



Department of Energy & Climate Change  
3 Whitehall Place  
London SW1A 2AW

10 March 2011

**RE: Response to Electricity Market Reform Consultation**

Dear Sir/Madam

I have pleasure in attaching Energy Development Limited's (EDL) response to the Electricity Market Reform consultation.

EDL is one of the largest Australian listed renewable energy companies. The Company currently owns and operates an international portfolio of 78 power generation facilities in Australia, the United States, the United Kingdom and Europe from a range of fuel sources including landfill gas (LFG), waste coal mine gas (WCMG) natural gas and liquefied natural gas (LNG) with a total installed capacity of over 600 MW.

In the UK, the company has currently 11 landfill gas generation sites with a capacity of 70MW. We have recently completed a strategic review in which we are actively contemplating a substantial increase in our presence in the UK across a number of different renewable technologies. Future policy changes in the UK will therefore have a significant impact on the execution of that strategy.

We have made a number of comments in our response which I think are valuable to summarise here.

1 We fundamentally believe that the RO should not be replaced. It has taken the industry and the investment community a long time to get comfortable with the mechanism which we now believe is working correctly and will deliver. Any change at this stage will be counterproductive to the UK's ambitions for 2020 as any change will cause a hiatus in lending from the investment community.

2 We think that the proposed reforms have a number of major flaws. In particular, we believe that the government should not under estimate the way investors will react to the change from a price risk environment which they understand to government risk environment which is much harder to model. Recent changes in European FIT regimes highlight the real risks in this respect.

3 The current RO system has an implied dispatch priority inbuilt for renewable generators due to the obligation on suppliers. However, under a FIT regime (of whatever type), no such guarantee applies.

4 The most concerning is that the data which has been used to assess these changes appears to be different to the reality being experienced by developers.

In our opinion the UK Government would be best served at this stage to address the problems that really do affect build, such as planning, grid and availability of funding - none of which are addressed by this reform package.

If you would like to discuss any of the points raised in this letter or the detailed response, please do not hesitate to contact me.

Regards

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Energy Developments (UK) Limited

# ENERGY DEVELOPMENT'S DETAILED RESPONSE TO THE ELECTRICITY MARKET REFORM CONSULTATION

DETAILED QUESTION	Y/N	SPECIFIC COMMENT
<p><b>Q1- Do you agree with the Government's assessment of the ability of the current market to support the investment in low-carbon generation needed to meet environmental targets?</b></p>	<p><b>N</b></p>	<p>EDL's preference would be for the Renewable Obligation (RO) to remain in place. We do not concur with the view that the lack of delivery to date of low carbon capacity is solely due to the RO. It is also a function of restrictions in the UK planning system, grid connection issues and more recently the worst financial crisis for over 70 years.</p> <p>Provision and deployment of sufficient low carbon generation for future UK needs will require a coordinated policy to address fiscal, planning and grid connection issues.</p> <p>The proposals put forward have the effect of removing significant elements of wholesale price risk and replacing these with a political risk of price setting. There should not be a movement from financial/market risk to political risk. Investors understand market risks but are very nervous of uncertain long term political support. These risks have been underlined by recent actions taken by European governments.</p> <p>If we must move away from the RO - and EDL would prefer that the RO remain in place to maintain investor confidence - any replacement mechanism must be durable, robust, on no less favourable terms than the RO and quickly cement investor confidence.</p>

<p><b>Q2 – Do you agree with the Government's assessment of the future risks to the UK's security of electricity supplies?</b></p>	<p><b>N</b></p> <p>UK security of supply risks will be addressed with new centralised nuclear capacity, the bringing forward of new de-centralised renewable capacity and new grid interconnector capacity between the UK and stable European countries.</p> <p>The most significant short-term security of supply risk is any hiatus that may arise in the period before the EMR is introduced and how the RO and EMR co-exist. This together with any early changes to the EMR would again undermine investor confidence and may undermine the amount and timing of additional low carbon generation and new grid interconnector capacity.</p>
<p><b>Q3 – Do you agree with the Government's assessment of the pros and cons of each of the models of feed-in tariff (FIT)?</b></p>	<p><b>N</b></p> <p>By their very nature FIT mechanisms swap financial risk for government risk. Investors and lenders have got comfortable with market based financial risk. The prospect of the EMR is already slowing down the development process under the RO both from a lender and investor perspective. Government intervention in FIT tariffs in Spain, Italy and more recently evidenced by the solar review in the UK de-stabilise the whole market.</p> <p>The RO has been very successful in providing a priority route of despatch for renewables regardless of technology through the obligation on suppliers. It has also encouraged supplier/generator engagement and provided intermittency and locational price signals. All of the FIT proposals ignore these important points.</p> <p>For intermittent renewables such as wind, it is vital that priority despatch is maintained. De-linking from a market based mechanism could stifle innovation and development of broader</p>



