

Confidential filing

Prime Ministers meeting with
Dr Walter Marshall, Chairman of
the United Kingdom Atomic Energy
Authority (UKAEA). Mr Stern of
Westinghouse and Mr Reusch, President
of the Bechtel Power Corporation.

PRIME MINISTER

SEPTEMBER 1981

Referred to	Date	Referred to	Date	Referred to	Date	Referred to	Date
17.9.81							
<p>PREM 19/572</p>							

SUBJECT
cc Mosler

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VMP



file

10 DOWNING STREET

From the Private Secretary

17 September 1981

Dear John,

As you know, Dr. Walter Marshall, Chairman of the United Kingdom Atomic Energy Authority, called on the Prime Minister yesterday afternoon along with Mr. Stern of Westinghouse and Mr. Reinsch, President of the Bechtel Power Corporation. Your Secretary of State and Sir Robert Armstrong were also present.

Dr. Marshall said that he realised the timing of the meeting was not ideal because he had not yet had an opportunity to brief the new Secretary of State on the various issues relating to the PWR programme. However, Mr. Stern and Mr. Reinsch, who had been working with him on his steering group were only in London for a short time, and he wanted the Prime Minister to have the opportunity of hearing their views on the PWR. He was glad to report that the steering group had reached unanimous agreement on the basic design of the PWR for the UK programme. The design was not exactly the same as that adopted by the French, but it was broadly comparable; it would be accepted by the nuclear industry; it was economical; and it would meet the Nuclear Installations Inspectorate's safety requirements. They had made sufficient progress so that the CEGB would be able to publish their pre-construction safety report on 1 May 1982, and the NII should be in a position to report on 1 July 1982. He was absolutely confident that the NII would give their approval. It was now for the Secretary of State to announce the start of the public inquiry consistent with these dates. It ought, in his view, to be possible to start the public inquiry by October 1982. The nuclear industry had been asked by the steering group to reorganise their resources so as to ensure the rapid implementation of the programme. He was impressed by their response. In particular, the CEGB establishment at Barnwood was going to be effectively privatised: it was going to move from an inward looking to an outward looking establishment on the lines of Harwell. He recognised that the time-scale was tight, and that there were political considerations which Ministers would have to take into account before deciding on the timing of the inquiry. The crucial question was how much time should be allowed for comments between the publication of the two reports he had referred to and the start of the inquiry.

Mr. Reinsch said that Bechtel had been working with the National Nuclear Company for some time. As of April, they had been considering withdrawing because of the slow progress in putting together the PWR design. However, since Dr. Marshall had taken over, tremendous progress had been made; and together, they now had a project in which Bechtel were proud to be participating.

/Bechtel and

CONFIDENTIAL

CONFIDENTIAL

- 2 -

Bechtel and Westinghouse were now putting together a first class team to carry the project forward. Mr. Stern also paid tribute to Dr. Marshall, and said that in Westinghouse's view also, the prospects for the PWR were now excellent.

The Prime Minister said she was delighted to hear of the progress that had been made. As for the safety aspects, she hoped Dr. Marshall and his associates fully understood just how sensitive a matter this was. She was slightly surprised that Dr. Marshall was so confident that the NII would approve the design, even though the CEGB's pre-construction report was still some nine months off.

The worst outcome would be for the inquiry to start, and then for the Government to be criticised for not allowing sufficient time for representations on the CEGB and NII reports. So far, successive Governments had managed to convince the environmental lobby that nuclear power generation in this country was acceptable; but this was only because tremendous care had been taken of the safety aspect. It would, for example, make it easier to convince the public that the PWR was safe if, by the time the inquiry started, there were already in operation some new PWR units that had been built after the Three Mile Island accident. Having said this, she was still very keen for the programme to go ahead as fast as possible.

