Scottish Water Consultation Response
DECC: Electricity Market Reform
March 2011

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Submission by Scottish Water
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Introduction

Scottish Water is pleased to make the following submission to the DECC Electricity Market Reform consultation.

We have given consideration to the proposed measures and implementation issues, focusing on the impacts of the proposed measures and any unintended consequences. We have also attempted to identify potential opportunities for modifications which are not defined within the proposals.

Key Points

1. Scottish Water agrees that change is needed to deliver the required investment to provide the UK's energy security and meet targets for the decarbonisation of power, whilst coping with increased electricity demand.

2. The cost of reforms and the impact on electricity prices are of concern to Scottish Water from a number of perspectives. Of critical importance to Scottish Water is the affordability to customers of any mechanisms to encourage new investment in low carbon technologies.

3. Scottish Water acknowledges that investment is needed across the entire energy system. As well as investment in low-carbon generation technologies, investment is needed in energy infrastructure and in training and development of the personnel required to achieve Government carbon reduction targets.

4. Scottish Water suggests that a low carbon incentive in the form of a feed-in tariff (FIT) is the most important measure to encourage new investment in the energy industry. What is less clear to us is which of the FIT options would be the best in practical terms. We have considered some of the potential advantages and disadvantages of each mechanism in our response.

5. Further clarity is needed with regard to the details and practicalities of implementing the proposals, particularly concerning the FIT with Contract for Difference (CfD) and proposed central agency. Scottish Water feels there is an opportunity for DECC to demonstrate to stakeholders how CfD is designed to work.

6. Scottish Water is concerned that there is an existing multitude of instruments designed to incentivise and stimulate investment in low/zero carbon technology to support generation and demand-side measures, i.e. Renewable Obligation, FIT, EUETS, Climate Change Levy and CRC Energy Efficiency Scheme. All of these measures currently add considerable cost to the electricity supply chain and therefore to customers' bills (estimated at a total of £20/MWh). Scottish Water is

concerned that new measures will both serve to add more complexity, risk and added cost, and believes there is an opportunity to simplify measures in this area. Scottish Water also believes that transparency around where this revenue is being invested should be mandated.

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?

1.1. Scottish Water agrees that the current market arrangements are unlikely to deliver the investment required to deliver low-carbon technologies to meet environmental targets.

1.2. Any changes to the electricity market must bring certainty for incumbents and new participants wishing to invest in the energy industry. Investors need clear signals from Government in order to reduce risk. However this needs to be balanced with affordability and transparency for customers.

1.3. As part of any new mechanisms, generators must either be mandated to invest in low carbon technologies or be taxed on any windfalls. In the current electricity market arrangements, large generators have not invested despite free allocation of EUETS allowances, which now have a market value.

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

2.1. Scottish Water agrees that the current market system does not provide security of electricity supply. This problem is likely to exacerbate towards the end on the current decade if no changes are made to the electricity market. In order to alleviate future risks, and given the long lead times for projects, it is crucial that investment is made without undue delay.

Options for Decarbonisation

<u>Carbon Price Support</u>

Scottish Water has already submitted comments specific to the carbon price support mechanism directly to HM Treasury. In summary:

1. Scottish Water supports incentivising decarbonisation but cautions that any new mechanism should not favour or disfavour any scale or technology. A carbon floor price should give more certainty for investment in lower carbon energy generation. However any carbon floor price must equally provide fair value for consumers as well as incentivising generators to invest in grid decarbonisation.

2. Participant costs to purchase carbon allowances in the CRC-EES are payable from 2012 onwards. These introduce another significant cost increase to large energy users such as Scottish Water. This should be taken into account by DECC and HM Treasury when considering the additional cost implications of a carbon floor price.

3. Current renewables incentives (e.g. Renewable Obligation Order) have resulted in hidden pass-through costs from suppliers to consumers, irrespective of suppliers' actual exposure. Scottish Water suggests Government should address this anomaly by mandating transparency in this area. (Suppliers in this context being vertically-integrated companies in the electricity market).

4. Scottish Water suggests that low-carbon generation should not be able to benefit from high electricity prices during periods when higher-carbon-fuelled generators are providing the marginal supply.

5. Scottish Water is concerned that the current array of taxes and incentives for a low-carbon economy creates confusion and hidden costs for consumers. Without simplification, we are concerned that there will be continued confusion and hidden costs for the consumer. Scottish Water supports moves to simplify and create transparency of decarbonisation costs borne by consumers.

