

IAN KEILLAR

Date--24.05.05

Professor Maxwell Irvine,
Chairman of Energy Committee,
Royal Society of Edinburgh,
22-24 George Street,
Edinburgh EH2 2PQ

Dear Professor,

As Chairman of the Energy Committee you will be asking the opinions of the great and the good as well as that of the general public. From the ranks of the latter, may I make my contribution?

I have lived well beyond my three score years and ten and note that mankind is subject to two over-riding universal rules. One is the law of unexpected consequences, while the second is MacPherson's or Sod's law. Then, also influencing what happens, is public opinion. This is usually based on the lowest common denominator, accompanied with a desire to have ones cake and eat it. An example is the universality of the mobile 'phone, and associated with it is a reluctance to allow the erection of the necessary fixed station aerials. As for the great and the good, their evidence has to be approached with the admonition *cui boncP*. kept firmly in mind.

However, I am not writing to tell my granny how to suck eggs, but to put forward my views, to be considered along with all the other propaganda you will be subjected to.

My first observation is that we must use energy more efficiently, and I understand that industry is well aware of this. Domestically, and in our use of transport, much still remains to be done. Houses are still being built with standards of insulation far inferior to those prevailing elsewhere in north Europe. It is well over forty years since I saw my first triple glazed window, alas not in this country. Solar water heating is creeping in but heat pumps still seem to be too exotic for us. Electrified transport requires to be encouraged and an urgent case for attention is the railway line between Edinburgh and Glasgow. This, surely demands priority before the proposed border line. The use of gas to generate electricity must be reduced. Reliance on Russian gas is both politically hazardous and energy inefficient. The overall efficiency of the use of gas when turned into electricity and delivered to my domestic heater is about half that of burning the gas in my domestic boiler.

Next, as a principle, electricity should be generated as close to the end use as is possible. Proposals to site wind generators on the Western Isles have limited practicability, provided capacity is limited and there is no intention to shift large blocks of power to the south. Perhaps in the future, diamond semi-conductor technology will be such that D.C. transmission is possible and an underground cable could replace overhead lines. But the technology is in its infancy. Also in its childhood is tidal/wave energy. Here there is great scope for local generation and use.

Since the extensive use of coal, despite clean bum, is probably politically impossible and wind power, once it becomes so extensive that it ceases to be the tail and becomes the dog, requires at least 90% spinning reserve fuelled from a reliable resource, then we are looking

at the nuclear option. This presses all the buttons and the various slogans dutifully appear. Of these two are realistic. What do we do with the waste and what happens if an airbus hits a reactor? For the first question there is no ideal solution and the crazy solutions are, simply that, crazy. Deep burial appears to be the least hazardous of all the alternatives and I suggest that a committee of three, consisting of a nuclear physicist, geologist and engineer be given the task of selecting a site within 18 months. "Action this day" as Churchill used to note. As for the reactor being hit by an aircraft; it is surely possible to bury the reactor in the ground.

Finally, a friend of mine, has penned a little diatribe which I enclose for your attention.

"THE SECRET ABOUT WINDFARMS

A critical piece of information concerning windfarms, that appears to have been withheld from the public domain, is that they are totally redundant! It is a little known fact that they do not replace other power sources because due to the fickle nature of the wind every windfarm has an alternative power source on immediate standby. Most of this is supplied by coal fired power stations equipped with steam turbines. These monsters have to be kept turning constantly whether immediately required or not because they need 24 hours to get up to speed. Bang goes the claim of economy and bang goes the much vaunted reduction in pollution. The only effect these vastly expensive eyesores have is to provide some short term employment, to line the pockets of developers and suppliers whilst at the same time despoiling our heritage.

No wonder the Danes flung them out."

I hope that if you are prepared to accept my observations that you will also consider those of my friend's as a separate contribution from Anon.

Yours sincerely,

Ian Keillar.