In response, Dr. Marshall explained that his confidence on the safety angle was based on the indications he already had from the NII on what their findings were going to be. Indeed, NII would be sending the Secretary of State early the following week a statement setting out the broad terms in which they intended to approve the design in their report. This statement, which had been negotiated over at length, had been approved by the Health and Safety Executive. The NII could never say that they were "totally satisfied" that a particular power station would always be safe. The main responsibility for safety on a continuing basis lay with the CEGB. All the NII could do was say that they had examined the design, and they had no objection on safety grounds of the construction proceeding. As regards Sir Alan Cottrell's earlier criticisms of the welding in the PWR, Cottrell had now published a book saying that if Harwell were satisfied that this problem had been successfully tackled, he was satisfied. As regards the Prime Minister's point about Three Mile Island, Mr. Reinsch said that several new PWR units would be on stream - in Korea, Japan and also in the USA - before the UK inquiry was likely to get underway. Mr. Stern added that the equipment at Three Mile Island had responded just as designed, but the man/machine interface had failed. The latest PWR design included new instrumentation to show more effectively any faults that might arise in operation.

The Secretary of State said that he would be discussing the PWR programme with Dr. Marshall shortly. He was extremely impressed by the way which Dr. Marshall had apparently taken a grip of the programme; like the Prime Minister, he was also most conscious of the safety aspects.

/The discussion

CONFIDENTIAL

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- 3 -

The discussion then turned to exports and, in particular, the Guangdong project. Mr. Stern said that HMG should look seriously at the potential for exporting the PWR. Westinghouse had a strong interest in this for the following reasons. First, the US Administration's non-proliferation policy made it difficult for them to export from the US direct to a number of countries. Second, the policy of the Exim Bank was no longer so conducive to export financing. Third, the UK had trading links with some countries which were more favourable than the links they had with the USA. Fourth, unlike the USA, the UK offered re-processing facilities. A number of countries, for example in a recent case Finland, were only prepared to allow bids for nuclear plant from countries which offered re-processing. In practice, this meant France, the UK and Russia only. Fifth, EEC tariff barriers made it more difficult for equipment manufactured in the US to compete in Europe than if it were manufactured in the UK.

Mr. Stern went on to say that there was an immediate opportunity with the Guangdong project in China. Westinghouse and Bechtel were in competition for this project with the French company, Framatome. It seemed that the Government was giving its support to the Framatome proposal because of the components that would be built in the UK. However, a successful Westinghouse/Bechtel bid would result in a far greater amount of work for the UK. (Mr. Stern handed the Prime Minister two charts showing the much greater amount of work that the UK could expect if the project went to Westinghouse/Bechtel.) He thought it would be very difficult for the Government to defend a Westinghouse/Bechtel design for the UK while supporting the Framatome design abroad. Dr. Marshall added that he strongly supported the proposal that Westinghouse and Bechtel should design the Guangdong plant from the start so as to give the UK industry a major part of the action. Several months ago this would not have been a credible option; but in view of the progress that had been made on the UK design, it was now a real possibility. He had discussed it with Department of Industry officials who appeared to understand the force of the argument.

while The Secretary of State said that he was aware of the Guangdong issue; / there was not the same urgency as in the case of the decisions that had to be taken over the UK programme, he intended to look into it urgently.

I am sending a copy of this letter to Ian Ellison (Department of Industry), Francis Richards (Foreign and Commonwealth Office), John Kerr (HM Treasury) and David Wright (Cabinet Office).

J.D. West, Esq.,
Department of Energy.

