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PRIME MINISTER

EXPORT OF PLUTONIUM TO FRANCE AND THE UNITED STATES

The attached note, recommending approval of two proposals to export plutonium to France and the United States, has been prepared by a group of officials from the Departments concerned (Energy, Ministry of Defence, Foreign and Commonwealth Office and Treasury) under Cabinet Office Chairmanship.

The first proposal is for a loan of 500 kg of plutonium from BNFL to the French CEA for use in the Superphenix fast reactor. The loan is commercially advantageous and worth several million pounds to BNFL. The plutonium will be returned at the end of 5 years when MOD may have a requirement for it. Officials believe that although the French nuclear weapons programme is most unlikely to depend on the supply of this plutonium the loan could be used indirectly to support that programme. They therefore recommend that the Americans should be informed about it.

The second proposal is for the sale of up to 5 tonnes of plutonium by the CEGB to the US Department of Energy for use in their fast reactor programme. The Americans are short of civil plutonium because of the delay in their reprocessing programme. The sale could be worth up to £50 million to the CEGB. The sale could also be helpful to MOD in negotiating the procurement of military plutonium from the US Department of Energy; but there would be no explicit link between the civil sale and the military purchase.

I am satisfied that both the loan to the French and the sale to the Americans are in the interests of the UK civil nuclear programme.



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I also believe that the inter-governmental conditions proposed for both these exports of plutonium are satisfactory.

I believe therefore that both proposals should be approved as recommended, and I should be grateful for confirmation that you agree. I am sending copies of this minute (and its attachment) to the Foreign and Commonwealth Secretary, the Chancellor of the Exchequer and the Secretary of State for Defence, who will no doubt let you know if they dissent; and to Sir Robert Armstrong.

Secretary of State for Energy

28 July 1981

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EXPORT OF PLUTONIUM TO FRANCE AND THE UNITED STATES

Note by Officials

I. INTRODUCTION

The purpose of this note is to seek approval for the loan of reactor grade plutonium to France and to seek approval, in principle, for the sale of reactor grade plutonium to the United States. The French requirement, which arose before the election of President Mitterand, is for 1000 kilogrammes (kg) of plutonium for use by the Commissariat à l'Energie Atomique (CEA) in the Super Phenix fast reactor, of which 500 kg could be supplied by British Nuclear Fuels Limited (BNFL). The potential United States requirement is for up to 5000 kg (5 tonnes) of plutonium for their civil nuclear programme and could be supplied by the Central Electricity Generating Board (CEGB). The enquiry from the United States was made through Ministry of Defence (MOD) channels and has a relevance to the United Kingdom's requirement to procure weapons grade plutonium from the United States.

2. This note examines in sections II and III political, economic and defence issues which should influence the response to the French and the American enquiries respectively. The need for consistency of policy towards the United States and France in these matters is considered in Section IV. The note's conclusions and recommendations are in Section V.

II. FRANCE'S REQUIREMENT

3. There is an involved background to the current French request. The last transfer (in this case a sale) of United Kingdom plutonium to France, 95 kg of it, took place in 1974 under a contract signed in 1973. In mid-1974

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it became the policy to exercise extreme caution in the supply of plutonium to France because of the contribution this might make to her nuclear weapons capability, and because of concern over French atmospheric testing of nuclear weapons, over her approach to NATO, and over her attitude towards non-proliferation. This policy discriminated in practice against France compared with our other Euratom partners. The basis of this policy had weakened considerably by mid-1976 with France's suspension of atmospheric nuclear testing and her decision to join the Nuclear Suppliers Group (NSG). But the opportunity to introduce a less restrictive policy was soon overtaken by the international controversy about the objections of President Carter's incoming administration to the use of plutonium in civil nuclear power programmes.