		technologies. A return to the NFFO type tendering process should be avoided, the NFFO process was jarred, dislocated from the wholesale market and in NFFO 4 and NFFO 5 failed to deliver significant amounts of capacity.
<b>Q4 - Do you agree with the Government's preferred policy of introducing a contract for difference based feed-in tariff (FIT with CfD)?</b>	<b>N</b>	<p>CfD's are widely available for mitigation of financial risk for a number of commodities and products. The success of these rely on transparent independent markets and procedures and settlement processes. It is therefore difficult to see how a 'one size fits all' FIT CfD policy will work in practice.</p> <p>We do believe that the market is/would be prepared to provide a CfD for political risk/substantial change in government policy.</p> <p>In the absence of a clear market linked traded price, we would prefer a Premium FIT, with which each generator could then enter into a separate 3<sup>rd</sup> party CfD if required.</p>
<b>Q5 - What do you see as the advantages and disadvantages of transferring different risks from the generator or the supplier to the Government? In particular, what are the implications of removing the (long-term) electricity price risk from generators under the CfD model?</b>		<p>Under the RO, most generators and financiers have been comfortable with long term electricity price risk and there are various contract structures and other products available to ameliorate this risk, if required. The market is mature and already offering CfDs. Many developers have trading strategy skills in-house.</p> <p>To date, we don't believe that long term price risk has been a significant factor in the delivery of low carbon generation projects.</p> <p>There is a small financing advantage of bundling electricity price with a CfD, as a lender would treat this as fixed rather than variable revenue.</p>

<p><b>Q6 – What are the efficient operational decisions that the price signal incentivises? How important are these for the market to function properly? How would they be affected by the proposed policy?</b></p>		<p>It is important to maintain the generator/supplier dialogue which has evolved. For the balancing and settlement market to work effectively these parties cannot work in isolation. Price signals help existing and proposed plants to maximise flexibility and location for the low carbon technologies that are able to do so. Of the 3 FIT options proposed, only the premium FIT addresses these concerns.</p>
<p><b>Q7 – Do you agree with the Government's assessment of the impact of the different models of FITs on the cost of capital for low-carbon generators?</b></p>	<p><b>N</b></p>	<p>EDL has recently completed a strategic review and is actively contemplating significant UK expansion into additional low carbon generation. Our analysis suggests that Baseline hurdle rates (independent developer) for Onshore wind are more like 10-12% and Biomass 13-15%; significantly greater than those used in the DECC/Redpoint Analysis.</p> <p>Also, the indicated discounts in IRR of moving to the fixed and CfD arrangements (i.e. how lenders treat fixed and variable revenues within an overall debt package) appear to be overstated.</p>

**Q8 – What impact do you think the different models of FITs will have on the availability of finance for low-carbon electricity generation investments from both new investors and existing the investor base?**

The threat of moving away from the RO to a FIT arrangement has already affected investor/lenders short term view, primarily through the lack of bankable PPAs from electricity suppliers awaiting clarity over how the RO and FIT will interact. This, in turn, has significantly slowed down the financing of such projects until greater clarity emerges. A number of low-carbon projects will not therefore be able to reach financial close and will stall until such time clarity is provided on the government's proposals and confirmation that they are at least as favourable as current arrangements. Again, this potential hiatus is and could continue to have a significant impact on timing and overall capacity delivered.

Both latterly with the RO and in FITs in other countries, there is significant interest in asset ownership from pension funds and infrastructure funds. It should be noted that this type of investor is only interested in operational assets with a track record and would require other parties to carry the development risk and develop such projects.

