

RESPONSE from HES Biopower Limited to “Electricity Market Reform” Consultation Questionnaire (DECC December 2010)

Current Market Arrangements

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?

Given the very slow investment in renewable DECC have considerably underestimated the barriers to increased investment. Particularly, there is no mention in the consultation paper of:

- (i) Planning delays, objections, problems and cost - a very severe limitation which if not solved is always going to be break on new power generation capacity; and
- (ii) Environmental Agency: long delays in processing Environmental Permit applications; and
- (iii) Ofgem: long administration delays in granting preliminary and final ROCs accreditation and obstructive attitude (e.g. FMS); and
- (iv) ROCs: the most fundamental mistake that ROCs accreditation is not on application after planning consent introduces the risk of banding change during the construction and commissioning period. This is a mistake that should never have been made and DECC refuses to correct this error even in this consultation paper. FITS will probably have the same problem; and
- (v) Capital rationing: failure to recognize that Basel III plus financing the public sector deficit (“crowding out”) plus high and persistent inflation in UK will cause high cost of capital and capital rationing for the next decade.

2. Do you agree with the Government’s assessment of the future risks to the UK’s security of electricity supplies?

Seriously underestimates the problems and delays with renewing the existing generation capacity. Lack of short route: see all the reason given in Question 1 above plus capital rationing which consultation paper ignores. ROI calculations are way out of date.

Options for Decarbonisation Carbon Price Support

This is the subject of a separate HM Treasury / HMRC consultation. Readers of this consultation with specific comments on the carbon price support mechanism should cover these in a separate submission to the HM Treasury / HMRC consultation, which can be found at http://www.hm-treasury.gov.uk/consult_index.htm

Feed-in Tariffs

3. Do you agree with the Government's assessment of the pros and cons of each

Yes but the raising of finance has not been adequately addressed in the Consultation Paper. DECC has ignored the fact that several of the Big 6 are or are contemplating selling all or some of their generating and distribution in the UK and have no intentions in investing in new generation of any type in the UK. To attract new entrants for £200 billion will need far higher subsidies than is contemplated in the Consultation Paper.

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

Package 3 has been pre-determined by DECC.

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 (long-term) electricity price risk from generators under the CfD model?

DECC and/or Ofgem will find in practice the CfD model is very difficult to administer. Allocation of large sums of capital (C. £200 billion) in an environment of severe capital rationing requires regulatory certainty which includes a proven operating regulatory system. Ofgem has failed to operate ROCs in a competent way and various Governments keep changing the RO regime (the "grandfathering" fiasco being only the latest example). Most foreign investors and almost all foreign banks consider the regulatory risk too high at any ROI given the history. At least one large British bank considers that RO has a high regulatory risk and allocates finance accordingly.

Removal of the electricity price risk by CfD is replaced by a regulatory risk vis. considerable doubt until proven over time whether FITS and CfD can be administered competently and reliably. Provided equity financiers and lenders accepted the regulatory risk of ROCs (many did not) they were prepared to accept the future power price risk because it is a risk which a power generator understands and in the total revenue stream it was the reliability of ROCs prices and payments which underpinned all renewable investment decisions not precise expectations of future power prices.

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?

- (i) Lowest capital investment consistent with the technology band;
- (ii) Fuel supply decisions and risks (including wind); and
- (iii) Lowest maintenance costs (particularly in the early years of the plant).

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?

Completely wrong - gross underestimate of the future cost of capital. The estimates have ignored the continuing crisis in capital markets and Basel III. No allowance has been made for higher risk premium for new entrants (as existing generators are leaving/not allocating capital to new investment in generating in the UK). No estimate has been made of the regulatory risk premium of a new unproven subsidy regime = changing from ROCs to FITs. No risk premium for investing in long term stranded Sterling denominated assets and Sterling cash flow.

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?

See answer to Question 7 above.

9. 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?

The consultation paper and the Ofgem open letter address the severe shortage of liquidity in the wholesale market. How this problem is resolved is the answer to the question. Ofgem have not decided (see open letter) and there is no recommended policy alternative in the consultation paper? See Chapter 4 of the consultation paper.

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?

This is the most critical question:

- (i) Until the liquidity question is satisfactory resolved and a deep traded forward market in power is in existence (not a "policy objective") FITS plus CfD will be no more than another traded ROCs system.
- (ii) There is no index which could be relied upon. It is essential for DECC to grasp this fundamental issue and to create or attempt to create a synthetic index will increase the opportunities for arbitrage against the CfD subsidy by large generators of all types of plant.