4. The CEA have made informal approaches to BNFL and the CEGB on a number of occasions in recent years (although, excepting the current approach, not in the lifetime of the present United Kingdom Government) about the supply of plutonium for their fast reactor programme. These approaches came to nothing because the French were not prepared to agree to our stipulation that they should place the material under International Atomic Energy Agency (IAEA) safeguards. Co-operation with the French has nevertheless been close in the past two years, a reflection of our common interest as the only commercial reprocessing countries (the United States having withdrawn from this field) in resisting President Carter's stance on reprocessing. A set of guidelines has been agreed with the French on the conditions for the return of plutonium by BNFL and the Compagnie Generale des Matieres Nucleaires (COGEMA) to their reprocessing customers; and a joint negotiating position has recently been worked out with the French (and the Germans) for the IAEA International Plutonium Storage scheme.

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5. There has also been discussion with the French at both government and industry level on fast reactor co-operation. We want to keep open the options on co-operation with the French or with the Americans until a decision has been taken on which will serve our interests best. If the current French request can be met this can only improve the atmosphere of the talks with them. The appointment of Communist Ministers to the French Government has not altered the desirability of developing co-operation with them; and these appointments do not in the view of officials raise any new problems for the proposed loan.

6. MOD assess that the CEA have the capacity to produce enough plutonium for France's civil and military needs. Why then are they seeking supplies of British plutonium, and why do they want to borrow it rather than buy it outright? Part of the answer is that, while they have failed so far to achieve the planned throughput at the Cap de la Hague reprocessing plant, it may be no more than a further few years before they do in practice realise the plant's potential; so there is no need for an outright purchase. A further reason is that some of the plutonium being reprocessed and used in the Super Phenix programme is derived from material of US origin. This material is subject to US conditions of supply. The French wish to minimise the use of such US "obligated" material, because that would reduce the extent to which any US restrictions apply to the subsequent use, for defence or some civil purposes, of plutonium bred in Super Phenix. These restrictions might be made tougher when the Euratom/US safeguards agreement is renegotiated. The French have said that their aim is as far as possible to feed Super Phenix with "unobligated" plutonium which is what they are looking to BNFL to supply. While the supply of British plutonium for use in Super Phenix may therefore indirectly help the French nuclear weapons programme, it seems highly improbable that the programme itself is dependant on a loan from BNFL.

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7. It is strongly in BNFL's interests to meet as much as possible of CEA's requirement, for the following reasons. Firstly, BNFL have no foreseeable use for their plutonium in the next few years. Secondly, the loan would produce income for the company, in the region of £2 $\frac{1}{2}$ -5 million. And thirdly, BNFL think it desirable to gain some credit with the CEA in order to make it easier to persuade the French to continue the BNFL/COGEMA co-operation agreement on reprocessing. The agreement is at present working to BNFL's advantage to an embarrassing degree in that COGEMA have made important advances in oxide reprocessing and vitrification techniques, and BNFL wish to preserve their access free of charge to this technology.

8. BNFL can meet from their present stocks 300 kg of the 500 kg they are able to offer but would need to spread delivery of the remaining 200 kg forward into 1982. They envisage that a total of 500 kg could be delivered by June 1982. This is acceptable to the CEA. BNFL would have preferred to sell the plutonium rather than lend it to the CEA, but MOD strongly oppose a sale because a defence requirement for the material might arise at some later date. BNFL have therefore pursued their enquiries with the CEA on the basis that the material should be returned at the end of 5 years. Under the agreement proposed, the CEA has an absolute obligation to return the equivalent amount of

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plutonium to BNFL within 5 years of delivery of any consignment, but BNFL would have the option to extend the period to a maximum of 6 years.

Payment to BNFL for the loan would be based on monthly charges.

9. The original French request was for the loan of 1000 kg of material. BNFL could not supply the full amount in the required timescale. Any addition to the 500 kg now under consideration would be a matter for separate decision.

10. The French have offered us an exchange of letters covering the deal which would provide assurances that the material -

- a. will not be used for explosive testing
- b. will be subject to Euratom safeguards
- c. will be subject to the levels of physical protection required by the NSG Guidelines
- d. will not be transferred without our consent

These assurances are consistent with our commitments under the Euratom Treaty, the partial test ban Treaty, the nuclear non-proliferation Treaty and the NSG Guidelines.

