

Energy Market Reform – DECC Consultation

Respect Energy Limited

Respect Energy is an independent consultancy working on bringing innovation and entrepreneurship to the development of pathways to a low carbon economy. This response reflects both the views of Respect Energy and

Question 1: 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?

No. Your proposed actions will stimulate investment in supply (winners and losers) but that investment will not be sufficient to meet the environmental targets as the demand side will not be sufficiently active. This is a substantive response to the key questions concerning the development of a low carbon economy. The other responses are very much of a secondary nature.

Government and society has a problem; the development of a low carbon economy and meeting the environmental targets is good government stewardship, however performance is poor (Kyoto) primarily because our citizens (and those of other countries) are disengaged with the issue and until they take up the fight themselves we will move from one initiative to another without meaningful progress. Ambitious and innovative interventions that bring the challenge closer to citizens is essential and lower cost than continuing to poor high cost energy into a system where waste is high.

This response makes the argument that Electricity Market Reforms that deal predominantly with supply side stimulus are going to do just that without tackling the necessary demand side actions. Your proposals are directed towards the development of a central generation board, government run that determines the big calls on energy production. Whilst turning back the clock 20 years is undesirable the principal concern is that the issues of a low carbon economy move further towards being a problem for Government and less towards a problem for citizens. This viscous circle creates a failure in performance that builds a bigger head of pressure on the climate and the resources needed to sustain life.

It is time for a step change in energy in the UK; Respect Energy proposes a different list of market interventions that have the potential to achieve far more than those proposed;

- **Universal time of use tariffs through installation of universal prepayment smart meters (UPSM) for all gas and electricity consumption by 2016;** pricing energy at the point of use to reflect the underlying costs of the system is a necessary and vital intervention to increase customer engagement and reduce total system costs. Moving from a one tariff band to say three, then five then seven over a roll out period would provide simple easy to understand tariff bands to reflect the costs of peaks, daytime, night-time and weekend etc. The retail system would be redesigned to allow customers to pre-purchase volumes of energy in specified time of use periods from any supplier at any time, removing the entire customer switching process from the industry. The UPSM volumes can be tagged green or brown. Such a market design is consistent with a massive deployment of electric vehicles. By making the shopping process more akin to transport fuel and food the consumer will become engaged and actively pursue costs reduction behaviours to save costs. Demand will move to

periods of cheaper energy and a very substantial cost saving will be made in grid, networks and generation assets.

- **Social Volumes not Social Tariffs;** a universal volume of energy that is delivered at a social price to remove the need for self disconnection for essential utilities made possible by the infrastructure above.
- **A Pool for electricity and Micro Pool's;** NETA has not achieved very much other than keep out effective long term new entry. The Pool should be reinstated to make simple what is in effect simple. Alongside the new Pool we need Micro Pools, these are communities that wish to isolate themselves from the main market and achieve local environmental and security of supply targets, whilst not physically disconnected they draw services from the Grid and Pool on an aggregated basis. The primary objective function here is to stimulate local communities of active low carbon development to start to solve the problems at source.
- **Premium Fits for the 5-250 MW market;** using your Premium Fit proposal target this at the community energy scheme level. This is specifically to stimulate distributed energy and district heating.
- **Carbon Price Support;** A mechanism as proposed that increases the price of carbon year on year as the principal mechanism for fuel mix decisions and large plant development. This is the only intervention needed in the large plant market and the only additional constraint on existing plant.
- **Emissions Performance Standard;** A backstop mechanism for the prevention of new unabated plant along the lines proposed is a sensible backstop

Question 2: Do you agree with the Government's assessment of the future risks to the UK's security of electricity supplies?

No. The only threat to the system is that environmental targets are not met, as citizens are currently not concerned about that an opportunity arises to allow plant to extend lives etc and for gas fired CCGT to fill the gap which it would do. Nuclear could be offered a stimulus as a hedge as renewables have i.e. a Nuclear obligation.

Higher energy prices and UPSM would reduce demand such that supply security would move off the table. Now the industry has brought shale gas into the equation we need to use it; an innovation that is so large and recent as to lay redundant most of the European strategic energy thinking of the last 20 years. We now have lots of cheap gas/LNG.

Question 3: Do you agree with the Government's assessment of the pros and cons of each of the models of feed-in tariff (FIT)?

You can put anything into a model and get anything out; if it's the wrong input it's the wrong output. These tools are of a far more secondary nature than the principal problems and their solutions. We do not have time to move the deckchairs.

Question 4: Do you agree with the Government's preferred policy of introducing a contract for difference based feed-in tariff (FIT with CfD)?

No only for Nuclear (and to replace ROC's as a simplification).

Question 5: 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 (longterm) electricity price risk from generators under the CfD model?

