

Secretary of State for Industry

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18 February 1980

The Rt Hon the Lord Carrington KCMG MC
Secretary of State for
Foreign and Commonwealth Affairs
HM Diplomatic Service Foreign and
Commonwealth Office
Downing Street
London SW1A 2AL

NBPA yet

1 hrs 15/2

Dear Peter,

GUANGDONG NUCLEAR POWER-STATION, PEOPLE'S REPUBLIC OF CHINA

On 25 October last year at the time of Chairman Hua's visit, I informed you and colleagues of possible UK involvement in the construction of a nuclear power-station in the Chinese Province of Guangdong. Under the proposal a joint venture for the construction and operation of the station would be established between Guangdong Electricity Company and the China Light and Power Company of Hong Kong (CLP), with Hong Kong taking about half of the station's output.

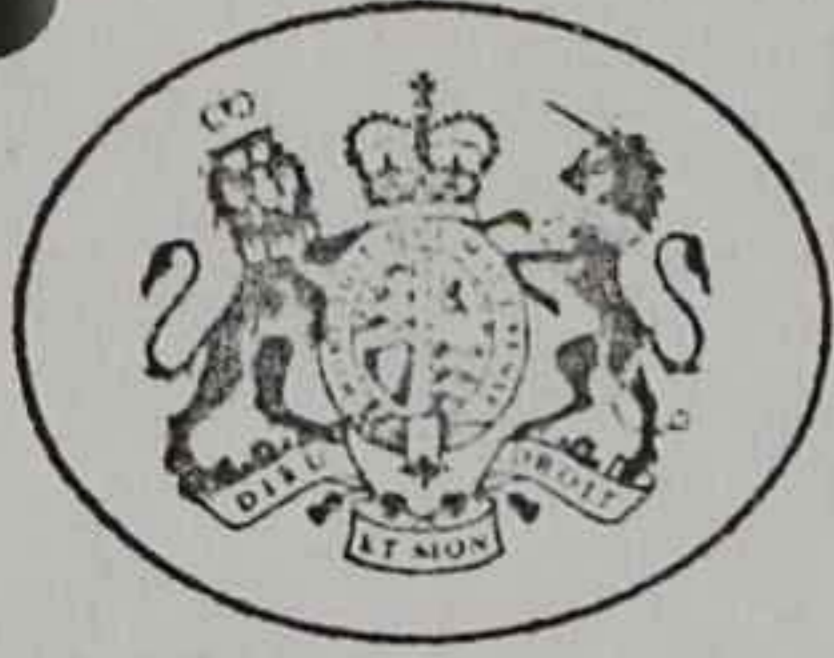
Since then officials have been reviewing developments, keeping closely in touch with both CLP and the Hong Kong authorities.

... The attached report, which reflects the views of UK Departments as well as the Hong Kong authorities, proposes that the UK should continue its close involvement in the project and recommends a line to take with the Chinese on the issue of nuclear safeguards.

Although there must be some uncertainty as to whether the project will even receive assent from Peking, it offers the potential for £380m worth of export business to our power-plant manufacturers in a situation where the Hong Kong connection should be an important asset. I consider it is, therefore, worth pursuing along the lines set out in the report by officials, provided you are content with the recommendations on how the issue of nuclear safeguards should be handled.

If you agree the line proposed, I doubt if a Ministerial meeting is necessary.

/I ...



I am copying this letter and the report to the Prime Minister, John Nott, David Howell, and Sir Robert Armstrong.

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Kew



GUANGDONG NUCLEAR POWER PROJECT

PURPOSE OF PAPER

1 The Secretary of State for Industry informed the Prime Minister and Ministerial colleagues on 25 October 1979 of talks between the Southern China Province of Guangdong and the UK nuclear and power plant industries about the possible sale of a nuclear power station to China. This paper which has been agreed between the Departments concerned (DOI, FCO, DOT and DEh):-

- (a) outlines progress since then in discussions with the Guangdong Provincial Authorities;
- (b) draws the attention of Ministers to the principal issues of foreign and industrial policy that are involved; and
- (c) seeks Ministerial endorsement of the UK's continued involvement in the project and approval of the line to take with the Chinese on the issue of nuclear safeguards.

