Route to Market Q&A

1) Why won't the CfD-FITs provide a route to market for independent generators?

There is no FIT to the CFD. There is no mechanism for generators to "feed in" their power to access a CFD tariff. Under the Energy Bill, generators can only access the CFD if they sell their power into the electricity market. While that's fine for vertically integrated suppliers, banks and investors have made it clear to the independent generators - who depend on them for finance - that they are not prepared to invest unless the generators have already signed a viable long-term contract (15 years typically) with a large BBB+ credit rated company that will deliver the power into the electricity market on the independent generator's behalf.

A long-term contract is required because the banks need to be certain that if the project owner defaults for any reason, the bank will be are able to step in, take control of the project and recover their investment. They will not be able to do this unless there is a contract in place with to sell the output with a credible counterparty (typically a large supplier).

Banks (and the pension funds that the Government is looking to attract to the UK through the EMR) do not have the detailed technical knowledge of the electricity market and how balancing and trading cost may change over time. As a result they need to mitigate this risk by contracting it out.

The availability of the long-term contracts required by banks is drying up and there is no reason that this should change under EMR. This will make CFDs un-investable for independent generators who need bank finance. DECC is relying on independent generators for 60-80% of new onshore wind build and 25% of offshore wind build.

2) Why won't the problem be resolved with the introduction of CfDs?

DECC's explanation for why route to market will cease to be a problem under the CfD is that there will no longer be a requirement for a floor price (para 319 of Annex A) and the removal of risk arising from the sale of the RO certificate.

Indeed when presenting to the committee Jonathan Brearley has said: *"one of the reasons for [the lack of viable PPAs] is that [independent generators] need further price guarantees to be able to get debt and therefore need price floors within the PPAs, for example. Those are hard for the suppliers to give, partly because they then get accounted on their balance sheet. We think CfDs have improved the situation. We do think they give greater revenue clarity for independent generators but allow them to sell at a variable price, which makes it easier for suppliers to offer PPAs."*

Yet in Annex A, DECC officials also concede that independent gas generators are also having problems securing viable long term PPAs (para 331 of Annex A) even though they don't need a floor price for their PPAs to be viable. Why then should simply adding a floor price (which CFDs will do) make PPAs viable for independent renewable generators?

For PPAs to be viable they need to be of sufficient length, to be affordable and they must include balancing costs – the introduction of the CFD will not address these other issues

3) Why won't the proposed "voluntary/market-led" solutions of establishing "voluntary" model PPA contract terms and improved transparency solve the problem?

The current solution proposed by DECC officials is to work "*with market participants to prepare for the introduction of the CfD..... The outputs of this process could include inter alia, model PPA contract terms to serve as a basis for commercial negotiation and a code of conduct on transparency of PPA pricing*" (Annex A para 327).

This completely misdiagnoses the problem and simply assumes, against all the evidence that big suppliers will want to offer PPAs which are viable when the evidence is that they won't. The important question is 1) whether someone is prepared to offer the contract and 2) whether they are prepared to do so at an acceptable cost that minimises the cost to the consumer and enables projects to be viable.

Having a model PPA does not help if there is no one willing to sign the contract or charges such a high price that it makes the contract unviable. Voluntary codes can't solve a problem of market failure – the generators know this and telling them otherwise doesn't build confidence that the problem will be solved.

By removing 3 or 4 clauses from an existing ROC based contract it is possible to create a contract that would be fit for purpose to sell electricity under a CfD.

4) Is there sufficient evidence that there is a problem that justifies market intervention?

DECC officials accept that this is evidence of a problem now. Annex A states *"The evidence that we received broadly supports the views of the independent generators that the market has shifted in recent years and that generators are finding it difficult to secure PPAs on terms that are as beneficial as they used to be."* (para 313 of Annex A) before going on to list five specific changes that have occurred to the detriment of independent generators. They then conclude that *"the evidence available does not yet demonstrate that there is a sufficiently clear case for intervening in the PPA market" (*para 328 Annex A).

In fact in the Impact Assessment they state *"Whereas during 2006-2010 the market in each year was reasonably well distributed between different counterparties, in both 2011 and 2012 one participant seems to have accounted for the majority of the market. <u>This may, of course, represent normal competitive market activity</u>"* (Energy Bill 2012 Impact Assessment: Reducing Barriers to Securing Long term Contracts for Independent Generation Investment, para 27).

This is clear evidence of market failure. One participant in the market DOES NOT represent a normal competitive market as the Impact Assessment claims.

If the evidence available is insufficient to justify market intervention it is unclear what evidence would do so short of generators leaving the market

5) How do we know that this problem isn't simply transitional?

Under DECC's misdiagnosis the problem will be resolved as a result of the lifting to the floor price requirement and the requirement to sell ROCs. This however misunderstands the problem, which is that independent generators need a long term contract with a credit worthy (BBB+) counterparty who is willing to take balancing risk for a long period of time (15 years).

This fundamental requirement remains unchanged under the CfD, and whilst removing the floor price may make offering such a contract slightly less unattractive, and removing the RO may or may not have an impact they do not address the fundamental cause of the problem - that the large utilities that are able to offer that long-term route to market have no incentive to do so apart from financial gain.

