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Secretary of State for Industry

22 September 1980

The Rt Hon The Lord Carrington  
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 Secretary of State for Foreign  
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 Downing Street  
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*John Peter*

GUANGDONG NUCLEAR POWER STATION PROJECT

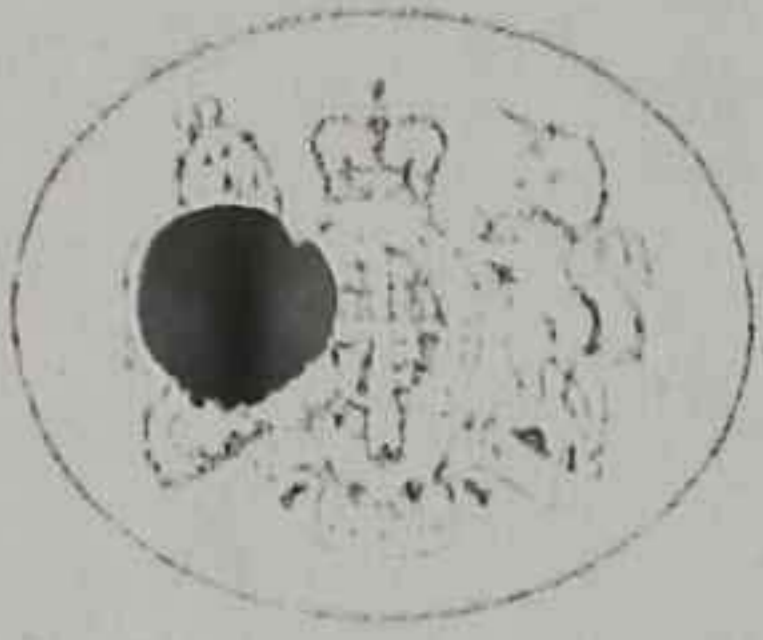
During your forthcoming visit to Peking, it would be helpful if you could probe Chinese attitudes on this important project. You are in any event liable to be asked about our attitude both in China and Hong Kong.

... 2 Officials have prepared the attached short report and speaking note which show that you can generally be very positive on a project which could have considerable political significance in relation to the future of Hong Kong as well as commercial benefits to UK manufacturing industry. As you know, the UK has had some success in selling power plant to China Light and Power in Hong Kong and we intend to pursue an even larger order over the coming months. The possible sale of nuclear plant to a joint venture consisting of CLP and their Chinese neighbours in Guangdong would consolidate our position.

3 I am copying this letter to Geoffrey Howe, John Nott and David Howell, since their officials along with those here agreed the attachments. I am also copying this to the Prime Minister as she expressed her interest in the project when she last saw Sir Lawrence Kadoorie during his recent visit to the UK.

*Yoniva*

*Kerr*



## GUANGDONG NUCLEAR PROJECT

## POINTS TO MAKE

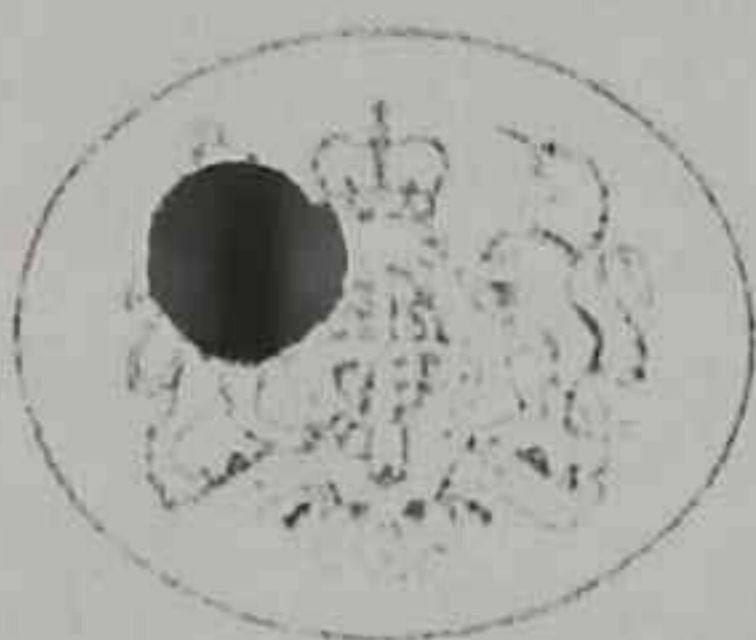
1 British government have followed with close attention discussions in Guangdong. See project as one of immense significance to UK/Hong Kong/China relations. First nuclear power station in China: a most important example of cooperation between Guangdong and Hong Kong: and potentially largest ever commercial deal in China involving British interests.