Feed-in Tariffs

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

Whilst by no means an exhaustive list, in response to this question Scottish Water has considered the various advantages and disadvantages of the different FIT models. Many of the points raised here are considered in greater detail in the **Analysis of Packages** and **Implementation Issues** sections of this consultation response.

3.1. Fixed FIT

(Pays one fixed tariff per unit of electricity, regardless of the wholesale price)

Advantages

3.1.1 Fixed FIT will achieve the Government's aim of providing long term certainty to investors.

3.1.2 Fixed FIT is a straightforward mechanism, easily understandable to investors and customers.

3.1.3 Fixed FIT would be an extension of the existing FIT for small scale low carbon generation and is therefore a simpler concept for generators, particularly new entrants, to understand.

3.1.4 Fixed FIT could be controlled by a review of the term over which the fixed FIT is applicable and consequently varying the length of the term, where evidence suggests rewards had grown to outweigh risks over time.

Disadvantages

3.1.5 Fixed FIT could only operate in a 100% guaranteed market. This would require some further thought to operate effectively, e.g. by introduction of a "FIT Obligation" similar to the RO with headroom to ensure 100% guaranteed market.

3.1.6 Fixed FIT does not consider the price of input fuel. The input fuel price risk must be considered. For example, if there is a fixed FIT price for 15 years that doesn't acknowledge change in the input fuel price; a big risk premium would be needed, which would be expensive for consumers.

3.2. **FIT with Contract for Difference (CfD)**

(Generators sell their electricity into the market, then apply an adjustment which is calculated as the difference between average wholesale price and agreed tariff level)

Advantages

3.2.1 FIT with CfD would provide long term certainty required by investors and generators.

3.2.2 The CfD would retain a market element, with generators continuing to sell into the wholesale market.

3.2.3 FIT with CfD helps to guard against windfalls and excessive rents.

3.2.4 It should be remembered that the first North Sea dash for gas was completely financed by load-following CfDs.

Disadvantages

3.2.5 The complexities of the system are not fully understood, this complexity could dissuade investors from supporting projects and could lead to customers paying too much.

3.2.6 A FIT with CfD will need a reference price or index, which again introduces uncertainty to investors and customers, depending on when and how often the indexation is applied.

3.2.7 The CfD alone will neither reduce risk nor lower the cost of capital since FIT with CfD relies on a target price and on a liquid market. Market liquidity can't be predicted far enough ahead to deal with the long lead-times for projects, e.g. for nuclear generation, you need to look at least 8 years ahead. Current wholesale market liquidity is typically 24 months – 36 months.

3.2.8 Under the CfD, the proposed central agency would take the volume risk. This is not a good thing and Scottish Water feel this should be left to the market provided again that consumers do not bear an unacceptable premium for this.

3.2.9 The proposals suggest there will be a lot of negotiating with Government's central agency, in addition to customers. This is likely to lead to inefficiencies since the gap between Government and the market is likely to be considerable.

3.3. **Premium FIT**
(Pays a fixed premium on top of the variable wholesale electricity price)

Advantages

3.3.1 A Premium FIT is similar to the current Renewables Obligation (RO) system and therefore would be the easiest to implement, causing minimum disruption. The premium FIT effectively de-couples the FIT from the underlying wholesale electricity price.

3.3.2 Premium FIT offers the opportunity for transparency to consumers, if suppliers are mandated to declare the FIT cost separately on consumers' bills.

Disadvantages

3.3.3 In order for investors to lend, the risks associated with low carbon generation need to be minimised. The long-term electricity price also affects the overall return (as well as the FIT itself), making the Premium FIT more unpredictable than the Fixed/CfD options. However lenders have generally supported investments based on the RO, which is a comparable mechanism.

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

4.1. Scottish Water agrees that there are substantial benefits from FIT with CfD but that much more is needed from Government in terms of the details and practicalities of the proposals. The complexities of how the mechanism will work and how consumers will be afforded transparency need to be elaborated upon further.

4.2. There is an opportunity for DECC to further explore the practicalities of CfD and the other suggested mechanisms. This could be in the form of stakeholder workshops, providing DECC with the opportunity to run through particular case studies or worked examples of various scenarios for each mechanism for different technologies.

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?

5.1. As previously suggested, there are many unknowns associated with the implementation of FIT with CfD - an inherent difficulty with any new system. Scottish Water wishes to see more from Government as to the details of how CfD will work in practice. Further clarity is also needed as to the nature of the central agency to be set up.