11. As the plutonium is to be used in a civil facility, it would be preferable if the French also agreed to place it under IAEA safeguards in accordance with the guidelines which the French and ourselves have worked out for the

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international transfer of plutonium. However, while the application of Euratom safeguards to Super Phenix cannot be avoided, the French agreement with the IAEA on the implementation of IAEA safeguards does not oblige them to accept Agency safeguards at this installation. The French position is that although they do not rule out putting Super Phenix under IAEA safeguards (which we accept at Dounreay), they wish to keep open the option of excluding the programme from their safeguards agreement with the Agency. In particular, they have made it clear that they are not prepared to accept the application of IAEA safeguards to plutonium transferred from BNFL as a condition of the deal. They have pointed out that none of the material contributed by the Germans and Italians to the Super Phenix programme is subject to Agency safeguards; nor is the small amount of French plutonium, mentioned at paragraph 6, which is derived from US material. If the deal goes ahead on the terms proposed by the French, the United Kingdom will run some risk of being criticised for not requiring the application of IAEA safeguards, and possibly for discriminating in that respect between nuclear and non-nuclear weapon states. The fact that Euratom safeguards will apply could reduce but probably not eliminate this criticism because Euratom safeguards are not considered by some to be as effective as those of the Agency. On the other hand, to stand out against the French position on IAEA safeguards would deprive BNFL of revenue, prejudice the continuation on the present highly satisfactory terms of the BNFL/COGEMA co-operation agreement, and sour the atmosphere of the Anglo-French talks on fast reactor co-operation. The balance of these points favours accepting the terms proposed by the French, and not insisting on IAEA safeguards.

III. THE UNITED STATES' REQUIREMENT

12. During informal discussion between the MOD and the United States Department of Energy (USDOE) on the availability of United States plutonium for the United Kingdom's defence nuclear programme, the USDOE said

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that they might be interested in acquiring up to about 5 tonnes of reactor grade plutonium between 1986 and 1992 for their civil nuclear programme. In the 1960s a similar quantity was exported to the United States under the provisions of the 1958 Defence Agreement. Although the Americans have produced large quantities of reactor grade plutonium, the vast majority of it is still in irradiated fuel elements which they have no ready useable capacity to reprocess.

13. When the possible United States requirement was first mentioned, the possibility was considered of a barter arrangement under which United States weapons grade would be exchanged for United Kingdom reactor grade plutonium. But the USDOE have concluded that they would not wish such procurement of reactor grade material for their civil programme to be linked to the supply of weapons grade material. Any explicit relationship between the two deals would complicate the USDOE's internal consideration and approval of them. There is of course an implicit connection in that, if the American requirement were confirmed but we refused on political grounds to try to meet it, their attitude to meeting the United Kingdom defence requirement - for which we are dependent on the Americans - could be adversely affected.

14. The CEGB, who would be able to meet the American requirement, would wish to see their plutonium exported only for civil safeguarded use. As this is what the USDOE have in mind (unlike the French, they would accept the material under IAEA safeguards), the ~~CEGB~~ Board would probably be willing to sell provided that agreement can be reached on the commercial aspects of the deal, notably price.

15. On price, difficulties might well arise because the United States value plutonium at only about one-third of the value assigned in the United Kingdom. The USDOE bid price for CEGB plutonium would be likely therefore to be

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unattractive to the CEGB who would be looking for the best possible price for a deal which, at United Kingdom prices, would be worth in the region of £50 million. The result might be that no bargain could be struck. This would not necessarily affect the prospects of obtaining United States plutonium for defence use, provided that it were clear to the Americans that no political obstacle had been placed in the way of the deal. A judgement cannot at this stage be made as to how the Americans would react if the negotiations were to fail for commercial reasons. It would be possible to avoid the risk of an adverse reaction by arranging for MOD resources to be made available to the CEGB to enable them to reduce their price. But this, if it were done at all, would better be done when in the judgement of the MOD they felt that it was the only way of maintaining access to American supplies of weapons grade plutonium. The CEGB should therefore be left and even encouraged to negotiate on a commercial basis.

