators creating a route to market for non-energy professionals both SME and community generators. We are the third largest FIT licensee and are leading the way on community engagement in our own generation plans.

It is our firm belief that the decarbonisation of the UK electricity market cannot take place without a significant increase in distributed generation and engagement of parties beyond the traditional vertically integrated utilities. This is necessary not only to ensure that sufficient investment is attracted to the market from more independent generators, but also to help reduce demand from traditional, centralised fossil-fuel fired plant.

Good Energy notes that the Department, Ofgem, the Energy and Climate Change Select Committee and the International Energy Agency have repeatedly stressed the need for EMR to attract greater independent ownership of generation assets, in order to improve wholesale market liquidity and to ensure that the proposals function as intended. The depth of that liquidity would need to be sufficient so that suppliers are able to access products at a range of shapes and sizes.

To this end it is vital to ensure that EMR proposals, and the proposed FIT CFD in particular, work for the 5 – 50MW band of renewable generation, which is connected via the distribution network.

### Executive Summary

The EMR proposals are designed to deliver large scale, transmission connected generation run by energy professionals. Whilst this might seem an appropriate approach to take when considering attracting investment for traditional forms of centralised plant it fails to take in to account the reality that renewable technology, by its nature, differs in that it can be deployed at a wider scale and so is more accessible to a wider range of developers, many of whom may not be professional energy market participants. This accessibility means that the technology has the potential to act as vehicle for improving market liquidity, whilst the potential for dispersed deployment means that it can deliver new forms of generation capacity that reduces the use centralised fossil-fuel fired plant. A flexible PPA market, where terms and conditions can be tailored to a generator's specific needs, is necessary to capitalise on these attributes.

One of the key benefits of the current market arrangements is that distributed generators and suppliers can enter into fixed price PPAs, with firm prices for energy, and market related payments for all three certificates (ROCs, LECs and REGOs). For nearly all distributed generation, this takes the form of an output contract, where the supplier buys the whole output, with no constraints on when or how much energy is delivered. The supplier takes the risk of balancing