The premium FIT is the closest option to the system currently in place in the market so it may inspire more confidence in investors.

<p><b>Q9 – What impact do you think the different models of FITs will have on different types of generators (e.g. vertically integrated utilities, existing independent gas, wind or biomass generators and new entrant generators)? How would the different models impact on contract negotiations/relationships with electricity suppliers?</b></p>	<p>Through the requirements of the RO, suppliers have had to develop effective relationships with small and large renewable generators of different technologies. Through the suppliers' primary requirement for ROCs, the intermittent nature of the generation and balancing of the electricity purchase became a secondary concern. Under the proposed FIT schemes (except CfD) some immature and intermittent technologies could have the value of their electricity heavily discounted.</p> <p>There is the possibility of the system favouring the vertically integrated utilities and becoming prejudiced against small independent developers and generators inhibiting enterprise and product development.</p>
<p><b>Q10 – How important do you think greater liquidity in the wholesale market is to the effective operation of the FIT with CfD model? What reference price or index should be used?</b></p>	<p>We do not believe that the wholesale market currently lacks liquidity. As suggested above we do not favour a FIT with CfD. The market continues to provide various transparent and independent reference prices both for forward baseload power and power sold.</p>



<p><b>Q11 – Should the FIT be paid on availability or output?</b></p>		<p>FIT must be paid on output (MWh) produced rather than availability to despatch. Not to do so would further erode the price signals to the generator.</p> <p>Payments on availability are expensive to the customer and tax payer, open to gaming and the reward for 'good' generators is broken.</p>
<p><b>Q12 - Do you agree with the Government's assessment of the impact of an emission performance standard on the decarbonisation of the electricity sector and on security of supply risk?</b></p>		<p>EDL has no comment on this point.</p>
<p><b>Q13 – Which option do you consider most appropriate for the level of the EPS? What considerations should the Government take into account in designing derogations for projects forming part of the UK or EU demonstration programme?</b></p>		<p>EDL has no comment on this point.</p>
<p><b>Q14 – Do you agree that the EPS should be aimed at new plant, and 'grandfathered' at the point of consent? How should the Government determine the economic life of a power station for the purposes of grandfathering?</b></p>		<p>EDL has no comment on this point.</p>
<p><b>Q15 – Do you agree that the EPS should be extended to cover existing plant in the event they undergo significant life extensions or upgrades? How could the Government implement such an approach in practice?</b></p>		<p>EDL has no comment on this point.</p>

<b>Q16 – Do you agree with the proposed review of the EPS, incorporated into the progress reports required under the Energy Act 2010?</b>		EDL has no comment on this point.
<b>Q17- How should biomass be treated for the purposes of meeting the EPS? What additional considerations should the Government take into account?</b>		The emissions arising from biomass fired electricity generation should be treated in accordance with agreed sustainability criteria and in particular the renewable nature of the biomass fuel fired.
<b>Q18 – Do you agree the principle of exceptions to the EPS in the event of long-term or short-term energy shortfalls?</b>	<b>Y</b>	Existing coal fired plant could provide useful back-up (last resort capacity) and safeguard until new nuclear plant is built and operational.
<b>Q19 - Do you agree with our assessment of the pros and cons of introducing a capacity mechanism?</b>	<b>Y</b>	
<b>Q20 – Do you agree with the Government's preferred policy of introducing a capacity mechanism in addition to the improvements to the current market?</b>	<b>Y</b>	Adequate reserve capacity, whether generation, demand side reduction, interconnection and storage will be essential given the higher volumes of intermittent generation (predominantly wind) that are likely to arise. Reserve capacity owners should be adequately compensated for their flexibility in providing this service.
<b>Q21 - What do you think the impacts of introducing a targeted capacity mechanism will be on prices in the wholesale electricity market?</b>		A properly targeted capacity mechanism which involves, generation, demand side reduction, interconnection and storage should not have an overall material impact on wholesale prices, but should help out by smoothing and limiting price peaks and troughs.