As a long term contract leaves them exposed to long term regulatory and market share risk, their shareholders will correctly demand that a large utilities receives a significant financial reward to compensate for the increased long-term risk exposure, and this will be a direct cost to the consumer.

By removing the need for a long-term contract through a structure like GPAM and using pricing contracts on a shorter term basis this risk can be priced effectively.

6) Why can't PPAs be kept "under review"?

The Government have said that they will "*keep the PPA market under review as EMR is delivered and, in particular, will consider the results for the first allocation of CfDs to identify whether there are further steps that are needed to support independent developers"* (Annex A, para 31)

Keeping the PPA market under review after the first allocation of CfDs to see whether further action is required fundamentally misunderstands the contracting process. A PPA contract is one of the last contracts to be sought. CfDs will be allocated *after* planning and grid contracts are in place, it may be another 6 months to a year before a PPA contract is sought. Therefore evidence to show the absence of viable PPAs for those CfDs will not come until sometime after the initial allocation [2014]. At this stage, significant deposits on key pieces of equipment (turbines, transfrormers etc) will be posted, and the cost of withdrawing from a project due to an ability to secure a PPA would be untenable for many independent generators.

It would be commercially unsustainable for independent generators to "kick their heels" will sustaining commercial losses whilst DECC officials collected further evidence that the problem is real, went through appropriate consultation processes, defined and implemented an effective solution – by the time any "backstop power" was implemented they would have had to exit the UK market.

7) Why won't the backstop powers in the bill provide sufficient comfort that a solution can be implemented later?

Ministers have said: *"we are taking powers in the Bill to enable the Government to intervene in the event that the PPA market does not develop as expected".* They have specified three forms of intervention

a. Obligation to offer terms (Annex A, para 330) proposes "*introducing minimum terms for contract duration and change of law provisions for example, <u>but would not go as far as setting prices</u>".* Without setting prices however, such an obligation is worthless. Utilities that are able to offer PPAs but chose not to will simply offer financially unviable PPA contracts. The obligation will be met, but independent generators will still be unable to operate in the market.

   There is no shortage of <u>unviable</u> PPAs. A requirement to offer PPAs that are not viable does not address the real problem – that <u>the PPAs are not viable.</u>

b. Off-taker of last resort (Annex A, para 332) is ruled out as it would "require administrative price setting which could lead to significant market distortions" and could act as a barrier to entry for small suppliers and aggregators.

c. Short Term PPA auction (Annex A, para 334) - this is the closest to the Green Power Auction Market (GPAM) structure. It is not clear whether this is ruled out or not, however as it is a market solution rather than a regulatory intervention; it cannot be implemented overnight and reignite investor confidence in a broken market. Leaving its implementation until after the first allocation of CfDs in 2014 rules it out as a practical solution.

GPAM needs to be implemented as a priority and deployed within the necessary timescale to avoid market exit by independent generators.

8) Could the RO be extended to solve this problem?

No – the PPA market is already collapsing – the RO is now insufficient incentive on suppliers to provide a market in viable PPAs.

9) Won't Ofgem liquidity reforms sort this problem out?

No, the Ofgem liquidity reforms are important in terms of ensuring effective trading of electricity. However there is little relationship between market liquidity and PPA terms. Improvements in liquidity will reduce the transaction cost of organisations actively trading in the market (utilities and small suppliers). However, to access the finance that is critical for independent generators, and ensure the success of the EMR in attracting low cost capital, independent generators will still need to secure a long term contract that providers a route to market, and as such will remain dependent on the large utilities to provide this route to the market.

Market liquidity is important, but improving market liquidity does not directly impact the competitive basis under which long-term PPAs will be priced, as there remain only a select number of large utilities that have the credit rating required to stand behind a financeable long term PPA and many will continue to decide that it is not in their strategic interest to offer such contracts.

10) Won't Ofgem's cashout reforms help?

No, the OFGEM cash-out reforms are likely to make the situation worse as the current proposals may increase the cost of balancing.

It is precisely because of the frequency and the material impact of such regulatory interventions that financiers are unwilling to finance projects that are exposed to balancing costs, and why long-term PPA contracts have a significant risk premium built into them.

11) What about independent aggregation?

The market opportunity for independent aggregators is limited, and the historical evidence has shown that they have struggled to participate in the market.

Typically aggregators are comfortable with managing risk effectively over 2 to 3 years, potentially out to 5 years. There are very few willing to provide long-term contracts (15 years).

In other markets - such as Nordpool - this is not an issue. Firstly because of its pool structure and secondly because of its fragmented supply market that provides a structure which a large number of aggregators can operate in effectively. Banks can be comfortable that there is will always be a choice of PPA providers and are willing to accept to shorter-term PPAs as a result. In contrast, the UK has a vertically integrated, illiquid structure and an oligopolistic supply base. As a result there is little if any visible scope for independent aggregation services in the UK to provide PPAs that would be viable to independent generators and due to the restricted market space banks are not comfortable that there will always be a choice of PPA providers and are unwilling to accept shorter-term PPAs.