2 On British/Hong Kong side negotiations have been conducted principally by China Light and Power (Kadoorie) with technical assistance and expertise provided by Dr Walter Marshall in a personal capacity supported by a team from UKAEA. Understand that Guangdong negotiators have sought closer identification with project on part of British and Hong Kong governments. If Guangdong authorities are seeking reassurance of British and Hong Kong governments' attitude can assure that this is very positive in expectation of major benefits to UK industry.

3 Ministerial colleagues will wish to know if Chinese government (Peking) attaches same priority to project as Guangdong authorities. Would therefore welcome statement of Chinese attitude.

4 Depending on answer to 3 above. Glad to find China shares UK view of project's importance. Many technical, safety, commerce, financial questions. Suggest team of British officials visit Peking and Guangdong soon to follow up. Meanwhile will report to Cabinet.

5 If asked about equity investment by the British and Hong Kong governments An unusual suggestion. The British government (while a shareholder or owner of many industries in UK) does not normally invest overseas. Nevertheless prepared to consider proposal if Chinese really attach important to it and in view of project's significance.



6 /If pressed/

Nuclear non-proliferation

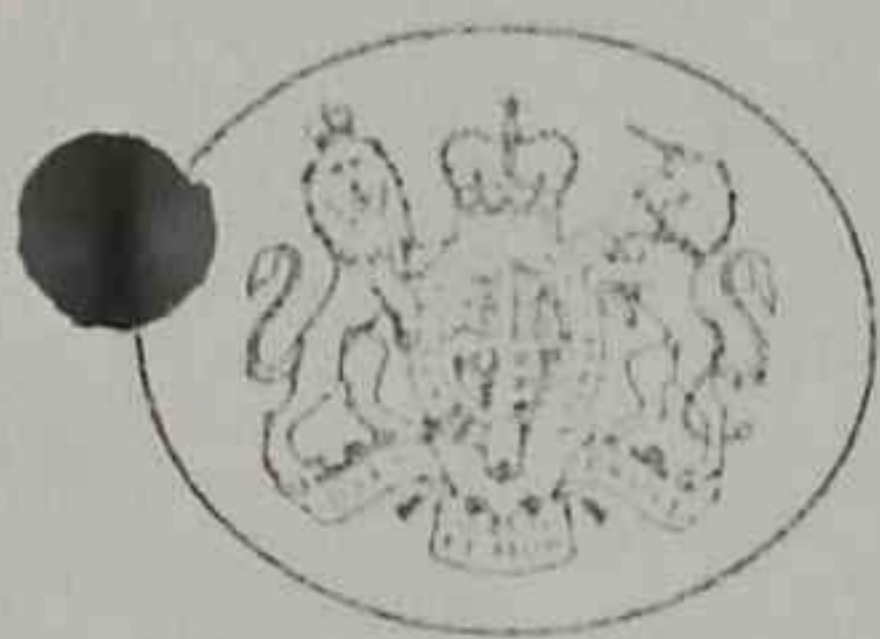
"This will be primarily a matter for the government of the supplier of the nuclear reactor. We would of course wish to take part in any discussions on this subject, but we would not expect more restrictive conditions than would be likely to be required by other governments."

Accident liability

"We recognise that this raises important questions which will need to be discussed at a later stage between our two governments."

Credit facilities

"The wide range of facilities provided by HMG will be available in support of UK contenders for this prospective contract. These will ensure that the terms on offer from the UK will be at least as favourable as those available elsewhere."



PAPER FOR MINISTERS ON THE GUANGDONG NUCLEAR POWER PROJECT

INTRODUCTION

The Secretary of State for Industry informed colleagues on 25 October 1979 and 18 February 1980 about prospects for UK involvement in a nuclear power station to be built as a joint venture between China Light and Power Limited (CLP) and the Guangdong Electricity Company (KEC); about half of the output is to be sold to CLP to finance the venture. Ministers agreed then that:

- a continuing UK industrial and official involvement in the project was justified;
- technical support should be provided to CLP for the feasibility study;
- the UK would not insist on nuclear inspection safeguards but would seek general assurances on the peaceful application of nuclear technology and fuel.