5.2. Scottish Water is concerned that towards the end of the decade and beyond, there is the potential for supply security to become a significant issue in the UK. In order to minimise this risk, it is accepted that Government will have to play more of a role than has been the case to date.

5.3. Scottish Water is concerned as to the level of Government involvement in the market under CfD. In the current proposals for CfD, the proposed Government agency will take on the volume risk as well as the price risk. Scottish Water is concerned that this is something that might be best avoided.

5.4. Scottish Water is uncomfortable with the Government planning and setting the power generation mix. A generation mix which is determined by anything other than a market mechanism runs the risk of being inefficient and therefore resulting in increased costs for consumers. There is the potential of this happening under CfD proposals, as has been the case under previous central planning regimes. However, the market needs to be appropriately incentivised by Government policy on carbon etc.

5.5. Power demands are changing and will continue to change. There are implications with regards to the affordability of the measures to the consumer. Scottish Water believes that electricity prices will increase for the consumer, regardless of the model chosen. Critically, this process must be articulated, providing reassurances that, whilst there will be price increases, these will be kept to the minimum possible, and that the alternatives would likely lead to even higher 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?

6.1. The issue of market liquidity is of critical importance to allow the market to function properly. This is especially important under the preferred proposed conditions, where FIT with CfD would be dependent on reaching a strike price. This makes the outcomes of the market liquidity review currently underway by OFGEM of crucial importance to the success of the proposed policy.

6.2. Scottish Water is concerned that the current BETTA wholesale trading arrangements affords the marginal price to all generation. We believe this must be reviewed. We do not think it is reasonable that all generators receive payment equivalent to the most expensive generation on the system at any given time, since this will not be reflective of costs.

6.3. Scottish Water is also concerned that much of current wholesale market participation is transacted by non-suppliers and non-end-users, i.e. banks and other organisations which seek to profit from trading. Scottish Water would welcome a review of these practices with a view to achieving fairer prices for consumers.

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?

7.1 The incumbent generators cannot deliver the scale of investment required (c. £200bn) from their balance sheets. The greater the certainty provided by the new mechanism, then the more likely it is to encourage new entrants.

7.2 Scottish Water suggests that whichever mechanism is taken forward; it should be as simple as possible. The more complex the measure, the more difficult it is for consumers and investors to understand.

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 the existing investor base?

8.1. Scottish Water suggests that the system should be fair, understandable and certain/predictable for all market participants; for consumers, for new entrants, existing companies and investors. This would suggest Fixed or Premium FIT models are preferential. However, in many instances, the impacts on investor confidence and finance availability are likely to depend on the levels set in the FIT, regardless of model chosen.

8.2. Electricity generators are reliant on a robust investment framework being in place to secure the levels of capital investment needed to deliver economic low-carbon projects in the quantum required. The issue of bankability is of critical importance to investors, incumbents and new entrants alike. Without greater stability and predictability for investors, the value of a FIT would be much reduced.

8.3. Currently, there is a lot of uncertainty amongst stakeholders as to how the FIT reference price will be set by the proposed central agency. CfD is likely to involve enormous complexity in setting prices. Scottish Water is concerned about how the strike price will be set and feel further clarity is needed.

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?

9.1 Scottish Water agrees that all types of electricity generators should be treated equally. Investment is needed in all forms of energy technology in order to meet the energy challenge, particularly from a security of supply perspective. It is important that the UK has a balanced mix of generation types.

9.2 Scottish Water recognises that different generating technologies are at different stages of maturity. Treating all equally would give an immediate advantage to mature technologies, even when they do not fulfil the requirements of society and Government policy. There is recognition by Scottish Water that, even between new technologies, there will be a degree of bias in order to fulfil these requirements.

9.3 Scottish Water suggests that different rates of FITs could provide different benefits for different technologies. For example, whilst more mature, larger scale low-carbon technologies might tend towards FIT with CfD, newer technologies may be more likely to favour the simplicity of the Fixed FIT.

9.4 In order for contracts to be effective, a liquid market is needed with many buyers and sellers transacting frequently. Based on current experience, Scottish Water is unsure there are enough generators and suppliers to make this work for the UK alone. Scottish Water cautions against the dominant position of non-end-users taking positions with a view to profiting.

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?