BACKGROUND

2 Guangdong Province, with its rate of growth spurred by its being adjacent to Hong Kong, foresees a substantial growth in electricity demand. It is considering the possibility of constructing a nuclear PWR station, initially of 1400MW, the cost of which would be offset largely by the sale of electricity to Hong Kong; this is clearly a key factor in the Chinese decision to consider a project of such magnitude. The value of the imported hardware might be some \$465m at current prices with a potential UK manufacturing element of about 80% as we do not yet have the ability to supply a PWR nuclear steam supply system, the heart of the nuclear island.

3 Earlier talks between the Chinese and the UK nuclear and power plant industries have recently been followed up by discussions between KEC (the Guangdong Electricity Company) and China Light and Power (CLP) whose Chairman is Sir Lawrence Macdonie.



4 There are at present two main reasons why the deal may not materialise. Firstly, Peking, who would have the final decision on a project of this importance, may eventually decide not to proceed at all with a venture which is currently being pursued at the initiative of Guangdong. Peking's current attitude is one of caution, although they are willing to look at the results of a feasibility study. Secondly, there can be no certainty that the Hong Kong connexion will ensure the level of benefit to UK industry indicated above: the Chinese could award the whole of the contract to one of our competitors, and the French have been particularly active. Consideration of the issues involved should take account of these possibilities.

5 The major issues which need to be considered are those of nuclear proliferation and foreign policy; the relationship between China and Hong Kong; and industrial policy including nuclear co-operation with countries who are potential suppliers of FWR nuclear steam supply systems.

NUCLEAR PROLIFERATION AND FOREIGN POLICY CONSIDERATIONS

6 Successful negotiation of the contract would reflect the importance of, and potential for, commercial co-operation between China, the UK and Hong Kong; and increase China's interest in Hong Kong's stability and prosperity. It is, however, apparent that the Chinese will not take commercial discussions much further until they have a firm indication of the non-proliferation terms and conditions we will seek. They have stated that they will not accept inspection of the nuclear installation and the French have already assured the Chinese that they would require no more than an undertaking not to divert from civil to military purposes any nuclear materials and equipment supplied.

7 In looking at the problem, we must consider:-

- (a) our long-term policy towards the Chinese on this issue; and
- (b) short-term tactical considerations



The Longer Term

8 There is no requirement under the Non-Proliferation Treaty (NPT) for Nuclear Weapons States (NWS) to accept safeguards on their civil nuclear facilities; nor any obligation on a supplier country to insist on an NWS accepting safeguards, although for a number of reasons we should not ask for less in the way of assurances than have the French. The acquisition of a PWR is however unlikely to add to China's already extensive weapons capability.

9 On the other hand there are wider foreign policy considerations and in particular the possible effect on India of any sale of an un-safeguarded nuclear reactor to China. The security concerns of China, India and Pakistan interlock. India remains deeply suspicious of China's military intentions and is not reconciled to China's status as a NWS. A hostile reaction can therefore be expected from India to the sale of an unsafeguarded nuclear reactor to China whatever the logic of the case. This would be likely to make even more difficult the task of winning Indian acceptance of international non-proliferation arrangements including safeguards on all her own programmes. But, since the French have already agreed to supply nuclear equipment to China on the basis described above, for us to insist on stiffer terms would merely jeopardise the prime commercial objective without reducing the risk that India will cite Western nuclear sales to China to justify an unhelpful attitude on her part.

10 Criticism can also be expected from the USSR. In normal circumstances they would be unlikely to press very hard but in the present situation they can be expected to take every opportunity of seeking to gain advantage with the Indians and extending their influence in the sub-Continent.

11 It should also be a UK objective to seek to draw the Chinese into wider international discussion of nuclear trade and non-proliferation in particular by encouraging China to join the IAEA. The Guangdong nuclear project perhaps provides us with an opportunity to do this.