<p><b>Q22 - Do you agree with Government's preference for a the design of a capacity mechanism:</b></p> <ul style="list-style-type: none"> <li>• a central body holding the responsibility;</li> <li>• volume based, not price based; and</li> <li>• a targeted mechanism, rather than market-wide.</li> </ul>		<p>The existing Short Term Operating Reserve (STOR) mechanism has proved to be very effective and works well. An extension of this scheme with a central body continuing to hold the responsibility is preferred. There is neither need nor good reason to alter something that works well.</p>
<p><b>Q23- What do you think the impact of introducing a capacity mechanism would be on incentives to invest in demand-side response, storage, interconnection and energy efficiency? Will the preferred package of options allow these technologies to play more of a role?</b></p>	Y	<p>The preferred package will result in demand-side response, storage and interconnection playing an integral part in a more flexible and dynamic system. An incentive to encourage small scale biomass peaking plant preferably from indigenous supplies should be encouraged.</p>
<p><b>Q24 - Which of the two models of targeted capacity mechanism would you prefer to see implemented:</b></p> <ul style="list-style-type: none"> <li>• Last-resort dispatch; or</li> <li>• Economic dispatch</li> </ul>		<p>Again, extension of the existing model of economic dispatch would be preferred.</p>
<p><b>Q25 - Do you think there should be a locational element to capacity pricing?</b></p>	Y	<p>A locational element to capacity pricing would encourage demand side response and generation within areas where they would provide most benefit to the system.</p>
<p><b>Q26 - Do you agree with the Government's preferred package of options (carbon price support, feed-in tariff (CfD or premium), emission performance standard, peak capacity tender)? Why?</b></p>	N	<p>As already stated our real preference is not to change from the RO.</p> <p>But given the options, our preference would be for carbon price support, premium feed-in tariff and capacity payments as this would send generators the appropriate market based electricity pricing signals and additionally reward their low carbon nature. Capacity payments will drive the market towards provision of a more responsive and dynamic system.</p>

<b>Q27 - What are your views on the alternative package that Government has described?</b>		Please see answer to Q26.
<b>Q28 - Will the proposed package of options have wider impacts on the electricity system that have not been identified in this document, for example on electricity networks?</b>	<b>Y</b>	By their very nature the transmission and distribution networks are inextricably linked and cannot operate in isolation. A properly designed capacity mechanism should ensure that demand side reduction and reserve generation can also provide a valuable contribution at distribution network level albeit on a smaller scale.
<b>Q29 - How do you see the different elements of the preferred package interacting? Are these interactions different for other packages?</b>		Please see answer to Q26.
<b>Q30 - What do you think are the main implementation risks for the Government's preferred package? Are these risks different for the other packages being considered?</b>		<p>FITs with CfDs have not been requested /welcomed by the majority of low carbon generators. It would be much easier to introduce and operate a premium FIT and those generators that require power price certainty can secure a CfD from a 3rd party.</p> <p>The main risk is that this further change causes major apathy in the investment community. Credit committees of major banks could move favourably towards other technologies as a result.</p>

<p><b>Q31 - Do you have views on the role that auctions or tenders can play in setting the price for a feed-in tariff, compared to administratively determined support levels?</b></p> <p><input type="checkbox"/> Can auctions or tenders deliver competitive market prices that appropriately reflect the risks and uncertainties of new or emerging technologies?</p> <ul style="list-style-type: none"> <li>• Should auctions, tenders or the administrative approach to setting levels be technology neutral or technology specific?</li> <li>• How should the different costs of each technology be reflected? Should there be a single contract for difference on the electricity price for all low-carbon and a series of technology different premiums on top?</li> <li>• Are there other models government should consider?</li> <li>• Should prices be set for individual projects or for technologies</li> <li>• Do you think there is sufficient competition amongst potential developers / sites to run effective auctions?</li> <li>• Could an auction contribute to preventing the feed-in tariff policy from incentivising an unsustainable level of deployment of any one particular technology? Are there other ways to mitigate against this risk?</li> </ul>	<p>The NFPA on- sale auctions for NFFO contract output do demonstrate that auctions can deliver competitive market prices that appropriately reflect the risks and uncertainties of differing technologies when linked to the open/traded market. We are not sure that this type of process would work so effectively if it were the government buying the power rather than the suppliers bidding in competition. Tenders take away the operator/market interface and can distort/eliminate the trading risks and costs around differing technologies.</p> <p>The original NFFO project tendering process was jarred, flawed and inflexible. It led to many developers, who didn't have all of the project information rights/consents, submitting artificially low and spoiling bids. This specifically caused the slow delivery of NFFO 4 and NFFO 5 capacity.</p> <p>The market has and will continue to value the power output from low carbon projects in terms of its intermittency and balancing risk/cost.</p> <p>Low carbon generators should continue to receive market based values for their electricity and receive additional payments for their low carbon contribution through the proposed carbon support mechanisms.</p>
<p><b>Q32 - What changes do you think would be necessary to the institutional arrangements in the electricity sector to support these market reforms?</b></p>	<p>EDL has no comment on this point.</p>



