Hugh Montefiore resigns from Friends of the Earth – Independent 22nd October 2004

Hugh Montefiore: We need nuclear power to save the planet from looming catastrophe. I've been a Friends of the Earth trustee for 20 years, but I am told it is incompatible with being pro nuclear energy 22 October 2004

The dangers of global warming are greater than any other facing the planet. The rise in ocean levels, melting ice fields and the death in Europe of 25,000 from last year's heatwave are pointers to what may lie ahead, and the Government's chief scientific adviser has warned us that future climate change is a worse threat than terrorism. As a theologian, I believe that we have a duty to play our full part in safeguarding the future of our planet, and I have been a committed environmentalist for many years. It is because of this commitment and the graveness of the consequences of global warming for the planet that I have now come to the conclusion that the solution is to make more use of nuclear energy.

This belief, and my wish to make it clear in this article, has led me to sever my ties with the campaign group Friends of the Earth. I have been a trustee of Friends of the Earth for 20 years and when I told my fellow trustees that I wished to write on nuclear energy, I was told that this is not compatible with being a trustee. I have therefore resigned because no alternative was open to me. The future of the planet is more important than membership of Friends of the Earth.

The Royal Commission on Pollution and the International Panel on Climate Change has told us that a 60 per cent reduction of global warming gas emissions by 2050 has to be achieved if we are to keep the planet comfortable for life. But how are we to do this? As a first step towards this goal, our Government has set itself the target of supplying 10 per cent of electricity from "renewables" by 2010, a target, incidentally, endorsed by Michael Howard who dislikes the main means by which it is hoped to achieve this - literally thousands more highly subsidised wind turbines that will scar the landscape and coastline, to say nothing of the problems caused to radar.

At present, 20 per cent of our electricity comes from nuclear reactors. But given that the Government has decided not to replace our nuclear reactors when they become obsolete, and as the chairman of the British Wind Energy Association is only confident of wind contributing 5.5 per cent of the 10 per cent required from renewables, it seems very unlikely that the Government's 2010 target will be reached - especially as steps need to be taken to ensure household and commercial economies of energy or the reduction of carbon dioxide emitted from motor vehicles.

This needs to be rigorously followed up if the 60 per cent reduction of global warming gases is to be achieved in time. So our Government has further set itself the "aspiration" of 20 per cent of electricity from renewables by 2020. Yet there seems to be little idea how this second target can be achieved. Presumably by then, there will be greater household and commercial economies, and long before then cheap air travel will surely be stopped by a tax imposed on aircraft fuel.

No doubt it is hoped that fresh forms of renewable energy will by then come on stream. Biomass is one kind, the burning of straw and wood (and chicken litters but not chicken feathers!). But carbon dioxide would be emitted in bringing great amounts of biomass long distances to be burnt. Solar power is unlikely to bring large-scale returns at Britain's latitude. As for wave power, marine technologies and nuclear fusion, they are nowhere near commercial viability and the chief executive of the Renewable Power Association has said there is no coherent long-term development programme.

Clean coal technology with the reduction of carbon is certainly attractive, but it is very far from being commercially viable. There would be problems with yet more installation of wind turbines, which would mean further traditional sources of electricity would then be required as back-up. It might be possible by 2010 for hydrogen to be available for transport, but the making of hydrogen involves carbon dioxide, unless electricity from renewables is used.

It is crucial if the world is to be saved from catastrophe that non-global warming sources of energy should be increasingly available after 2010. Petrol will begin to be in ever costlier and shorter supply, especially with the industrialisation of China. By then, oil supplies may even have peaked. Gas will become more expensive and huge supplies will have to be obtained from abroad. For security of supply as well as for the environment, it will be essential to have other sources of energy.

This is why nuclear energy is the most viable alternative, but the problem is that it takes several years between a decision to build a nuclear reactor and its commercial operation. If we are to have more nuclear energy soon after 2010, we must plan now.

The Government has said that it is keeping open the nuclear option, but the question remains: why aren't our nuclear reactors being replaced as they become obsolete? Nuclear energy provides a reliable, safe, cheap, almost limitless form of pollution-free energy. The Government says it is too expensive.

The real reason why the Government has not taken up the nuclear option is because it lacks public acceptance, due to scare stories in the media and the stonewalling opposition of powerful environmental organisations. Most, if not all, of the objections do not stand up to objective assessment. Four hundred and forty two reactors across the globe produce 16 per cent of the world's electricity. Modern nuclear reactors are of vastly improved design, approved by the International Atomic Energy Agency. The permissible dose for reactor operatives is far less than the natural radiation in Cornwall!

Then there is the problem of nuclear waste. In Britain, short-lived and intermediate wastes are safely contained in trenches of glacial clay, compacted, containerised and capped with water-resistant clay. Long-lived wastes which last for thousands of years need more extensive treatment. The total amount of these since Britain began using nuclear energy is only the size of a 10-metre cube in volume. After cooling, the waste components need to be compacted into a vitrified solid, sealed in a metallic container, together with a metallic or ceramic "overpack", and placed in stable rock at least 300 metres deep together with a backfill to minimise any water movement. How safe is this? A former natural nuclear reactor has been found in Gabon which has remained undisturbed for thousands of years. There is minimal risk of danger to posterity.

The advantages far outweigh any objections, and I can see no practical way of meeting the world's needs without nuclear energy. The predictions of the world's scientists are dire and the consequences for the planet of global warming are catastrophic. This is why I believe we must now consider nuclear energy. The subject is so important that it should be a matter of informed public debate.