Tactical Considerations

12 It will be several years before any contract is drawn up and ten years before any fuel has to be supplied. The UK therefore does not have to give any formal assurances at this time. It would in any case be for the country supplying the PWR nuclear island to have the prime responsibility for negotiating the non-proliferation conditions. This is unlikely to be the UK. On the other hand we need to give the Chinese some indication of our likely position now.

Action with the Chinese

13 We propose doing this by instructing HMA Peking to speak to the Chinese on the following lines, which takes into account the various considerations above:

- a) to indicate the assurances which we should definitely need; to take explicit note of China's position about inspection and to leave them with a fairly clear impression that we would not seek inspection without indicating that position formally at this stage - formal negotiations should come later when the commercial position is clearer;
- b) to explore the possibility of China playing a further role in international efforts to contain proliferation, including voluntary acceptance of safeguards.

HONG KONG CONSIDERATIONS

14 Hong Kong is already to some extent reliant on China for a proportion of its needs, notably food and water. A joint venture between organisations in Hong Kong and Guangdong on the supply of electricity would further co-operation between Hong Kong and the Southern China provinces which is important to China in the context of their modernisation programme. An advantage to the UK is that it would increase Chinese interest in maintaining the status quo in Hong Kong, helping to bolster business confidence in the territory and counter any uncertainty about Hong Kong's future arising from



the theoretical expiry of the lease on the New Territories in 1997.

15 The Hong Kong Government would be content to accept a proportion of their electricity supply from Guangdong, provided they do not become excessively dependent on China for such a vital resource. They are conducting a study to determine what proportion they could safely take. They also see some advantage in broadening the fuel base from which their electricity is produced. They are thus in principle sympathetic to the concept of a nuclear power station established in China on a joint venture basis supplying electricity to the territory, provided discussions do not end up by straining rather than improving political relations through uncertainty on the non-proliferation aspects.

16 The Hong Kong Government would require satisfactory agreements to be reached on security of electricity supply, tariff structure and safety and environmental issues. Electricity supply in Hong Kong is entirely in the hands of the private sector. The Hong Kong Government consider that they can adequately safeguard the interests of Hong Kong and also minimise any possible risk to Hong Kong/Guangdong relations by continuing to allow negotiations to be carried out by China Light and Power without direct Government involvement. Similarly, while they would like to see British equipment, they would prefer to leave the pursuit of this objective to China Light and Power. They are however keeping in close touch with China Light and Power about the negotiations.

UK INVOLVEMENT

17 CLP and KEC have established an executive Working Group with four sub-committees to investigate and report on: the method of joint development and financial analysis; site investigation and selection; the selection of nuclear reactors, turbo-generators and consultants; and the design, development and operation of the power system. Ministers need to consider whether we should leave such discussions to CLP or seek to provide technical support and even direct representation.



Technical Support to Hong Kong Government and CLP

18 Although CLP has over the past two years placed with the UK power plant and transmission industry orders worth about £500m and we have confidence in Sir Lawrence Kadoorie's efforts to secure a major UK hardware content in the station, issues such as nuclear safety could not be left entirely to the CLP team. Neither CLP nor the Hong Kong Government have any experience in nuclear technology and safety aspects.

19 It is therefore desirable for the UK to offer technical support to CLP and to the Hong Kong Government. The Nuclear Power Company have been engaged in parallel discussions with the Chinese. Their expertise and that of UKAEA, CEGB and Nuclear Installations Inspectorate could all be made available.

DIRECT REPRESENTATION

20 UK industry has recently secured about £500m worth of power plant orders from CLP and hopes with continued Government involvement and support to secure orders for at least a further £250m for a development of a Castle Peak 'B' power station with at least 2 x 660 MW units. The Guangdong nuclear station might possibly be substituted for a second 2 x 660 MW stage of the Castle Peak 'B' station - worth a further £200m. We thus want to be in a position to ensure that should the second stage of Castle Peak not proceed, UK manufacturers gain as recompense as much of the manufacturing content of the PWR station as possible.