As Sir Lawrence Kadoorie reported to the Prime Minister, Secretary of State for Industry and the Lord Privy Seal during his recent visit, prospects of a favourable outcome on the project have improved. The Governor of Hong Kong also believes this. There have however been no direct contact between EMC officials and those responsible for the project in Guangdong and no firm evidence that the central leadership in Peking approve of the project. Two good opportunities to probe Chinese intentions now exist: a middle ranking member of the Guangdong Provincial Government who has been closely involved in the project is to visit the UK from 18 September; and the Foreign Secretary will be able to sound out Chinese leaders in Peking.

COMMERCIAL ISSUES

The feasibility study should be completed at the end of October. It is likely to conclude in favour of 2 x 900 MW PWR with associated pump storage and transmission schemes (valued at US \$4000M) with the UK as preferred supplier of the non-nuclear hardware (valued at about US \$1300M). As such the project would be the largest Sino British venture at least since the Revolution. Additionally contracts for the transmission network (US \$500M) and fuel services from BNFL are possible, while the prestige project could open up wider trade possibilities in South China and the area generally with enormous potential benefits to UK industry.

Our aim is for GEC to obtain a major contract but they need a nuclear partner. GEC would want this partner to assume contractual responsibility for the whole nuclear island. There are three contenders: KWU (Germany), Framatome and Westinghouse; KWU is acceptable technically, but its commercial practice has been to offer turnkey contracts, which could well be unacceptable to the Chinese. Framatome designs would require technical changes to bring them more into line with expected future requirements on safety, but they are more likely to be disposed to assume responsibility for the whole nuclear island. To lock them into a partnership with GEC would forestall a pre-emptive bid by the French - who were earlier negotiating to sell such a PWR to China - would



be "communautaire" and could lead to joint ventures elsewhere, such as Korea. The third contender, Westinghouse, is preferred from the technical and safety point of view, but prefers to sell only a part of the nuclear hardware. Officials will consider the choice of nuclear partner best suited to satisfy the apparently conflicting technical, safety and commercial objectives.

#### POLITICAL BENEFITS

With the New Territories lease due to expire in 1997, the increased economic interdependence between Guangdong and Hong Kong would contribute to Hong Kong's stability and business confidence and help to reassure investors about the territory's future status.

With HMG's support of the CLP study known to the Chinese, to attempt to disengage now would only be adversely interpreted and so weaken the credibility of the UK and Hong Kong Governments, and the position of Sir Lawrence Kadoorie. Apart from the nuclear prospect, Sir Lawrence's good will is critical to secure a negotiated contract for the 4 x 660 MW Castle Peak B Station, decisions on which are expected early next year.

#### ISSUES TO BE FACED

The main issues to be faced are:

##### The Credit Package

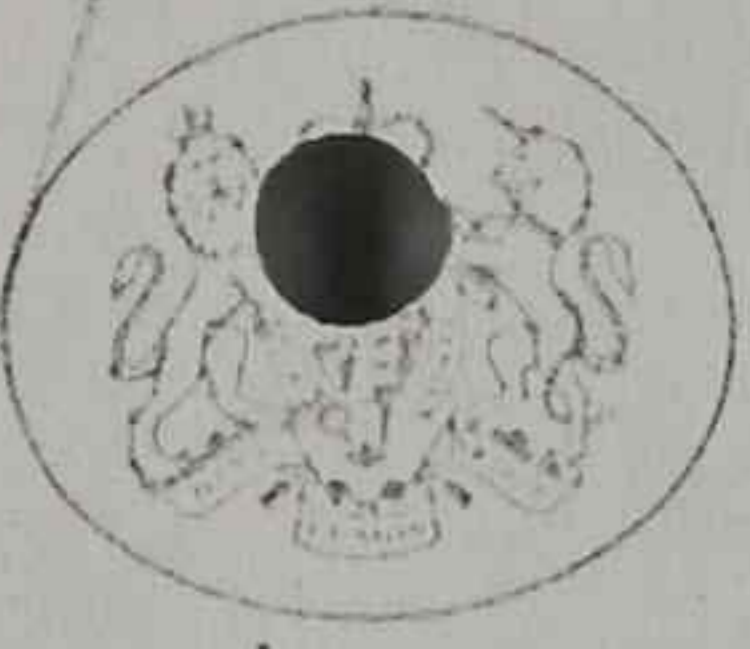
The finance package will have a crucial effect on the project's capability to be self-financing. Under OECD rules, ECGD could agree support for a 90% loan repayable over 12 years, but ab initio would propose an 85% loan over 10 years - the terms that EEC members are proposing for power stations, both conventional and nuclear. The actual terms will depend upon those proposed by the nuclear island partner, or upon the cash flow projections on the viability of the project. The security of ECGD loans to CLP will also need to be safeguarded.