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FRENCH

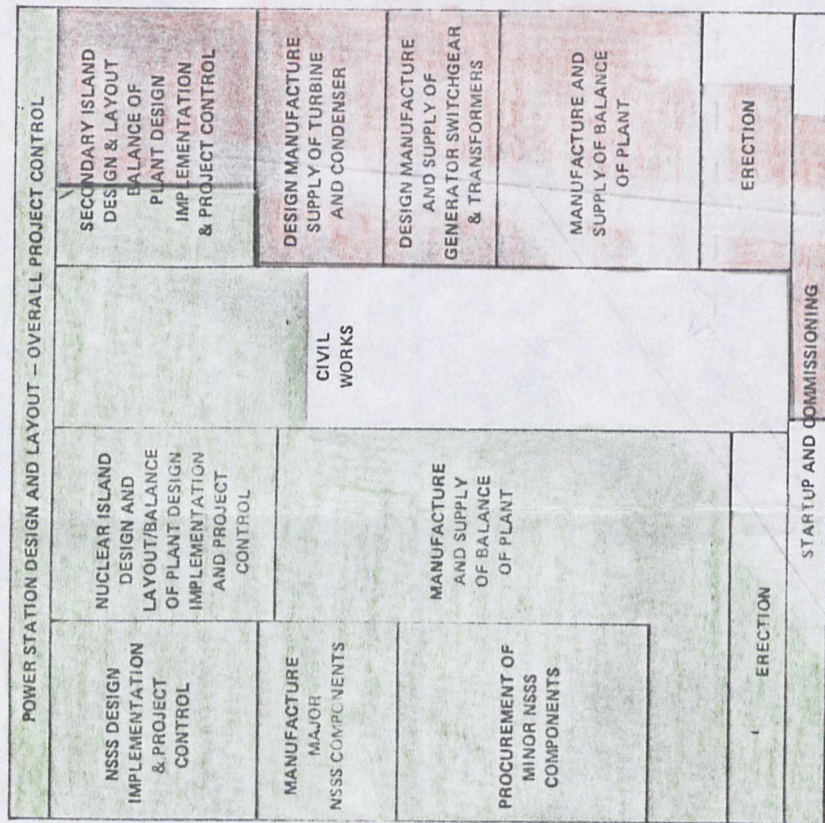
POSSIBLE US/UK SCOPE SPLIT

HONG KONG / GUANGDONG PROJECT

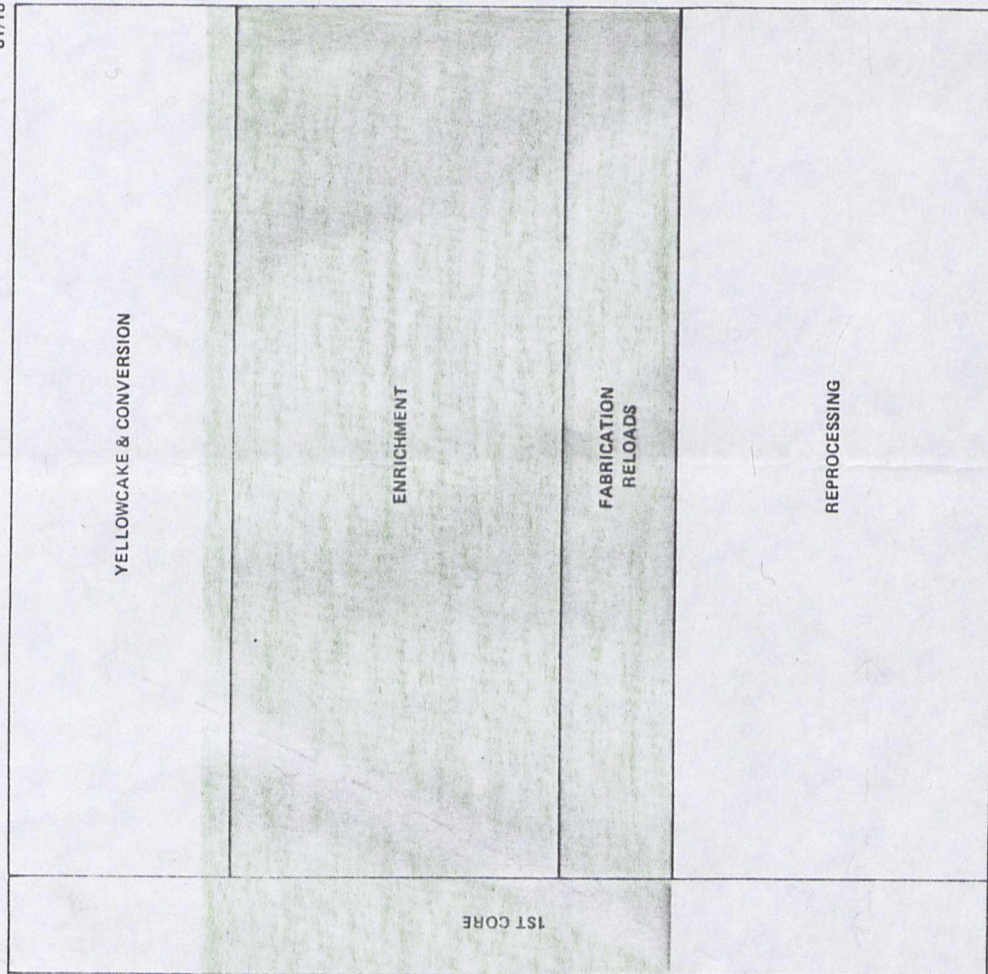
FUEL CYCLE (30 YEARS)

