

Response by the Nuclear Industry Association to the DECC consultation on Electricity Market Reform

The Nuclear Industry Association (NIA) welcomes this opportunity to comment on the Government's consultation on Electricity Market Reform.

NIA is the trade association and information and representative body for the civil nuclear industry in the UK. It represents over 250 companies operating in all aspects of the nuclear fuel cycle, including the current and prospective operators of the nuclear power stations, the international designers and vendors of nuclear power stations, and those engaged in decommissioning, waste management and nuclear liabilities management. Members also include nuclear equipment suppliers, engineering and construction firms, nuclear research organisations, and legal, financial and consultancy companies.

Many of these companies, particularly the prospective new build operators, have direct involvement in the electricity market and are in a better position than the NIA to offer detailed responses to the specific questions posed in the consultation based on their practical experience of operating a diverse range of generating technologies within a competitive electricity market. This response focuses largely on the more general questions at the beginning of the consultation.

As we have stated in our responses to earlier consultations the NIA strongly agrees with Government that the UK needs credible plans to decarbonise the power sector if it is to meet its energy security and climate change targets, and warmly welcomes the commitment to progressing market reforms to develop a robust market framework capable of underpinning the low carbon investment required. Over the next decade all but one of our existing nuclear stations could close, along with much of our coal fired and all our oil fired capacity. It is therefore vital that a start is made soon on building more low carbon technology – new nuclear, renewables and coal with CCS. Delays in taking decision now could result in the UK becoming locked into a high carbon scenario. This consultation is a significant step towards achieving secure, affordable, low carbon electricity supplies and it is crucial that Government moves quickly to establish the new market arrangements, to enable investors to proceed with their plans for low carbon investment

In terms of nuclear we are already seeing a substantial commitment to new UK build, with three consortia announcing plans for up to 16 GW of new plant by 2025 – the first commissioning in 2018. However significant funds will be required to bring this to fruition and the consortia concerned will only proceed if they are convinced that the new plant will be economic. This is unlikely to occur in the current market. What is required is the creation of an electricity market that will provide stable, predictable returns commensurate with the risks of large low carbon projects. Importantly the new arrangements need to reflect the long term nature of the investments and provide policy stability over an extended period.

Against this background, as we stated in our response to the earlier consultation on the carbon floor price, the NIA strongly supports the Government's intention to transform the electricity market so that it rewards low carbon generation. The combined package of measures proposed in these consultations should provide investors with the certainty they need to proceed with the construction of the plant that is critical to meeting the UK's goals on carbon emissions and security of supply.

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?

The NIA agrees with the Government's assessment that the current market arrangements are unlikely to deliver the required investment, not least because - as the Government recognises - low carbon generation typically has high construction (capital) costs and low operating costs. Such long term projects are unlikely to attract investment in a market where wholesale electricity prices are set by the short run marginal costs of gas and coal plant. The EUETS has so far failed to provide a strong long term carbon price signal for investment in low carbon generation.

As noted above, three new build consortia have plans for up to 16 GW of new nuclear plant by 2025, creating thousands of jobs, and contributing significantly to the nation's carbon reduction targets. However those companies have not yet made their investment decisions and these projects will only proceed if investors are convinced that the new plant will be economic. This requires the creation of a market that will provide stable, predictable returns commensurate with the risks of large low carbon projects.

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

We agree with Government that there could be significant risks to security of supply if no changes are made to current market arrangements. Over the next decade all but one of our existing nuclear stations could close, along with much of our coal fired and all our oil fired capacity. New plant will need to be built to replace this plant, and this will be predominantly gas and renewable generation under current market arrangements. The result is that the UK is likely to become increasingly dependant on imported gas, with significant implications for both our security of supply and ability to meet our climate change objectives.

We agree with Government that to improve long term security of supply the electricity market needs to be reformed to provide the right signals to bring forward the appropriate investment including in new base load plant. As noted earlier it is vital that a start is made soon on building low carbon technology – new nuclear, renewables and coal with CCS – if the UK's environmental objectives are to be met.

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)

Whilst this is more an issue for the prospective operators and the Government, in general we agree with the Government's assessment of the pros and cons of the different models.

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

Again this is more a matter for the prospective operators and Government. However we support the Government's conclusion that the lead option for low carbon revenue support should be a FIT with CfD. The CfDs will, however, require a Government-backed agency to act as counter-party, and more clarity will be needed on the policy framework within which the agency will enter into contracts.

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

Again this is more a matter for the prospective operators and Government. However a well designed CfD model should help remove carbon price and fossil fuel risk, and thus encourage investment in long term low carbon generation projects. Development, construction and operational risks will, however, remain and prospective operators would be looking for returns to reflect these.

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?

Again this is more a matter for the prospective operators and investors and Government. Nonetheless it seems likely that as well as stimulating the initial investment in long term low carbon generation projects, the CfD FIT model would encourage operators to run their plant as efficiently and reliably as possible to reduce their costs over the long term, and to improve their returns against the CfD reference price.

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?

This is a matter for the utilities.

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 the existing investor base?

Assessing the relative merits of the different models is a matter for the utilities and investors. In general, as noted above, the proposed market reforms should be very helpful in encouraging investment in low carbon generation provided they are properly designed and implemented.

Questions 9 to 11

These are essentially matters for the utilities.

Question 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?

An Emission Performance Standard (EPS) could be a viable measure to ensure abatement of emissions from fossil plant, but the clear priority for Government should be to implement electricity market reforms and other incentives, such as a carbon price floor, to deliver investment in new low-carbon generation.

Questions 13-18

These are essentially matters for the utilities.

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

NIA broadly agrees with the Government's assessment of introducing a capacity mechanism. The planned growth in the proportion of electricity generating capacity provided from intermittent sources over the next few years has implications for security of supply unless sufficient back up capacity is available to meet potential shortfalls in supply. The detailed means of incentivising and achieving such capacity are not a matter for the NIA, but it is important that the Government involves the utilities in the design process to ensure that the final arrangements are practical.

Question 20 to 25

The above questions are not matters for the NIA

Question 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?

The NIA believes the Government's proposals for incentivising new low carbon generation should provide investors with the certainty they need to proceed with the plant that is critical to meeting the UK's goals on carbon emissions and security of supply. However it will be important to produce a coherent and sustainable package and the Government will need to clarify and refine the detail of the various elements, and their interrelationships, in close consultation with industry.

Questions 27 to 38

These are not issues for the NIA

Nuclear Industry Association
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