So for smaller generators of which most renewable operators will be, the only reliable system will be a fixed price for each type of technology per MWh (long term contract

for difference – see Figure 8) and the plant operator will submit a monthly return to the CfD administrator of the metered power exported and the export price invoiced/received (even if a half hourly tariff via the Balancing Mechanism) and the CfD payment will be the difference between the two. Figure 8 will not happen in the current wholesale power market. Any alternative based on a synthetic power price index will fail to attract new investment because of the uncertainty of the index particularly for technologies with a fuel cost/ gate fee (e.g. biomass and AD) or high maintenance costs (e.g. offshore wind).

11. Should the FIT be paid on availability or output?

Output to encourage actual generation to overcome what is going to be critical shortages of generating capacity; plus
An availability premium related to available operating hours per annum plus a STOR system.

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?

No opinion.

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?

Yes. For the term of the FITS i.e. 20 or 25 years.

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?

The question is irrelevant. No existing coal fired plant in the UK is supercritical or could be converted to supercritical.

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

No opinion.

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 assessed for EPS and EU ETS based upon "2010 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting: Methodology Paper for Emission Factors October 2010" Tables 51 and 52; plus Credits should be saleable as an incentive for EPS; plus Minimum thermal efficiencies.

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

No, makes nonsense of the objective of a low carbon economy.

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?

Yes.

20. Do you agree with the Government's preferred policy of introducing a capacity mechanism in addition to the improvements to the current market? 21. What do you think the impacts of introducing a targeted capacity mechanism will be on prices in the wholesale electricity market?

The most important issue is to improve the wholesale power market mechanism for new entrants and small generators. Given the quantum of new generating capacity required a capacity mechanism would require a large subsidy and that is probably unrealistic for the consumer price objective.

22. Do you agree with Government's preference for a 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.

None are relevant to the generating shortfall if not accompanied with a large subsidy for new installed low carbon generating capacity and that leads back to a FITs for installed capacity rather than output?

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?

A subsidy for Smart metering would have the greatest impact on the demand side plus ***(essential) with license mandate on all NDO to offer all consumers a 4 hour based tariff if the consumer has installed a Smart meter. This would significantly aid liquidity in the wholesale market. (An hourly tariff might be mandatory??; plus A floor price in the wholesale market for all sub 5 MWe FITs exported power generation and local NGO must take all the power as part of the wholesale market mechanism. This begins to create liquidity. Trading threshold reduced to 5 MWe.***

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

Last-resort dispatch; or
Economic dispatch.

No opinion.

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

Yes but that would add to the consumer tariff in remote areas.

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?

Because DECC has already decide on Package 3.

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

Not applicable see answer to Question 26.

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?

Not applicable see answer to Question 26.

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

Not applicable see answer to Question 26.

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?

Given the implementation failures of the RO, the failure to have a well thought out very clear and unambiguous regime administered by a competent third party (definitely not Ofgem) is the main risk for the Government in completely changing the renewables and low carbon regime with the 2020 climate change target so close. Given the history of implementation of ROCs there will be a propensity to wait and "see if and how it works" in the industry and amongst financiers.

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?

Not without significant wholesale power market reforms.

Should auctions, tenders or the administrative approach to setting levels be technology neutral or technology specific?

Technology specific is essential or like the pre 2009 ROCs regime FITs with CfD will only encourage the lowest cost technology which in turn will fail the DECC diversity of generating capacity objective.

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?

Premium top-ups along the lines of banded ROCs (see answer above)

Are there other models government should consider?

No already too complicated

Should prices be set for individual projects or for technologies

Technologies. Government cannot possibly administer a project based subsidy, the implementation would be a complete failure

Do you think there is sufficient competition amongst potential developers / sites to run effective auctions?

No.

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?

Yes because the winner of the auction will always be the lowest combination of capital and operating costs over the subsidy period = onshore wind in the first phase of ROCs.

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

See comments above on liquidity in the wholesale market and Smart meters and 1 or 4 hourly mandatory tariffs for Smart meter users.

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?

Do not do it.

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 a very severe almost inevitable risk given the history of ROCs.

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?

Be prepared to continue ROCs past 2017 if it becomes evident by 2013 - 2015 that the new FITs plus CfD regime is not accepted by the generating industry and financiers.

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;

See answer to Question 35.

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.

Agreed this partially answers the Question 35

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?

DECC has already decided it will have reviews.

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

Early reviews will be a fatal mistake: DECC should have learnt from the biomass grandfathering fiasco to create a stable regime where there is minimal regulatory risk during the long period (circa 3-5 years) of site selection, planning, EP approval, construction and commissioning.

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?

This would demonstrate that HMG could not be trusted under any low carbon regime and may have investment decision implications for investment in other subsidised investments, it would make the regulatory skepticism already prevalent a certainty.

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 third option