81/18

NUCLEAR POWER PLANT (3LOOP)



- FRENCH SUPPLY
- U.K. SUPPLY
- LOCAL SUPPLY



NOTE: FUEL CYCLE IS POTENTIAL U.K. SUPPLY UP TO THE POINT WHEN PRC ESTABLISH THEIR OWN CAPABILITY.

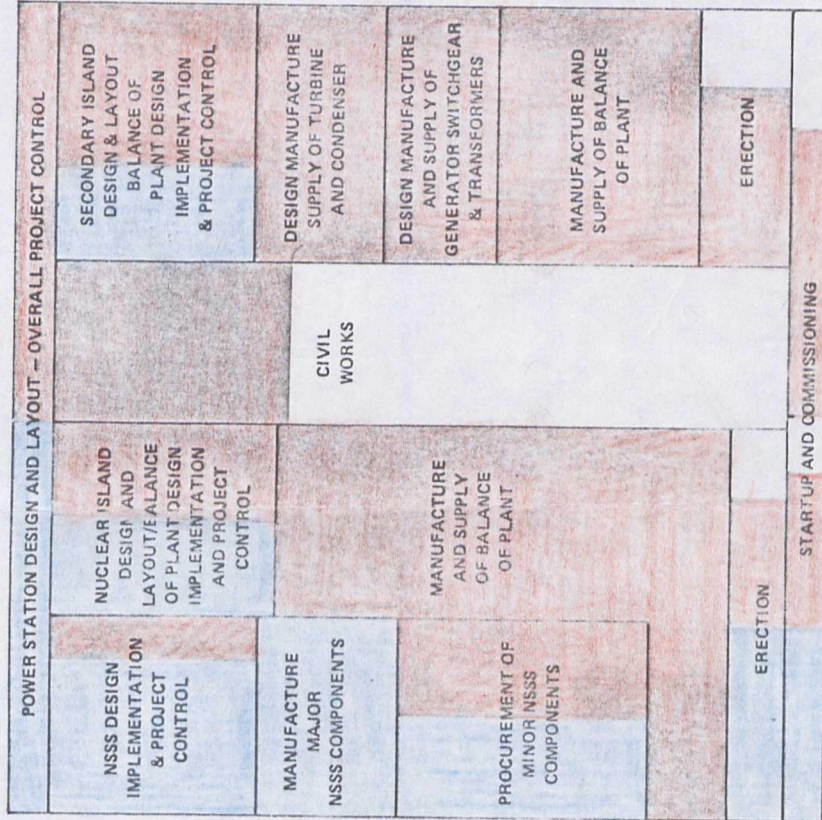
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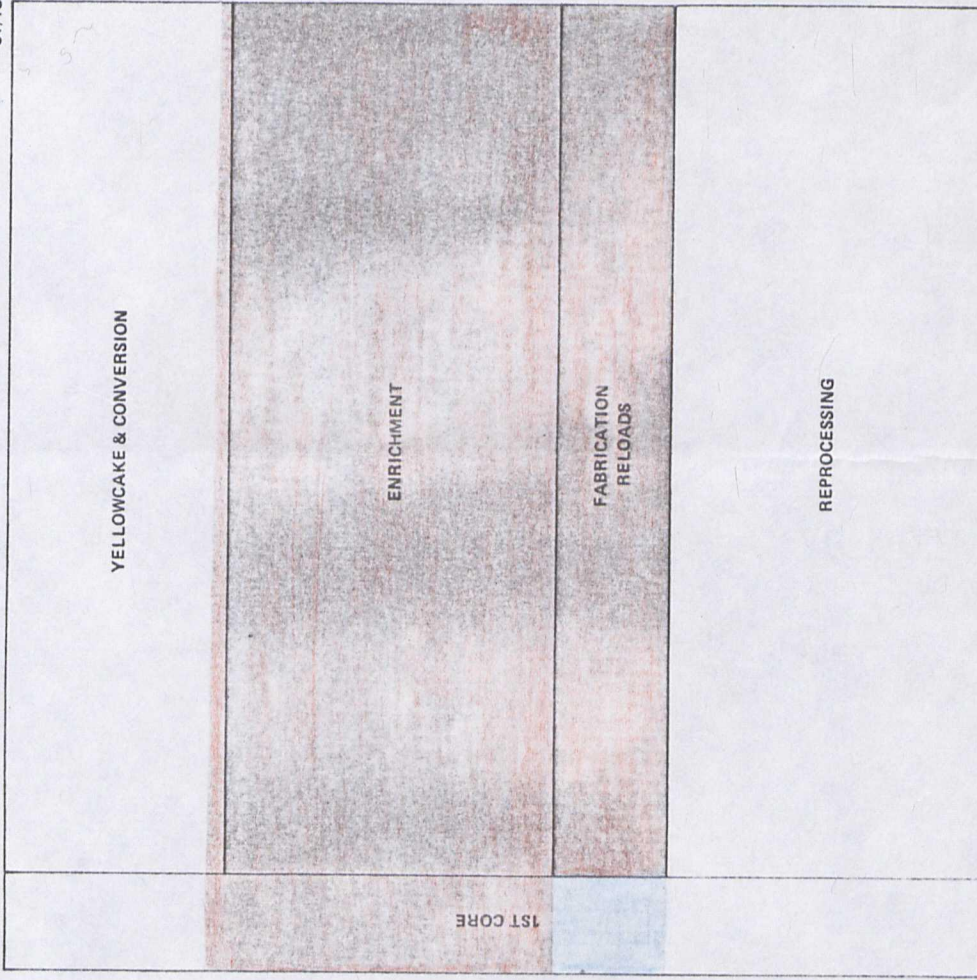
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SECRETARY OF STATE FOR ENERGY
THAMES HOUSE SOUTH
MILLBANK LONDON SW1P 4QJ