The introduction of the GPAM would actually provide the catalyst that would allow new traders, aggregators and suppliers to enter the market as it would allow them to source generation from a geographically diverse set of assets and technologies and thereby defining a portfolio that minimises their risk exposure.

12) Why can't independent generators come together and provide their own route to market?

Unfortunately, no. It is very clear to investors that independent aggregators have struggled to survive in the UK market between 2001 and 2010 we have identified 20 independent suppliers and aggregators that have been forced out of the market. 13 of these went into administration, the remaining we acquired by one of the larger utilities.

The fact that these companies that have the specialist knowledge of the electricity market, risk management procedures and trading knowledge have struggled to operate effectively in the UK market will make any investor very sceptical about a group of independent generators that "self-aggregate" in order to provide a route to market.

Correctly any investor will question "why if there is so much history of specialised trading companies failing do you think that that you will be able to deliver?" and investors will immediately move to less risky alternatives.

13) We understand that there is an industry lead proposal being led by the large utilities, is it too early to commit to GPAM?

There is an industry proposal that is being pulled together by two of the large utilities. Whilst the precise details of this proposal have not been fully worked up, the basic proposal is that the strike price should be increased to allow for changes in balancing risk over time.

However, this proposal still requires independent generators to contract direct with one of the large utilities, accordingly it does not ensure that large utilities will be any more likely to offer viable long-term PPAs, and it still precludes independent generators from contracting directly with the small suppliers (who do not have the necessary credit rating).

The proposal does reduce the level of risk associated with entering into a CfD contract, and this may make a utility more willing to offer a PPA, however, there can be no certainty that this will be the case. Whilst this will de-risk the investment proposition for large utilities, independent generators will still be dependent on those same utilities to secure a route through a viable long term PPA contract.

14) Is it worth disrupting the market for a marginal problem?

Government have stated on many occasions that the large utilities alone cannot deliver the investment necessary to deliver the low carbon electricity required and to replace the obsolete coal and gas plants that need to retire over the next decade.

It is because of this challenge that the Government appreciates the need for independent generators, and the need to foster greater competition in the electricity market.

Independent generators are poised to deliver this investment with almost 75% of the onshore wind development pipeline estimated to be brought on stream by independent generators, this is in addition to approximately 25% of the offshore pipeline and significant proportions of the PV and biomass pipeline.. This investment - along with British energy security - is in jeopardy if independent generators are unable to invest in a cost effective manner.

15) Why are Dong and Staatkraft saying they don't need PPAs to invest?

In their home markets, they are integrated utilities just as SSE or Eon are in UK. As a result they have the trading desks, the risk management structures and the scale to manage the sale of their output directly into the market, and they have the size to ensure that any losses can be absorbed without threatening their overall business. For most independent generators this is not the case.

16) CfDs have been shown to work internationally and they will be applied successfully here.

There is very limited international experience and the one market where there is a direct parallel (the Netherlands) investment has suffered, and the scheme has had to be overhauled.

a. Germany – has introduced a CfD structure. However, they have maintained the fixed FIT that has driven investment for the last ten years and allows operating sites to alternate between structures at short notice. This provides investors with confidence that if the route to market under the CfD structure should dry-up as in the UK, then they can revert back to the original fixed FIT.

b. Denmark - The CfD has been applied to the largest offshore generators that are also operated by the largest utilities. They have not applied the structure to small generators.

c. Canada – they do not use CfDs for generators. Generators get a straight fixed contract with the supply company, however they supply company uses the CfD structure to secure (or reimburse) the necessary funds from the consumer.

d. Netherlands - the CfD has been in place since 2008 by the end of 2011 contracts had been awarded to allow for almost 1 GW of onshore wind to be constructed, however of this only 84MW was actually built, forcing them to revise the scheme.

17) If Long-Term PPA costs are so high, doesn't this reflect the true cost of balancing wind?

The balancing characteristics of a wind generator do not change over the life of the project - the patterns of wind and the speed with which changes in wind speed are realised remain broadly constant. However the

cost of being out of balance (not being able to deliver the volume of electricity that you expected to deliver) is set by a very volatile market that is subject to regular upheaval and intervention.

Currently under the closest that we can get to a market cost of balancing wind generation is the NFPA auctions. Over the last eight auctions these have shown a cost of balancing for wind generation of around 3% of the value of the total revenue stream. This compares with a long-term PPA cost of 10-20%.

The difference between these two figures is comprised of risk and uncertainty surrounding how those balancing costs are likely to change in future years (which depends largely on government policy) and financial incentive required to encourage a large utility to provide that long contract. Because of the lack of transparency and effective competition, it is impossible to ascertain the relative shares of each.

18) Does the fact that independent generators cannot secure PPAs from the Big Six suggest that their business case is simply not viable?

It will not be viable in the UK under the new energy bill because the UK lacks the fully competitive market that would incentivise competitive PPA offers or a means to pass that such as the pool provided by Nordpool and the FIT provided in Germany. DECC has stated it wants more investment from independent generators. It therefore needs to ensure that there is a viable market for their business model to operate otherwise they will be forced to invest abroad.