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[redacted] (Energy Markets Networks)

From:	[redacted]
Sent:	17 August 2012 14:00
To:	Coyne Matthew (Energy Markets and Networks)
Subject:	DECC call for evidence on barriers to securing long-term contracts for independent renewable generation investment

Dear Matthew,

Firstly, apologies for the late submission of this e-mail – a rather stretched interpretation of EOB 16th August, I appreciate. Hopefully you'll still be able to accept this as part of your body of evidence.

AES is a US-based multinational independent power developer/owner/operator, somewhat analogous to International Power prior to its acquisition by GdF Suez, to put us in a UK context. We use non-recourse project finance (as well as a proportion of our own equity) to fund our projects, and sell output to local utilities (or industrial customers) dependent on market structure wherever we are doing business around the world; hence for purposes of this call for evidence we are an "independent renewable developer".

In the UK AES currently focuses on onshore wind, and so far we have one plant in operation (financial close late 2008), and three in construction (financial closes 2011-12). We are also currently actively developing a pipeline of 9 sites totalling some 330MW which we expect to reach financial close between end 2013 and end 2016, subject of course to success in permitting.

I will focus this response mainly on your **first question on page 15** and the specific issues set out in **Annex A**.

In mid-2008 we went out with an RfP for the PPA on our first project; we had eight valid responses, of which six were bankable 15 year PPAs, one bankable but only for a term of 10 years and the eighth was only for 7 years. All six of the major VIUs responded, one of them only on the basis of 10 years (rather than 15 years). Of the six bankable 15-year responses, one was from the trading arm of a major portfolio generator that was subsequently acquired by a VIU; hence in terms comparable with today's market we had the equivalent of five 15 year offers, one 10 year offer and one 7 year offer. All offers were for full output (power, ROCs and LECs), with floor or fixed price protection to facilitate bank funding.

It is also worth noting that the commercial terms across the various respondents at that time were closely matched i.e. the market was competitive.

In mid-2010 we repeated this process with the intention of choosing an off-taker for our next three projects. Only two of the VIUs responded with bankable offers (i.e. full terms off-take over 15 years with a floor price), but we also had bankable offers from two "new entrants" (trading arms of major foreign utilities who are not vertically integrated in the UK). The other 4 VIUs either (a) declined to bid; (b) could not go beyond 7-10 years; or (c) would not take 100% of output (particularly ROCs). Eventually we opted to contract with one of the "new entrants" for our second project.

We then chose to re-test the PPA market in July 2011 for the third and fourth projects. The field of bidders was slightly smaller than the exercise in 2010 (no more new entrants or re-entrants to the market, and one of the previous four bidders were temporarily inactive); and we decided to go with one of the VIUs for those two projects, and entered negotiations with a view to closing a deal in September/October. Unfortunately in August 2011 the parent company of the VIU in question had a change in policy and stopped writing any more PPAs with floor prices (hence their PPA was no longer bankable). Fortunately the off-taker on our second project came back to us with an improved offer at that stage, and we were therefore able to contract for the third and fourth projects in our pipeline and raise project finance as intended to meet our deadlines.

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In summary, by 2010/11 the field had thinned to only a few "bankable" PPA players, and it was only by good fortune, after the change in commercial position by the VIU noted above, that we were able to meet our backstop timing requirements (i.e. to allow all projects to come online by April 2013).

We are aware that it is also possible to contract directly with end-users (in conjunction with a back-to-back supplier deal for ROC processing and balancing), but these PPA structures are widely reported to take approximately a year to negotiate, hence are very unattractive when one is faced with short deadlines for development in the context of ROC re-banding dates. As a result we have not explored this option, but may well do in future, especially for our smaller projects. Whether this model can be used for large projects, however, is another question; we have only heard of this off-take model for small generators (max 10-15MW), so it may not be applicable to utility-sized schemes, where lenders may still prefer utility balance sheets behind the off-take arrangement.

A few more specific points from our two tender rounds, in response to your questions at p18 of the call for evidence :

In our tenders, we have generally seen discounts in the range 85-90% for power, and toward the upper end of that range for ROCs. We have heard of discounts up to 80% reported for power off-take, but have not experienced that in our own tenders. We have however recently observed discounts on LECs falling to 70% of statutory CCL rate, due to structural issues in the market for those certificates. Discount levels seem have not changed hugely, perhaps just "nudged downwards".

The major downward change has been to floor price levels and whether the floor price caters for change in law risk i.e. whether off-takers will offer a floor on "bundled power and ROC" – this is now rarely if ever on offer (indeed some VIUs no longer offer floors at all). Some lenders left the UK wind project finance market when this change occurred (i.e. when off-takers ceased to offer bundled floors and would only offer wholesale power price floors). As a result, just as the field of feasible off-takers has thinned, so the field of feasible lenders has thinned, and the developer's job is to match up a lender with an off-taker (each bank has a view on the off-takers that they will or will not do business with). Where available, floor prices have been falling.