IV. HANDLING OF THE TWO DEALS

16. Both deals, if they proceed, are likely to become public knowledge sooner or later, and thus whether or not positive steps are taken to inform each customer of our deal with the other, they will find out. It is therefore important for the sake of our relations with the two countries that they should be treated over political aspects of the transactions as nearly in the same way as the nature of the two deals makes possible. Within this general precept the presumption would have to be, for defence reasons, that the Americans should not be treated less favourably than the French. The arrangements envisaged in this note are consistent with this approach: for example, although the plutonium exported to the United States would be placed under IAEA safeguards and that to France would not, this point is not at issue with the Americans. As far as United States controls on Super Phenix are concerned, although United Kingdom supplied plutonium would reduce their impact, it seems unlikely that the Americans will react adversely.

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17. There is one further point. The nature of our defence relationship in the nuclear field with the Americans is such that we should tell them formally about an export of plutonium to France which could contribute to the French nuclear weapons programme, even though that is not its purpose. It seems unlikely that the United States would have any objection to this export of plutonium to France; and there would be the risk of a damaging reaction from the French if, under pressure from the Americans, we withdrew from the deal with the French. These considerations point to informing the Americans after the deal with the French has been agreed.

V. CONCLUSIONS AND RECOMMENDATIONS

18. Officials conclude that -

a. The prospective transfers of reactor grade plutonium to France and to the United States, besides being commercially valuable, would contribute to a favourable climate for talks with each country about co-operation on fast reactors. The loan to France would help balance the advantages which BNFL enjoys under the co-operation agreement with COGEMA on reprocessing technology.

b. A refusal on political grounds to sanction either deal would reverse the position at a. above; and, in the case of the United States deal, could adversely affect the Americans' attitude to supplying weapons grade plutonium for the United Kingdom defence programme, which depends on these supplies.

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c. There is a risk that we would be criticised for transferring plutonium to France for civil use without requiring the material to be placed under IAEA safeguards. But the balance of British interests in this transfer points to not insisting on IAEA safeguards.

d. Although the French nuclear weapons programme is most unlikely to depend on their obtaining supplies of unobligated plutonium from the United Kingdom, the prospective loan could be used, indirectly to support that programme. In view of the close Anglo-American relationship in the nuclear defence field, the Americans should be told about the loan, but not before agreement has been reached with the French.

e. Negotiations with the Americans, between the CEGB and the USDOE, should be conducted on a commercial basis. If the CEGB are unable to negotiate a satisfactory price, the MOD will need to consider whether the consequences for their access to supplies of weapons grade plutonium might make it worth their subsidising the CEGB price.

f. The political considerations envisaged for the two deals are as consistent as circumstances allow. The course of the two sets of negotiations will need to be monitored to ensure that this remains so, and, in the case of the CEGB/USDOE negotiations, to enable the point at e. above to be considered if necessary.

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19. Ministers are invited to agree that -

a. The French should be informed that the United Kingdom Government is prepared to authorise the loan of up to 500 kg of reactor grade plutonium by BNFL to CEA for use in the Super Phenix reactor, on the conditions proposed by the French without, in this particular case, insisting on the application of IAEA safeguards.

b. BNFL should be authorised to negotiate with CEA the loan at a., for a period of up to five years and with a provision for extension by up to a further year at BNFL's discretion.

c. The Department of Energy should approach the CEGB Board to establish whether the Board would be prepared in principle to sell up to 5 tonnes of safeguarded reactor grade plutonium to the USDOE for civil use under IAEA safeguards.

d. The USDOE should be informed that the United Kingdom Government would be prepared to authorise the sale of up to 5 tonnes of reactor grade plutonium for civil use under IAEA safeguards, and that the CEGB stand ready to conduct the necessary contract negotiations.

e. CEGB should be authorised to negotiate accordingly with the USDOE, keeping the Department of Energy closely informed.

Cabinet Office

23 July 1981