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10 DOWNING STREET

THE PRIME MINISTER

7 December 1979

Dear Ralph,

Thank you for your letter of 9 November enclosing one from Mr. E.W. Young about nuclear power.

The Government believe that nuclear power has a vital role to play in energy policy and that orders for nuclear stations will need to continue if we are to have a realistic policy for meeting Britain's long term energy needs.

It is quite true, as Mr. Young points out, that the first AGR programme suffered serious setbacks, but two of the stations have now been commissioned and the two more recent AGR orders, which we have confirmed, show the confidence of the generating boards in this type of reactor. The CEGB has also said that it intends to order a PWR, subject to full safety clearances being obtained.

Our nuclear industry has suffered from a long period of uncertainty and from an absence of orders during most of the 1970s. It will take time to build up its skills and capacities, and I agree with Mr. Young that we cannot rely on nuclear power alone to meet the 'energy gap' that we expect to develop as North Sea oil and gas supplies begin to decline in the 1990s. But it would be equally wrong to suppose that we could do without a nuclear contribution. The Department of Energy's projections suggest that even with a major programme of nuclear expansion, and after allowing for substantial savings from energy conservation as well as major investment in long life economic coal production capacity, we will still have a substantial energy import requirement by the year 2000.

/I am not sure

I am not sure what Mr. Young has in mind when he says that nuclear stations built now would soon be obsolescent. Magnox stations that were built more than ten or fifteen years ago are still providing our cheapest electricity, and there is no reason to suppose that nuclear stations now planned or under construction will not have full working lives.

There have of course been technical problems at some nuclear reactors in the UK but many of them have good records of reliable operation and, for instance, the Magnox reactor at Hunterston has achieved a lifetime load factor of 85%; better than any other nuclear station in the Western world.

Safety considerations must always be of overriding importance in our nuclear policy and it is essential that we should learn the lessons of the Three Mile Island nuclear accident. The Secretary of State for Energy has asked the Health and Safety Executive and the CEGB to assess its significance for the UK and it is his intention to publish their reports.

However, I think Mr. Young is wrong to dismiss the outstanding safety record of nuclear power in this country as meaningless. The annual radiation exposure to the UK population from all the activities of the nuclear industry is less than half of one per cent of the total radiation exposure from all natural and man-made sources, and there is no evidence that any injury has been caused by radiation from a nuclear power station in the UK.

Mr. Young also raised the question of the de-commissioning of nuclear stations. Although it will be several years before this will need to take place the CEGB expects it to be done in several stages. The first step would include shutting down the reactor, removing the fuel, and making the site secure. The next, to follow as soon as practicable, would involve dismantling all the plant and buildings outside the reactor's biological shield. The reactor occupies a relatively small part of the site, which would then be free for re-use for new generating plant. It would be secured and kept under surveillance for 25-75 years until it too was removed. Because of the decay of radioactivity this delay would ease the problems of waste management.

Turning to alternative sources of energy mentioned by Mr. Young, nuclear fusion, if it can be harnessed, offers a source of energy of considerable potential. The Joint European Torus experiment which is already under construction at Culham is expected to cost a total of £125 million, and the construction should be completed by 1983. The task of achieving nuclear fusion is of immense technical difficulty and there is no guarantee that it will finally be commercially viable. As Mr. Young points out, it is in any case not expected to contribute to commercial electricity supply until well into the next century.

I very much agree with Mr. Young on the importance of using energy as efficiently as possible, and energy conservation has a central place in the Government's energy policy. One aspect of this is the Department of the Environment's Homes Insulation Scheme which gives positive encouragement to householders to insulate their homes by offering grants of 66% of the cost of installing basic insulation subject to a maximum payment of £50. This scheme has recently been extended to make public sector tenants eligible for grants. Another aspect of conservation is the example set by Government's use of energy - in the last few years 30% of energy consumption has been saved in Government buildings and 19% in National Health Service buildings. However, the role of the individual is vital and it is up to everyone to contribute to national savings in energy consumption by themselves using energy efficiently and without waste.

I also agree that we must develop alternative sources of energy. Government expenditure on research and development on renewable sources such as wind, waves and sun, has increased year by year. The programmes on all these sources are now well established and the Department of Energy's expenditure on the current financial year is estimated at about £7 million. This may seem fairly modest but progress on research of this nature depends less on the amount of money being spent than on the state of the technology itself, and it is not expected that renewable sources will make a significant contribution before the end of the century.

I hope these comments will be of value to Mr. Young. The Government do not regard nuclear power as an end in itself. We are very conscious that we must have a balanced energy policy drawing on every one of the resources available to us, and that safety must be paramount. But we cannot have such a policy without a substantial nuclear element.

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Ralph Howell, Esq., MP.