10.1. As mentioned in response to question 6, greater market liquidity is of critical importance to allow the market to function properly. This is especially important under the preferred proposed conditions, where FIT with CfD would be dependent on reaching a strike price. This makes the outcomes of the market liquidity review currently underway by OFGEM of crucial importance to the success of the proposed policy.

10.2. Scottish Water sees the necessity of a stable reference price but is unclear as to how Government hopes to achieve this. Hence Scottish Water sees the simpler proposal of Fixed FIT or Premium FIT as being preferable mechanisms.

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

11.1 Scottish Water suggests that FIT should be paid based on output. Whilst this increases the risk for generators, it would be undesirable for customers to be funding non-operational plant.

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?

12.1 Whilst agreeing with the reasons to introduce an EPS, Scottish Water is concerned about the implications for supply security and the use of existing fossil fuel plant towards the end of this decade.

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?

13.1 Existing UK law already exists to require all new coal fired power plant to be built with 300MW of CCS. It would be useful to understand how effective this is before setting additional EPS levels.

13.2 Scottish Water agrees that derogations for demonstration projects should be available. There are concerns as to what will happen after that.

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?

14.1. Scottish Water agrees that the EPS should be aimed at new plant and grandfathered at the point of consent.

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?

15.1. Scottish Water believes there needs to be an assessment of the potential impact of EPS in existing plant. We must be sure that we incentivise improvements but that these make economic sense (in terms of retrofit) so that we do not adversely impact supply security.

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

16.1. Scottish Water agrees with the proposed review process.

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

17.1. Scottish Water has responded to the most recent consultation on the Renewable Obligation Order, agreeing with the targets set out therein for biomass.

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

18.1. Scottish Water suggests that, in the event of short-term energy shortfalls, special dispensations should be given to ensure security of supply and maintain affordability to consumers.

Options for Market Efficiency and Security of Supply

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

19.1 Scottish Water recognises the benefits of introducing a capacity mechanism to ensure the system is capable of meeting all supply/demand scenarios. A capacity mechanism that rewards flexibility would foster innovation.

19.2 Scottish Water expects fossil fuels will provide much of the peak/marginal capacity. There is potential conflict between two mechanisms - a peak capacity mechanism that rewards flexibility, for example coal fired generation, whilst the EPS mechanism simultaneously penalises coal. There is concern that the latter measure could dilute flexibility.

19.3 Scottish Water is concerned that under BETTA, all generators are awarded the marginal price. Scottish Water suggests this allows some generators to made high returns, with excessive costs being passed through to customers. Scottish Water suggests this system should be changed to a system which rewards each generation based on its cost plus a fair rate of return.

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

20.1 Scottish Water supports the introduction of a balanced package of mechanisms and agrees that a capacity mechanism, within such a balanced

package, would help address the issue of supply security. However we reiterate our view that any package of measures should be considered from the perspective of fairness affordability for consumers.

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

21.1. Scottish Water suggests it is difficult to predict the impacts of this without a full understanding on the details of how this mechanism will operate.

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

- **A central body holding the responsibility;**
- **Volume based, not price based; and**
- **A targeted mechanism, rather than market-wide?**

22.1 Scottish Water is cautious of supporting a targeted capacity mechanism. Previous targeted mechanisms have not been 100% capable of fulfilling the role they were designed for, leading to further tweaks and changes to the system at a later date. Such tweaks and changes have evolved targeted mechanisms into more market-wide tools.

22.2 Scottish Water would be interested to see further details of the central body designed to allocate capacity mechanism allowances and carry out other responsibilities detailed in the consultation document.

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?

23.1 Scottish Water feels that, while the preferred package of options could allow for demand-side response, storage, physical interconnection and energy efficiency technologies, the EMR document does not go far enough to articulate the opportunities available and could do more to demonstrate the potential inter-relationship between these technologies and capacity payments.

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

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

24.1. Scottish Water prefers the Economic dispatch mechanism, on the basis that this would achieve the desired outcome whilst minimising any additional costs to be borne by consumers.

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

25.1 The location of peak load capacity is important, since it will allow deployment at places of maximum system stress and thus minimise system requirements to transport peak capacity. The link between investment in generation and investment in the overall system should be acknowledged. Currently, most of the focus is on a high voltage network; attention is also needed on medium and low voltage investment.

Analysis of Packages

26. Do you agree with the Government's preferred package of options (carbon price support, feed-in tariff (CfD or premium), emissions performance standard, peak capacity tender)? Why?