Your proposals are directed towards the development of a central generation board, government run that determines the big calls on energy production. Whilst turning back the clock 20 years is undesirable the principal concern is that the issues of a low carbon economy move further towards being a problem for Government and less towards a problem for citizens. This viscous circle creates a failure in performance that builds a bigger head of pressure on the climate and the resources needed to sustain life.

It seems clear that if we need Nuclear in the mix, and we do, it needs a contract so a contract for Nuclear is a good idea.

Question 6: 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?

This is NETA speak and tries to intellectualise what is a simple act of grid balance. Ofgem should revert to a RPI +X control function.

Question 7: 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?

A properly structured PPA for Nuclear will lower the cost of capital, stimulate investment and in the operational phase reward availability and export. These issues will all be covered in a PPA negotiation.

Question 8: 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?

A properly structured PPA for Nuclear will lower the cost of capital, stimulate investment and in the operational phase reward availability and export. These issues will all be covered in a PPA negotiation.

Question 9: What impact do you think the different models of FITs will have on different types of generators (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?

The effect of the new PPA's should be to increase liquidity in the market and not be forced onto suppliers in some burdensome process. Some form of trading operation will be needed by HMG to facilitate this.

Question 10: 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?

A reference price to match the generation type should be used, for Nuclear that might be a 5 year average base load price and for Wind a yearly daytime base load price

Question 11: Should the FIT be paid on availability or output?

You will get one price with availability and one with output so it depends, again this can all be covered in the PPA negotiation these points are tradable against price.

Emissions Performance Standards

12. 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?

Yes

13. 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?

The most ambitious you can achieve with the levels increasing in a four yearly review process.

14. 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?

EPS should only affect new plant and as such is not a major measure. A standard grandfathered period per technology type should be assumed for most fossil fuel plants 20 years would provide enough time for the investment to perform. Only the technology specific assets should be the residual site has value for future technologies.

15. 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?

EPS should apply to plant that is extended but not upgraded.

16. Do you agree with the proposed review of the EPS, incorporated into the progress reports required under the Energy Act 2010?

Yes

17. How should biomass be treated for the purposes of meeting the EPS? What additional considerations should the Government take into account?

Biomass should be considered as zero carbon for the purposes of EPS. No other considerations should be taken into account by EPS even though they clearly exist.

18. Do you agree the principle of exceptions to the EPS in the event of long-term or short-term energy shortfalls?

Yes no needs to shoot our foot off; options are valuable to the UK citizen and must be held open during the transition.

Options for Market Efficiency and Security of Supply

19. Do you agree with our assessment of the pros and cons of introducing a capacity mechanism?

No. This is not needed at this time if UPSM is implemented and Nuclear and Renewables are stimulated by the new PPA's/FiTs and Grid has an expanded role to meet and increased imbalance then these costs can be avoided

20. Do you agree with the Government's preferred policy of introducing a capacity mechanism in addition to the improvements to the current market?

No. This is not needed at this time if UPSM is implemented and Nuclear and Renewables are stimulated by the new PPA's/FiTs and Grid has an expanded role to meet and increased imbalance then these costs can be avoided

21. What do you think the impacts of introducing a targeted capacity mechanism will be on prices in the wholesale electricity market?

The length of that piece of string is difficult to determine when we do not know who is holding one end and is another good reason for not doing it.

22. Do you agree with Government's preference for the design of a capacity mechanism:

- a central body holding the responsibility;
- volume based, not price based; and
- a targeted mechanism, rather than market-wide.

Your proposals are directed towards the development of a central generation board, government run that determines the big calls on energy production. Whilst turning back the clock 20 years is undesirable the principal concern is that the issues of a low carbon economy move further towards being a problem for Government and less towards a problem for citizens. This viscous circle creates a failure in performance that builds a bigger head of pressure on the climate and the resources needed to sustain life.

23. 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?

Insufficient stimulus for demand reduction misses this golden opportunity to move demand reduction to centre stage.

24. Which of the two models of targeted capacity mechanism would you prefer to see implemented:

- **Last-resort dispatch; or**
- **Economic dispatch.**

They are different products needed for different reasons so both can be incorporated into Grid purchasing decisions.

25. Do you think there should be a locational element to capacity pricing?

Capacity should always be incentivised where it is needed near to demand.

Analysis of Packages

26. 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?

No. The whole consultation is around tools without addressing objectives first. Your actions will stimulate some investment (winners and losers) but that investment will not be sufficient to meet the environmental targets as the demand side will not be sufficiently active. This is a substantive answer to the key questions concerning the development of a low carbon economy. The other answers in this response are very much of a secondary nature.

Government and society has a problem; the development of a low carbon economy and meeting the environmental targets is good government stewardship, however performance is poor (Kyoto) primarily because our citizens (and those of other countries) are disengaged with the issue and until they take up the fight themselves we will move from one initiative to another without meaningful progress.