01 211 6402

Tim Lankester Esq
Private Secretary to the Prime Minister
10 Downing Street
London SW1

15 September 1981

Dear Tim

As requested this afternoon by Caroline Stephens, I enclose a brief for the Prime Minister's meeting tomorrow with Mr Stern of Westinghouse and Mr Reinsch of Bechtel.

Both Mr Stern and Mr Reinsch are members of the Steering Group which oversees the work of the PWR Task Force referred to in the brief and which was to meet Energy Ministers for lunch today. In the event, following the re-shuffle, no Energy Ministers were able to be present and the lunch was hosted by our former Parliamentary Under Secretary, Mr Lamont.

Yours ever

David Lumley

David Lumley
Private Secretary



MEETING WITH MR STERN OF WESTINGHOUSE AND MR REINSCH OF
BECHTEL: 16 SEPTEMBER 1981

Background

The Prime Minister has agreed at Dr Marshall's suggestion to see Mr Stern who is Executive Vice-President, Nuclear Engineering Systems, Westinghouse Power Systems Co and Mr Reinsch who is President of the Bechtel Power Corporation.

2. Both are in this country for a few days to attend a series of meetings concerned mainly with progressing the proposed PWR design for Sizewell. Westinghouse are the licensor for the design upon which the Sizewell station is to be based, and both Westinghouse and Bechtel have seconded staff to the National Nuclear Corporation project team responsible for working up that design. The Prime Minister will recall that in July a Task Force was set up under the Chairmanship of Dr Marshall to oversee the rapid development of the design. Westinghouse and Bechtel are participants in the Task Force. Work has progressed to the point where the Task Force is about to put firm advice to the Secretary of State on the basic design concept and on the timescale for preparations for a Public Inquiry. Messrs. Reinsch and Stern have come over to participate in the discussions leading to that advice going forward, and to meet the Secretary of State.

3. Both companies are acutely concerned that the Sizewell PWR should be a success, and have expressed serious doubts about the competence of NNC to carry through the construction phase. Discussions between NNC, CEGB, AEA, Bechtel and Westinghouse have established broad agreement on the need to establish a dedicated team drawing on the resources of all these organisations, to handle the construction. The Secretary of State expects firm advice from the industry on this



by the end of October.