##### Equity Involvement

We have been told by CLP that the Guangdong authorities may seek direct HMG and Hong Kong Government equity involvement probably because it would ensure political and moral commitment.

##### Liabilities

Most of the risks associated with the Guangdong project can be covered by commercial insurance. HMG may have to accept some financial responsibility in the event of a major nuclear accident: the Guangdong project is essentially a joint venture and the PRC might insist on shared liability as part of the price for preferring equipment and other supplies from the UK. If this price has to be paid we should negotiate an agreement with the PRC whereby:



- (a) IMG would meet the cost of technical direction of the cleaning up operation;
- (b) the company operating the station should have strict liability in respect of third party damage up to an agreed limit;
- (c) the PRC Government should accept all residual liability for damage within the PRC: responsibility for Hong Kong should rest with the Hong Kong/UK Governments. (The latter would require legislation)".

#### Non-Proliferation

Ministers have agreed the following approach:

- (a) No requirement for IAEA safeguards (since the PRC is a Nuclear Weapon Station);
- (b) But we should seek assurances of physical protection, no diversion from peaceful use, and no retransfer without agreement.

Non-proliferation conditions may prove to be a key factor in establishing Chinese preference between the US and France. The French have obtained President Carter's approval to their supplying on similar conditions a French built PWR based on a Westinghouse design. But the US position on direct supply to the PRC would be different. It seems likely that even if IAEA safeguards were not required bilateral US safeguards would be.

#### Safety Issues

The Governor of Hong Kong wishes to be assured that the station will be constructed and operated in accordance with UK safety standards. KFC appears ready to pay close attention to these and has suggested informally that the UK should help China establish a safety authority. The NII would be the most appropriate authority to do this and to offer advice to the Governor but its resources are fully committed to the UK nuclear programme. Consideration must therefore be given to the means by which the UK can meet these needs.

#### NRC Participation

The NRC could also offer valuable expertise to either customer or contractor. Involvement of NRC may be seen by the Chinese as a desirable expression of UK support. The extent of the NRC role will however be constrained by commitments to the UK nuclear programme and the choice of nuclear reactor partner.

#### CXGB Role

Experienced operating staff from the CXGB and the nuclear supplying country will be needed during the initial operation of the station to make good the lack of CLP and KFC expertise. Possible calls on these resources will need to be clarified.



CONCLUSION

The immediate steps are:

- To use the visit of the Guangdong official to probe Chinese thinking further, in order to establish direct contact with the Guangdong authorities;
- To use the visit of the Foreign Secretary to try to ascertain the Peking Government's attitude.

In addition:

- Action will continue at official level to resolve the outstanding issues;
- Depending upon the outcome of the Foreign Secretary's visit, officials will hold early discussions with the Chinese;
- On the issues requiring decisions, officials will report to Ministers consistent with the timescale of the project.

23 SEP 1980







*China*

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From the  
Parliamentary Secretary

The Rt Hon Sir Keith Joseph Bt MP  
Secretary of State for Industry  
Department of Industry  
Ashdown House  
123 Victoria Street SW1E 6RB

*pa*  
*Am*

26 September 1980

*Dear Sir Keith*

GUANGDONG NUCLEAR POWER STATION PROJECT

I have seen your letter to Peter Carrington, copied to David Howell here who is currently visiting South America. I am replying, as I understand it would help FCO in preparing Lord Carrington's brief for his visit to China.

I agree that it would be useful to obtain first-hand knowledge of the attitude of the Chinese Government to the proposed project. I also think the brief is right to allude to the several major issues which would need to be resolved before the UK could agree to support the project.

I know your officials have been alerted to the issues which are of concern to my Department (in particular the issues of safety, liabilities and the role of the NNC), and I hope that the Foreign Secretary's visit will open the way to quick progress in resolving them.

I am copying this letter to the Prime Minister, Peter Carrington, Geoffrey Howe and John Nott.

*Andrew Freun*

*11*  
NORMAN LAMONT

(Draft approved by Mr Lamont and letter signed in his absence abroad by Private Secretary)



27 SEP 1980