26.1 Scottish Water agrees there is a need to de-risk revenue streams whilst prioritising decarbonised generation plant and that there should be an incentive to optimise electricity dispatch. The current electricity market arrangements will not provide the investment needed to secure supply and meet the UK targets for 2020 and beyond. Providing long-term security to generators will encourage new investment. However, Scottish Water suggests that achieving the desired outcomes should be done at minimal additional cost to consumers and with minimum added complexity to the market system.
Scottish Water is unsure if the package of measures proposed and opting for the CfD FIT achieves all of these objectives.

26.2 A low carbon support mechanism in the form of a FIT, whichever option chosen, is regarded as a central pillar to drive forward the development of low-carbon technologies. A FIT of some kind is a flexible tool that could address a number of potential objectives.

26.3 Scottish Water is concerned that Government is adding further layers of complexity on top of an already complex system. This will make it very difficult for new entrants unless further detail and information is provided, particularly in reference to the FIT proposals.

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

27.1. Scottish Water agrees that premium FITs could offer a viable alternative should the CfD mechanism not be practical. A Premium FIT is similar to the current Renewables Obligation (RO) system and therefore its implementation would be expected to cause minimum disruption.

27.2. Scottish Water suggests that the fixed FIT, whilst having some disadvantages, would be the most straightforward mechanism to implement and therefore encourage the quickest investor response time – as evidenced by the existing FIT scheme aimed at generation <5MW.

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?

28.1. It is expected that, once the UK progressively decarbonises, the new structure (with differentiated support for technologies) will be phased out and eventually replaced by a level playing field. Scottish Water is concerned that, over time, the vast majority of the market could be dictated by long-term contracts for low carbon, leading to a potential situation where the market eventually ceases to operate.

28.2. Scottish Water is concerned that, even by 2040, gas will still be setting the marginal price, despite only being a small proportion of the overall electricity mix at this time. This will be on the basis that gas replaces coal as the most expensive generation type. Scottish Water would like further clarity on the issue of a contract system for low-, mid- and high-merit plant a low-carbon world. Scottish Water suggests that the current bid-in merit system may not work effectively alongside the EMR proposals.

28.3. Scottish Water agrees that all types of electricity generators should be treated equally. Investment is needed in all forms of energy technology in order to meet the energy challenge, particularly from a security of supply perspective. The UK will be best-served by a diverse portfolio of generation types.

28.4. Scottish Water feels that particular attention should be paid to practical issues during the transitional period. For example, there is a need to know how the renewables regime will work after the Renewables Obligation has been phased out in 2017. Unless the transition path is clearly defined, there could be a hiatus in investment as market participants wait for further clarity. There is evidence of hiatus in investment in RO supported projects presently.

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

29.1. Scottish Water sees a low-carbon incentive mechanism, in the form of a FIT, as able to deliver the greatest level of new investment. Certainty in the long-term price of carbon plays an important supporting role to the FIT mechanism, enabling a lower cost of capital for developers whilst reducing the burden on the consumer. Scottish Water is uncertain whether **both** carbon floor price and FIT are required to stimulate new investment.

29.2. Scottish Water foresees great complexity and difficulty in setting the electricity price for the CfD and it might not accurately reflect the reality of the price a particular generator might receive for their electricity. The premium FIT is seen as a viable alternative to the CfD. This type of arrangement has already worked effectively under the existing RO.

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?

30.1 Scottish Water suggests that the proposed EMR package will result in the interaction of very complicated regulatory measures in addition to a number of existing complex measures. It is likely there will be many unintended consequences.

30.2 Scottish Water is concerned as to the possibility of windfalls for existing renewable energy generators, nuclear plants and, to a certain extent gas, at least while unabated coal is part of the energy mix. It will ultimately be the consumer who will pay for this. It is not clear from the EMR document, how excessive rents and/or windfalls will be avoided.

30.3 The current system, with peaks & troughs in investment, already causes unnecessary additional costs. The cost of reforms and the impact on electricity prices are a concern to Scottish Water

30.4 Scottish Water would like to see more in the package to encourage more physical interconnection. This would need to be regulated to ensure that capacity will be made of use in the UK and not traded elsewhere in the interests of enhanced returns. This would mean alterations to license conditions.

30.5 Scottish Water feels that there is no incentive for suppliers to buy low carbon, rather than high carbon, electricity (other than price). The absence of an obligation may undermine the whole package.

