

The Energy White Paper 2007

Review by Robert Freer

This is the fourth report by the Government on national energy policy in the last five years and has the encouraging title “Meeting the Challenge”¹. But although it includes some positive steps towards a sound national energy policy it will still disappoint those looking for strong leadership and a necessary sense of urgency and commitment.

Previous energy reviews have been long on the need for consultation, discussion, debate and more research, but less positive about making decisions and taking action to avoid an impending energy crisis. Decisions delayed always become more expensive. Meanwhile all our major power stations are ageing, many will close and there is little incentive for generating companies to invest in new ones. Keeping the lights on will become increasingly more difficult.

Energy policy is a matter of national importance because we cannot operate or survive as a modern country without a secure and reliable supply of energy. In the introduction to the Energy Challenge in 2006, Tony Blair specifically and correctly identified security of supply as the most important of the “immense challenges” facing us. Identifying a single focus helps to concentrate resources.

But the new White Paper seeks to achieve two objectives, to reduce greenhouse gas emissions and to ensure we have a secure supply of energy. Trying to achieve two objectives simultaneously will almost

inevitably lead to tensions which will make the problems that much more difficult to solve.

There are practical differences between these objectives.

Ensuring security of supply is a straightforward technical problem; we rely on power stations using coal, gas or uranium to produce power when required.

Controlling emissions is a different problem because to be effective we need to negotiate and achieve international co-operation with countries whose priorities may be different from ours. For example, liberalisation of the energy market even within Europe is proceeding more slowly than expected. Our efforts alone will not be significant; our example may be persuasive, but later rather than sooner.

It is important that we plan to use a diversity of fuels. For the first time in our history we are no longer self-sufficient in energy and we will need to buy our fuels, coal, uranium and gas, in the most reliable markets. Coal is available throughout the world and will continue to be a major fuel, provided we can find a way to burn it cleanly.

The White Paper says that “successful demonstration of CCS (carbon capture and storage) would be a major contribution by the UK to global efforts to tackle climate change” and it was therefore unfortunate that the Government could not provide sufficient incentive to enable BP to proceed with their innovative project for CCS at



Peterhead power station. This could have been a model for other countries to follow. But the competition for funds for CCS has been put back to November and BP apparently decided this “was a delay too far”.

We also need to replace our old nuclear power stations with new ones, and the White Paper states “it is in the public interest to give the private sector the option of investing in new nuclear power stations”. The Government now proposes a 20-week period of consultation before they make a decision. This hesitation is not supported by *The Times* which said, “The Government must stop sending ambiguous signals and make absolutely clear as soon as possible that nuclear energy will have a large and growing role in provision of power for the people.”

Other countries are busily planning and building new nuclear power stations and it is unfortunate that the Government recently sold Westinghouse so that we will now have to buy our expertise from abroad to restart an industry which we pioneered and of which we were formerly among the world leaders.

In discussing renewable energy the White Paper says, “renewables are the key to our strategy to tackle climate change” and the target is “to see renewables grow as a proportion

of our electricity supplies to 10% by 2010, and an aspiration to double by 2020". It is difficult to see how this can be achieved. Our present electricity demand is about 375Twh a year to which hydro contributes about 1% and wind energy also about 1%. But historically demand has been increasing at about 1% per year and therefore new build is unlikely to keep pace with new demand.

In contrast to its reluctance to support base load fuels it is surprising to learn that the Government intends to continue the long term subsidy for wind energy through the Renewables Obligation although the output is small and unpredictable. The International Energy Agency has said that the subsidy for onshore wind farms is excessively generous and even the

developers agree that without this subsidy no-one would build them. Any form of electricity generation which requires to be supported by continuing subsidy cannot be good engineering or good economics.

There are better low carbon alternatives available, such as the thermal recycling of Municipal Solid Waste through an Energy from Waste plant, which could meet about half the 2010 target, and ground source heat pumps which produce 3kwh of heat for 1kwh of electrical input. But the White Paper does not appear to explore these possibilities fully.

The frequency of these energy reviews and White Papers calls into question whether this is the correct way of establishing energy policy as part of the national infrastructure,

and how technical advice from industry and the professions intended to produce workable and affordable solutions can best be incorporated into Government policy. If the Government Minister responsible for Energy had a seat in the Cabinet perhaps long term planning would have a greater national priority.

This White Paper demonstrates that politicians and scientists are clearly concerned by the linear increase in carbon dioxide emissions, but they appear to be less interested in trying to address the exponential increase in the world population which is the root cause of the problem.

¹ Meeting the Energy Challenge – A White Paper on Energy, May 2007. Department of Trade and Industry CM 7124.