<b>Q33 - Do you have view on how market distortion and any other unintended consequences of a FIT or a targeted capacity mechanism can be minimised?</b>		We firmly believe that electricity market isn't distorted by the RO incentive. As this mechanism will be replaced our preference of a premium FIT has a fundamental link to the market and less potential for market distortion.
<b>Q34 - Do you agree with the Government's assessment of the risks of delays to planned investments while the preferred package is implemented?</b>	<b>Y</b>	It is imperative that investor confidence is achieved and maintained through the implementation of a durable low carbon incentive scheme.
<b>Q35 - Do you agree with the principles underpinning the transition of the Renewables Obligation into the new arrangements? Are there other strategies which you think could be used to avoid delays to planned investments?</b>	<b>N</b>	Please see answer to Q36 below.

**Q36 - We propose that accreditation under the RO would remain open until 31 March**

**2017. The Government's ambition to introduce the new feed-in tariff for low carbon in 2013/14 (subject to Parliamentary time). Which of these options do you favour:**

- **All new renewable electricity capacity accrediting before 1 April 2017 accredits under the RO;**
- **All new renewable electricity capacity accrediting after the introduction of the low-carbon support mechanism but before 1 April 2017 should have a choice between accrediting under the RO or the new mechanism.**

As we already hold and operate contracts under both the NFFO and RO regimes we are very keen to seek early clarity on how these schemes will operate under the proposed FIT in the future. Our preference would be:

- Up to introduction of the FIT, all new projects would accredit under the RO and those rights at the time of accreditation grandfathered for the 20 year term of support.
- From the introduction of the FIT until 1<sup>st</sup> April 2017 the generator has the choice of accrediting new projects, or NFFO projects which terminate during that time under either the RO or FIT. Again any projects accredited under the RO would retain those rights at the time of accreditation grandfathered for the 20 year term of support.
- For the small number of NFFO contracts which terminate after the 1<sup>st</sup> April 2017 the generator has the choice of accrediting new projects, or NFFO projects which terminate at that time under either the RO or FIT. Again any projects accredited under the RO would retain those rights at the time of accreditation grandfathered for the 20 year term of support.

<p><b>Q37 - Some technologies are not currently grandfathered under the RO. If the Government chooses not to grandfather some or all of these technologies, should we:</b></p> <ul style="list-style-type: none"> <li>• Carry out scheduled banding reviews (either separately or as part of the tariff setting for the new scheme)? How frequently should these be carried out?</li> <li>• Carry out an "early review" if evidence is provided of significant change in costs or other criteria as in legislation?</li> <li>• Should we move them out of the "vintaged" RO and into the new scheme, removing the potential need for scheduled banding reviews under the RO?</li> </ul>		<p>EDL does not have a firm view on these proposals but suggests that any reviews are undertaken at appropriate intervals and not subject to constant and knee jerk change as this would continue to undermine investor confidence.</p> <p>Any reviews need to be clear, consistent and timely. Any signals need to give certainty not cast any doubt.</p>
<p><b>Q38 - Which option for calculating the Obligation post 2017 do you favour?</b></p> <ul style="list-style-type: none"> <li>• Continue using both target and headroom</li> <li>• Use Calculation B (Headroom) only from 2017</li> <li>• Fix the price of a ROC for existing and new generation</li> </ul>		<p>Our preference would be for a continuation of both target and headroom as this would continue with the parameters that the RO was designed to deliver.</p>