Imbalance risk lies with the off-taker subject to forecasting and data access requirements placed on generators that have grown more onerous, but not to the extent of being impracticable (and arguably should be within the capabilities of a competent operator). Passing off imbalance risk – subject to reasonable forecasting of turbine availability - is one of the main reasons for generators needing PPAs, and the off-takers still willing to offer PPAs have not violated this understanding.

Change in law is now a risk that is subject to a fairly well familiarised re-negotiation clause, which leaves much to future debate as to "preserving the economic equilibrium of the parties" (and similar concepts). Any future legislation widely triggering these change in law clauses could cause industry chaos as there may not be enough legal resource available to allow all affected PPAs to be re-negotiated without "staggering" negotiations, and payments withheld from projects "at the end of the lawyer's queue" during such a period of widespread re-negotiations could force independent projects into bankruptcy.

Lenders have indeed become more risk averse; they have responded by either withdrawing (either permanently or temporarily) from the market, or applying more onerous stress tests that result in lower loan sizes (leverage). At the end of the day, if the off-takers have the market power due to their increased concentration, then any lender wanting to stay in the game has to accept much of what the off-taker stipulates, and so the only way the lender can maintain its risk profile is by reducing loan size; hence the party that takes the hit is equity.

Regarding your other **questions on page 15** of the call for evidence :

2. Changes observed in the PPA market are largely as noted above – fewer off-takers, players moving in and out of market, reluctance to offer floors or full 15 year terms, lower floor prices. Reasons are doubtless various, and the following may be contributory factors :
- Impact of floor prices on balance sheet metrics of increasingly strained utilities;

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- Uncertainty in the run-up to EMR making off-takers less willing to take long-term positions on discounts (as it is harder to price imbalance risk over 15 years) and floors (as it is harder to gauge wholesale pricing future scenarios);
- Uncertainty of how much renewable capacity will opt into RO vs EMR CfD 2014-2017 making it harder to gauge VIUs net long/short positions on ROCs – hence they prefer to rely on own generation and to otherwise stay slightly short.

3. We also do business in Poland, where the green certificate system is quite similar to the UK's RO. We like the fact that those two markets are similar as it assists internal senior management understanding of our European wind business (which is a small part of AES, AES being a relatively complex company spread across some 25 different countries). We have also done business in France, which has a very straightforward FiT system; by comparison the proposed EMR CfD appears more complex and riskier, and may therefore prove more challenging, depending on the final details.

4. Planning risk is high in the UK market, and issues such as radar (MOD & civilian) and local objection seem more prevalent than in some other countries. Wholesale market price risk in the RO standard PPA market has been a consideration, but one that can be quantified and priced, so is not an inhibitor in the same sense as planning (as planning risk is less predictable, and can wipe out development investment at a stroke). Grid availability timing is of course an important issue in certain parts of the country, but that is so elsewhere in Europe also. At the moment business planning is hard because one has no visibility as to returns from projects coming on after April 2014 due to (a) potential for a further ROC re-banding from April 2014; (b) unknown CfD strike price from April 2017. Without visibility on those two revenue-related issues it is hard to make a case for commencing new project development at this time, given that time to develop a project is typically 4+ years.

5. It will be hard to answer this until the counterparty contract model is clearer and more details have been provided. One positive aspect however is the removal of wholesale price risk as this will remove the need for a floor price and so make projects easier to "bank" (lenders will like the price certainty).

6. Determining factors are as might be expected : term (we need minimum 15 years for project finance), discount levels, floor price levels, creditworthiness, and the familiarity of the off-taker with standard lender clauses in PPAs (it is important that one has confidence that a contract can be negotiated with the counter-party in a timescale that does not impede timely financial close).

7. Yes : transfer of risks from off-takers to projects through lower floors and change to a power-only floor have meant lower leverages (debt:equity levels) for equity investors and hence lower levered returns, as lenders apply more onerous stress tests, constraining leverages. We can clearly observe this in our portfolio. Reasons are linked partly to the PPA market, partly to the banking market. How debt levels and equity returns will change in EMR is to be proven as details regarding contract/counter-party model, allocation of imbalance risk and crucially CfD strike price are yet to be resolved; so it is too early to say.

There is a limit as to how granular one can be in such a response for reasons of commercial confidentiality of course. Nonetheless, I hope this has been somewhat useful even though you have doubtless heard similar messages from others.

With regard to confidentiality, we are happy for you to use the above comments in your analysis, but ask that you keep it on an anonymous basis. As we have very few projects and off-takers, any comments linked to ourselves could be mis-construed as applying to one or two specific counter-parties, even though I have offered this in the context of general commentary on the industry trends. If keeping the source of above comments anonymous presents a problem to you then please let me know, either by reply or by calling on 020 8334 5303 / 07710 056929.

Do feel free to get in touch with any questions regarding the above.

Best regards,

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