30.6 Scottish Water believes changes to the customer side of the meter are also a large part of the solution, but details as to how this could work are missing from the consultation.

30.7 Scottish Water are concerned about the costs to consumers of implementing the ambitious EMR package and feel that Government should do more work to justify those costs.

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 different technology 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?**

31.1. Scottish Water has concerns about auctioning and we don't see it as a viable option for many reasons. Negotiation between Government and generators is unlikely to produce a good deal for consumers. Without competition and/or transparency, Scottish Water has concerns for price discovery, again potentially disadvantaging consumers.

31.2. Scottish Water feels that auctioning may disadvantage small players and new market entrants. In order to participate in auctions, very skilled operators are needed. This is contradictory to the objective of encouraging small players and new entrants. It is also possible there will not be enough competing projects to justify an auction. Consumers are more interested in the cost of electricity rather than the provider - incumbent or new entrant.

31.3. A single auction for all technologies could be a problem. Projects, locations, technologies, etc, have different characteristics, therefore it is extremely difficult to have a level playing field. Significant investment will be exhausted when competing in auctions.

31.4. The timing dislocation between successful bidding and project completion will make auctions extremely difficult to manage, and/or add new risks for investors, again potentially discouraging investment.

31.5. The examples of the NFFO/SRO and CCS competition processes provide a warning as to the difficulties of an auction based system. This model was not practical and many CCS projects have fallen away in the UK competition. This is not a model to replicate.

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

32.1 Scottish Water is concerned that central agency will not be able to deliver projects on the scale and in the time frame required to meet Government targets.

32.2 Scottish Water feels more detail is needed as to the role and responsibilities of the proposed central agency. As mentioned previously, there are concerns as to how the reference price will be achieved.

32.3 As we have highlighted elsewhere in our response, Scottish Water is concerned that the current bid-in merit system will not operate correctly alongside the proposed new EMR measures.

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

33.1. In order to minimise market distortion and unintended consequences a clearly defined roadmap and mechanism for the transition process is needed. In order to increase investor confidence, measures should not be retroactive.

33.2. As has been previously mentioned in this response, Scottish Water is concerned about the potential complexity of the FIT/CfD operation and suggests that DECC should provide details on how this should operate, possibly including stakeholder workshops including modelling CfD scenarios. This would help stakeholders to understand the detail of the CfD, whilst also helping Government to uncover any unintended consequences.

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

34.1. Due to the long lead times for projects, many investment decisions need to be taken very soon in order to secure supply towards 2020. Scottish Water agrees that delays to planned investments in low carbon technologies should be minimised through the use of grandfathering arrangements and other measures to reduce investor uncertainty.

35. Do you agree with the principles underpinning the transition of the Renewables Obligation (RO) into the new arrangements? Are there other strategies which you think could be used to avoid delays to planned investments?

35.1. Scottish Water sees the transition of the Renewables Obligation (RO) into the new arrangements as a sensible approach to give certainty to change over period. However investors will need some surety regarding what will happen to ROC values post 1st April 2017. See our comment under Q38.

35.2. As a cautionary note, Scottish Water believes the RO is currently working effectively and has made a positive impact in the investment community. Destabilising that progress is a risk which could create an investment hiatus. Whilst future changes to the RO were inevitable, the transition period needs careful management.

36. We propose that accreditation under the RO would remain open until 31 March 2017. The Government's ambition is to introduce the new feed-in tariff for low carbon in 2013/14. 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.**

36.1 Scottish Water suggests it is sensible that, prior to 1 April 2017, the accreditation mechanism to be used (i.e. the option of RO or FIT) should be a decision for generators.

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 Government move them out of the "vintaged" RO and into the new scheme, removing the potential need for scheduled banding reviews under the RO?**

37.1. Scottish Water suggests that all technologies should be grandfathered under the RO, unless there is clear evidence that any particular technology no longer requires financial support. This would imply that regular banding reviews would need to continue beyond April 2017.

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**

38.1. Scottish Water suggests the fixed price for ROCs would be preferable. This is in view of the likely declining volume of ROCs circulating in the system post 2017, which could have the effect of skewing market prices and hence reduce investor confidence in current ROC schemes. Scottish Water suggests adopting a fixed price, consisting of the 2017 buy-out price plus the average of the annual recycle funds since the RO started. This combined figure would then be indexed annually from 2018 onwards until the RO ceased to be required by virtue of there being no participants.