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PRIME MINISTER

6 November 1989

NUCLEAR ELECTRICITY

Before the twenty-second century, mankind will obtain the bulk of its energy from some form of nuclear process. Regrettably, today's technology does not permit Government to give a strong, market-inspired lead in that direction. The strategic electricity privatisation decisions made two years ago have now forced a proper cost-benefit analysis of nuclear energy. The results show how badly ministers were misled by the numbers presented at Chequers. We are now advised:

1. Shareholders will not take any nuclear risk at all. All the cost uncertainties of nuclear generation must remain with Government.
2. Banks, the other providers of private capital, also insist upon complete nuclear risk isolation.
3. The Nuclear Installations Inspectorate (NII), a semi-independent quango reporting to the Department of Employment, have and use the power to load nuclear costs without limit. If they required every fuel rod to be encased in a ton of solid gold, the industry would have no choice but to comply!

The inevitable conclusion is that to force customers and shareholders to provide a substantial future proportion of electricity from nuclear sources undermines the commercial privatisation of NP, unless all risks are retained by HMG. It would therefore be better to leave all nuclear capacity under state ownership.

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The case for competition

The Department of Energy thus recommend complete capitulation to what the sceptics argued two years ago by keeping nuclear generation within the State sector. National Power will be completely fossil-fuelled and private sector generation will therefore begin as a cosy duopoly.

This is bound to exploit every mischievous scheme for discouraging new entrants. It would have been far better to put the fossil fuelled stations into at least four if not five companies. The compelling arguments for this were masked by the perceived necessity of finding "private" solutions for nuclear. Urgent consideration should therefore be given to whether this is still possible within the time scale for a privatisation this Parliament. The Department of Energy's glib assertion that this is no longer possible within the timetable should be strongly challenged. It plays directly to the monopolists of the CEGB.

The environmental case is two-edged. The cleanest argument which favours nuclear is that no sulphurous or carboniferous gases are discharged by nuclear plant. Provided, therefore, that it is built safely, such a power station is a high efficiency triumph of modern technology. This is the myth. In practice, long term consequences of decommissioning and fuel processing for fission-based generators are causing ever greater concern among the professionals. This concern, driven by risk uncertainties, is leading to the high cost loadings of the NII mentioned above.

Casting aside the loony Greens, it is still hard to find an informed environmentalist willing to trade the unpleasant, but ascertainable, environmental consequences of fossil fuel for the uncertain environmental consequences of nuclear using present technology.

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If it is decided to keep nuclear power under State ownership, a sensible environmental case can be made. Ultimately, mankind will use some form of atomic process for its energy source but today's technology produces too much uncertainty. While research will continue to seek safer and cheaper nuclear technologies, a significant proportion of electricity generation must continue from fossil sources.

Natural gas, of which Britain has an abundance, is far less environmentally harmful than coal. First, because it has negligible sulphur release. Secondly, natural gas is terrestrially trapped methane, which is itself a most effective greenhouse gas. When it is burnt, two harmless H<sub>2</sub>O molecules are released for every CO<sub>2</sub> which means a lower net release of greenhouse gases per unit of energy than for either coal or oil. The case for natural gas is therefore an extension of the energy efficiency argument which can be emphasised in order to offset any retreat on nuclear.

The diversity objective can also be achieved without privatising nuclear. HMG's original strategy was to limit the dependence of electricity consumers upon NUM coal. By encouraging the growth of UDM pits, open cast TGWU pits, and French energy sources, diversity in the original sense is also served. Scotland, and also to a limited extent England and Wales, offer hydro-electric sources which are both renewable and non-fossil.

Beware of overloading this argument. Bizarre schemes for wind generation and tidal estuary sources may be helpful at the margin but they must never be relied upon as a significant component of basic supply.

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Could we still privatise nuclear?

Notwithstanding the above, there is a way of privatising the operation of nuclear power without total capitulation to the Marshall demands for guaranteed economic returns without any commercial risks. It would require some bold new principles:

1. The cost of the economic distortion necessary to encourage private sector nuclear generation would be transferred from customers to tax payers. This would mean replacing the non-fossil fuel levy on customers with central taxation.
2. The NII would have its wings clipped so that it could not endlessly load costs on to nuclear generators by fiat. It would need to be brought under tighter departmental regulation to circumscribe its power to load costs while still responding sensibly to concerns about nuclear safety.
3. It is possible and desirable to introduce competitive practice into the nuclear power industry within the Government's strategic requirement for a significant proportion of future generation to be non-fossil fuelled. This would be through regular competitive tender for the operation of State owned nuclear plant.

These ideas are further developed in the Annex.

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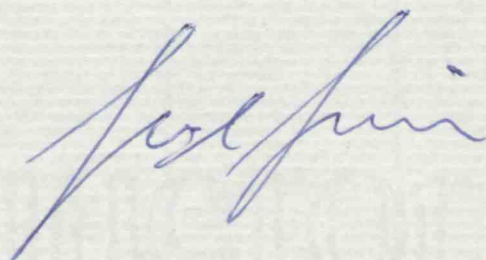
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RECOMMENDATIONS

- 1 Either accept the retention of nuclear power in the state sector or have the economic distortion of running it in the private sector met by central taxation.
- 2 If nuclear assets are retained by HMG, National Power should be split into more than one fossil fuel company. 702.
- 3 Great emphasis should be made upon the benefits of natural gas, both environmentally and for diversity.
- 4 Nuclear operations can be privatised without the transfer of nuclear assets. This leads to the concept of an operating company as set out in my annex.



GEORGE GUISE

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10 DOWNING STREET

Prime Minister

Electricity Privatization and

Nuclear

Policy Unit briefing is  
not yet available; I will  
put it in the last box  
tomorrow if we have it by then.

But you may want to have  
another look during the evening  
at these main papers for  
tomorrow's meeting which you  
read over the weekend. PR 66/11