4. Westinghouse has recently approached the Government with a suggestion that a joint Westinghouse/UK entity should be formed to pursue PWR exports. Specific opportunities cited are Guangdong, Finland, South Africa. In this way Westinghouse argue that the UK could secure fuel cycle services for the UK, as well as component supplies, bringing a major export boost. Westinghouse were vague about the form of such a joint enterprise.

5. Guangdong

Westinghouse are very interested in the possibility of the export of a nuclear power station jointly to the Chinese People's Republic and Hong Kong - called the Guang Dong project; and wish to be associated with a UK bid for the project since there could be political difficulties in a bid emanating directly from the US. The French are also keenly interested in the project and may be willing to associate themselves with the UK in a bid. Although a bid in association with Westinghouse could produce more UK orders (including for the fuel cycle) than one associated with Framatome (the relevant French Company), it was thought that in view of the political commitment that the Chinese had given to the French there was a better chance of securing a stake in the order by associating with the French. This view was reinforced by GEC's own commercial judgement, and by Sir Lawrence Kadoorie's view that the French were likely to get the order. Accordingly in February 1981 the Government agreed to give preference to a bid in association with the French. But while the Chinese Government are studying the report produced by the Hong Kong and Guangdong electricity utilities and have not indicated their preferred source of supply we consider it imprudent for the UK to be

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linked exclusively with only one of the contenders.

6. The line which Stern and Reinsch are likely to take with the Prime Minister is:-

- a. it is essential to form a dedicated team for the PWR construction.
- b. the UK Government should put its weight behind a joint UK/Westinghouse effort for exports generally
- c. Specifically the Government should back a UK/US effort for Guangdong in preference to a UK/French bid.

7. Westinghouse may seek to connect their contribution on the Sizewell PWR with progress on the export enterprise or on Guangdong. In our view there is no inherent conflict between the various initiatives. In particular if satisfactory progress can be made on the organisation for the construction of Sizewell this will provide a good basis for potential co-operation in export business.

8. Line to take

Need for a dedicated PWR construction team

Understand that these ideas have been put to Secretary of State for Energy, and that the parties have been encouraged to work up their ideas and put firm proposals to Government as soon as they are ready.

9. A Joint UK/Westinghouse Export entity

Understand that this idea has also been put to Secretary of State for Energy, who has invited the parties to continue their discussions and put forward more specific proposals; priority must be given to

4.



the Sizewell PWR.

Guangdong

10. Welcome Westinghouse interest in collaborating with the UK on Guangdong. Aware of potential benefits to UK industry, particularly with regard to fuel supply. Hope that consultations can continue so that a quick response can be made^{as} and when China decides she wants an Anglo/US package.

AE Division

DEPARTMENT OF ENERGY

15 September 1981

Copy to Mr Duguid:

United Kingdom Atomic Energy Authority

11 Charles II Street
London SW1Y 4QP

From the Chairman
Dr W Marshall CBE FRS

cc J. West (Energy)

Telephone: 01-930 5454

PERSONAL

11 September 1981

Mr C Whitmore
Private Secretary to the Prime Minister
10 Downing Street
LONDON
SW1

Dear Mr Whitmore

When she last visited Harwell, the Prime Minister made clear her enormous interest in the PWR Project and asked me to keep her in touch from time to time on a personal basis.

I thought therefore that it would be timely to let you know that on Tuesday I shall be reporting to the Secretary of State for Energy on the state of the PWR Project. I shall be telling him that we have an agreed design based on existing US plants, that that design has been up-graded to meet UK safety guidelines in full, that it is economical and at least 30% cheaper than an AGR, that the pre-construction safety report will be published on 1 May 1982, that the NII review of safety will be published on 1 July 1982, that that NII review will be entirely favourable and the Public Inquiry can open in the autumn of 1982.

In making this report I shall be supported by Mr Ted Stern, the President of Westinghouse, who is flying to the UK from Pittsburgh specially for this occasion and Mr Harry Reinsch, the President of Bechtel, who is flying here from San Francisco specially for this occasion.