21 Although the UK does not have much leverage and the Hong Kong connection is our major card, the fact that the Chinese have decided not to proceed with two power plant projects previously "earmarked" for the UK might at some stage be invoked to further UK participation in the Guangdong project as compensation. We would also wish to ensure that any CLP commitments would not prejudice the servicing of their existing debts to the UK. Keeping in touch with the negotiations and participating as and when necessary especially on the Executive Working Group would certainly be a way of looking after our interests. We have, as part of the



facilities available under the Overseas Projects Fund, offered CLP part of the cost of a feasibility study, the total cost of which would be shared with the Chinese. If accepted, this would secure UK participation on the Working Group.

NUCLEAR COLLABORATION

22 In the earlier discussions between NPC and the Guangdong authorities the latter expressed a preference for a Magnox reactor. There is now however a clear Chinese preference for a FWR. Four countries have the necessary FWR capability: Japan, America, Federal Republic of Germany and France. China has suggested she might seek direct offers from the last three countries and the UK. While the UK can supply about 30% of the hardware value of such a station, it does not currently have the capability to supply the nuclear steam supply system - the heart of the nuclear island - and it will therefore be necessary for the UK to enter a joint venture with another country but preferably maintaining the lead on the project.

23 Owing to the greater restrictions applying to direct exports of the Westinghouse FWR compared with sales by foreign licensees, the USA conditions of supply would probably be unacceptable to the Chinese; they could however, change with developments in the latest international situation. The French, on the other hand, have already established themselves as a potential FWR supplier to the Chinese and they are most likely to be the preferred choice. Moreover, the French have shown recent interest in collaborating with the UK on the FWR. The FGR is a possible partner and so in theory is Japan though the Chinese have shown no interest in the latter.



CONCLUSIONS

24 In spite of the difficulties of securing a major UK manufacturing involvement in a proposed PWR station in Guangdong, the project offers the potential for £380m worth of export business to the power plant industry and on that basis alone is worth pursuing. Although the UK's negotiating position is not particularly strong, the Hong Kong connection should appear of importance to the Chinese who have to satisfy both the Hong Kong Government and CLP before the project can proceed. Although there are limits to the willingness of the Hong Kong Government to press the argument for UK manufacturing involvement, CLP and its chairman Sir Lawrence Kadoorie are favourably disposed towards UK equipment and open to general influence on UK involvement. The UK might also exert direct political leverage at an appropriate stage in Peking where the final decisions on this project will be taken.

25 Though CLP are currently ill-equipped to proceed on feasibility studies into nuclear matters, the UK has technical support, particularly that of NPC, which should be made available to both CLP and the Hong Kong Government. Direct HMG involvement may from time to time also prove necessary to safeguard the UK's industrial and financial interests. In terms of foreign and nuclear policy there is no compelling reason for safeguards on any nuclear equipment or material we may sell to China. We should indicate our position to the Chinese, but in view of our concern about India we should stop short of a formal commitment not to seek inspection. We should explore the scope for drawing them more fully into international efforts to contain nuclear weapons proliferation.

RECOMMENDATIONS

26 We accordingly recommend that:

1. Ministers should endorse continuing UK industrial and official involvements in the nuclear project as set out in the paper.
2. Ministers should agree the UK's position on non-



proliferation assurances given in paragraph 13
above.

Department of Industry
15 February 1980



19 FEB 1980

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01 211 6402

Sir Keith Joseph
Secretary of State
for Industry
Ashdown House
123 Victoria Street
LONDON SW1

China
NRPA
Rus
14 March 1980

See Keith

GUANGDONG NUCLEAR POWER STATION, PEOPLE'S REPUBLIC OF CHINA

In your letter to Peter Carrington of 18 February, you sought agreement to the UK continuing a close involvement with the Guangdong nuclear power project in the hope of obtaining power plant orders worth up to £380 million.

