

## **FINAL COPY**

### **RESPONSE TO GOVERNMENT'S CONSULTATION DOCUMENT ON ELECTRICITY MARKET REFORM From Supporters of Nuclear Energy (SONE)**

This response to the Government's consultation on electricity market reforms does not address itself to individual questions posed in the document. Instead, it is concerned with the validity of the Government's entire approach not merely to electricity supply but also to overall energy policy.

There is little useful purpose in wasting the Government's time or our own in addressing detailed questions if the Government's approach to energy supply and climate change is felt to be incompetent, impractical, wasteful and economically dangerous.

In support of that argument we make the following points:

1 – Coal, gas and nuclear will remain the essential fuels for electricity supply for the foreseeable future. National or EU targets for the contribution of renewable sources of energy in 2020, 2030 or 2050 will not change that fact if only because, on present knowledge, they are unachievable. They may be felt to be politically virtuous but they contribute nothing to securing electricity supplies or a viable economy.

2 – The energy policy objective of securing a low carbon supply at affordable cost cannot be achieved if it is driven by environmental dogma to the exclusion of physical practicalities and value for money.

3 – The energy policy, which the consultative document seeks to shore up, is unsustainable on the following counts:

- a) wind, waves, tides, solar, geothermal, biomass and even hydro-power are marginal in the UK or unproven yet form a major element in future projections of supply; this is no way to construct an energy policy
- b) wind, tides and solar are either unpredictable (wind) or not continuous (tides and solar); wave power has yet to boil more than a few kettles; geothermal is insignificant; biomass is predictable but likely to be expensive in import terms and a potential source of hunger because of its massive demand for land; and hydro-power is virtually fully developed in the UK. Only hydro-power is possibly affordable. To build a substantial contribution from these sources into energy policy is frankly delusional.
- c) Because of their intermittency wind and solar are a seriously defective means of reducing carbon emissions since they require stand-by power which, in the case of volatile wind, has to be fossil-fuel fired. If the proposed capacity payments are, among other things, intended to compensate generators for being available when

the wind is not blowing, we can only conclude that current energy policy has no regard whatsoever for economy and is an entirely unwarranted imposition on industry and the consumer.

- d) The drive to encourage the development of heavily subsidised wind power flies in the face of the known problem of operating a reliable national grid that has to cope with a substantial amount of unpredictable supplies. We know of no agreement among engineers as to the proportion of unpredictable supply that the grid could accommodate without difficulty but we believe it to be somewhere between 8 and 12 per cent. To press ahead with wind power in the face of this serious unresolved practical question is in our eyes culpably reckless.
- e) To promote the development of renewables (notably wind and solar) through micro-generation and feed in tariffs would be similarly reckless if there were any chance of its substantial growth. As of now, that seems unlikely. But that does not alter the fact that it is promoting mostly unreliable sources of energy at exorbitant cost and potentially complicating even further the operation of the national grid. The return in avoided carbon emissions is likely to be derisory. It owes more to political correctness than substance. There are also serious questions to be asked about promoting a scheme to undermine the national grid which was developed some 90 years ago in the interests of reliability of supply at the most economical cost.
- f) Current energy policy is partly predicated on the development of carbon capture and storage (CCS) which is entirely unproven on the scale required - ie the long-term sequestration of around 200m tonnes carbon dioxide (CO<sub>2</sub>) a year under the North Sea from the UK alone – to enable fossil fuel power stations to continue to be used and thereby offset the closure of existing coal-fired power stations on environmental grounds. This is counting chickens even before the eggs have been laid and before there is any notion of cost, though some early estimates suggest it could double the price of coal-generated power -and presumably gas-generated power since it also emits large quantities of CO<sub>2</sub>.
- g) So far as energy efficiency and waste elimination are concerned, we consider the Government again takes a wholly optimistic view of the return in energy saved. Increasing the efficiency with which energy is used effectively lowers its price and therefore in turn encourages its use. All electricity economy measures, even smart meters, depend to a large extent on permanent changes in behaviour, which are notoriously difficult to engineer. If the purpose of smart grids is centrally to impose economy, any responsible Government should make that clear at the outset.

It follows from all this that we regard the consultative document on the electricity market as putting the cart before the horse. We need a viable energy policy before the electricity market can be reliably reformed to serve a useful purpose.

Nonetheless, we give the document a qualified welcome to the extent that it is designed to promote the development of nuclear power as the only non-fossil fuel system capable of producing in quantity safe, clean, reliable and economic electricity. A rational energy policy would be built around nuclear as part of a reliable mix.

If CO<sub>2</sub> is regarded as a threat to the planet, it makes sense to put a price on it through a simple mechanism, though there is nothing simple about the consultative document's proposition. As such it would encourage all forms of low carbon energy but it follows from the above that other forms of low carbon energy apart from nuclear should not additionally benefit from another subsidised distortion of the market.

Similarly, capacity payments for the availability of power when needed make sense since privatisation abolished the previous obligation to supply. But capacity payments make no sense at all if they are also intended to compensate more *reliable* and economic forms of power generation for switching off and on as and when the wind is not blowing optimally or at night when we lose the sun.

**IN SHORT, SONE'S MESSAGE IS THAT THE CONSULTATIVE DOCUMENT SEEKS TO BUILD ON A SERIOUSLY DEFECTIVE ENERGY POLICY. ITS NET EFFECT IS LIKELY TO IMPERIL ELECTRICITY SUPPLY, INCREASE FUEL POVERTY AND RENDER BRITISH INDUSTRY AND COMMERCE LESS COMPETITIVE. IT IS TO BE WELCOMED ONLY TO THE EXTENT THAT IT BELATEDLY PROMOTES THE DEVELOPMENT OF NUCLEAR POWER.**

We are, however, entitled to ask what is going on in view of the Redpoint study released along with the Government's consultative document. This underlines the entirely unsatisfactory nature of current policy. It points to the risk to security of supply with a large amount of wind on the grid, the closure of a third of existing generating capacity and uncertain returns for investors in thermal plants. Yet it does not recommend a drive to develop nuclear power, the one proven and economic form of low carbon electricity. Instead it ludicrously regards nuclear as an "emerging technology" even though it has been commercially generating power for 55 years. Worse still, under its baseline set of assumptions, it does not foresee any new nuclear contributing to UK electricity supplies until 2026 – eight years later than previously indicated by Ministers.

We recognise that this is Redpoint's baseline case and that it brings forward proposals at least partly to remedy it. We hope they succeed, though whether they will bear out Minister's claims that the first new nuclear power will come on stream in 2018 are another matter. But they will not remedy the expensive futility of the subsidised building of some 35GW of unpredictable renewables when a substantial part of the cost could be avoided by concentrating on new nuclear now.

[REDACTED]