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CABINET

DISPOSAL OF RADIOACTIVE WASTE

Memorandum by the Lord President of the Council

The Home and Social Affairs Committee (H) has discussed radioactive waste disposal on five occasions since November 1984. A decision is now needed urgently on the selection and announcement of a shortlist of sites for disposal of low level and short-lived intermediate level wastes. On behalf of the Committee, I am reporting the considerations to Cabinet.

THE TECHNICAL BACKGROUND

- 2. Low level and short-lived intermediate level wastes can be disposed in relatively shallow sites, protected by concrete and clay. The longer-lived intermediate level wastes need to be disposed deeper underground. In both cases, one of the major points made by objectors is the danger that water will penetrate to the waste itself, will become radioactive and will then leak through the successive protective layers into the local drainage system. One way of minimising water-problems is to site the disposal facility close to the sea, so that any water draining from it will go quickly into the sea and be diluted there. The French have adopted this technique. The Ministry of Agriculture, Fisheries and Food are concerned about the possible effect of the drainage of radioactive water from inland sites on to agricultural land and therefore would prefer a coastal site.
- 3. A Ministry of Defence (MOD) requirement needs to be borne in mind. The MOD already has in storage one decommissioned nuclear submarine. They expect another two by 1992. The reactor casings of these submarines will require the same standards of disposal as low level waste, but, because of their great size and weight, they would be most easily transported by sea to a coastal site and moved a short distance inland to their burial point.
- 4. The alternative to disposal of this form of radioactive waste, either on an inland or a coastal site, is to store it. This involves building large, above-ground facilities in which the waste can be stored and monitored. This is the technique adopted for the much smaller volumes of high level waste. It has been clear at least since the sixth report of the Royal Commission on Environmental Pollution in 1976 that scientific opinion does not think that this is necessary for low level wastes. Last year's report by the Radioactive Waste Management and Advisory Committee emphasised that "There is no technical advantage in delaying disposal of

either low level waste or intermediate level waste ... and no technical barrier to their disposal". That is the view that underlies Government evidence to the Sizewell Inquiry and which, on present assumptions, must underlie evidence to the forthcoming Dounreay Inquiry.

THE SEARCH FOR SITES

- 5. The most recent Government statement was made in the House of Commons on 24 January 1985 by the then Secretary of State for the Environment, following discussion in H. Mr Jenkin said that the Nuclear Industry Radioactive Waste Executive (NIREX) would be required to carry out geological investigations of at least three possible sites for each type of depository; that for short-lived wastes, NIREX would be required to select and announce as soon as possible two possible sites in addition to one already under discussion at Elstow in Bedfordshire; and that NIREX should start the search for alternative sites for deeper-level facilities, on which further work was needed on the technical options. Mr Jenkin proposed that the planning permission for the geological investigations should be conferred by a Special Development Order that would be debatable in Parliament.
- 6. Since January 1985 NIREX have limited their search to sites in public sector ownership. (This follows earlier trouble over a promising site owned by a private sector company.) In view of the considerations summarised in paragraph 2 of this note, NIREX have also sought to include coastal sites in their shortlist, and this is generally known to interested parties.
- 7. Following the canvassing of various possibilities, the list submitted by NIREX for the shorter-lived wastes now consists of Elstow (Bedfordshire), Fulbeck (Lincolnshire), Bradwell (Essex) and South Killingholme (Lincolnshire). The final two are coastal sites.
- 8. A majority of H, regarding the matter as one of nuclear policy, appeared to favour the NIREX proposal. The proposals submitted by NIREX envisage that the explorations would take 12-18 months: thereafter, decisions could be taken to focus on one or more sites for a full planning inquiry. Any further delay in settling our waste disposal plans could lead to a reopening of, or a challenge to, the Sizewell Inquiry, which could result in delay to the further development of the nuclear power programme. This would be very damaging to the United Kingdom nuclear industry, which is already in difficulty.
- 9. My Cabinet colleagues will appreciate the controversy that would inevitably arise in the areas affected by this decision. If it were felt that the pressures would be of such an order as to make it impossible to proceed with the explorations of the four sites, it might be possible to set up an authoritative new study of the whole question of radioactive waste disposal. But the majority of H felt that delay would damage the interests of the nuclear industry.

CONCLUSION

10. Since what is at issue here raises questions of major national importance, H thought it right to submit the matter to Cabinet for final decision.

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Privy Council Office

12 February 1986