I was aware at the time of Chairman Hua's visit last October that the UK nuclear and power plant industries had been exploring the possibility of Guangdong purchasing a nuclear power station and that the latter had expressed interest in both the Magnox and the PWR. The officials' paper enclosed with your letter shows however that there is now a clear preference for the PWR. For this reason and others mentioned in the paper, there can be no certainty that the UK will secure orders for even part of the project, since we shall be dependent on a satisfactory collaboration with a PWR supplier country. Nevertheless, given the potential value of the work to the UK, I share your view that we should continue our efforts at both industrial and official level to obtain for this country as much of the business as possible.

I agree with the recommended line set out in the paper, subject to the following points being taken into account:

(a) Non-proliferation assurances: the wording of paragraph 13(a) should be understood as meaning that we would in due course need assurances from the Chinese on physical protection arrangements and retransfers; also that any equipment or materials supplied from the UK would not be diverted to a military use.

(b) UK technical support: I would have no objection to the UK offering its experience and advice on nuclear technology and safety aspects, providing such assistance can be made available without affecting the level of effort required to fulfil the UK's own nuclear programme;

(c) nuclear collaboration: Care must be taken to ensure that Governmental exploratory moves towards collaboration with China do not go far until we have some assurance that satisfactory collaboration on the industrial level is also possible.

I am sending copies of this letter to the Prime Minister, Peter Carrington, John Nott, and Sir Robert Armstrong.

Yours ever

Daws

D A R HOWELL



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SECRETARY OF STATE FOR INDUSTRY

Guandong Nuclear Power Station: People's Republic of China

I agree that the project referred to in your letter of 18 February is worth pursuing along the lines suggested by officials. I am generally content with the recommendations on the handling of the safeguards issue, but we shall want to look carefully at the instructions to HM Ambassador at Peking arising out of paragraph 13 of the detailed note. The Indians will be worried if we sell a reactor to China without the usual IAEA safeguards which we know the Chinese would not accept, but at this stage we can meet any Indian concern with the response that we have not even started serious discussions with the Chinese on the non-proliferation aspects. We should in any case seek to encourage the Chinese to take a more active interest on proliferation questions, particularly in Asia.

It is clearly for the government rather than industry to discuss non-proliferation questions with the Chinese. As regards ensuring that our interests are taken into account in the commercial negotiations, it is important that China Light and Power (CLP) and the Chinese accept that this must be done (especially if we think we are contributing financially). But I think we should be flexible over how it should be done, and prepared to take account of the views both of the CLP and the Chinese on the nature of the proposed project, which could make overt British Government participation difficult. I agree that a Ministerial meeting is probably unnecessary.

I am copying this minute to the recipients of yours.

C

(CARRINGTON)

Foreign and Commonwealth Office

14 March 1980

CONFIDENTIAL

14 MAR 1980





China

From the Secretary of State

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

12 March 1980

CF These should be copies of the PRC recent
 exchange of letters with Sir L. Kadoorie on
 this file.

Am 12/3

Dear Keith

GUANGDONG NUCLEAR POWER STATION, PEOPLE'S REPUBLIC OF CHINA

Thank you for copying to me your letter of 18 February to the
 Foreign Secretary.

While I have no illusions about the difficulties of securing such
 a project for the UK, I agree that it is worth pursuing along the
 lines suggested in the paper by officials. Success would be
 valuable both for the direct business it would bring and, perhaps
 more importantly, as a valuable demonstration of the UK's capacity
 for project management and major contracting work.

I am, of course, sensitive to the non-proliferation issue. But
 I would not wish the UK to lose the contract to a competitor because
 of the relative stringency of our terms. I hope therefore that
 in the final analysis we would not insist on stronger terms than
 those already indicated by the French.

I am copying this letter to the Prime Minister, Lord Carrington,
 David Howell and Sir Robert Armstrong.

Yours ever
 John

PS. I spoke at length to Kadoorie about this
 project recently. I will report to you orally on what he said.

JOHN NOTT

12 MAR 1980