The help that Reinsch and Stern have given us has been most valuable. They are, of course, two of the most senior men in nuclear power in the entire world. They have both told me how much they would appreciate an opportunity to meet the Prime Minister and if she could see them for a few minutes I am sure that would play a valuable part in speeding the PWR Project on its way.

Reinsch and Stern arrive in this country on Sunday 13 September and they both depart on the morning of Thursday 17 September.

Yours sincerely

W Marshall

Ref. A05489

MR. WHITMORE

Yes - of course

*Prime Minister:
Agree to see the Presidents
of Westinghouse and Bechtel, with
Dr Marshall, on (say) Wednesday
of next week? *Yes* *11:15*
attached.*

You will shortly receive a letter from Dr. Walter Marshall, Chairman of the United Kingdom Atomic Energy Authority, conveying a request from the Presidents of Westinghouse and Bechtel, who will be in London early next week, for a few minutes of the Prime Minister's time while they are in London.

2. The background is as follows.

3. Earlier this year, there was a series of setbacks to the pressurised water reactor (PWR) programme. The design produced was much too expensive, and created some safety problems. The design had to be rejected and a task force was set up under Dr. Marshall to try to overcome the problems. Dr. Marshall will report to the Secretary of State for Energy on Tuesday 15th September. The task force has produced an agreed design, which promises to have solved the problems. The cost of the reactor will be 30 to 35 per cent less than that of a comparable advanced gas-cooled reactor (AGR); slightly higher than the French PWR because it will be built to more rigorous safety standards; and lower than the comparable German PWR. Dr. Marshall will say that the detailed specifications (if that is the right words) will be issued by May 1982; that the Nuclear Installations Inspectorate (NII) will report in July 1982, and will report favourably; and that the way is clear for the Secretary of State for Energy to arrange for a public inquiry in autumn 1982.

4. As to the organisation for this project, Dr. Marshall is writing to the Department of Energy to propose that it should be done as a joint venture between the Central Electricity Generating Board (CEGB) and the National Nuclear Corporation (NNC). He believes that this will produce the right combination of technical leadership and good working relations which will make sure that the project goes ahead as quickly and as smoothly as possible. Dr. Marshall says that this proposed organisation has been agreed with all the parties concerned.

5. Some months ago, Westinghouse wrote to the Department of Energy proposing a co-operative venture on the sale of PWRs in export markets. As our PWR programme was at that stage in disarray, no more than an acknowledgment

was sent. Westinghouse, and with them Bechtel, are aware of the work of Dr. Marshall's task force and approve the agreed design which it has produced. It makes them all the keener to co-operate with this country in joint ventures in export markets. What is envisaged is a consortium in which Bechtel provides the selling organisation, Westinghouse licenses the nuclear steam supply system, and British industry makes the reactor and the turbines. Countries in which joint ventures of this kind are contemplated include China, Finland, Mexico and South Africa.

6. With the agreed design established, Westinghouse and Bechtel are eager to get on with the establishment of these joint ventures. The matter has a degree of urgency because the President of Bechtel is visiting China next month on this subject. This is among the matters which the Presidents of Westinghouse and Bechtel will be discussing on their visit to London early next week.

7. Understandably, Dr. Marshall is excited, both at having arrived at an agreed design and at the possibility of these joint ventures in export markets, with all that they would mean for the British nuclear industry and for jobs in Britain. He is, however, caught up on a difference of view between the Department of Energy and the Department of Industry. The Department of Industry have been committed to co-operation with the French on civil nuclear projects in China. There is thus an interdepartmental dispute to be resolved before a commitment can be made to a joint venture with the Americans of the kind envisaged by Dr. Marshall. He would very much like to find some way to sort out the dispute, so that a clear answer can be given before the President of Bechtel goes to China.

8. If the Prime Minister felt able to accede to the requests of the Presidents of Westinghouse and Bechtel for a short meeting, that would provide a basis on which we could ask for urgent advice from the two Departments and, if there was disagreement (as seems likely), bang their heads together and sort it out before the Prime Minister goes to Melbourne on 25th September.

9. I realise that the timing is not ideal. But the Presidents of Westinghouse and Bechtel are two very major figures in the nuclear business; and the issues at stake are obviously very big.

RA

ROBERT ARMSTRONG

10th September 1981.