This response makes the argument that Electricity Market Reforms that deal predominantly with supply side stimulus are going to do just that without tackling the necessary demand side actions. Your proposals are directed towards the development of a central generation board, government run that determines the big calls on energy production. Whilst turning back the clock 20 years is undesirable the principal concern is that the issues of a low carbon economy move further towards being a problem for Government and less towards a problem for citizens. This viscous circle creates a failure in performance that builds a bigger head of pressure on the climate and the resources needed to sustain life.

27. What are your views on the alternative package that Government has described?

The whole consultation is around tools without addressing objectives first. Your actions will stimulate some investment (winners and losers) but that investment will not be sufficient to meet the environmental targets as the demand side will not be sufficiently active. This is a substantive answer to the key questions concerning the development of a low carbon economy. The other answers in this response are very much of a secondary nature.

Government and society has a problem; the development of a low carbon economy and meeting the environmental targets is good government stewardship, however performance is poor (Kyoto) primarily because our citizens (and those of other countries) are disengaged with the issue and until they take up the fight themselves we will move from one initiative to another without meaningful progress.

This response makes the argument that Electricity Market Reforms that deal predominantly with supply side stimulus are going to do just that without tackling the necessary demand side actions. Your proposals are directed towards the development of a central generation board, government run that determines the big calls on energy production. Whilst turning back the clock 20 years is undesirable the principal concern is that the issues of a low carbon economy move further towards being a problem for Government and less towards a problem for citizens. This viscous circle creates a failure in performance that builds a bigger head of pressure on the climate and the resources needed to sustain life.

28. 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?

The whole consultation is around tools without addressing objectives first. Your actions will stimulate some investment (winners and losers) but that investment will not be sufficient to meet the environmental targets as the demand side will not be sufficiently active. This is a substantive answer to the key questions concerning the development of a low carbon economy. The other answers in this response are very much of a secondary nature.

Government and society has a problem; the development of a low carbon economy and meeting the environmental targets is good government stewardship, however performance is poor (Kyoto) primarily because our citizens (and those of other countries) are disengaged with the issue and until they take up the fight themselves we will move from one initiative to another without meaningful progress.

This response makes the argument that Electricity Market Reforms that deal predominantly with supply side stimulus are going to do just that without tackling the necessary demand side actions. Your proposals are directed towards the development of a central generation board, government run that determines the big calls on energy production. Whilst turning back the clock 20 years is undesirable the principal concern is that the issues of a low carbon economy move further towards being a problem for Government and less towards a problem for citizens. This viscous circle creates a failure in performance that builds a bigger head of pressure on the climate and the resources needed to sustain life.

29. How do you see the different elements of the preferred package interacting? Are these interactions different for other packages?

The complexity contained in this question and the market that will result from these interventions will be one that only the very large energy companies can handle. This moves the issues further from the citizens that need to make the changes and so will ultimately be unsuccessful on all the implied objectives.

Implementation Issues

30. 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?

Such dramatic changes can stop investment dead in its tracks. Therefore it is essential that decisions are taken quickly to pursue or drop large parts of this quickly.

31. 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?

- **Can auctions or tenders deliver competitive market prices that appropriately reflect the risks and uncertainties of new or emerging technologies?**
- **Should auctions, tenders or the administrative approach to setting levels be technology neutral or technology specific?**
- **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?**
- **Are there other models government should consider?**
- **Should prices be set for individual projects or for technologies**
- **Do you think there is sufficient competition amongst potential developers /sites to run effective auctions?**
- **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?**

Take a long hard look at the CCS debacle and you can see that auctions are far from a panacea. Use the carbon support price as the principal mechanism and stimulate renewables and nuclear with bespoke PPA's held in a negotiated auction process.

32. What changes do you think would be necessary to the institutional arrangements in the electricity sector to support these market reforms?

The central planning aspects of this, parts of Ofgem and those of the grid operators should be combined into a new organisation

33. Do you have view on how market distortion and any other unintended consequences of a FIT or a targeted capacity mechanism can be minimised?

The risks of the unintended consequences which will occur must be set against the benefits.

34. Do you agree with the Government's assessment of the risks of delays to planned investments while the preferred package is implemented?

This is already causing delay and that will only continue until the objectives and details are finalised.

35. 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?

Our industry has become overly complex, masking what is a fairly straight forward issue of decarbonisation, it makes sense to rationalise approaches wherever possible. The only strategy is to clear the uncertainty quickly and completely.

36. 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 lowcarbon 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.

Give the developers the choice.

37. Some technologies are not currently grandfathered under the RO. If the Government chooses not to grandfather some or all of these technologies, should we:

- 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?
- Carry out an "early review" if evidence is provided of significant change in costs or other criteria as in legislation?
- 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?

Carry out scheduled banding reviews (either separately or as part of the tariff setting for the new scheme).

38. Which option for calculating the Obligation post 2017 do you favour?

- Continue using both target and headroom
- Use Calculation B (Headroom) only from 2017

- **Fix the price of a ROC for existing and new generation**

The option that causes the least disruption appears to be to continue to use both target and headroom.